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### Publication Date

2010

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Minerva's Mexico: Science, Religion, and the Art of Healing in Late Colonial  
Epidemics, 1736-1821

By

Paul Francis Ramírez

A dissertation submitted in partial satisfaction of the

requirement for the degree of

Doctor of Philosophy

in

History

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor William B. Taylor, Chair

Professor Margaret Chowning

Professor William F. Hanks

Fall 2010



## Abstract

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This study examines processes of reform in disease management in the Viceroyalty of New Spain in the eighteenth and early-nineteenth centuries. Especially under the enlightened rule of Charles III (1759-1788), onerous programs of epidemic management were introduced into communities accustomed to resolving disease in municipalities, villages, barrios, parishes, and homes. The objections of these communities to the interventions of the state led to an early and rapid adjustment in the official policy. In place of disruptive *cordons sanitaires* and isolation of patients in makeshift infirmaries, the viceregal government turned to immunization, where religious symbols, personnel, rituals, charity, and institutions helped frame modern medicine for lay communities. Bourbon reforms in the realm of public health ultimately became a reality through a modified “paternalistic” program of medical provision.

This program was a natural outcome of centuries of Habsburg rule, in which indigenous villages had been accorded certain legal and fiduciary considerations and deemed especially vulnerable to disease, intemperate reform, and intervention from outsiders. Bourbon innovations in public health of necessity respected these longstanding arrangements or risked failure. The injunction to provide and receive charity in crisis, and the belief that ceremonial performance was the best way to effect conversions to novel practices such as vaccine, led to a sustained effort to transfer sacred status to the new components of public health policy. As one crown attorney observed, administrators had been reminded by subjects of the obligation to make use of the “sacred ties of civil society” whenever possible.

Historical studies of public health have tended to stress innovations in hygiene and urban sanitation in the nineteenth century. This study shows that significant change occurred earlier and actively involved non-state actors in adapting and popularizing medicine at the local level. By considering the numerous sites where medical science, ideology, and techniques were tested and critiqued, it seeks a more adequate view of scientific culture and enlightened medical programs as the product of diverse laypeople, multiple epistemologies, and longstanding colonial practice.

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## Acknowledgements

In the course of completing this project I have incurred numerous personal and professional debts. The financial support of the University of California's Chancellor's Fund, the University of California Institute for Mexico and the United States (UC MEXUS), the Mabelle McLeod Lewis Memorial Fund, and the Muriel McKeivitt Sonne Chair made possible several extended research trips in archives and libraries. The following repositories and their staffs made available the documentation on which this dissertation is based: in Mexico, the Archivo General de la Nación, the Archivo Histórico del Distrito Federal, the Archivo General Municipal de Puebla, the Archivo General del Estado de Oaxaca, the Archivo de la Mitra de la Catedral de Oaxaca, the Archivo del Poder Judicial de Oaxaca, and the Archivo Histórico del Arzobispado de México, where Berenise Bravo Rubio and Marco Antonio Pérez Iturbe shared their vast learning in Mexican religion; in Spain, the Archivo General de Indias; in the United States, the Benson Latin American Collection at UT Austin, the Francis A. Countway Library of Medicine at Harvard Medical School, the Beinecke Rare Book and Manuscript Library at Yale University, the John Crerar Collection of Rare Books in the History of Medicine at the University of Chicago, the Sutro Library at California State, where Martha Whittaker graciously shared her expertise, the Bancroft Library at UC Berkeley, and especially Walter Brem, former curator of the Mexican collection, and the Latin American Library at Tulane, where Hortensia Calvo and David Dressing took an interest in my project.

Numerous individuals shared their research and expertise. Adam Warren kindly provided unpublished work from his groundbreaking study of medicine and epidemics in Peru. Linda Arnold's determined digitization of guides to Mexican archives has aided many beside myself. The following colleagues and scholars commented on drafts or advised on the general conceptualization of the project: Miruna Achim, Noble David Cook, Victor Goldgel Carballo, Bea Gurwitz, Sarah Hines, John Kelleher, Larissa Kelly, Kinga Novak, Brian Madigan, Sean McEnroe, Matthew O'Hara, Abena Osseo-Asare, Adriana Rodríguez Delgado, Javier Salinas Sáenz, Sylvia Sellers-Garcia, Chris Shaw, and Sarah Wells. For their wisdom, interest, and time I am extremely grateful.

At critical moments, José Hernández Palomo and Brian Connaughton generously provided letters of introduction and support. Brian Connaughton also shared his insights on the Republican era, and I regret having been unable to make better use of his advice in this iteration of the project. At Berkeley, Linda Lewin and Mark Healey supplied crucial intellectual and professional support at the beginning and again toward the end. The theoretical influence of William F. Hanks is apparent in the pages of this dissertation; less obvious is his steady support during graduate studies. I am extremely grateful to Margaret Chowning for her good advice, attention to detail, and help seeing larger conceptual problems, and to William B. Taylor, whose presence throughout could not have been greater and whose scholarly and professional example are sources of inspiration.

The result is for my grandparents, Juana and Leoncio, Mary Jo and Russell, and parents, Laura and Marcos. Their patience for works in progress is unsurpassed.

## INTRODUCTION

### Science in Translation

As Fernand Braudel wrote in his magisterial history of the early modern world, epidemics prior to the nineteenth century were part of ordinary life. Human societies lingered in a biological *ancien régime*, and “wherever he lived, man could only count on a short expectation of life, with a few extra years in the case of the rich.”<sup>1</sup> Those with the means to escape a city or town often did, while those left behind diagnosed, placed blame, and found scapegoats. Through it all people gathered to pray, feast, atone, worship, gossip, and take part in other collective rituals that confirmed solidarity and a commitment to shared values. From bubonic plague up to the contemporary AIDS tragedy, outbreaks of disease have consistently forced communities to reflect on values and conditions of existence in such similar ways that historians have spoken of a “common dramaturgy” and “archetypically patterned responses” accompanying acute disease outbreaks.<sup>2</sup>

In the eighteenth century, the periodic disaster occasioned by epidemic outbreaks became the subject of regular debate as the three great Atlantic empires – France, Britain, and Spain – took part in a complex geopolitical dance. A new science of statecraft and human populations, referred to as mercantilism, or cameralism, focused increasing attention on the health and productivity of populations, which had consequences for taxation, trade, and military strength. The problems of disease, the human body, and the health of society thus became urgent; a quantitative study of populations, achieved by counting births and deaths, helped track life expectancy, health, and the age of a population, and this arithmetic was put to use by absolutist states for more efficient, enlightened statecraft.<sup>3</sup>

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<sup>1</sup> Fernand Braudel, *The Structures of Everyday Life*, vol. 1, trans. Sian Reynolds (New York: Harper & Row Publishers, 1981), 90-2; even the most fortunate regions of Europe could expect periodic epidemics that inevitably subverted or reversed long-term growth in population.

<sup>2</sup> See especially Charles Rosenberg’s synthesis of an epidemic’s dramaturgic forms and aspects in *Explaining Epidemics, and Other Studies in the History of Medicine* (Cambridge: Cambridge University Press, 1992), 278-292, first published as “What Is an Epidemic? AIDS in Historical Perspective,” *Daedalus* 118:2 (1989), 1-17; Paul Slack, “Introduction” to *Epidemics and Ideas: Essays on the Historical Perception of Pestilence* (Cambridge: Cambridge University Press, 1992), 3, where he cites Richard Evans wondering whether a “common dramaturgy” existed in all epidemics.

<sup>3</sup> Dorothy Porter, *Health, Civilization and the State: A History of Public Health from Ancient to Modern Times* (New York: Routledge, 1999); George Rosen, *A History of Public Health* (Baltimore: Johns Hopkins University Press, 1993); Andrea Rusnock, “Biopolitics: Political Arithmetic in the Enlightenment,” in *The Sciences in Enlightened Europe*, eds. William Clark et al. (Chicago: The University of Chicago Press, 1999), 49-68; and Michel Foucault, “The Politics of Health in the Eighteenth Century,” in *Power/Knowledge: Selected Interviews and Other Writing, 1972-1977*, ed. Colin Gordon (New York: Pantheon Books, 1980), 166-182.



The stakes for the Spanish metropolis and its American viceroyalty of New Spain were high. In the eighteenth century, and especially under the enlightened rule of Charles III (1759-1788), the Bourbon Crown introduced reforms designed in part to facilitate exploitation of the mining wealth of the Americas. At the time, mining surpluses just in New Spain, most populous and for most of the period wealthiest of Spain's colonies, contributed nearly half of the empire's mineral wealth.<sup>4</sup> In order to ensure continued revenue, but also reverse the decline of the empire over the previous centuries and defend against real and perceived threats from its geopolitical rivals, Spain's enlightened ministers undertook an aggressive modernizing offensive that had the effect of centralizing power through more formal, rational rule. Reforms affected the economic, political, and social realms, but medical improvements represented a major hope, as the consequences of success in combating disease could be monumental. No longer would Spanish vassals be carried to their graves or rendered lame and unproductive by periodic bouts of smallpox, typhus, and yellow fever. Though scientific practice in the Spanish Peninsula was more fragmented and eccentric than its European rivals, the Crown managed a massive program of reform in the management of epidemics that culminated, in the early years of the nineteenth century, in a global vaccinating campaign.<sup>5</sup> And in part because of the diffuse nature of scientific practice in the Spanish world, this medical campaign ultimately involved a far more numerous and diverse coterie of professionals and laypeople in the American colonies than Spain's ministers ever imagined.

Within this transatlantic context, this study examines the effects of a period of enlightened reform in medicine in dozens of settings of colonial Mexico. Situated at the

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<sup>4</sup> The first (1765) and second (1788) *reglamentos del comercio libre* – Spain's attempts to revise its transatlantic trading system and bolster profit from colonial revenues and markets – was in many respects simply a shortcut, as Barbara and Stanley Stein argue: a turn from the tedious development of domestic industries to an immediately lucrative solution overseas, which spawned a long struggle with vested commercial interests in Cádiz and Mexico City. Its failures notwithstanding, this reorientation in economic policy represented a fundamental change in colonial prioritization that paralleled the sanitation and health policies introduced around the same time – in other words, a related development and context for, if not necessarily cause of, the reforms traced in this dissertation. On the *reglamentos* and the strategic importance of New Spain, Stanley Stein and Barbara Stein, *Apogee of Empire: Spain and New Spain in the Age of Charles III, 1759-1789* (Baltimore: The Johns Hopkins University Press, 2003), 69-80 and 143-175.

<sup>5</sup> On the role of scientific institutions in enlightened Spain's modernization, there is a large literature. For examples, see Francisco Javier Puerto Sarmiento, *La ilusión quebrada: Botánica, sanidad y política científica en la España Ilustrada* (Madrid: CSIC, 1988); Michael E. Burke, *The Royal College of San Carlos: Surgery and Spanish Medical Reform in the Late Eighteenth Century* (Durham: Duke University Press, 1977); and Antonio Lafuente, "Institucionalización metropolitana de la ciencia española en el siglo XVIII," in *Ciencia colonial en América*, Antonio Lafuente and José Sala Catalá, eds., (Madrid: Alianza Editorial, S.A., 1992), 91-118. Except for Barcelona, Spain lacked academies of science or other independent centers of scientific innovation, and reforming ministers came to rely instead on the institutionalization of enlightened learning in scientific centers – the military, research hospitals, botanical gardens, observatories – based in the cities of Cádiz, Madrid, and Barcelona. These centers, highly dependent on the support and initiatives of the Crown, were basically governmental agencies, and therefore oriented toward the fulfillment of its projects of administrative and cultural reform, which included, among other things, eliminating independent guilds and corporations in favor of close supervision of professions and centers of learning, the application of scientific discoveries to industry, statecraft, and commerce, the patronage of new academies of science and learning, which helped bind key institutions of reform to the state, and endorsing a number of scientific expeditions in for cataloging and collecting in the last two decades of the eighteenth century.

nexus of urban and rural communities, the viceregal government, and the Catholic Church, it traces the ways a diverse group of state actors, scientists, professionals, clergymen, and laypeople converged to define, explain, and manage epidemic disease over the course of roughly a century of typhus, smallpox, and cholera epidemics (1736-1833). By privileging the diverse communities that took part, it shows that a great deal of the initiative and resources in this period of change came from non-specialists and non-governmental actors, groups that have often remained at the margins of studies of enlightened scientific practice. Through a more expansive view of scientific culture, it becomes possible to revise, specify, or clarify the dominant view of the Enlightenment in Mexico as primarily an elite, literate, urban phenomenon. To this end, its chapters move between cosmopolitan centers and rural villages in an effort to discern the participation of a more socially heterogeneous society, which often required rather different solutions to disease than those devised in the Spanish metropolis.

In a tangential manner, this study addresses the nature, scope, and successes of the Bourbon reforms. Social reform “from above” initiated a long process of revision in the understanding of a state’s relation to its subjects, in which some of New Spain’s independence as a kingdom (*reino*) was revoked in favor of its subordination as a colony that could contribute to the political and economic interests of the Spanish metropolis. These reforms, which always engendered some protest, included tribute and taxation, trade, the mining industry, the religious orders, and administration, as well as the provision of medicine and emergency relief. This dissertation shows that in this last arena New Spain witnessed broad engagement at the local level: colonial governments, headed by the viceroy in Mexico City and municipal bodies across the viceroyalty, were active, sometimes proactive in matters affecting public health; independent scientists experimented, published, and advised on healing strategies; and an effervescence of scientific inquiry, promoted and patronized by the Spanish state, gradually acquired new audiences among literate laypeople, to the extent that this learning had relevance for their health. In effect, medicine came to encompass not only diagnosis and treatment, but also prevention, primarily as a result of the efforts of American actors. A sea change in the management of disease was the product not only of mercantilist principles, but also of the efforts, protestations, and insights of a number of non-state actors.

The project has its origins in a question about consent. In the absence of force, how were laypeople persuaded to adopt new medical practices that remained at the time uncertain, potentially dangerous, and largely untested? How were changes in the healing arts introduced and received? A preliminary answer came in the figure of Minerva, goddess of wisdom and patron saint of medicine, which I have borrowed as a symbol of this era of enlightened reform. Minerva was featured prominently in a promotional treatise on smallpox inoculation, written and submitted to Mexico City’s municipal council for publication in 1779. The treatise, penned by the French expatriate and physician Esteban Morel, reported the promising results of the first experiments with immunization and featured a series of imagined dialogues with parents in which the physician rebutted their imagined protests. For the frontispiece, Morel imagined a scene of afflicted patients suffering in the shadows at the center of the capital’s central plaza. To one side, bathed in light, a group of vaccinated children would be laughing happily in front of the capital’s municipal building, some holding toys, one held in the arms of a physician, and all under the protection of a Mexican Minerva. The illuminated scene was

supposed to indicate the safety of the procedure, but it revealed certain attitudes toward New Spain's population, who were be kept under the protection of medicine's muse, "shielded" from an abrasive and intemperate introduction of a new medical practice.

Though never published, I have taken the treatise's projected frontispiece as an emblem that represents the way an elite tried to make new techniques and knowledge available to a heterogeneous society. Who would stand in the glow of enlightened healing? How would those of insufficient talents be prevented from putting their hands, as the creole polymath José Antonio Alzate y Ramírez later wrote, on the altars of Minerva?<sup>6</sup> How would medicine's wisdom and the right to enlightened health care be extended to Spanish subjects? Though some dismissed the notion of participation by the lower classes, these concerns were real and widely discussed, and many were hopeful as they sought to usher Mexico's population into a new era of preventive medicine. Minerva is a provocation, intended as a way to begin reckoning with the ways a novel scientific learning was translated for, appropriated, and scrutinized by non-scientific audiences. It serves as a point of entry for a consideration of intellectual assessments about laypeople and their capacity for enlightened medicine, rational science, and other modern things, and ultimately of the perceptions and interpretations of many more communities remaining in the shadows of narratives of this era of enlightened medicine.

### **Smelling Sickness: The Popular and the Enlightened in Health Care**

To see the obstacles to a more inclusive history of this era of enlightened disease management, some initial discussion of the significance of the category "enlightenment" and the epistemic shift it is supposed to have augured is necessary. For decades, scholars of the Spanish American Enlightenment understood the category as a search for "useful" knowledge that came not only from France but also from England, Italy, and Germany. It was particular in its timing, content, and protagonists, moreover, and could be as conservative in its application as revolutionary or liberating.<sup>7</sup> Along the way, these early lessons were ignored. For the late François-Xavier Guerra, enlightenment became interchangeable with modernity and identified with the political culture of France. The influential French scholar – influential because of the way he institutionalized the study of Atlantic Independence at the Sorbonne during his tenure there – sought an explanation for the shared features and simultaneity of Independence movements across a highly diverse territory and ultimately argued that something "radically new" was present in the outlook of those who participated in revolutionary processes.<sup>8</sup> An "eruption of Modernity" had taken place in the final decades of *ancien régime*, he argued, when new forms of sociability created a shared mental universe or system of references (*sistema de referencias*) that gave primacy to the individual and pursued an idea or ideal of society as

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<sup>6</sup> *Asuntos varios sobre ciencias y artes* no. 1 (November 2, 1772), in José Antonio de Alzate y Ramírez, *Gacetas de literatura de México* (Puebla: Hospital de San Pedro, 1831), 85.

<sup>7</sup> Arthur Whitaker, "The Dual Role of Latin America in the Enlightenment," in *Latin America and the Enlightenment*, ed. Arthur Whitaker (New York: D. Appleton-Century Co., 1942), 3-21.

<sup>8</sup> On François-Xavier Guerra's influence on studies of revolutionary liberalism, see Alfredo Ávila, "De las independencias a la modernidad: Notas sobre un cambio historiográfico," in *Conceptualizar lo que se ve: François-Xavier Guerra, historiador, homenaje*, eds. Erika Pani and Alicia Salmerón (Mexico: Instituto Mora, 2004), 76-112.

a voluntary association of such individuals. Guerra posited a shared political sphere in publications of books, pamphlets, and periodicals, which peaked in the years of revolution, and in which a modern, literate intellectual and social elite (including clergymen, lawyers, military men, and the nobility) participated. Though the proliferation of the printed page made possible considerations of questions of political culture (rights, obligations, authority, sovereignty, etc.), the answers, he concluded, flowed from “center” to “periphery” – from France, the center of Enlightenment, to the Iberian Peninsula and finally, following the establishment of a free press in 1812, to the coasts and major cities of New Spain.<sup>9</sup> While Guerra refined and updated the argument, often in conversation with his colleagues, the underlying assumptions about the centrality of the written word as a quintessentially modern form of sociability remained.<sup>10</sup>

Worth noting is that in this thesis, what Guerra called the “geography of modernity” coincided almost perfectly with those places in which printing activities and literacy rates were high. The “Republic of Letters” included literate elites, usually male, in urban centers such as Mexico City (second in publishing only to Madrid). Positing an oral-literate dichotomy, Guerra thought that the former pole had to be somehow overcome in order for modernity to prosper – in Mexico’s case, bridged through education. There is much to admire in diffusionist studies such as Guerra’s, but also much with which to take issue, and in the latter respect the recent intervention of Jorge Cañizares-Esguerra has posed a major challenge to depictions of Europe (specifically France) as the center of the Enlightenment. Cañizares-Esguerra’s *How to Write the*

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<sup>9</sup> François-Xavier Guerra, *Modernidad e independencias: Ensayos sobre las revoluciones hispánicas* (Madrid: Editorial MAPFRE, 1992), 11-15, 46-7, 85-113, and 275-318. Guerra discounted tertulias and other non-virtual associations insofar as they continued to be organized by ties of friendship, kinship, paternalism, etc. He comes closest to challenging his thesis when considering revolutionary movements that occurred in the near total absence of print publications, as in Caracas, pp. 108-9. In such cases, however, a public space continues to be constituted by the exchange of print culture and thus defined by literacy: “*está estructurado, más que por la prensa y por la abundancia de libros, por prácticas culturales. Las redes de correspondencia hacen circular muchos manuscritos y los escasos impresos de que se dispone; y el préstamo y la lectura en común aumentan la difusión de papeles de orígenes diversos, pero provenientes sobre todo de aquellos en los que la libertad de reunirse y de publicar permite el ‘progreso de las luces’.* Estos últimos lugares, muchas veces lejanos, suplen las carencias estructurales de las zonas periféricas, o los obstáculos temporales que las medidas políticas restrictivas imponen a otras.”

Challenging the idea that a uniform nationalist sentiment precipitated revolutionary movements, Eric Van Young has questioned Guerra’s quantitative analysis of publishing activities, pointing out that an upswing *followed* rather than preceded the early independence movements. See “The Limits of Atlantic-World Nationalism in a Revolutionary Age: Imagined Communities and Lived Communities in Mexico, 1810-1821,” in *Empire to Nation: Historical Perspectives on the Making of the Modern World*, eds. Joseph Esherick et al. (New York: Rowman & Littlefield Publishers, Inc., 2006), 46f and note 22.

<sup>10</sup> Like oral culture, François-Xavier Guerra saw religion as mostly incompatible with modernity, placing it in the “traditional” column as if to quarantine it from the march of change. For example, despite what he acknowledged to be the nationalizing potential of a population united under the banner of a single Catholic faith, religion also tied communities to the Catholic monarchy, and even more ominously for modernity, represented a cellular form of sociability that inhibited modern nationalities and habits of political association. E.g. François-Xavier Guerra, “Las mutaciones de la identidad en la América hispánica,” in *Inventando la nación*, eds. Antonio Annino and François-Xavier Guerra (Mexico: Fonda de Cultura Económica, 2003), 185-220, on 202: “*De esta identificación del catolicismo con la lealtad monárquica resultará poco después la dificultad de concebir la Independencia: ¿cómo se puede ser, al mismo tiempo, independiente, republicano y católico?*”

*History of the New World: Histories, Epistemologies, and Identities in the Eighteenth-Century Atlantic World* argues that the evidentiary base used by creole intellectuals in Mexico City was eclectic and in many respects not literary at all. Their outlook took shape in an “aggressively modern” historical project that displayed at once Americans’ critical capacities, privileged access to sources (by virtue of residence in the colonies), and independence of Spanish historians and histories. Though the modern project relied on techniques of literacy, it actively sought out non-literary sources for analysis, including glyphs, monumental architecture, and Mexican antiquities and bringing a “Baroque American epistemology” to the enterprise of reading and interpreting texts and signs. Though the protagonists are similar to Guerra’s – a creole elite in a cosmopolitan center of the Atlantic World, including clergy, students, and intellectuals – the political pamphlets are conspicuously absent, in part because Cañizares-Guerra is more interested in the evolution of identity and patriotic sentiment in scientific productions than in political philosophy.<sup>11</sup>

Cañizares-Esguerra’s work has the effect of shifting the analysis back to this side of the Atlantic as it stresses that the terms and content of the Enlightenment were structured along often very different lines or “epistemologies” than in Europe. In so doing, the study nevertheless perpetuates some familiar tendencies. Both he and Guerra, for example, begin with the premise that only certain sectors of society could at this moment be modern,<sup>12</sup> a position made explicit by Cañizares-Esguerra in a subsequent collection of essays on the history of science in the colonial Spanish world, where he writes that this history, “by and large, does not belong in the ‘non-Western world’. The scientific practices and ideas that became dominant were those brought by Europeans as they strove to create stable, viable colonial societies.”<sup>13</sup> The field of scientific activity thus tends to be conceived in modern Western terms and within the fairly contained world of cosmopolitan Mexican elites.

As much as understandings of Enlightenment have been revised, it remains difficult to shake the notion that a critical “willingness to question authority,” which Cañizares-Esguerra construes as a fundamental characteristic of a “modern” epistemology, was for the most part limited to elite, literate circles. The construal of the modern critical mind’s genesis at the upper echelons is a natural result of the objects of study – political philosophy, social reform, scientific investigation, history writing, etc. –

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<sup>11</sup> “The intellectual and cultural histories of colonial Spanish America have more often than not been captured in shibboleths. Perhaps a second look at the *radical modernity* of the Spanish American Baroque could in the same critical spirit of the patriotic epistemologists reviewed in this book begin decentering the Euro- and Anglocentric models that dominate the field.” Cañizares-Esguerra, *How to Write the History of the New World* (Stanford: Stanford University Press, 2001), 344, emphasis added.

<sup>12</sup> E.g., Guerra, *Modernidad e independencias*, 96: “La modernidad se propaga casi siempre desde arriba, como un esfuerzo pedagógico para difundir ‘las luces’.”

<sup>13</sup> Jorge Cañizares-Esguerra, *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World* (Stanford: Stanford University Press, 2006), 46-47. Cañizares-Esguerra explains the absence of indigenous science by pointing to the simplifications in social hierarchy experienced by once-complex Inca, Maya, and Aztec civilizations, suggesting the accompanying decline of the priests, scribes, and intellectuals who produced scientific knowledge and asked the important theological and cosmological questions prior to the arrival of the Spanish. What remained in the aftermath was a hybrid “folk Catholicism,” largely popular knowledge relegated to the margins of colonial society with little relevance for colonial science or for the volume of essays.

and also a more deeply ingrained proposition underlying our understanding of enlightenment as historical period and intellectual trend. Insofar as histories of science are about national historiographies and progress, they tend to highlight the accomplishments of creole classes that most actively fueled Iberian expansion in the early modern world (those who subsequently formed the backbone of the new nations). But it seems an opportune time to ask harder questions of the implications of this approach.

The extreme version of a critique can be found in the condemnation of Max Horkheimer and Theodor Adorno, who in *Dialectic of Enlightenment* (1947) went so far as to equate enlightenment with totalitarianism. By then witness to two wars and the fascist turns of the most civilized European states, they viewed scientific thought as similar to the mythology it replaced: there was a magical quality in scientific manipulation of the world, in the way it rendered homogenous what it sought to classify and know. They charged that insofar as the new “instrumental reason” brutally eliminated what did not conform, and insofar as the “corrosive rationality” excluded and destroyed what was not knowable, the new epistemology was marred by violence and carried the seed of its own undoing. The destructive side of ideals such as progress came to predominate as reason was wielded as a weapon by ruling classes against the masses of humans excluded from the leveling, homogenizing apparatus.<sup>14</sup> The unknown had to be made known, with any incongruous remainder destroyed.<sup>15</sup>

The problem they posed, by implication, was whether and how a heterogeneity naturally opposed to the universalizing intended by the Enlightenment could be maintained and valued, or whether as a result of its reason a large majority of the population was to be excluded de facto from participation in the modern forms of sociability these concepts described. Was enlightened science in reality over the heads, or naturally exclusive, of most of those living beyond the orbit of Mexico City? Assumptions about the relation of peasants, religious actors, and non-literate communities to scientific practice, enlightened processes, and other modern things have a long history. Since as early as Galileo, commentators have taken modern science to be irreconcilable with the beliefs, worldview, competencies, and language of common laypeople. These have rarely been seen as part of the enlarged public to which new science was directed and disseminated, which has helped keep rural Mexico at the margins of these studies of enlightenment science. To a great degree, the problem of science and its scope in colonial Mexico is one of perspective and definition: how are the dominant “practices and ideas” that we study and that contemporaries debated determined, and by whom? By restricting at the outset the big issues and dominant ideas to a few problems (nationalism, the decline of empire, and history of Mesoamerican artifacts), there has been little for most ordinary laypeople – peasants, artisans, weavers, parents, and others who were not trained scientists, technicians, inventors, natural historians, collectors, or state functionaries – to add. The assumption is that most laypeople in New Spain, over ninety percent rural at the close of the colonial period, went

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<sup>14</sup> Horkheimer and Adorno, *Dialectic of Enlightenment*, trans. Edmund Jephcott (Stanford: Stanford University Press, 2002), 1-34. For their intellectual and political context and legacy, see Dorinda Outram, “The Enlightenment Our Contemporary,” in *The Sciences in Enlightened Europe*, eds. William Clark et al. (Chicago: The University of Chicago Press, 1999), 32-40.

<sup>15</sup> Horkheimer and Adorno, *Dialectic of Enlightenment*, 9: “it amputates the incommensurable.”

about their lives oblivious to scientific activities in places like Mexico City. These groups did not, strictly speaking, consume the science of Mexico City's literary journals as part of its reading public, or contribute much to its production by way of debate, writing, invention, experimentation, or collection. They were marginal insofar as most lived in rural areas, outside of the centers of policymaking, experimentation, and publication, and were less involved in industry and the major problems of statecraft.

In fact this perspective has implications for the politics of inclusion and exclusion in early modern science. This politics was anything but consistent or uniform: while there were some in New Spain who believed that new scientific learning could not be spread to the lower classes – that science, as Galileo thought, was not fit for the minds of vulgar people – many more at every level of colonial society saw that new medical science could accord with popular views and attempted to close a perceived educational and cultural gap in order to make new learning not only accessible but agreeable to the unlettered.

Why this might have been so becomes clear in the light of literature on the practice of enlightened science. Despite the stress on *philosophes*, political philosophy, and the world of ideas, it is worth recalling the early lesson that a great deal of enlightened learning in Latin America found its fulfillment in action and work – in mines, in agriculture, in hospitals and other places of medicine, and in the collection and administration of botanicals.<sup>16</sup> For decades, studies of Latin American science have paid close attention to the resulting diversity of scientific practice when applied in a multitude of institutions and social fields.<sup>17</sup> Histories of science show that enlightened learning in Latin America was anything but disinterested or detached from colonial institutions, and that only a careful consideration of science's places can reveal the multiple imbrications of philanthropic and commercial interests that characterized scientific work. At the risk of overstatement, what was worth knowing, and what contemporaries paid most attention

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<sup>16</sup> Among others, Alberto Saladino García makes a similar point in his study of the content of enlightened periodicals that flourished in Latin America in the last decades of the eighteenth century. “*Cierto es que se cultivaron ciencias como la astronomía y la matemática, pero fueron preferidas y mayormente apoyadas las ciencias que aportaban saberes útiles, de empleo inmediato como la botánica, la física experimental, la química y la mineralogía. Los resultados de las investigaciones en esos campos del conocimiento científico buscaron o tuvieron aplicación en los ámbitos de la alimentación, comercio, industria, medicina, etc.*” Alberto Saladino García, *Ciencia y prensa durante la ilustración latinoamericana* (Mexico City: UNAM, 1992), 323 and passim. See also Arthur Whitaker, op. cit.

<sup>17</sup> For example, to understand natural history collecting as an enlightened phenomenon, it was necessary to understand a brand of practice pioneered by the clergy, especially the Jesuits on the frontiers of Spanish America in the seventeenth century; one leaned on by technicians working in urban and mining centers, especially engineers; and a tradition of questionnaires and expeditions intended for the accumulation and classification of animal, mineral, botanical, and cultural artifacts that originated in the Spanish metropolis and grew especially important in the final decades of the eighteenth century. These studies of science in action were partially a reaction to prior developmentalist studies that saw science as an instrument to promote national development and incorporation into the so-called First World, or an explanation for a perceived backwardness. See Juan José Saldaña, “Introducción: Teatro científico americano,” in *Historia social de las ciencias en América Latina*, ed. Juan José Saldaña (Mexico: UNAM, 1996), 7-41; Antonio Lafuente and Leoncio López-Ocón, “Tradiciones científicas y expediciones ilustradas en la América hispana del siglo XVIII,” in *ibidem*, 247-281; and Antonio Lafuente and José Sala Catalá, “Ciencia y mundo colonial: el contexto iberoamericano,” in *Ciencia colonial en América*, eds. Lafuente and Sala Catalá, 13-25.

to, was what was relevant or pragmatically useful in a place or to a particular community. One conclusion is that major change is not to be found in the emphasis on empiricism, classification, or rationalism – aspects traceable to the Renaissance – but rather in a more efficient application of this learning to the ends of enlightened states and social groups.<sup>18</sup> In the eighteenth century, to know a territory still meant to possess its population, but knowing could facilitate the creation of new products for trade and commercial profit or the production of pharmaceuticals to conserve the health of subjects (and thus the workforce), all of which bolstered revenue. For good reason, we are now far less likely to speak of science in the abstract or to view accumulated social facts apart from their social, regional, and political contexts.

A more recent surge of interest in the sciences of the eighteenth century has further transformed the field. Among other things, these studies demonstrate the major contributions of indigenous healing and *materia médica* to a newly commodified European pharmaceutical trade,<sup>19</sup> the role of journals and the creation of a reading public in the dissemination of debates and discoveries of indigenous medications,<sup>20</sup> and the commercial and geo-political consequences of Spain's scientific expeditions to the Americas.<sup>21</sup> Especially strong on the transatlantic world, national identity, and the practices of a literate and “ideal cosmopolitan community of scientists” in Mexico City, they also demonstrate the eighteenth century to be one of great change in scientific practice and make clear the many ways colonial knowledge was appropriated for international markets and the maintenance of national and imperial status.<sup>22</sup>

Despite these advances, it remains the case that if peasants were participating in applications of medical science in this enlightened era of knowledge production, we would be unprepared and poorly positioned to see it. To begin, it seems safe to say that in

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<sup>18</sup> Historians have traced the questionnaire system, employed in the eighteenth century for the methodical accumulation of economic and social data, to the sixteenth century, the era of the *relaciones geográficas*. The paucity of questionnaires in the seventeenth century has been addressed, as well: Pilar Ponce considers the role of the Society of Jesus as cosmographers and cartographers and suggests that their expulsion in 1767 required renewed consideration of the scientific endeavors and functions that the Society had previously assumed for itself. See Ponce, “Burocracia colonial y territorio americano: Las Relaciones de Indias,” in *Ciencia colonial en America*, eds. Lafuente and Sala Catalá, 29-44.

<sup>19</sup> See the essays in *Science in the Spanish and Portuguese Empires, 1500-1800*, eds. Daniela Bleichmar, et al. (Stanford: Stanford University Press, 2009).

<sup>20</sup> Miruna Achim, *Lagartijas medicinales: remedios americanos y debates científicos en la Ilustración* (México, D.F.: UAM Cuajimalpa, 2008).

<sup>21</sup> Antonio Lafuente and Nuria Valverde, “Linnaean Botany and Spanish Imperial Biopolitics,” in *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*, eds. Londa Schiebinger and Claudia Swan (Philadelphia: University of Pennsylvania Press, 2005), 134-147; Paula De Vos, “Natural History and the Pursuit of Empire in Eighteenth-Century Spain,” *Eighteenth-Century Studies* 40:2 (2007), 209-39, and “Research, Development, and Empire: State Support of Science in the Later Spanish Empire,” *Colonial Latin American Review* 15:1 (2006), 55-79; and David Weber, *Bárbaros: Spaniards and Their Savages in the Age of Enlightenment* (New Haven: Yale University Press, 2005), which examines how ideas about collecting, artifacts, civilization, and empire in the “age of reason” impacted and involved societies on the frontiers of the Spanish Empire.

<sup>22</sup> The phrase is from Anna More, “Cosmopolitanism and Scientific Reason in New Spain: Carlos de Sigüenza y Góngora and the Dispute over the 1680 Comet,” in *Science in the Spanish and Portuguese Empires*, 118.



light of the finding that so much of ostensibly Western medicine began as non-Western knowledge, it seems counterproductive to try to untangle once and for all the Western and non-Western worlds in matters of science. It also seems unnecessary to define the major problems at the outset: a more adequate approach would do justice at once to the bigger issues as these were defined by the interests of intellectuals and functionaries (e.g. what to do about the decline of the Spanish empire in Europe; how taming disease could bolster industry; what was uniquely American about science) while keeping in view a wider audience for empirical medicine, with their attendant ways of experiencing and defining disease, to understand how lay societies lived in relation to, and periodically impacted, these global processes. Though scientific culture, or the way scientific practice intersects with society, might have been rather narrowly conceived in journals and academies, during epidemics, innovations in scientific knowledge underwent a number of reformulations or *translations* in a dual sense: a physical relocation to new places and a conversion of the method into other media and forms. The consequences would have implications for the lives of ordinary people throughout New Spain. In these moments, medical science acquired relevance for “consumers” far beyond those who actually read scientific journals and followed their debates. If not strictly speaking early modern science’s public, ordinary people in New Spain – agriculturalists, artisans, day laborers, mothers, the urban underclass – felt its effects in powerful and as yet unexplored ways.

Let me suggest briefly some of the kinds of studies that, in addition to *How to Write the History of the New World*, have paved the way for a reassessment of the role of literacy, and thus the potential role of non-literate groups, in enlightened learning. In a study full of reproductions of eighteenth-century paintings, picture books, and frontispieces to pedagogical texts, art historian Barbara Maria Stafford argues for the importance of a visual component within the growing entertainment industry in Enlightenment France, where learning and self-improvement (and access to a new experimental science), she argues, were achieved in large part through non-textual, non-literary pursuits and pastimes, long neglected in scholarship on the period. So entrenched was this penchant that she is able to speak of the “vernacular oral-visual world of the *ancien régime*.”<sup>23</sup> Two contributions to a recent collection on science in the Spanish Empire focus on less commonly studied dimensions of the eighteenth-century natural history expeditions and their collecting activities. Paula de Vos shows that a hunger for curiosities, rarities, and the extraordinary in these collections was actively pursued despite expectations that interest in the public utility of the collections would supersede this dimension,<sup>24</sup> while the central role of illustrations in these expeditions leads Daniela Bleichmar to argue for visual culture as a technique that continued to facilitate the classification and accumulation of a good deal of scientific knowledge.<sup>25</sup> Further afield,

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<sup>23</sup> Barbara Maria Stafford, *Artful Science: Enlightenment Entertainment and the Eclipse of Visual Education* (Cambridge: MIT Press, 1994), xxiv. Stafford finds continuity with baroque pedagogy, but concludes that the oral-visual culture she traces was finally “eclipsed” in and through the emergence of experimental science.

<sup>24</sup> Paula De Vos, “The Rare, the Singular, and the Extraordinary: Natural History and the Collection of Curiosities in the Spanish Empire,” in *Science in the Spanish and Portuguese Empires*, 270-289.

<sup>25</sup> Daniela Bleichmar, “A Visible and Useful Empire: Visual Culture and Colonial Natural History in the Eighteenth-Century Spanish World,” in *ibidem*, 290-310.

the studies of French historian Alain Corbain touch not on the visual but on the olfactory and auditory registers as ways of knowing and communicating in eighteenth- and nineteenth-century France. In *Village Bells* he showed that the revolutionary campaign against bell ringing in rural France gave way to a re-sacralization of an “auditory landscape” in the nineteenth century. As a result, the auditory channel continued to hold a “density of truth” perhaps more remarkable to us than it would have been to contemporaries.

It was through ringing that knowledge about others was transmitted, an indispensable function in a society defined in terms of mutual acquaintance. Bells provided a sort of auditory certification, transmitted information about the major events of private life, and solemnized rites of passage. When natural disaster threatened, when bandits or enemies loomed, when a fire took hold, only the tocsin could sound the alarm. Possessing a peal of bells was a prerequisite of modernity in a society increasingly subject to haste but as yet without any other means of transmitting information simultaneously.<sup>26</sup>

The social significance of bell ringing was its ability to transmit messages and news of events from a national sphere lying beyond the village proper; global and local, elite and commoner came together in the sensibilities and significations of sound. A heightened sensitivity to smells in the same period shaped what contemporaries deemed healthy and unhealthy, as Corbain argued in a previous study. This sensitized olfactory register contributed to a “perceptual revolution,” in which scientists and communities of experts, by weighing, measuring, and classifying exhalations, bestowed a precision in definitions and quantifications of disease that filtered down to the population. Consequently, a substance such as vinegar, key in France’s battle with miasmatic putrefaction, reflected a relationship between chemical science and broader cultural practice. “We have lost sight of that connection,” Corbain noted, “because we operate with a history of science that favors the discovery of scientific truth and neglects the history of scientific error.”<sup>27</sup>

I take these histories of the senses as a starting point in analyzing the ways communities in Mexico coped with epidemic disease. Though bells appear only peripherally, they were central in Mexico’s medical history: the aural, oral, olfactory, and tactile registers helped transmit information about disease, and their continued ubiquity indicates that even for those most wedded to notions of medical empiricism, a plural epistemology continued to shape the accumulation of medical knowledge. Ritual performances in cities and villages herded members into and around churches to witness the spectacle of modern vaccine, to hear sermons on its benefits and to sing paeans to the “medical miracle.” Epidemics left behind documents sprinkled or sprayed with vinegar, stained where drops landed and now filed away in archives in Mexico and Spain. They are the material remnants of an understanding of illness and disease peculiar to a time when disease was invariably smelled. Whereas Corbain sees scientific classification as a movement from top to bottom, however, in New Spain this activity was a reciprocal

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<sup>26</sup> Alain Corbain, *Village Bells: Sound and Meaning in the 19<sup>th</sup>-Century French Countryside*, trans. Martin Thom (New York: Columbia University Press, 1998), x.

<sup>27</sup> Alain Corbain, *The Foul and the Fragrant: Odor and the French Social Imagination* (Cambridge: Harvard University Press, 1986), 15, 44f, and 49.

engagement with longstanding popular understandings of disease and contagion. In the acrid paper that passed between officials, in the perfumed streets of Mexico City during typhus epidemics, and in the numerous volleys of canon and rifles that purified pestilential air, ways of knowing disease and medicine through the eyes, ears, and nose made possible some surprising transformations in the management of epidemic disease at the turn of the nineteenth century.

In sum, and at the risk of putting too fine a point on the problem, the historiography has made clear, on one hand, that Mexico in the eighteenth century was modern in unique ways; on the other, it has generally neglected the way the various parts of New Spain's society might have fit into the whole of this particular historical puzzle. Enlightenment and modernity in Mexico remain more or less elite, and the many peasants in the colony's history remain awkwardly on the sidelines. We know little about the process by which they were excluded from such conversations, often assumed rather than critically examined. A more precise definition of modernity is stymied by a lingering belief that it means secular, empirical, or philosophical, and peasants, it seems, were rarely any of those things. A considerable challenge lies in the tendency to correlate modernity with a linear process by which the population acquired access to or familiarity with the techniques of reading and writing. Reevaluations of the uses of writing have begun to change this. For example, it bothered modernizers that so many dialects of Spanish and such a diverse array of languages continued to flow forth from the mouths of citizens because speaking, as much as writing, formed the identity and integrity of modern nations.<sup>28</sup> The reduction of culture, law, and citizenship to written technologies has a long, complex legacy in the Western world, one that many elites in Latin America pursued and reified in the nineteenth century, but one that should not prevent the search for other modes and modalities of thinking and acting. As ethnohistorical studies of healing suggest, a complex of rituals, therapies, and diagnostic strategies brought diverse solutions to problems of disease.<sup>29</sup> Catholic liturgical performances were common ways of framing and resolving disease; well into the national period colonial Mexico remained a place of ceremony and theater where people supplicated and narrated suffering with their hands, feet, eyes, and ears more than in letters or journals. The aim is not to exclude those who read and published but to insist that this activity did not exhaust the ways they apprehended and classified disease, and that sight, sound, speech and the senses in general played an important part in the creation of Enlightened men and women.

To return to the Enlightenment against which Horkheimer and Adorno devastatingly wrote, the exclusionary and destructive tendencies they identified were not

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<sup>28</sup> Studies of the role of the press in Latin America's insurgency period are reassessing the written word, suggesting that its true political import can only be understood in relation to the spoken word, even after Independence, when nation-building elites were far more likely to associate writing with civilization. See the contributions to Iván Jaksic, ed., *The Political Power of the Word: Press and Oratory in Nineteenth-Century Latin America* (London: Institute of Latin American Studies, 2002), especially those of Rebecca Earle and Sol Serrano and Iván Jaksic.

<sup>29</sup> Gonzalo Aguirre Beltrán, *Medicina y magia: El proceso de aculturación en la estructura colonial* [Medicine and Magic: The Process of Acculturation in the Colonial Structure] (México: INI, 1963); Noemí Quezada, *Enfermedad y maleficio: El curandero en el México colonial* [Sickness and Spells: The Shaman in Colonial Mexico] (México: UNAM, 1989).

a given at the time, and it makes little sense for historians to assume otherwise.<sup>30</sup> The ubiquitous Spanish vinegar that continued to be used in Mexico's epidemics can be taken as an important reminder of so much that did not change in the midst of numerous ruptures and the increasing prestige and attraction of medical empiricism. At the start of the nineteenth century, as "expert" opinion in Mexico began to encourage vaccination for smallpox, physicians continued to prescribe bonfires and fumigation of clothing in order, as they put it, to "purify" the air and "promote ventilation." Pamphlets published with instructions for vaccination noted the harms of eating chile and other "stimulating condiments" and encouraged residents to sprinkle their homes liberally with vinegar. These curious inclusions were not anachronisms or aberrations, but rather represent the accommodations and points of coincidence of multiple kinds of knowledge.

### **Explaining Religion**

As historians correct outdated Black Legend ideas about the absence of original scientific activity once thought to characterize Spanish America, they continue to think through the problematic relation of religion to narratives of modernity in the Enlightenment.<sup>31</sup> For Mexico, Pamela Voekel's *Alone before God: The Religious Origins of Modernity in Mexico* offers the most provocative recent reassessment of the supposed shift in epistemological authority from religion to medical empiricism. Voekel traces changes in the communal dimensions of dying and salvation the eighteenth-century Mexico, gathering evidence from wills of wealthy testators in Mexico City – merchants and their wives, physicians, secular clergy, government bureaucrats, among others – as well as correspondence and legislation on cemetery reform to argue that a reformed piety or sensibility in religious matters came into being in this period among self-described *sensatos*. This change was reflected in a declining interest in the patronage of saints and elaborate mortuary rituals and the willingness of a clerical elite to form a fairly easy alliance with public health reformers over cemetery reforms. The more offensive, anti-clerical notions of the *philosophes* were avoided in favor of a cautious marriage between medicine and religion. In the nineteenth century, however, the enlightened clerics who eagerly pronounced in favor of empiricist approaches to medicine and health subsequently found themselves and their theological justifications for cemetery reform irrelevant. "The clerical proponents of the new piety gave birth to the new [professional and evidence-based] epistemology, only to suffer mortally at the hands of their ungrateful heir." Now physicians and secular bureaucrats rather than religion would be looked to for supporting evidence, and with new medical institutions in the Republican period the maintenance of burial and cemetery administration was left firmly in control of secular health organizations.<sup>32</sup>

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<sup>30</sup> One would want to avoid the utopian vision in which period is the origin and sole locus of ideals of criticism, freedom, egalitarian political organization, and progress; see, for example, the reclamation of this understanding proposed in Stephen Eric Bronner, *Reclaiming the Enlightenment: Toward a Politics of Radical Engagement* (New York: Columbia University Press, 2004).

<sup>31</sup> Jorge Cañizares-Esguerra, "Introduction" to *Science in the Spanish and Portuguese Empires*, 1-5.

<sup>32</sup> Voekel, *Alone before God: The Religious Origins of Modernity in Mexico* (Durham: Duke University Press, 2002), 9-10, 189 (for a qualified formulation), 197, 199-201, 205-208, and 184.

Voekel's study is a good example of the new emphasis on local and plural forms of Enlightenment and a point of reference for the current study of the relevance of religion in epidemics and medicine. When turning to "modernity," the ostensible subject of Voekel's study, a "medical empiricism" can only be consummated through a negation of religious precursors and participants. On a superficial level, some objections to this zero-sum view could be made on the basis of the Catholic Church's institutional predicament in the Republican period. Was its supposed irrelevance the product of a decisive shift in epistemology – in the ways people validated ideas about disease – or does Voekel take a temporary power vacuum at the upper strata of the ecclesiastical hierarchy and unclear jurisdictional boundaries in the post-Independence period for something deeper?<sup>33</sup> This process of medical reform and the epistemological change of which it was part does not necessarily require, or even demonstrate, the irrelevance of theology, the high clergy, or religious rituals in matters of public health.

Voekel's argument about the continued relevance of religion and religious institutions for an enlightened elite in New Spain betrays broader assumptions about the relation of religious epistemologies to an objective medical empiricism. What are the origins of this assumption? Recent studies of the sharply contrasted tones of black and white in eighteenth-century France, where religion clashed with philosophy, God with reason, the spiritual with the secular, demonstrate that oppositions were historically contingent and reiterate that there was nothing intrinsically irreconcilable between religion and secular philosophy. Catholic "opponents" of the Enlightenment objected to a particular brand of "modernity" and were not for that reason "anti-modern," but rather made prescient predictions about a society in which the liberated individual ran free in pursuit of his or her own self-interest. They imagined a new, changed relevance for religion within a radically altered political order and put print media (appropriated from the *philosophes*) to good use for the publication of their ideas.<sup>34</sup> Scholars have proposed

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<sup>33</sup> For years (1823-1840) Mexico lacked an archbishop to head the church, with the Vatican declining to appoint so long as the newly independent nation refused to make amends with Spain, and yet as Brian Connaughton shows in his analysis of the sermons of the high clergy in the diocese of Guadalajara, many continued to view themselves as essential mediators between a reforming liberal state and its populace through this tumultuous period. Brian Connaughton, *Clerical Ideology in a Revolutionary Age: The Guadalajara Church and the Idea of the Mexican Nation, 1788-1853*, trans. Mark Healey (Boulder: University Press of Colorado, 2003). In more recent publications Connaughton goes beyond the high clergy, finding in popular expressions of Catholic pride in the decades following Independence a continued investment of legitimacy in faith and religious agents, e.g. Brian Connaughton, "Los curas y la feligresía ciudadana en México, siglo XIX," in *Las nuevas naciones: España y México, 1800-1850*, ed. Jaime E. Rodríguez (Madrid: Fundación MAPFRE, 2008), 242-272. For the colonial period, Matthew O'Hara has made a case for the reiteration of local corporate religious identities and politics in Mexico City as a consequence of Bourbon reforms, "A Flock Divided: Religion and Community in Mexico City, 1749-1800" (Ph.D diss., University of California San Diego, 2003), and also Matthew O'Hara, "Stone, Mortar, and Memory: Church Construction and Community in Late Colonial Mexico City," *Hispanic American Historical Review* 86:4 (2006): 647-680.

<sup>34</sup> Warfare and apocalyptic clash provided the analytical and rhetorical frameworks for "anti-*philosophie* discourse" in the last decades of the eighteenth century, when growing popularity of these authors and the seeming ubiquity of notions of atheism, deism, materialism, and the will of the rational individual compelled those on the other side to publicize their opinions on the rational individual and the consequences of a secular society in sermons, pastoral letters, literary works, pamphlets, and finally periodicals. The Right defined the *philosophes* as die-hard enemies of religion intent on carrying out an upheaval, while the *philosophes*, in print and otherwise, produced the ostensible foes of philosophy –

salvaging enlightenment studies by rethinking religion as an analytical category: pointing to the politics of religion of the United States, Jonathan Sheehan notes that the decline of religion and its ideological force is by no means an inevitable consequence of a supposed secular modernity, and argues for a reassessment of “the ostensible birthplace of secular modernity, the Enlightenment.” The solution in this case is to disassociate the concept from the common philosophical and intellectual perspective by which it has been studied, stressing that religion can be understood in its anthropological, social, ideological, and institutional aspects, in addition to emphasis on “belief” followed by enlightened societies of the eighteenth century. “Each of these [other] visions shifts not only the kind of relationship possible between the Enlightenment and religion but also the story we can tell about religious transformation.”<sup>35</sup>

Historians trying to bring religion back into studies of the national period of Mexico have been left struggling to explain a cyclical “rise” from the ashes. A recent collection of essays on “religious culture in modern Mexico” is overall adamant that “the late nineteenth century witnessed resurgence of spirituality and Catholic activities.”<sup>36</sup> The familiar question is how, after so many years of Church-State conflict in Mexico, could there be so much religiosity. How can this seeming historical aberration be explained? Mexico has become a source of amazement, full of religiosity despite attacks by enlightened reason, liberal reforms, capital investment, revolutionary politics, and globalization. One interpretation proposed is that Mexico’s has always been a deeply religious culture, and that such religiosity has acquired and required expression in powerful symbols such as the Virgin of Guadalupe, which allowed expression of this deeply religious society. But there is a clear tautology in these formulations: collective religiosity always exists in some “deep structure” ready to fill an empty vessel – devotional societies, patron saints, a miraculous well – in the absence of the institutional Church, or in the material and spiritual “vacuums” left behind as a result of secularism and secularist philosophies.<sup>37</sup> In a provocative essay Fernando Cervantes invokes the “ritual constant” of Mexican history, arguing that common interest in the *mundus*, the collective construction of the world of ordinary experience, allowed Christians missionaries and native actors to exchange freely in the realm of shrines, relics, miracles,

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seemingly unshakable religious actors who argued vehemently that Catholic religion had to maintain its relevance if France, and the world, were to survive this onslaught of change. Darrin McMahon, *Enemies of the Enlightenment* (Oxford: Oxford University Press, 2001), 10-14, 106-114, 188, and 200, where McMahon concludes: “Rather than think of opponents of the principal ‘advances’ in modern civilization as somehow acting outside the flow of historical time – as atavisms, or prisoners of the past – we would do better to think of them as endemic of modernity itself. In this view, the men and women of the French Counter-Enlightenment, the men and women of the early French Right, were bound up in a common process with the very movement they sought to destroy.”

<sup>35</sup> Jonathan Sheehan, “Enlightenment, Religion, and the Enigma of Secularization: A Review Essay,” *American Historical Review* 108:4 (October 2003).

<sup>36</sup> Martin Austin Nesvig, “Introduction” to *Religious Culture in Modern Mexico*, ed. Martin Austin Nesvig (New York: Rowman & Littlefield Publishers, 2007), 4.

<sup>37</sup> Daniela Traffano, “‘Para formar el corazón religioso de los jóvenes’: Processes of Change in Collective Religiosity in Nineteenth-Century Oaxaca,” in *ibidem*, 35-49, especially 45f. There is some imprecision when using concepts such as piety, worship, religion, and religiosity, and perhaps this has been a source of confusion. It is difficult to know if what historians are referring to is really a continuation, something different or totally new.

and other potential sources of healing power. There were few incommensurables in and between religions; everyone concerned him- or herself with the power available through ritual action, much of which extended beyond the sphere of control belonging to the Catholic Church.<sup>38</sup> Voekel has written in more than one publication of the capacity for reconciliation of divergent perspectives in enlightened (liberal) Mexican thinkers, such as the early nineteenth-century reformers José María Luis Mora and José Joaquín Fernández de Lizardi, who championed a modern political economy while remaining fundamentally Christian and thus can be seen to embody “a process of modernization that differs from sectarian Protestant or deist preconceptions about the mutual incompatibility of Catholicism and modern rationalism.”<sup>39</sup>

As Margaret Lavinia Anderson remarked in an essay on a revival of Catholicism in nineteenth-century Germany, the religious sympathies of liberal intellectuals are more symptom than adequate explanation for the persistence or resurgence of religion.<sup>40</sup> If a medical brand of empiricism did not turn on religion and render it irrelevant, then what did, in fact, happen in the interim? There remain more questions than answers for Mexico’s constitution as a Catholic polity in the span from colony to republic, when modernity, with its tendency toward secularization, is supposed to have begun to gain the upper hand. The best options currently available are to extrapolate from excellent studies of the roles and experiences of religion in Mexico at the end of the colonial period or to lean on the handful of attempts to trace religion and processes of reform in the intervening years.<sup>41</sup>

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<sup>38</sup> Fernando Cervantes, “Mexico’s ‘Ritual Constant’: Religion and Liberty from Colony to Post-Revolution,” in *Faith and Impiety in Revolutionary Mexico*, ed. Matthew Butler (Palgrave Macmillan, 2007).

<sup>39</sup> Voekel, *Alone before God*, 160, and Chapter Six passim. See also Voekel, “Liberal Religion: The Schism of 1861,” in *Religious Culture in Modern Mexico*, ed. Austin Nesvig, 78-105, which argues that liberals were not Godless or secularized even if they were anti-clerical. They continued to view the French Enlightenment as an “exotic plant” that could not be transplanted to Mexico and even stressed in their press and pamphlets the importance of the parish priest as intermediary. Voekel argues that this liberal piety accounts for the “deep religiosity” traced in the collection of which her essay is part: the laity echoed or internalized the emphasis of the Reforma’s liberal Catholics on true charity and benevolence and condemnation of exterior cult (the fading of “candles, bells, and rich cloth” in 350 wills between 1710-20 to 1850-60 is presented as evidence of a causal connection between the two). See especially p. 82.

<sup>40</sup> Anderson asks why *das Volk* so readily allied itself with a presumably moribund Church, the victim of roughly a century of supposed secularization. In answering this, she examines the growing clergy in Germany, increasingly rural and supported with income from real estate, and stresses a gentler and kinder cadre of priests able to deal with the not-yet-dead notion of sin in ways that were satisfactory to laypersons in the confessional and in public missions. “The growing secularization of the European mind in the century of Darwin and Marx has long been a truism – especially for the general educated public, but also as a kind of background assumption for German historians working in social, economic, even political topics.” Margaret Lavinia Anderson, “The Limits of Secularization: On the Problem of the Catholic Revival in Nineteenth-Century Germany,” *The Historical Journal* 38:3 (1995): 647.

In Mexico, where the triumph of liberalism and liberal ideas and reforms mitigated the role of the clergy in Catholicism in the years after 1857 (and before), Anderson’s answers are not applicable. The clergy was less of a factor, owing not only to the expropriation of revenue-generating real estate, but also a drawn out battle with Rome over appointments and control of clergy.

<sup>41</sup> See the references to the work of William B. Taylor, Eric Van Young, Nancy Farriss, and Brian Connaughton in the Bibliography, as well as Margaret Chowning, “Convent Reform, Catholic Reform, and

The present study cannot resolve this historiographic dilemma, but by recognizing it as such and considering the way trust and consent in healing were secured on the ground through the tumultuous insurgency years it goes part of the way toward a recognition of the extent to which enlightened epistemologies and medical empiricism could be “radically modern” and plural. From a different perspective, it reassesses a picture in which an empirical and university-trained approach to medicine, here called *medical science*, emerges triumphant in matters of health in the course of the eighteenth and especially nineteenth centuries. This view of change over time, hardly the norm elsewhere in the early modern and nation periods, is especially misguided with respect to what happened in the practice of health care in Mexico. Assumptions that medical science *should* colonize other kinds of medicine rest on a narrow conceptualization of social utility or productivity, and ultimately on an over-confidence in the absolute move from “traditional” to “modern” medical practices, technologies, and ideologies.

For Mexico, it is surprising that this tendency should exist at all. As historians of the late colonial and early national period repeatedly insist, medical science and regulatory systems were immature, which left numerous options to the sick and ailing.<sup>42</sup> It is a story of what Guenter Risse referred to as the “failure of medicine,” and of course its failures were well known and remarked upon by communities far removed from the centers of medical training and knowledge production.<sup>43</sup> Professional medicine in the colony was so inefficacious, the individuals authorized to practice so few and far between, and regulation so limited that the “medical marketplace,” as Sherry Fields writes, supported a number of other practitioners, including unlicensed and untrained doctors, surgeons, phlebotomists, pharmacists, *curanderos*, midwives, and saints, who rushed to fill demand created in this environment, with sometimes disastrous results. Fields notes an “exchange of medical advice up and down the social ladder,” stressing the continuing shared basis of notions of disease between laypeople and professionals, which persisted until the separation between “learned and domestic medicine” that took place in the nineteenth and twentieth centuries.<sup>44</sup>

The idea of a hierarchy of recourse is appealing, but threatens misunderstanding if followed too far. The logical and seemingly inevitable implication seems to be that once

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Bourbon Reform: The View from the Nunnery," *Hispanic American Historical Review* 85:1 (February 2005), 1-37.

<sup>42</sup> For example, John Tate Lanning, *The Royal Protomedicato: The Regulation of the Medical Professions in the Spanish Empire*, ed. John Jay TePaske (Durham: Duke University Press, 1985); Hernández Sáenz, Luz María, *Learning to Heal: The Medical Profession in Colonial Mexico 1767-1831* (Peter Lang Publishers, 1997); and to a lesser extent, Noemí Quezada, *op. cit.*

<sup>43</sup> Reforms in medical science, sanitation, health care, and urban policing are generally thought to have escalated during the Porfiriato (1877-1910), which reflects a common assumption that change was minimal or negligible before the rise of eugenics, industrialized states, and bacteriology. As Corbain wrote for France, medical discourse vacillated when it came to understanding and explaining the causes of sickness, with vagueness in its formulations often leading to confusion rather than clarity. He explained the persistence of aromatic fumigation there well into the nineteenth century by noting that advances in chemistry were insufficient to allow scientists to explain away miasma and fumigation definitively or without ambiguity, particularly in the face of increasingly powerful tastes and preferences of the elite, and obsession with and anxiety about bodily hygiene. Corbain, *The Foul and the Fragrant*, 60, 65f, and 70f.

<sup>44</sup> Sherry Fields, *Pestilence and Headcolds: Encountering Illness in Colonial Mexico* (New York: Columbia University Press, 2008), 43, 146, and for the “medical marketplace,” Chapter Two.



significant advances on the empirical side occur (e.g. once training, regulation, and technologies improve sufficiently), these unofficial providers of healthcare will be eliminated or rendered obsolete. If illicit, untrained, or religious practitioners owe their demand in the colonial period to the inefficacy of medical science, then once this inefficacy is removed by improved success rates, the logic dictates, patients will gradually abandon these other solutions, which should fade away. But this outcome is belied time and again by historical and contemporary accounts of healing; when popular or religious practices refuse to die, this persistence tends to cause some discomfort. Outdated vestiges that endure in spite of the presence of scientists on surer empirical footing evokes blame of faulty developmental mechanism, or worse.<sup>45</sup>

If this implication of the medical marketplace approach – that certain “commodities” will be eliminated by the improved efficiency and accessibility of others – is inescapable, contemporary ethnography of religious rituals and healing pilgrimages offer a way out. Informants at French shrines today express an understanding of the “empirical” genetic, infectious, and dietetic causes of illness, even as they find room for religious metaphors and explanations of illness that invoke the Virgin Mary and Jesus. Pilgrims at the famous Lourdes shrine, seeking out the miraculous water to be had there, also say, “when a person becomes ill, the most important thing to do is to seek conventional medical treatment.” Religious pilgrims thus view doctors and science in a generally positive light.<sup>46</sup> Why, then, do these positive experiences with professional medicine not dissuade them from making the long, arduous journey to the shrine to seek out miraculous waters and a cure? The sick traveling to shrines today are in search of whatever healing power is available. Ethnographies of healing remind us that success often requires recourse to multiple strategies, while science alone (even a fully modern medical science with an empirically sound record) cannot provide the answers a patient seeks. The problem with the medical marketplace approach to illness and healing in the colonial period becomes clear: solutions did not negate one another, nor were they simply interchangeable.<sup>47</sup> In epidemics, perplexing situations *par excellence*, the search for answers did not end with the criteria for success offered by medical science.

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<sup>45</sup> In the early North American literature, historians such as Sherburne Cook tended to focus on New Spain’s shortcomings in the shift to modern methods of treatment, faulting a corrupt and inefficient bureaucracy, for example, for failing to adopt what were generally sound, “scientific” procedures. See Sherburne Cook, “The Smallpox Epidemic of 1797 in Mexico,” *Bulletin of the History of Medicine* 7:1 (1939): 937-969, and “Smallpox in Spanish and Mexican California, 1770-1845” *Bulletin of the History of Medicine* 7:2 (1939): 153-191.

<sup>46</sup> Deanna L. Weibel, “Of Consciousness Changes and Fortified Faith: Creativist and Catholic Pilgrimage at French Catholic Shrines,” in *Pilgrimage and Healing*, eds. Jill Dubisch and Michael Winkelmann (Tucson: The University of Arizona Press, 2005), 111-134, quotation on 124.

<sup>47</sup> Among historians of epidemics, Miguel Angel Cuenya Mateos acknowledges the requirements of explanation occasioned by colonial health crises and the inability of science to provide it, pointing to the existence of apparently complementary discourses. *Puebla de los Angeles en tiempos de una peste colonial*, 120. Anthropologists stress the role of religious perspectives and accounts of the world as privileged sites of cultural interpretation; “magic” and “applied science” are not evolutionarily related, as Stanley Tambiah argues, the latter the result of a linear progression from the former. Sacrifices and other rituals help bring a healthy universe into being; though pharmaceuticals may replace traditional medications, “scientific ‘skepticism’ and ‘prediction’ do not replace astrology, or consulting of oracles or of diviners, for the guidance of human actions and for providing meaning in perplexing situations.” The implication, Tambiah notes, is that we cannot apply the criteria of one, science, to the other, a successful ritual. “The net result of

Once we grant that the rise of medical empiricism did not require or initiate an inexorable decline in religious ideas about illness and healing, the picture expands to allow for the contributions of the communities themselves, which, with their varied ways of talking and thinking about disease, retained key roles and helped provide coherence and practicality to an otherwise unwieldy and simplistic imperial science. In order to work, the solutions put forth by proponents of medical science ultimately had to be concocted from a messy array of ritual practices, ideas about space and contagion, textbook knowledge, discourses in instructional pamphlets written by physicians and colonial officials, sermons, and shared ideas about health care, which saw in the household and the family the principal and the most appropriate place of healing. Rather than a growing hostility on the part of Bourbon authorities, epidemic crises show a coming together of priests and state bureaucrats, the latter repeatedly recognizing in the former a natural persuasive ability and charitable propensity that proved germane in crisis situations, where the cooperation of villagers and wealthy citizens (whose donations were solicited) was anything but certain. More than simply a papering over of differences, the vaccinating campaigns that began in earnest after 1803 provide further evidence of the dovetailing concerns and interests of institutions and their representatives, managed, in no small part, through parish priests and local healers and revelatory of continuing cooperation between representatives of church and state, priests and parishioners, and urban and rural that continued into the Republican period.

In short, by considering the institutional, symbolic, discursive, and ritualistic aspects of medical reform in Mexico, it becomes difficult to maintain a secular view of change in practice. Epidemics occasioned what Marshall Sahlins called “distant encounters,” as enlightened policies in medicine were felt in remote communities and local contexts were brought into unpredictable contact with newly sanctioned or championed knowledge and practice.<sup>48</sup> By rejecting linear models of scientific progress and avoiding the compartmentalization of solutions into strictly religious or secular categories, the formation of medical knowledge appears more halting and piecemeal, as “local knowledge” fused with, adapted to, and provided the basis for a medical vocabulary in formation.<sup>49</sup> What kinds of appropriations and interpretations took place as peasants and the urban lower classes came to terms with these changes? How did criticisms alter the formation of programs of public health? It turns out that residents of Mexico had much to say about their treatment in times of epidemic, the pretensions of a nascent, authoritative science notwithstanding. Appreciating some of the political dimensions and motivations for criticisms returns to religious actors and peasants the

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such comparative pursuit is to land oneself where [James] Frazer found himself – magical rituals are like science with the difference that they are mistaken and false.” Tambiah, *Culture, Thought, and Social Action* (Cambridge: Harvard University Press, 1985), 61, 83-84 (from “Form and Meaning of Magical Acts,” originally published in 1973). See also Stanley Tambiah, *Magic, Science, Religion, and the Scope of Rationality* (Cambridge: Cambridge University Press, 1990), and on the false dichotomy of magico-religious “tradition” and scientific “modernity,” Stephan Palmié, *Wizards and Scientists: Explorations in Afro-Cuban Modernity and Tradition* (Durham: Duke University Press, 2002).

<sup>48</sup> Marshall Sahlins, *Islands of History* (Chicago: The University of Chicago Press, 1985), 7f.

<sup>49</sup> William B. Taylor, “Between Global Process and Local Knowledge: An Inquiry into Early Latin American Social History, 1500-1900,” in *Reliving the Past: The Worlds of Social History*, ed. Olivier Zunz (Chapel Hill: University of North Carolina Press, 1985), 115-190.

penchant for observation and commentary in the face of science, often lost in our fascination with the powerful critical capacities of enlightened intellectuals. By the same token, those critical of science and its interventions in crises were not necessarily anti-modern or enemies of enlightened or scientific thought; this kind of criticism, even when aimed at a poorly conceptualized scientific intervention, is more properly viewed as a predication of modernity, the product of a concrete political and social context.

### **Plan of the Dissertation**

Lying dormant in dozens of archives in Mexico and Spain is a story of encounters in the provision of medicine, a small part of which is told in the following chapters. Drawing on an eclectic combination of sources, including medical treatises, scientific journals published in Mexico City, reports of popular rumors, descriptions of ceremonial processions for vaccine in cities and villages, medical opinions submitted by physicians and priests upon returning from a plagued community, popular song verses, and petitions and judicial testimony, the dissertation seeks a more comprehensive portrayal of the range of actors who took part in this era of imperial medical reform. By remaining attentive to the insights of disciplines such as the study of religion and medical anthropology, I look specifically for non-literary dimensions of practice, and in this follow the lead of many of the actors who appear in the historical record. Scientists, physicians, and policymakers frequently took an active, quasi-ethnographic interest in the individuals and communities who were the intended objects of their reforms, and more than a few saw that the knowledge and know-how lay communities brought to healing would or could be relevant (contemporaneous attempts to recover a trove of medications and remedies supposedly kept by indigenous populations is another example).

Among the project's inspirations is a body of scholarly literature that criticized medicine's early depiction as the heroic conquest of disease. This literature stressed instead medicine's internal power dynamics and relation to the political apparatus of the state. As scholars began conceiving of medicine as a vehicle for the expansion of Western culture, values, and territorial control, a number of case studies of "medical imperialism" on role of medical knowledge, practice, and technologies in nineteenth- and twentieth-century European imperial projects seemed to emphasize the state at the expense of the people. Medicine became laughably ineffective at best, and a form of professionalized violence at worst.<sup>50</sup> One consequence of this scholarly turn, as Roy MacLeod admirably noted in the introduction to a collected volume, was to construe

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<sup>50</sup> Effective as critiques of scientific or Western models of progress and modernization, these works tend to privilege their own capacity for effective critical reflection over their subjects', the ostensible objects of Western domination. See the essays in Frédérique Apffel Marglin and Stephen Marglin, eds., *Dominating Knowledge: Development, Culture, and Resistance* (New York: Oxford University Press, 1990), which argue that modernization limits choice by "foreclosing" other paths of development and effectively relegates local (or traditional) knowledge to oblivion, and especially Frédérique Apffel Marglin, "Smallpox in Two Systems of Knowledge," in *ibidem*, 102-144; but cf. Ashis Nandy and Shiv Visvanathan, "Modern Medicine and Its Non-Modern Critics: A Study in Discourse," in *ibidem*, 145-184, in which the authors isolate distinct "languages of criticism" of modern medicine in India, focusing on "the dialectic between the 'self' of modern medicine and its 'other', laying particular stress on the availability of alternative imaginations within which the dialectic works." (Quotation on 155.) On modern medicine as domination, see also Manu Kothari and Lopa Mehta, "Violence in Modern Medicine," in *Science, Hegemony and Violence: A Requiem for Modernity*, ed. Ashis Nandy (Delhi: Oxford University Press, 1988), 167-210.

medical ideology and its effects too narrowly, which concealed the “territorial and epistemological interplays between colonizers and the colonized, between European benevolence and colonial domination.”<sup>51</sup>

In considering exchanges rather than simply a process of diffusion, I have drawn on numerous earlier studies of epidemic disease in Latin America. In the years leading up to the Columbian Quincentenary, conferences and publications on the effects of the arrival of the Spanish on the indigenous populations of the Americas thrived. They revealed microbes to have been a significant ally of Spanish settlers, rivaling and surpassing in their destruction swords, the harquebus, the lash, and horses, and sought to place epidemics within the context of Spanish colonialism.<sup>52</sup> For Mexico, historians have recently been addressing the demographic impact, timing, and regional variation of epidemics, or focusing on isolated cases to understand their effect on migration, land tenure systems, and the sanitary reforms in major centers such as Mexico City.<sup>53</sup> Among works on colonial medical practice, John Tate Lanning’s study of the Spanish American health boards, the *protomedicatos*, stands out for having illuminated the role of these medical institutions in the regulation of formal and informal practices, although he

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<sup>51</sup> Roy MacLeod, “Introduction” to *Disease, Medicine, and Empire: Perspectives on Western Medicine and the Experience of European Expansion*, eds. Roy MacLeod and Milton Lewis (New York: Routledge, 1989), 11.

<sup>52</sup> These studies cover “disease chronologies,” population shifts, demographic impact, and epidemiological sleuthing meant to clarify the nature of the diseases and their vectors, e.g. the essays in “*Secret Judgments of God*”: *Old World Disease in Colonial Spanish America*, eds. Noble David Cook and W. George Lovell (Norman: University of Oklahoma Press, 1991). Among them, the contribution of Francisco Casanueva stands out in its focus and approach, placing a 1791 smallpox epidemic on Chile’s southern frontier within the context of the political and religious overtures to the peoples south of the Bío-Bío river. Noble David Cook has been the most thorough North American student of the early period of Latin American epidemics, but tends to reduce them to pathogens as cause and effect of historical change, microbes and their effects on human bodies, concluding in one study, “In spite of variations in mortality, the story was the same everywhere in the Americas.” See Noble David Cook, *Born to Die: Disease and New World Conquest, 1492-1650* (Cambridge: Cambridge University Press, 1998), 206. Several regional studies in South America place epidemics and their demographic impact within the broader context of Spanish colonial rule, e.g. Linda A. Newson, *Life and Death in Early Colonial Ecuador* (Norman: University of Oklahoma Press, 1995) and Suzanne Austin Alchon, *Native Society and Disease in Colonial Ecuador* (New York: Cambridge University Press, 1991).

<sup>53</sup> Lourdes Márquez Morfín and Miguel Ángel Cuenya take on the question of demography in times of crisis, for Mexico City during the typhus and cholera epidemics of 1813 and 1833 and for the city of Puebla for the typhus epidemic of 1737, respectively. See Márquez Morfín, *La desigualdad ante la muerte en la Ciudad de México: el tifo y el cólera, 1813 y 1833* (Mexico: Siglo XXI, 1994) and Cuenya Mateos, *Puebla de los Ángeles en tiempos de una peste colonial* (Mexico: El Colegio de Michoacán, 1999). América Molina del Villar’s study of the 1737 epidemic in the city and Valley of Mexico explores the relation of epidemics to famine crises before and after and shows the effects of epidemics on migration and land tenure. See *La Nueva España y el matlazahuatl, 1736-1739* (Mexico: Centro de Investigaciones y Estudios Superiores en Antropología Social, 2001). These studies in turn build on decades of scholarship on epidemic disease in Spain and Spanish America that drew on methods from the social sciences to explore demographic shifts, regional variations in official response, and the roles of bureaucrats and institutions in arriving at successful outcomes. See especially Enrique Florescano and Elsa Malvino, eds., *Ensayos sobre la historia de las epidemias en México*, 2 vols. (México City: Instituto Mexicano del Seguro Social, 1982). For a sample of more recent work along these lines, see José Jesús Hernández Palomo, ed., *Enfermedad y muerte en América y Andalucía, Siglos XVI-XX* (Seville: Escuela de Estudios Hispano-Americanos, 2004).

argued that the tribunals played only minor roles in epidemics.<sup>54</sup> Donald Cooper's institutional study of epidemics in Mexico City stressed the overlapping jurisdictions of royal, religious, municipal, and professional bodies in the management of disease from 1763 until 1813.<sup>55</sup> Because my purpose in studying epidemics is rather different than these – epidemics and their management are a point of entry for discussions about enlightenment science, social reform, and lay participation in healing programs – I have in many cases gone back to some of the same archival documentation on which these studies were based in the hope of addressing these and other issues. I use “medicine,” “preventive medicine” interchangeably with “healing arts,” though some contemporaries continued to use “physic” to refer to the art of regulating and promoting healthy living – diet, exercise, along with therapies such as bloodletting, sweating, and purging.<sup>56</sup>

The chapters in Part I chart the rise of a science of contagious disease in Mexico City and suggest how early programs of treatment and prevention were modified from the countryside. Part II explores the ways reforms in particular therapeutics, including the introduction of vaccine, were designed and executed.<sup>57</sup> Chapter One sets the dissertation's major themes, establishing the dramaturgical aspects of a colonial epidemic

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<sup>54</sup> Lanning ignored epidemics by noting that the medical board exercised a limited authority that was further circumscribed by viceroys, town councils, and practitioners in the field. Lanning, *The Royal Protomedicato*, 11f. “Only when a dangerous epidemic threatened to sweep the country did the machinery of public health as Americans understand it actually come into play. By then, the protomedicato was powerless to grapple with so sweeping an emergency. Its authority was insufficient, it had no command over army or policy beyond its own bailiff, and it had no appropriation or budget for this or any other purpose. Only the viceroy – or the king himself – could muster the finances, command the army, and enlist the support of the church.” Lanning's study focuses on the regulation of doctors, specifically the control over permission to practice medicine; the professional formation of practitioners; to a lesser extent, the setting in which many practitioners worked; and, to an even more limited degree, the careers of those illicit practitioners who fell outside of the regulatory jurisdiction of the tribunals. In relying on Lanning's rich study, I take his view that the Spanish understanding of public health was limited to education, examination, and licensing to be an overstatement or simplification of the various and changing views of public health in the Spanish colonies, and in particular in New Spain, in the eighteenth century.

<sup>55</sup> Cooper lacked some of the crucial archival documentation in Mexico now available, including sizeable records of epidemics in several communities at the turn of the nineteenth century, which, along with others Cooper examined only in passing, shed much light on specific contexts of healing and on the perspectives and practices of suffering communities. For their rich content, these sources alone justify an updated study of this crucial period of reform.

<sup>56</sup> As Harold Cook writes, historians of science have only grudgingly reserved a place for medicine as a component of a revolution in learning and practice, although this has changed as historians become less enamored with ideas that were empirically true from our modern perspective. “Since the idea of the Scientific Revolution is a historical concept identified with the quest for the origins of ‘modern science’, a great many – perhaps most – of its historians have quite understandably had difficulty in bringing anything as apparently impractical, unmodern, and nonmathematical as early modern ‘medicine’ into their accounts.” Harold J. Cook, “The New Philosophy and Medicine in Seventeenth-Century England,” in *Reappraisals of the Scientific Revolution*, eds. David C. Lindberg and Robert S. Westman (New York: Cambridge University Press, 1990), 397-436, quotation on 405.

<sup>57</sup> In the course of research it became clear that 1797 marked a turning point in the use of immunization against smallpox. The fact that so many parents made use of this unprecedented technique seemed to me to be in itself a story worth telling, given the expectation that progress in the realm of public health and disease management came much later, and as such the emphasis of the dissertation has shifted in order to provide ample consideration of this change.

as a point from which to evaluate later changes in disease management. The chapter makes selective use of a chronicle written by a cleric in the aftermath of Mexico City's 1736-37 typhus epidemic that documented the central role of shrines, processions, images, and urban ceremonies in restoring health. Colonial healing was a social drama, among other reasons, because of the way disease reaffirmed solidarity even as a colonial elite assigned blame to the victims (in this case, citing alcohol abuse among the lower classes). The chapter contends that frameworks of a hybrid "medical mixture" or *mélange* overemphasize particular therapies and medications at the expense of the key concerns and collective rituals embraced by residents within the contexts of epidemics.

Chapter Two draws on the scientific journals published for the first time in Mexico City to explore how a few creole intellectuals (residents of European descent born in New Spain) construed disease and health care for a broader reading public. Mexico City was a highly cosmopolitan place, with a mercantile and intellectual elite that traveled throughout the world and corresponded actively with academies in Europe. As such, it is no surprise to find there a vibrant medicinal culture. The prologues and articles in these works reveal a scientific elite eager to make new discoveries and the objective, quantifying language of science available to a growing reading public in the capital. They also suggest that the measurement of poverty, disease, dirt, and health periodically revived a tangled knot of religious discourses and values as the elite sought to moderate sinfulness and excess in living through a trope of moderation. For all its universalizing pretensions, then, enlightened science never escaped the society into which its practitioners were born.

Though limited, this homegrown view of illness and its etiology was still more complex in its understanding of human difference than the Bourbon policy of disease management arriving in the viceroyalty in the 1780s. This official program was a more egalitarian, socially sterile solution to epidemic destruction, in which patients were strictly isolated from infection in provisional hospitals and stripped of communal support. Attempts to enforce this initiative proved troublesome and inspired critiques from the diverse "public" ultimately subjected to these enlightened projects in the provinces. When this program was put in place in Oaxaca, vocal protests from agriculturalists, merchants, Indian republics, priests, and administrators prompted the viceregal center to reverse course in favor of treatment in homes, charitable committees of residents, and for the first time, inoculation. Chapter Three traces this development, drawing on reports from Oaxaca's bishop and priests, seditious papers discovered in the provincial capital, and the criminal records of a case in which residents of a weaving village, led by women, stormed the hospital and removed their children. In an age in which the productivity of male laborers and the rationality of men were being stressed, objections to the Bourbon program had the effect of incorporating women as protectors of their offspring into debates on health in New Spain. By bringing the relational factors of health to the attention of Bourbon functionaries, moreover, indigenous peasants anticipated the "modern" physicians, parents, and consumers of health care who today insist upon the contextual nature of illness and condemn overly narrow understandings of disease.

Chapter Four analyzes at the discursive level the ways intellectuals, bureaucrats, physicians, prelates, and ministers promoted immunization against smallpox. Immunization grew more popular because it did not entail the kinds of commercial disruptions and disputes between provinces and villages that often appeared with

quarantines and *cordons sanitaires*. Unlike the first unsuccessful attempts at emergency management, immunization with human pox and then, after 1804, with Jenner's cowpox vaccine, was more carefully tailored to the necessities and expectations of colonial society. The medical theory informing the procedure – by being made sick one would be protected from future sickness – thus underwent several initial translations beginning as early as 1780, when those responsible for the procedure began imagining how an unfamiliar practice would be accommodated to the values and capacities of communities. Promotional works penned in this period articulated the central role imagined for religious ceremony, as well as the intellectual stereotypes underlying elite assessments of popular capacities for rational medicine.

Toward the end of 1803, the Royal Vaccinating Expedition left Spain to distribute smallpox vaccine to the four continents of the Spanish empire and arrived in the port of Veracruz the following summer. In contrast to the natural history expeditions of the eighteenth century, this expedition has received hardly any recent attention, a surprising omission given that its effects were arguably greater and more immediate in New Spain than any preceding it.<sup>58</sup> As vaccine was distributed and taken up in colonial communities, a number of gifts, pleas, exhortations, theological justifications, compromises, and other ritualized exchanges ensued and helped ensure more widespread acceptance among parents. Chapter Five examines the ways vaccine was presented to a non-specialist public in a number of celebrations in cities and villages, with administrators imagining Mexico's populace to be especially susceptible to the sound and sense of such performances. These conspicuous displays fit within a familiar colonial idiom of gifting that expressed the largesse of a patron and obliged cooperation on the part of parents. In a tangential manner, the chapter takes issue with an existing scholarly literature that tends to stress the role of Spanish scientists in designing and executing the program and ignore American scientists, bureaucrats, religious figures, and indigenous healers. Americans hardly served as passive recipients: the vaccinating program was largely designed and executed in the colonies by physicians, administrators, and religious prelates who drew on a great deal of experience with prior epidemics and with the persuasive force of the ceremonial apparatus of church and state.

Chapter Six traces the extended struggles and burdens involved in distributing vaccine. Who should have to pay the costs? How were practitioners selected and trained? Administrators used local vaccinators in much of rural Mexico, often turning to indigenous bleeders and shamans, parish priests, and *aficionados* (individuals who dabbled in medicine, but were employed in other trades). As the cost of ongoing campaigns necessitated placing the technique in a growing number of hands, unlicensed indigenous healers became active partners in the provision of imperial medicine. This development revises a literature that has tended to portray the relation of unlicensed healers to the state primarily in terms of subversion, heterodoxy, and suppression, suggesting that these actors even enjoyed an expanding sphere of activity during these early years of experimentation with preventive medicine.

Chapter Seven analyzes scattered rumors about vaccination and vaccinators that appeared in the wake of the Royal Vaccinating Expedition. In a society steeped in oral

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<sup>58</sup> Peter Razell, *The Conquest of Smallpox: The Impact of Inoculation on Smallpox Mortality in Eighteenth-Century Britain* (Firle: Caliban Books, 1977), 158, goes so far as to argue that it introduced “medical measures completely unrivalled in their impact on health and mortality in the whole history of medicine.”

conventions, a rumor could have a disproportionate influence on the perception and reception of medicine and on the outcome of a vaccinating campaign. In rumors we see how communicative practices transmitted medical knowledge and public opinion in cities and Indian villages and how many laid bare the pretensions of a technique that the medical elite tended to advertise as a kind of nostrum, to be applied to everything from rabies to ulcers. In the face of the possible spread of loose talk, vaccinators had to proceed cautiously. Consequently, as the epistemological ground shifted beneath the feet of a colonial elite lured by empirical methods, numerous religious and secular authorities continued to acknowledge and even encourage the verbal knowledge about medicine articulated in and through popular rumors.

The final chapter builds on the theme of peasants as critical consumers. It analyzes several rural epidemic outbreaks in the vicinity of Mexico City in which specific therapies were targeted for reform, including bathing, bleeding, and the use alcohol. The chapter shows how enlightened medical ideals of moderation were implemented in these settings and adjusted to the realities of rural villages. With the mediation of parish priests, indigenous communities engaged as co-participants in diagnosis and treatment, often conversing on equal footing with physicians and setting the terms of the interaction. For their part, university-trained physicians belonged to islands of European culture within seas of indigenous botanicals and other remedies. What were the limitations of these reforms? How did patients influence the outcomes of these interactions?

In seeking to provide a more theoretically sophisticated account of the prolonged introduction of preventive medicine, the chapters in Part II offer two broad conclusions. First, in many local settings in New Spain the absolutist program, indisputably universal in scope as the vaccinating expedition traversed the globe, underwent creative adaptation, modification, and elaboration, which transformed it from a utopian dream into a practical, viable policy. This process relied on diverse kinds of colonial knowledge and expertise, from physicians and professors of medicine to mothers of patients. Second, at the threshold of the Republican period, as reforming Bourbons eager to increase revenue and challenge class interests sought to dissolve Mexico's legal division of two republics, of Indians and non-Indians, the foundations of a paternalistic colonial project remained solidly in place, reiterated in an enlightened science of disease and in the projects adapted from the official Bourbon programs. Reactions to epidemics afford a richly documented vantage onto the reasons for this continuity in the provision of medicine.<sup>59</sup>

At its broadest, this dissertation makes a contribution to understandings of cultural change resulting from shifts in policy and medical practice during the Bourbon era. Epidemics were moments of momentous rupture that nevertheless periodically reenacted a familiar dramaturgy, bringing intellectuals, bureaucrats, physicians, parish priests, and peasants together in intimate settings of diagnosis, treatment, and persuasion. By deemphasizing cosmopolitan centers such as Mexico City as the primary sites of scientific production and debate and turning to the proliferation of centers as vaccine and other reforms arrived in a dispersed constellation of localities, it is possible to write a

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<sup>59</sup> Owing to the ways bureaucrats tracked the spread of disease and the patterns of sociability of the lower classes during epidemics, these crises often left rich documentary trails; as Randolph Starn writes, "the official obsession with the pathological generates an almost surreal record of the normal . . ." Randolph Starn, "Foreword" to Giulia Calvi, *Histories of a Plague Year*, trans. Biocca et al. (Berkeley: University of California Press, 1989), xiv.



different and perhaps even more adequate history of medicine, one that accounts for the ways its ideology and methodology were shaped and infused by lay practice. The tensions between the ways empires, states, villages, and families thought about disease and health are central, and sources are accordingly read in such a way that these diverse actors are held in proximity when possible to see what kinds of insights, understandings, and misunderstandings emerged through decades of transformation in imperial medicine.

This is the first study to consider the effects of innovations in enlightened medicine for colonial Mexico's largely non-literate population. It is offered as a step forward in our understanding of how peasant communities and states interacted to solve shared problems, arrive at mutually beneficial solutions, and affirm local values and knowledge. Though it addresses problems proper to the historiography of late colonial Mexico, its themes reappeared in Latin America throughout the nineteenth and twentieth centuries, when immunization and public health repeatedly provided developing states with politically charged arenas in which to assess national progress and organize an expanding citizenry. The recent H1N1 epidemic, which struck early in Mexico and thrust its residents into the international spotlight, demonstrated the continued centrality of disease management in the confirmation of a state's modern status. Reenacting familiar patterns of blame and stigmatization, the outbreak echoed centuries of homogenizing discourse. To the extent that Latin America is not alone in taking medical science as a metric of civilized, orderly populations, this study uncovers a history of encounters between a state and its subjects that transcends its time and place of focus.<sup>60</sup>

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<sup>60</sup> For the civilizing role of science in India's colonial context, see Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton: Princeton University Press, 1999) and David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993).

## CHAPTER ONE

### Isolating Disease: Baroque Healing in Mexico City

Sacredness is highly contagious . . . all rites of consecration are founded upon this principle, the contagiousness of the sacred.

-Emile Durkheim (1912)<sup>61</sup>

The *matlazahuatl* epidemic that ravaged the Valley of Mexico in 1736 was the most severe in living memory and would serve, for subsequent generations of *capitalinos*, as a point of reference whenever pestilence struck again. Residents and bureaucrats would ask themselves, as they grappled with health reforms and the demands of an increasingly invasive medical science decades down the road, what had worked and what had not; which images bestowed grace and which had withheld favor; which therapies helped and which made things worse. Remarkable in many ways, the crisis left in its wake the kind of document that historians dream about: a magisterial chronicle of shrines, saints, processions, cathedrals, miracles, and acts of devotion and mutual aid written in a tedious baroque style by a cleric and distinguished poet, Cayetano Cabrera y Quintero. Cabrera was commissioned by the city council to commemorate the miraculous role attributed to the Virgin of Guadalupe and her subsequent election patron of the city, but numerous other devotional images also appear as residents turned to them against the pestilential onslaught in the capital. Following a decade of delays and paper shortages, officials at last managed the publication of 800 copies of his *Escudo de armas de México*, in which Cabrera dedicated it devoutly to God, “my reader,” declaring, “I give you what you wish of me.”<sup>62</sup>

*Escudo de armas de México*, the title a reference to Guadalupe, Mexico’s principal “shield of arms,” drops readers into one of the largest urban centers in the world in the midst of a traumatic health disaster. It is a universe at once familiar – modern readers recognize the suffering occasioned by disease – and unsettling, insofar as the experiences and understandings of illness refracted within the document are a world away. **(Figure 1-1)** The reader, led through the hospitals, churches, and streets of Mexico City in the middle of the eighteenth century, enters a world of baroque ritual and ceremony, which was sponsored by officials and prominent residents and vehemently insisted upon by those residents entrusted with the health of families, confraternity members, and barrios. Though not impenetrable, Cabrera’s chronicle poses a challenge. It requires modern readers to appreciate that in their healing practices, residents of colonial

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<sup>61</sup> *The Elementary Forms of Religious Life*, trans. Karen E. Fields (New York: The Free Press, 1995), 224.

<sup>62</sup> Cayetano Cabrera y Quintero, *Escudo de armas de México* (México: Instituto Mexicano del Seguro Social, 1981 [1746]), XXXVIII. Perhaps because of his critical stance toward the activities of the city’s physicians during the epidemic, the viceregal government ordered all copies removed from circulation. As a result readership in the eighteenth century would have been limited.

Mexico relied to a remarkable extent on the senses as a primary means of coming to terms with illness and restoring the integrity of their environment and society.



Figure 1-1. Guadalupe intercedes on behalf of the ailing capital in the frontispiece to Cayetano Cabrera y Quintero's *Escudo de armas de México*.

Cabrera's chronicle has provided historians of colonial Mexico with a wealth of information, especially for those tracing the development of Marian devotion in New Spain.<sup>63</sup> Much remains to be said, however, about healing practices and about the work performed within crises by some of the less famous saints invoked in times of need. The following pages draw selectively from the chronicle to explore the relationship of religion to disease in New Spain's colonial capital. In perceiving and reacting to the spread of sickness in the city, officials, physicians, and laypeople alike revealed a faith in the productive, protective powers of ritual action and images. Use of Cabrera's remarkable chronicle allows a shift in emphasis from official governmental policies to the healing practices of religious associations, barrios, and laypeople.

The study of epidemics, events of such central importance in the course of human civilizations, has a long and distinguished history. Reflecting on the contemporary AIDS epidemic, Charles Rosenberg saw in its progression a dramaturgic structure typical of historical episodes, including an initial perception and progressive revelation; attempts to manage "randomness" by placing the revelation into moral, physiological, and environmental terms; negotiation of public response, including acts of solidarity and reassurance; and the subsidence and retrospective evaluation of the event.<sup>64</sup> I borrow Rosenberg's scheme as a starting point from which to pursue the particular ways ritual practice helped structure and define Mexico City's disease crisis. Did an unequal distribution of material resources necessarily result in fundamentally different ways of coping with disease in Mexico City's public spaces?

Contemporaries often remarked that the predominantly Indian sectors were hardest hit by the epidemic and averred that their disorderly living conditions and eating habits were to blame. Assuming for the moment that this perception of a separate demography for the poor is more or less accurate, a focus on processions and other public acts of penance suggests that broad participation across classes was nevertheless characteristic of disease emergencies. Rituals of solidarity were indispensable parts of statecraft and public devotion in Catholic New Spain. The capital was a city of massive seasonal celebrations, as during Corpus Christi, but also a city of dispersed shrines and images, a place where reports of miracles brought residents to the dozens of sacred sites across the capital and each resident had a favorite devotion. Breakthroughs in the efficacy of medicine since the end of the nineteenth century have thrown a strong shadow on these realities, tempting us to impose binaries that distinguish empirical or secular approaches to illness, on one hand, from those that depended on divine intercession for mediation. Varied ideas about sickness and healing undoubtedly characterized different groups and

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<sup>63</sup> Most recent is David A. Brading, *Mexican Phoenix: Our Lady of Guadalupe, Image and Tradition across Five Centuries* (Cambridge: Cambridge University Press, 2001), 120-132, where he relies extensively on Cabrera's 1747 chronicle for his analysis of Guadalupan devotion. See also William Taylor's more selective use in "The Virgin of Guadalupe in New Spain: An Inquiry into the Social History of Marian Devotion," *American Ethnologist* 14 (1987), 9-33. Brading notes that beyond its usefulness in histories of Marian devotion, there is "material enough for an entire treatise on holy images in the capital," and numerous observations on medicine and the activities of the religious orders at the city's nine hospitals.

<sup>64</sup> Charles Rosenberg, "What is an Epidemic? AIDS in Historical Perspective," in *Explaining Epidemics and Other Studies in the History of Medicine*, ed. Charles Rosenberg (Cambridge: Cambridge University Press, 1992), 278-292.

contexts, but by treating as most compelling or interesting the divide between a more educated, literate elite and the views of commoners, the former are equated with a proto-modernity and the latter with folk superstition, a glaringly anachronistic dichotomy.

The use of Cabrera's account as historical evidence of these ritual activities requires a word on its limitations. As Victor Ruiz noted in an introduction to the chronicle, its style is anything but transparent. "Cabrera plotted *Escudo de armas* by a principle similar to that employed to design baroque portals," he wrote. "In the same manner that their architectural elements remain hidden within intricate ornamentation, in the book, the structure of the narrative is apparently lost in favor of an overflowing succession of historical dates and ideas, which reveal their coherence only upon reaching the end."<sup>65</sup> Cabrera excused its tortuous prose by explaining that adornment (*exornación*) aids narration and leads to history's principal end: the vindication of truth.<sup>66</sup> He insisted that certain flourishes, though perhaps considered without virtue, were appropriate to the historian's era – he invoked Tacitus, who was "obligated by the necessity of not writing that which cannot with pleasure be read."<sup>67</sup> In other words, by describing the pestilential landscape of Mexico City, Cabrera inevitably transformed it, compelled by the expectations of a terrestrial audience to highlight the prayers and deprecations, images and devotions, and many cults and favors incurred during the city's great need. Although his chronicle is complemented in this chapter with documents left behind by secular and religious administrators, the connection Cabrera sought to his reading public suggests that the work reflects sensibilities in healing that did not end with the author.

In some respects, Cabrera the poet was an exemplary instance of what has been seen as a baroque tendency of late colonial Mexico, in which a propensity for ornamentation and exaggeration in art and architecture engaged the viewer, as one historian has written, as co-participant in the resolution of a complex puzzle.<sup>68</sup> Cabrera's history has the same tendency for complexity insofar as he used metaphors and allegories to call to mind other times and places and evoke a biblical horizon that infused the present.<sup>69</sup> His work creates an effect of impressive devotion and miraculous intervention,

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<sup>65</sup> "Cabrera tramó el *Escudo de armas* . . . con un criterio similar al empleado para diseñar portadas barrocas, pues de la misma manera que en ellos los elementos arquitectónicos quedan ocultos en una intrincada ornamentación, en el libro, la estructura narrativa se pierde aparentemente, para favorecer una desbordada sucesión de datos históricos e ideas que sólo muestran su coherencia cuando la lectura ha llegado a su fin." Victor M. Ruiz Naufal, "Introduction" to Cabrera y Quintero, *Escudo de armas*, XLVII. While the comparison may be facile, in some sense the idea that prose shared similar ornamental, "surface" features is worth pursuing, provided one allows for differences in their semantic structure and expressive modes.

<sup>66</sup> Cabrera y Quintero, *Escudo de armas*, XXXIV.

<sup>67</sup> ". . . vicios, que más del Historiador son del Tiempo (acaso, en que escribía) y a que obliga la necesidad, a no escribir sino lo que con gusto se ha de leer." Cabrera y Quintero, *Escudo de Armas*, XXXV.

<sup>68</sup> José Antonio Maravall, *Culture of the Baroque: Analysis of a Historical Structure* (St. Paul: University of Minnesota Press, 1986).

<sup>69</sup> While Ruiz assesses the final product in a positive light, others ruled negatively on the quality of the work. Brading notes a lack of coherence in contemporary readings of the text. For Brading, Cabrera's awkward style muddled the events and data he hoped to describe, so that while the requirements of baroque culture could have been satisfied gracefully, Cabrera failed to rise to the occasion. Brading, *Mexican Phoenix*, 131.

attentive to the use of Mexico City's streets and shrines and especially the transient ephemera of public rituals: the *posas*, for example, that appeared along streets during religious and civic processions, "sumptuous and complex altars improvised in the open air;"<sup>70</sup> the decorations that adorned doorways and building façades; saints enlisted and saintly attire transformed for the occasion by devotees.<sup>71</sup> In Cabrera's text, the effects of such strategies acquired durability: its pages overflow with melting wax, clouds of smoke and vapor, and people in motion. These fleeting dimensions of colonial city life were perhaps best served by the distracted, evocative whimsy of Cabrera's design.

I read Cabrera's chronicle with these characteristics in mind, which were neither accidental nor incidental to the story of the epidemic. Focusing on one prominent cluster of healing strategies that corresponds roughly to the area that began at the city's main plaza and extended north to the shrine of Guadalupe, on the summit of the hill of Tepeyac, has the advantage of showing residents carving out swaths of habitable space for themselves in their local struggles with disease. In this northern sector of the city, Spanish viceroys made ceremonial entrances, devotees of the Virgin of Guadalupe converged on her shrine, residents of the indigenous barrio of Santiago Tlatelolco worshipped in and around their famous Franciscan church, and the city's Jesuits concentrated many of their buildings and educational activities. A local view within the city reveals the location, conceptualization, and constitution of places seen as pure and unclean during an epidemic outbreak. As Kevin Lynch argued, in experiencing and thinking about their cities, residents tend to construct mental maps full of *nodes*: sites in which awareness of surroundings is especially acute, taking shape through junctions of movement, or by a concentration of a particular activity, and frequently by some combination of both. These "strategic foci" might encompass a street corner, larger districts, or, "when conceiving the environment at a national level, the whole city itself may become a node."<sup>72</sup> Precisely this last possibility – that the capital as a whole was saved following a momentous conjuncture of miraculous events in 1737 – is the providential end to which Cabrera's devotional history moves, and yet attention to particular sites clustered within a single region suggests that such general well being was not certain. Individuals came together in procession, in churches, and around powerful images with an urgent purpose that extended less frequently to the city *as a whole*, Cabrera's vision notwithstanding. Lynch's spatial model is useful as a step toward an appreciation of the local, embodied dimensions of Mexican epidemics.

### **Managing Uncertainty: The View from the Administrative Center**

Historians of colonial Mexico have seen a pervasive impulse toward uniformity and homogeneity in the eighteenth century, consolidated under the reforms of the Bourbon monarch Charles III, which encouraged the control and ordering of human activity in the capital's spaces. In this view, the physical environment, now more strictly

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<sup>70</sup> Manuel Carrera Stampa, *Los gremios mexicanos: la organización gremial en Nueva España, 1521-1861* (México, D.F.: Edición y Distribución Ibero Americana de Publicaciones, S.A., 1954), 103.

<sup>71</sup> Entry for May 24, 25, and 26, 1737, in Juan Francisco Sahagún de Arévalo, *Gacetas de México*, vol. 2 [1732-36] (México: Secretaría de Educación Pública, 1950).

<sup>72</sup> Kevin Lynch, *The Image of the City* (Cambridge: MIT Press, 1960), 72.

regimented, directed human activity, rather than the other way around.<sup>73</sup> The scope of some of these changes is explored in subsequent chapters. Here it bears repeating that the viceregal capital was still messy in numerous senses: its streets muddy, unpaved, poorly lit, and besieged by the remains of human activity. Such disorder was only exacerbated by outbreaks of disease.

By the end of November 1736, the first case of the *matlazahuatl* fever had been discovered in a textile workshop in Tacuba, on the outskirts of the city, and by the new over a thousand sick lay in hospitals in the capital. Probably typhus, it manifested with a headache and high fever, swelling of the face, and delirium. Sometimes the infected person bled from the nose; rotting fingers and toes followed inflammation and caused an unbearable stench in the surroundings. By the fourth or fifth day those less fortunate victims, their skin covered with eruptions, died from the illness.<sup>74</sup> Statistics compiled by Cabrera from death registers, though debatable, totaled 40,157 deaths, with 9,787 interred in the cathedral and the city's main chapels and another 13,721 in the Royal Hospital for Indians and the predominantly Indian parishes of the city. For a city whose total population had not yet reached 100,000, the severity of destruction was undeniable.

The official strategy combined public prayers with sanitation of the city's public spaces. The first was conventional: whenever disasters struck, or when a prominent member of society died, or even when royal vessels set out to navigate the treacherous seas, residents customarily came together in prayer. The city's gazette is full of occasions on which "a general supplication was made in the churches," as when two vessels of war departed from Veracruz in June of 1736, and again on September 7, several days after an earthquake shook the city violently.<sup>75</sup> By December, while these entreaties continued, they had been joined by prayers that sought "the complete extinction of such a strong epidemic," as the procession of Our Lady of Loreto on January 20, 1737 was described.<sup>76</sup> In the first three months of 1737, the city council sponsored seventeen religious processions and *novenarios*, or nine-day prayer cycles, a remarkable number in light of the observation that its European counterparts often fled in epidemics, leaving residents to cope on their own.<sup>77</sup>

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<sup>73</sup> Juan Pedro Viqueira Albán, *Propriety and Permissiveness in Bourbon Mexico*, trans. Sonya Lipsett-Rivera and Sergio Rivera Ayala (Wilmington, DE: Scholarly Resources Inc., 1999 [1987]), 176, and Pamela Voekel, "Peeing on the Palace: Bodily Resistance to Bourbon Reforms in Mexico City," *Journal of Historical Sociology* 5:2 (June 1992): 183-208.

<sup>74</sup> Sahagún de Arévalo, *Gacetas de México*, vol. 2, 78. On typhus, see Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W.W. Norton, 1997), 26; América Molina del Villar, *La Nueva España y el matlazahuatl, 1736-1739* (México: El Colegio de Michoacán, 2001), 65-66; and Cabrera y Quintero, *Escudo de armas de México*, 59-60. The Greek etymology of typhus denotes smoke or vapor, a designation that might have derived from the perceived source of contagion.

<sup>75</sup> See the corresponding dates in Sahagún de Arévalo, *Gacetas de México*, vol. 2. ["... se hizo general rogativa en las Iglesias . . ."]

<sup>76</sup> Entry for January 20, 1737, Sahagún de Arévalo, *Gacetas de México*, vol. 2. This procession is treated in the following section. ["... la total extinción de tan fuerte Epidemia . . ."]

<sup>77</sup> Molina del Villar, *La Nueva España y el matlazahuatl*, 153. The complete breakdown of urban administrations in disease crises was a common occurrence in early modern Europe. In 1630, the administrative organization of Turin, with a population of roughly 30,000, collapsed as doctors, councilors, and mayors fled the city. Such departures left cities like Turin without a functioning government for weeks at a time. See Sandra Cavallo, *Charity and Power in Early Modern Italy: Benefactors and Their Motives in*

By January, *matlazahuatl* had reached the center of Mexico City, leading to urgent sanitation campaigns by the municipal government and the Protomedicato, the medical regulating board. Some of the first measures sanctioned by the city council involved the elimination of materials from streets that could cause corruption of the air: rotting corpses, infected clothing, and especially the urban poor. Decrees seeking improved sanitation and regulation of activities in the urban center came quickly. On January 24, the council agreed that in order to ameliorate the atmosphere of putrefaction, chapter heads of each district should place votive candles in their homes, reflecting a more or less constant concern with illumination. The viceroy was also petitioned to prohibit transport of the deceased through streets, a practice that was expected to increase with the number of funerals taking place. The following day, the council approved financial assistance of twenty pesos daily to hospitals serving Indian residents in the barrios of El Hornillo and San Sebastián.<sup>78</sup> Three days later, on January 28, the vicar general of Mexico's archbishopric mandated, threatening excommunication, that nothing be sold or traded in portals, plazas, or other public places during public celebrations.<sup>79</sup>

These early diagnoses of the source of the problem reflected suspicions among the elite that filth was being transmitted through public spaces. Officials found a convenient target in the impoverished communities of *indios* in the city, where living conditions, lax morals, and weak physical constitution came in for scrutiny. Cabrera observed that infection concentrated most readily in impoverished parts of the city – in Indian barrios generally, in narrow *chozas* (the meager huts in which poorer residents lived), and also in the textile workshops scattered throughout, places “where either voluntarily, or forced like meek sheep, those Indians worked to weave clothes for others,” which tended to reinforce the decision to fight disease in the filth and disorderly living conditions of these places.<sup>80</sup> Historian América Molina del Villar has suggested that the perception of disease incubating in the living and working conditions of the poor tended to oppose the city center to its Indian periphery, where piles of garbage, groups of destitute, dirty animals, and the “corrupt odors” generated in these sectors where the underclass lived were perceived as the origin of infestation, “considered sufficient to explain why epidemics ‘arrived from outside’ or originated in those places.”<sup>81</sup> Though the city council took active steps to combat the epidemic at these places, the fact that the sick were being isolated in lazarettos founded to serve the barrios of San Juan de la Penitencia and San Sebastián Atzacualco reflects its interest not only in the provision of medical and spiritual

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*Turin, 1541-1789* (Cambridge: Cambridge University Press, 1995), 52. On the effects of the flight of wealthier citizens to healthy cities in Italy, see also Ann Carmichael, *Plague and the Poor in Renaissance Florence* (Cambridge: Cambridge University Press, 1986), 100-1. Reasons for the continued functioning of Mexico City's *ayuntamiento* might have included the poor travel conditions of Mexico's central valley and the relatively rapid expansion of contagion from the capital elsewhere.

<sup>78</sup> From summaries of the original *actas* for January 24 and January 25, 1737, in Armando de la Riva Fernández, *Guía de las actas de Cabildo de la Ciudad de México, 1731-1740*, vol. 5 (México, 1988).

<sup>79</sup> January 28, 1737, Sahagún de Arévalo, *Gacetas de México*, vol. 2.

<sup>80</sup> “. . . donde o voluntarios, o forzados, como mansas ovejas, trabajan desnudos, para tejer a otros vestidos, era mas la necesidad . . .” Cabrera y Quintero, *Escudo de armas*, 252.

<sup>81</sup> América Molina del Villar, *Por voluntad divina: escasez, epidemias y otras calamidades en la Ciudad de México, 1700-1762* (México, D.F.: CIESAS, 1996), 62.



aid (the stations were run by religious societies), but also its hope that isolation of the infectious might prevent the spread of illness.<sup>82</sup>

Cabrera came close to identifying the conditions of poverty at the root of his observations about the disproportionate suffering of the lower classes. He noted that physicians, when considering the high occurrence of *matlazahuatl* in the Indian population, found four main causes: the use and abuse of brandy liquor and *pulque*; a shortage of food – due, naturally, to excessive expenditures on alcohol – which in turn resulted in less efficient circulation of blood in the capillaries; the overheating of bodies at work during the day followed by nights spent on the cold floors of huts, which also constricted vessels and hindered blood flow (the epidemic proliferated during the colder winter months in the capital); and consumption of cold water while perspiring and overheated, thought to have a similar effect. Echoing officials, Cabrera opined that use and abuse of *aguardiente* was the principal cause among Indians, citing evidence of a barrel of the firewater found in the Tacuba textile workshop where the epidemic was supposed to have originated.<sup>83</sup>

The resolution settled on by the city council and Archbishop Juan Antonio de Vizarrón, who at the time served in the dual capacities of archbishop and viceroy, was to prohibit consumption of *mistela*, or adulterated brandy, and any variation of it, effectively ignoring living conditions and focusing on the harm of intoxicating beverages for the lower sectors. On June 8, 1737, as the epidemic had already begun to subside, the archbishop issued a ban on the consumption of alcohol that was intended to restore good order and *común salud*, common health, to the city. As he explained a year later in his correspondence to the Spanish crown, he had called together the members of the Protomedicato to reason on the causes of the “general, pestilential illness,” as nothing so far had worked against it. The medical board saw the principal cause in the great excess in consumption of beverages, with singular proclivity in the Indians, not so much in the joy of drinking, but intentionally drinking until one gets drunk and falls down, and that because there were so many distilleries of false *aguardientes* and *mistelas* being made with mixtures and dangerous condiments to give them strength cheaply, the result was that they managed to fill up continuously on these harmful liquors, contracting a vice in their blood that was causing their deaths.<sup>84</sup>

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<sup>82</sup> Molina del Villar, *Por voluntad divina*, 64-68. With the collaboration of the Protomedicato, it subsidized six pharmacies in the barrios of San Pablo y San Pedro, Empedradillo, and Jesús Nazareno, which dispensed over 35,000 pesos of medication at a fixed price.

<sup>83</sup> Cabrera y Quintero, *Escudo de armas*, 67-8. In this assessment, which reflected ideas about hot and cold and their effects on the body, Cabrera followed the verdict of the Royal Tribunal of the Protomedicato, the city’s professional health board charged with regulating standards of practice at the time. For a lengthier discussion of the importance of hot and cold properties in ideas about health, see Chapter Eight.

<sup>84</sup> AGI Audiencia de Mexico leg. 506, Mexico 10 julio de 1738, Juan Antonio Arzobispo to Crown. [“. . . se me expuso por dicho Protomedicato por una y principal causa del referido accidente el largo exceso en las bebidas con singular apetito en los Yndios, no tanto en el deleite de beber como en beber aposta hasta embriagarse, y caerse, y que como había tanta copia de fabricas de Aguardientes y Mistelas falsas confeccionadas con mixturas y condimentos perniciosos para darles fortaleza a poca costa conseguían llenarse continuamente destos nocivos licores contrayendo vicio en la sangre que les ocasionaba la muerte.”]

To the city's medical experts and ruling elite, alcohol abuse seemed like a reasonable explanation, but it was far from a novel conclusion. Over-consumption of alcoholic beverages had been cited since the sixteenth century as a cause of moral decline among indigenous populations of New Spain.<sup>85</sup> After a riot in Mexico City's plaza in 1692, officials blamed alcohol before attempting to re-congregate the city's Indians in barrios around the circumference of the city.<sup>86</sup> And alcohol repeatedly appeared in the reports of priests and government officials in connection with a slew of social ills.<sup>87</sup> An ordinance of February 16, 1736, passed only months before signs of the epidemic, reflects this ongoing campaign. It called "unimaginable the disorder that recently is experienced in the many distilleries producing such beverages, as in their use, deal, and trade, irrespective of the person's *calidad* . . ." Robberies, homicides, and "incestuous acts against good habits" were "experienced continuously, with dreadful harm to servants, slaves, and officials, and what is more, to many people of high quality, and distinction, who are included in similar excesses . . ."<sup>88</sup> In effect, the battle against these beverages merely prolonged widespread debate about their role in the proliferation of society's ills.

But the epidemic was no mere pretext for a ban long in the making. Whereas prior to the epidemic Archbishop Vizarrón had made no distinction of class or ethnicity when singling out those who had succumbed to the use and abuse of prohibited beverages ("irrespective of the person's *calidad* . . ."),<sup>89</sup> afterward observers had to explain the excessive mortality and morbidity they had witnessed in the city's indigenous barrios.

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<sup>85</sup> In their response to Philip II's questionnaire in the sixteenth century, the notables of Chimalhuacan-Atenco cited the "great vice of [the natives'] drunken binges" as the reason for their community's general decline. Cited in Gruzinski, *The Conquest of Mexico*, 83, 85.

<sup>86</sup> On these reforms see Edmundo O'Gorman, "Reflexiones sobre la distribución urbana colonial de la ciudad de México," in *Seis estudios históricos de tema mexicano*, ed. E. O'Gorman (Xalapa, Mexico: Universidad Veracruzana, 1960), 38-40. On the aftermath of the riot, R. Douglas Cope, *The Limits of Racial Domination: Plebeian Society in Colonial Mexico City, 1660-1720* (Madison, WI: University of Wisconsin Press, 1994).

<sup>87</sup> Taylor, *Drinking, Homicide and Rebellion* (Stanford: Stanford University Press, 1979), 40-41. "These tend to be sweeping statements of excessive drinking and general indictments of pulque and *tepache* . . . as the cause of virtually all sins and social problems, including idolatry, rebellion, poverty, illness, violent crimes, infidelity, and incest. Some of the observations, such as those of Motolinía, are sober, measured indictments. Some deal in vague metaphors of epidemics and cancers; others conjure up the jaws of Hell. . . . In 1732 the bishop of Michoacán, who had lived for many years in Mexico City, concluded that drink among Indians was the wellspring of all vice."

<sup>88</sup> ". . . es imponderable el desorden, que actualmente se experimenta en las muchas fábricas de dichas bebidas prohibidas, su uso, trato, y comercio, sin distinción de calidad de Personas . . ." ". . . incestuosos desafueros, y otros innumerables pecados, maldades, y delitos, que continuamente se están experimentando, con lastimosa perdición de sirvientes, esclavos, y oficiales, y lo que es más, de muchas personas de calidad, y distinción, que son sorprendidas en semejantes excesos . . ." Bando of February 16, 1737, *Ordenes de la Corona*, vol. 1, part of the Hubert Howe Bancroft Collection, Bancroft Library.

<sup>89</sup> He did make distinctions when assigning punishment for transgression: Spaniards risked the loss of properties and expulsion from the city, while those *de color quebrado* (the darker strata) were threatened with two hundred lashes and six years in the galley. This bando took seventeenth-century rulings by the crown as its point of departure, citing a royal *cédula* of 1629 and a law of 1724 as precedents.

Whereas the February 1736 decree said little about the nature of the physical harms caused by alcohol abuse, by the summer of 1737 officials, physicians, and the Protomedicato were fully convinced that excessive consumption of pulque and doctored variations of it, along with brandy, was a disease of Indians and the reason for their continued decline in numbers all out of proportion. The viceroy had only to look to the barrel of pulque found in Tacuba, which caused residents the most severe devastation, the alcohol “having been the principal pestilence and original harm to the common health of this Republic.”<sup>90</sup> Specifically, it was the herbs, roots, and other ingredients used to reduce brandy to this beverage that was the root of the problem, but it opened onto questions of vice more generally and resulted in a total ban on consumption, with apparently little thought in this instance of the effects the prohibition would have on royal income.<sup>91</sup>

These discussions reveal a process of blaming and stigmatization that would be repeated in the following years as officials attempted to study the material conditions of poverty and link them to questions of morals and habits. Discussed further in the next chapter, these debates on intoxicating beverages reveal blame as a natural component of what were usually sincere efforts to manage the outbreak in the capital. Ultimately the attempts at management failed: controls on alcohol consumption came too late to have any effect on residents’ efforts to manage the spreading epidemic. Those indigenous communities ostensibly suffering the most were not in any event waiting to be diagnosed, but rather from the start took matters into their own hands. In its final issue of 1737, Mexico City’s gazette reviewed the many devout and miraculous images, “until then not seen, even in the most urgent necessities experienced by the city,” appearing in procession that year.<sup>92</sup> Though many of these images remain anonymous, they reveal how managing disease was often left to those communities in greatest need of assistance.

## **Managing Uncertainty II: Santiago Tlatelolco’s Penitential Procession**

On March 5, 1737, residents of the Indian barrio of Santiago Tlatelolco brought out in procession a sculpture of Santiago, Saint James, dressed as a penitent, in an apparent effort to alleviate the community’s afflictions. Though something of an aside in Cabrera’s chronicle, and already remarked upon by historians, revisiting this episode allows us to place it into its context within Cabrera’s text.<sup>93</sup> This return to previously

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<sup>90</sup> “. . . la gente . . . haya experimentado el mas riguroso estrago de la presente Epidemia, con la pérdida de sus vidas, como varias veces por el Prothomedicato de esta Ciudad, se me ha informado, y no haber sido otro el pestilencial principio, y original daño de la común salud de esta República.” Bando of June 6, 1737, *Ordenes de la Corona*, vol. 1, Hubert Howe Bancroft Collection, Bancroft Library.

<sup>91</sup> By contrast to this ban, subsequent decrees emphasized the crown’s economic interests in the revenue from sales of alcohol. The royal *cédula* of 1755 stated explicitly that furtive production of cane brandy, harmful to the health of natives, also harmed the royal treasury: covert production weakened commerce by reducing the demand for legitimate *vinos*, which further eliminated key opportunities to train marines for Spain’s wars. The logic of the 1755 decree serves as a reminder that financial interests and royal agendas frequently prevailed over considerations of the city’s health, and that in the second half of the century regulation and oversight were again aimed at promoting revenue from taxes. Real *Cédula*, August 22, 1755, in *Ordenes de la Corona*, vol. 1, Hubert Howe Bancroft Collection, Bancroft Library.

<sup>92</sup> December synopsis, Sahagún de Arévalo, *Gacetas de México*, vol. 2, 77.

<sup>93</sup> Historian Charles Gibson took the episode as evidence demonstrating the role that saints and other objects of devotion played in the lives of natives of New Spain. For Gibson, these were expressions, in Christian terms, of a fundamental communal cohesion. Gibson, *The Aztecs Under Spanish Rule*, 134.

covered territory is further justified by the lack of other sources that speak to this intriguing episode in the epidemic.

For the most part Cabrera wrote admiringly of the barrio of Santiago Tlatelolco, which leads one to wonder why he reacted disapprovingly of its procession. He referred to it as a sandy hill in the humble Valley of Mexico, with wide plazas and innumerable small houses, where extended battle against pestilence had piled high the sick, impoverished, and deceased; the parish was “the largest of Mexican Indians, and as such pitifully devastated by the severity of the fever.”<sup>94</sup> Out of this misery rose its magnificent church, “which is a miracle of the Arts, wonder of durability, seen as a marvel among the buildings of Mexico.”<sup>95</sup> The church, designed by Juan de Torquemada for the Franciscan convent at the beginning of the seventeenth century, was dedicated to its patron Santiago, the warrior apostle of the Spanish Conquest.<sup>96</sup>

Cabrera preceded his depiction of the sculpted patron saint’s procession with a lengthier discussion of a miracle involving the popular sculpture of St. Anthony of Padua, one of several miraculous images housed in an altar on the left side of the main chapel of Tlatelolco’s magnificent church. A visionary saint admired for his beauty and devotion, a series of miracles had transformed the traditional scene of the saint with the Child Christ.<sup>97</sup> At a prior moment, a crucifix in the oratory of a resident had sweated palpably. Several Spaniards, “who perhaps had been witness to the miracle, overcome by devotion and desiring a greater cult for the image,” made off with the crucifix to the nearby parish of Saint Catherine the Martyr, north of the city’s plaza. Residents of the barrio, “incited to action,” pursued and pelted the thieves with stones. A second miracle ensued:

It is not known what havoc it created among the Spaniards, but one can infer from that which it in fact caused to the Holy Image they were defending, which perhaps opposed the onslaught like a shield, and which a runaway stone struck on the instep of its right foot, which, as if sentient and made of flesh, swelled and bruised at the spot, which until today remains swollen and which they [the Indians] have wrapped in gauze. Ultimately they brought it back to [the church of] Santiago, and placed it in front of the Image and altar of St. Anthony, and at some height, fearing it would be easily reached, calling it until today the Holy Christ of the Miracle.<sup>98</sup>

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<sup>94</sup> Cabrera y Quintero, *Escudo de armas*, 150. [“. . . hoy la mayor de Indios Mexicanos, y como tal lastimosamente destrozada a los rigores de la fiebre.”]

<sup>95</sup> Cabrera y Quintero, *Escudo de armas*, 253. [“Levántase aquí su magnífica Parrochia, Templo, que es milagro de la Arte, y permanencia, vista por maravilla en los edificios de México, y perpetuada en el de esta Iglesia, dedicada al Apóstol, Patrón de las Españas Santiago . . .”]

<sup>96</sup> Torquemada built the domed church at Tlatelolco that replaced a simpler single-nave version, subsequently commenting on its divine inspiration in the multi-volume *Monarquía Indiana*, a text with which Cabrera was familiar. See Early, *The Colonial Architecture of Mexico*, 74.

<sup>97</sup> In Spain as elsewhere in Europe, representations of St. Anthony and his adoration of the Child Christ had acquired great popularity: in one common versions of his vision, the Child appears to Anthony while the latter preaches a sermon on the mystery of the Incarnation. For this reason, an open book often appeared prominently in representations. On the many variations of the legend and its depiction, see Victor Stoichita, *Visionary Experience in the Golden Age of Spanish Art* (London: Reaktion Books, 1995), 125-132.

<sup>98</sup> Cabrera y Quintero, *Escudo de armas*, 150. [“Algunos Españoles que acaso avían sido testigos del milagro arrebatados de la devoción, y deseosos del mayor culto de esta Imagen, cargaron con ella para

Upon recovering this crucifix, residents of Tlatelolco, fearful of a repeat theft, placed it at a height in the chapel, which caused Anthony to break his gaze on the Child Christ in favor of this novel wonder. Cabrera held up this gesture as an example of the worship others should assume when confronted with divine mystery: concentrated contemplation, eminently visual and, above all, silent.<sup>99</sup>

This suggests the unique aesthetic sensibility Cabrera brought to his subsequent disapproval of the barrio's procession. While many visitors continued to converge on the barrio to see St. Anthony on Tuesdays throughout the year, during the 1737 epidemic many more arrived on Shrove Tuesday, including esteemed members of the city council. These men paid to have the altar illuminated with wax, attended Mass, and took part in the "procession that encircled the cloister of the convent," from which the devout brought the miraculous image of St. Anthony,

escorted by its confraternity and by the bizarre Statue of Santiago, that *Caballero* on a well-sculpted beast that the group takes out in its functions as its Conquistador and Auxiliary; except that now, in this procession of blood, in which many went as humiliates and penitents, several who saw the image mortified themselves, for the Image of the Holy Apostle – which by its sculpture and aptitude [ordinarily] mounts a horse, confronts, attacks, brandishes his sword and arms, dressed and equipped as a Knight – on this

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*una de las Parroquias de México . . .* "Ignorase el destrozo que haría en los Españoles, y puede inferirse del que hizo en la Santa Imagen que defendían, que acaso se opuso como Escudo, y a que llegó desmandada una piedra, dando el golpe sobre la garganta del pie derecho, que como si la sintiera, y fuera en carne, levantó hinchazón, se acardenaló, y moreteó la parte, que hasta hoy permanece hinchada, y le tienen puesto un cendal: lleváronle por fin a Santiago, y colocáronle frente la Imagen, y Altar de San Antonio, y en alguna altura, temerosos de que con facilidad la alcanzaran, llamándole hasta hoy el Santo cristo del milagro; a que siguió otro [milagro] en la estatua de S. Antonio . . ."

When the crucifix was in their possession, the shield (*escudo*) protected the Spanish residents against the barrage of stones, which indicates that Cabrera thought them justified in their seizure of the image (the mutinous natives [*amotinados*] were opposed to the "devout intentions" of the Spaniards, etc.) In fact, Cabrera was playing on an extended metaphor based on the idea that Guadalupe was at once the new *escudo de armas* or emblem of the city, and also that she was its divine protectress (*escudo* means shield as well). Given this organizing metaphor, it is difficult to say how widespread the miraculous transformation of images into physical shields would have been, or whether this is primarily Cabrera's creative application of his own organizing framework.

<sup>99</sup> St. Anthony, "its eyes fixed on the Child Christ on its left, tilted its face and raised its eyes as if to see the Crucifix, a posture in which it remains today as credit to the miracle, of which there is authentic testimony, and by which we are taught to raise our eyes to the hill of Calvary and of the Heavens to obtain divine aid." Cabrera y Quintero, *Escudo de armas*, 150. [" . . . que teniendo fijos los ojos en el Niño del brazo izquierdo, inclinó el rostro, y levantó los ojos en ademán de ver al Crucifijo, acción en que hasta hoy permanece en crédito del milagro, de que hay auténtico testimonio, y con que nos enseña a levantar los ojos al monte del Calvario, y de los Cielos para lograr el divino auxilio."]

Art historians have shed much light on the historical trajectory leading to this seemingly common standard for "devotional images" in Catholicism. Giulio Argan notes that following Trent, reformers thought that the faithful deep in prayer should avoid distraction at all costs. Works meant strictly for devotion often excluded dramatic composition in order to avoid surprising the viewer, while the iconography of intermediary figures such as saints was restricted (their earthly attributes, gaze, and gestures indicating the simple invocation of God's grace on behalf of the faithful). Giulio Carlo Argan, *The Europe of the Capitals, 1600-1700*, trans. Anthony Rhodes (Geneva: Editions d'Art Albert Skira, 1964), 81f.

occasion had been dressed as a penitent, giving him who-knows-what appearance of punishing rather than assisting. For dressed as he was in a purple tunic, wearing a crown of thorns that reached his eyes, mounted on his vigorous beast, and brandishing a penitential whip instead of a sword, he resembled that other Celestial *Caballero* [Jesus Christ]...<sup>100</sup>

The combination of seemingly disparate elements in the dress and behavior of Santiago occasioned for Cabrera enormous dissonance, causing him subsequently to contemplate aloud the most appropriate measure in light of such abuse and to provide his own explanation of the transformation. “It is not my intention to censure, or to brand this devout sincerity of the Indians, who always do as they see done, free of whatever other regard.” He explained: “They had seen other Images as respectable as they were devout dressed in the garb and adornments of penitence, and in order to go out in the streets with theirs, without raising doubts as to its being of another ability, and on horseback, dressed Santiago in the same way . . .” If it was mere simplicity, “as I persuade myself,” then it could be celebrated, but if “indecent” then Cabrera thought the ceremony should be adjusted accordingly to fit the devotion.<sup>101</sup>

Although Cabrera noted other processions in the barrio, these were not listed, and so we are left with only a partial picture of the way members of this barrio were fighting the epidemic. What does the procession tell us about local relief? Though the procession happened on Shrove Tuesday, the day preceding Ash Wednesday (when Catholic societies are prone to relax norms and let loose in ways that contrast sharply with the severity imposed by Lent), I am not convinced it was simply a manifestation of a community’s carnivalesque devotion, a saint’s personality turned upside down for the benefit of the occasion. Given the context of disease and the sober, and by then familiar, atmosphere of repentance, it makes more sense to look for an explanation that accounts for the conditions and urgent necessities of this sector of the city in 1737.

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<sup>100</sup> Cabrera y Quintero, *Escudo de armas*, 150-1. [“. . . desde entonces permanece fina la devoción así al Crucifijo, como a su amante girasol S. Antonio, a cuyo patrocinio solicitado con peculiares cultos, devotas velaciones, y otros religiosos obsequios acuden numerosos concursos, con especialidad los Martes, y mucho más el de Carnestolendas 5. de Marzo, en que concurrió a efecto de la deprecación el Secular Mexicano Cabildo, y en que a sus expensas se encendió todo el Altar de rica cera: asistió a la solemne Misa, y Procesión que rodeó los claustros de aquel Convento: del cual entre otras Procesiones, que dejamos a otra ocasión, sacó la devoción de aquel barrio la misma milagrosa Imagen de San Antonio, conducida de su Cofradía, y de la bizarra Estatua de Santiago, que caballero sobre la de un bien esculpido bruto saca aquella parcialidad en sus funciones, como su Conquistador, y Auxiliar; bien que ahora en esta Procesión que fue de sangre, y en que iban muchos de mortificación, y penitencia, mortificaron a muchos que la vieron, pues la Imagen del Santo Apóstol, que en fuerza de su escultura, y aptitud, monta a caballo, lo enfrenta, y ataca, arbola la espada, y el brazo, se viste, y arma Caballero, en esta ocasión lo vistieron de penitente, dándole no sé qué apariencia de que más los castigaba que auxiliaba; pues vestido una morada túnica; ceñido de corona de espinas que le llegaba hasta los ojos, montado en su lozano bruto, y arbolando una disciplina en vez de espada, parecía el otro armado Celestial Caballero . . .”]

<sup>101</sup> Cabrera y Quintero, *Escudo de armas*, 150-1. [“No es mi ánimo censurar, ni motejar esta devota sinceridad de los Indios, que siempre hacen lo que ven hacer, libres de otro cualquier respecto. Habían visto en traje, y arreos de penitencia otras Imágenes tan decentes como devotas, y para salir con la suya, sin reparo a que estaba en otra aptitud, y a caballo, vistieron de la misma fuerte a Santiago . . . Me forzó a expresar la verdad, que pudiera desdorar este silencio, para que si fue, como me persuado, laudable sencillez, se celebre, y si indecencia se corrija, ajustando a su devoción sus ceremonias.”]

Clearly the devotional act was a variety of penitential procession. These were popular in Spain since the sixteenth century, when epidemics, earthquakes, and even the occasional illnesses of leaders caused flagellants, often as members of confraternities, to take to the streets in Barcelona and Seville. Such acts were a way of framing and interpreting natural disasters that went beyond Holy Week, when flagellant processions more often emulated the suffering and crucifixion of Christ.<sup>102</sup> The sculptural images made for use in these processions “were meant to engage and provoke the viewer” and “were among the most illusionistic sculptures ever made.”<sup>103</sup> Wending through a crowd in Mexico City, the appearance of a sculpted, lifelike Santiago powerfully evoked the saintly personality; transformed into penitent, he became one of numerous flagellants in procession, spilling blood vividly with or on behalf of his devotees.

What about the blood? Cabrera signaled the scourging that took place when referring to “this procession of blood” and the way participants “mortified themselves.” Scourging and processions of flagellants appear in the records for New Spain as early as the sixteenth century, when contemporaries suggested that enthusiasm for the practice stemmed from pre-Conquest pagan sacrifice.<sup>104</sup> In the eighteenth century the medical practice of bloodletting – variously promoted, tolerated, and condemned, and requested by patients – continued to be a key component of healing for residents of cities and rural villages, continuing well into the nineteenth century. In Mexico City, physicians were almost certainly bleeding their patients in this moment; Cabrera explicitly condemned the practice, writing that the physician “torments the patient in a thousand ways, presses him and nearly breaks his limbs, cutting him and squeezing blood from various parts, pretending that he removes the problem, and though [the patient] may appear to recover from the treatment, it is no more than a lie and punishment for their sins.” No wonder, Cabrera noted, that Indians refused to be seen by these physicians when they took ill again.<sup>105</sup> Is it possible that some were actively seeking out the practice, that self-flagellation achieved a similar end – extraction of blood, and with it, the source of disease? Blood, the material sign of atonement, would have carried multiple meanings in this interpretation, with Cabrera’s criticism of flagellants refracting, in addition to the unusualness of it all, his ongoing disagreement with the city’s physician over what he took to be barbaric healing practices.<sup>106</sup>

A better interpretation must presumably focus on the transformation in the personality of the saint itself that, since this was the most salient and objectionable for the cleric. Following William Christian, who argues that New Castilian peasants in desperate

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<sup>102</sup> Susan Verdi Webster argues that in Spain, “extracalendarial flagellant processions were the exception rather than the rule; virtually all groups confined their ritual acts of discipline to the days of Holy Week.” *Art and Ritual in Golden-Age Spain* (Princeton: Princeton University Press, 1998), 29.

<sup>103</sup> As Verdi Webster argues, pointing out that modern scholars of Spanish processional sculpture continue to obsess about the artificial or “impure” additions that render images realistic, the meanings of these examples are best understood within their ritual context. See *Art and Ritual*, 6-13.

<sup>104</sup> Robert Ricard, *The Spiritual Conquest of Mexico*, trans. Lesley Byrd Simpson (Berkeley: University of California Press, 1966), 121.

<sup>105</sup> Cabrera y Quintero, *Escudo de armas*, 91.

<sup>106</sup> América Molina del Villar believes that the censure of Cabrera’s book was a result of his acrid criticisms of the quality of the city’s doctors. *La Nueva España y el matlazahuatl*, 167-8.

need tended to be “flexible and open to new options,” forced to seek shelter in “a host of small changes and rearrangements” in the configuration of relations between humans and a divine protector, the transformed appearance and personality of Santiago becomes an indicator of the dire circumstances faced by residents and of the rapid adjustments made by a community in the midst of crisis.<sup>107</sup> The very possibility of Santiago’s transformation suggests that the episode be seen as evidence of a more permanent integration of saint into community; far from a last resort, this unity both obliged and facilitated periodic rearrangements or reiterations of older relations. The saint became a model for the community’s penance, and even atoned as a powerful intermediary on its behalf, his transformation reflecting the active reception of another sympathetically suffering penitent participating as a member of the community. Stress in this view falls on social integrity rather than ontological separation: as part of the afflicted community, the saint suffered; when the community repents, naturally the saint took up his own whip.<sup>108</sup>

Cabrera actually entertained mixed feelings about the devotional activities of Santiago Tlatelolco, whose residents were not socially homogenous and whose devotions were not restricted to processions of flagellants.<sup>109</sup> Cabrera remarked with approval, for example, that at a later date residents of the barrio brought their miraculous crucifix – the one that had so distracted St. Anthony – in procession to Guadalupe’s sanctuary after other cures failed. They sang praises and supplications along the way, did penance, and returned to the church of Santiago the same day to hear a sermon on the danger posed by the pestilence and the need to ask forgiveness and mend their ways. Cabrera admired these forms of worship, and they are a good reminder that for residents of a barrio such as Tlatelolco, the search for answers and the performance of collective rituals came in many modes, the flagellating Santiago only one of numerous tactics.<sup>110</sup>

Instead of a more or less pervasive social division between elite and popular practice, it seems another source of resistance to the procession was Cabrera’s position as an inexperienced outsider, uninitiated as he was into the symbolic senses that Santiago

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<sup>107</sup> Christian, *Local Religion in Sixteenth Century Spain* (Princeton: Princeton University Press, 1981), 22.

<sup>108</sup> For the Andes, anthropologist Olivia Harris has argued that mountain deities near Bolivia are sometimes represented as *gringos* with leather boots and spurs, and also as lawyers, priests, and policemen. Difference in ontology is blurred as deities are identified with especially powerful personalities within one’s society. This suggests that familiar social roles should be looked to as an apt vocabulary or set of analogies by which to conceptualize human-divine relationships. Olivia Harris, “The Coming of the White People: Reflections on the Mythologization of History in Latin America,” *Bulletin of Latin American Research* 14:1 (1995), 9-24. See also Richard Trexler on “typical” social relations in the dress of saints and deities, “Dressing and Undressing Images: An Analytic Sketch,” in *Religion in Social Context in Europe and America, 1200-1700* (Tempe: Arizona Center for Medieval and Renaissance Studies, 2002), 382, 392.

<sup>109</sup> In 1719, Tlatelolco’s parish priest said he could not isolate the “sheep” belonging to his flocks because he could not discern Indians from Spaniards. He cited numerous causes for the confusion: many geographically mobile Indians were living among Spaniards in the rest of the city; they refused to dress in traditional Indian clothing; there was frequent self-identification as *mestizo* rather than Indian; and the prevalent intermarriage of Indians, Spaniards, *negros*, *mulatos*, and *mestizos*. These were typical complaints of Mexico City’s social mixing, indicating the achieved self-sufficiency of members of the barrio – perhaps also at issue in Cabrera’s own disapproval. Dictamen de Conciencia por Fr. Miguel Camacho Villavisencio, dated 1719, Bancroft Library, M-M 135, fol. 18.

<sup>110</sup> Cabrera y Quintero, *Escudo de armas*, 254.



could assume as he was enlisted to respond to the epidemic with the community.<sup>111</sup> Cabrera's ideal, after all, was the miraculous St. Anthony, frozen in time in a gesture of silent, contemplative devotion. In the architectural realm, the structure housing these devout images became in Cabrera's eyes a magnificent temple, a fixed tribute to the distinguished history of Mexico's residents. On the other hand, the transformation in Santiago's appearance struck Cabrera as merely superficial, changing not at all the essential traditional nature and meaning of the saint as warrior and knight. Though the cleric-chronicler was a self-professed enthusiast of baroque adornment and devotion, in this instance he rejected the transformed saint as an anomaly rather than see it as the natural component of a widespread relief effort, which by his admission residents of Tlatelolco required more urgently than anyone else. For Cabrera, reflecting on the event at a distance, the barrio and its church made monumental statements about Mexico's past, but residents in the midst of coping with sickness could hardly afford the luxury of such static, commemorative repose.

Many other public devotions appeared during the epidemic, and though they were less controversial, all contained an element of what Emile Durkheim saw in the "totem": a projection of a society onto a symbolic container, which keep alive society's feelings and shared emotions and subsequently remind the group of its moral obligations.<sup>112</sup> In this case Santiago, patron saint, patronym, and member of the barrio, can be seen as one such container of values: a mnemonic reminding the community to make amends with God and with one another. The saint, dressed in the garb of a repentant flagellant, suffered with his community as devotees grappled with disease; his refashioning was theirs, their suffering his. In dire need, they appeared rather more disposed to appreciate surface renovations in the dress of their saint, to see these renovations as a sign of a deeper transformation in the identity and activity of the saint, and to see this as a sign of a transformation in themselves: an awakening to some transgression that required correction, or simply to their capacity to mediate the incomprehensible epidemic through which they were living and dying. It was a more complex way of placing blame than the timeworn debate on alcoholic beverages, but also only one of many attempts at management. Although Cabrera rejected any such symbiosis between community and saint in favor of the charitable works and more traditional Catholic devotions being performed throughout the city, debate about moderation and propriety in healing would continue for the next century and break along some occasionally surprising lines.

### **Negotiating Public Response: Anatomy of a Procession**

Publicly sponsored devotions meant different things to different groups, but few would have thought not to participate. On December 14, 1736, days after the celebration

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<sup>111</sup> Of this incident, David Brading writes that the scourging and procession of a penitent Santiago was "a spectacle that disturbed many spectators." In fact, it was Cabrera himself who was disturbed and not the "many spectators," whose reactions are not recorded. The difference is important, because when asked on what this uneasiness was founded we look in the wrong places if we fail to notice that Cabrera largely generates it himself. Brading, *Mexican Phoenix*, 124.

<sup>112</sup> "Wild passions that could unleash themselves in the midst of a crowd cool and died down once the crowd has dispersed, and individuals wonder with amazement how they could let themselves be carried so far out of character. But if the movements by which these feelings have been expressed eventually become inscribed on things that are durable, then they too become durable." Durkheim, *Elementary Forms*, 232.

of Guadalupe's feast day, the city council reminded the viceroy of the favors the city had acquired from the Virgin of Loreto in the past, including the epidemics of 1727 and 1734. "That which in the present urgency seemed most to the liking of the Lady of the City [Loreto]," Cabrera wrote, "was a devout *novenario*, or nine day Deprecation . . ." <sup>113</sup> Expenditures for the prayer cycle would come from communal properties, and the Commission on Festivals was to notify the Jesuit provincial in order to coordinate planning for the event, since the image was housed two blocks north of the city center in the church adjoining the Jesuit College of San Gregorio. <sup>114</sup> Having secured the cooperation of the custodians of the college and the permission of its rector, the *novenario*, that "first step toward the Heavens," began on December 17. <sup>115</sup>

Cabrera boasted that so many took refuge at Loreto's site from the devout *pueblo*, here meaning the urbs or urban community of Mexico City, that it seemed that Mexico had moved to a new home. They went to the shrine "not only owing to the stimulus of devotion, but by the agreement of physicians," who, like those physicians in Herodian's plague-stricken Rome, were "persuaded that by means of the fresher air that blows there and the plentiful *laureles* they would be protected against the contagion." <sup>116</sup> Despite this optimism, the *novenario* at the shrine ended without any sign of the epidemic's retreat. Rather it "grew like a well-nourished fire with the stubbornness of the fever . . ." Cabrera wrote that certain of her devotees, full of fervor and searching for other ways to appease her, were driven to insist on taking out the "remedy of Loreto" in procession to another church, "where, making a further deprecation to her, she would incline her mercy to our requests, purifying on the way there and back the vapors that were infesting Mexico City . . ." <sup>117</sup> The purpose was two-fold: to propitiate and win favor, but also to carve out a clean swath of air for residents as a prophylactic against spreading contagion.

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<sup>113</sup> Cabrera y Quintero, *Escudo de armas*, 101. [*La que en la presente urgencia pareció mas del agrado de la Señora de la Ciudad, fue la de un devoto Novenario, o Deprecación por nueve días . . .*] The viceroy was likely "reminded" by the request of the city's cabildo, December 13, 1736, in de la Riva Fernández, *Guía de las actas de Cabildo*, vol. 5, although it is possible that the impulse came from multiple directions.

<sup>114</sup> December 17, 1736, in de la Riva Fernández, *Guía de las actas de Cabildo*, vol. 5.

<sup>115</sup> Its conclusion on Christmas was significant, Cabrera noted, as the day on which Mary offered her greatest gift to the world.

<sup>116</sup> Significantly, Cabrera cites historical precedent *along with* the consenting opinion of medical doctors on the matter when he notes Loreto's attraction for residents of Mexico City in the epidemic, thus placing medical opinion on equal footing with "*estímulo de devoción*." Apparently, the opinion of medical experts mattered greatly in contributing to the expansion of participation in a particular cult: ". . . *asistió el primero, y ultimo día, y tanto concurso, y devoto pueblo en todos nueve, que parecía haber mudado México de sitio, trasladándose a de Loreto, y que no sólo por estímulo de devoción, sino por acuerdo de los Médicos, se había refugiado a aquel lugar: a manera que se lee en Herodiano, que apretada la Italia de Peste, y mucho más Roma, se retiraron sus moradores por consejo de los Médicos a Loreto, persuadidos, que por el Aire más fresco, que allí sopla, y el olor de los Laureles de que abunda, se preservarían del contagio.*" Cabrera y Quintero, *Escudo de armas*, 102.

<sup>117</sup> "*Acabado este Novenario, y no el peligro (que crecía como nutrido fuego con la terquedad de la fiebre) arbitraba ya la Nobilísima Ciudad otros medios con que aplicar a la Majestad Soberana; pero la devoción constante de algunos porfiaba en sacar el remedio de Loreto; a cuyo fin acordó sacar en una devota Procesión a la Señora trasladándola en ella a otro Templo, donde haciéndole otra deprecación, inclinara su misericordia a nuestros ruegos, purificando de ida, y vuelta los vapores que infestaban a México . . .*" Cabrera y Quintero, *Escudo de armas*, 102.

Who were these devotees? Unfortunately they remain unspecified in the text, but we know that they wanted to steer Loreto toward the Cathedral in the main plaza in order to perform a *novenario* that would reproduce the outcome of a 1727 epidemic, in which Loreto had convalesced the city out of its feverish state with great success. The Cathedral, however, was claimed for the reception of another great advocation, Our Lady of Remedios, which required that Loreto's enthusiasts devise an alternate plan. They resolved to bring her instead to the Jesuit's Casa Profesa, its school on the west side of the *traza*, two blocks from the Cathedral. On January 20, 1737, the procession congregated at two thirty in the afternoon. It headed south and east past several convents, pausing in the Cathedral, and at last arrived at the Jesuit school at around eight o'clock in the evening, where the image was received by members of the Society who had been keeping vigil for its arrival.<sup>118</sup>

The procession thus traversed at most eight city blocks in five and a half hours, an indication of the scale of such public acts of devotion in eighteenth-century Mexico City. It included many distinguished participants, among them the city's *corregidor*, don Joseph Padilla y Estrada, who carried Loreto's banner; the parish of the Cathedral, with its distinguished priest don Juan Joseph de la Mota carrying the processional cape; and the city council in the lead. If not attracting the entire city, it was so large that when exiting the wide plaza of the Jesuit's San Gregorio College, it continued to funnel slowly into the city's narrower streets well after departure.<sup>119</sup> Announcements had been posted in public places notifying residents of the planned procession, although Cabrera noted that some, such as members of the Indian barrios of Santiago Tlatelolco and San Juan Tenochtitlan, hardly needed to be asked to attend. "As the afflicted Indians of the city," he wrote pointedly, "they came more out of necessity than by invitation."<sup>120</sup> A *posada* at the city's Cathedral delayed things further: accompanied by organ music and singing, Loreto was brought to the main altar, placed in its gallery, and worshipped, at which point Loreto and Remedios and their faithful may have passed and seen one another, with participants in one leaving momentarily to pay their respects to the other, or perhaps, resentful of competition for the glorious interior space, ignoring the other altogether.<sup>121</sup>

Cabrera expended much poetic energy describing the procession of faithful, who, as he stressed, were highly diverse. The growing multitude shone not so much with its candlepower as through the devout circumspection with which it threaded together (*con*

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<sup>118</sup> Cabrera y Quintero, *Escudo de armas*, 103-04.

<sup>119</sup> Don Gabriel de Ribera, chaplain of the monastery of nearby Santa Inés, had donated 300 wax candles to be used by clergy taking part in the procession, which indicates the sizable participation of this sector of the capital. He also donated the same number of printed invitations, distributed to notable residents before the event.

<sup>120</sup> Cabrera y Quintero, *Escudo de armas*, 103. ["... [las] de las Gobernaciones de Santiago, y San Juan, que como los atribulados Indios de México vinieron mas por necesidad, que por convite."]

<sup>121</sup> Cabrera notes only that the *novenario* to Remedios ended the day before, on January 19. Assuming it followed the pattern of most others during the epidemic, she would have been carried out of the Cathedral on the following day, January 20. Cabrera y Quintero, *Escudo de armas*, 126. After nearly twenty years of labor, the altar inside the Cathedral designed by Jerónimo de Balbás of Seville was nearly complete. "The Altar de los Reyes is still Baroque, but a Baroque which has found its wings: every element of design is working against gravity, and with an instinct and coherency that can hardly be faulted." Weismann, *Art and Time in Mexico*, 49.

*que se hiló*). He played on the word *rosario*, which, as in English, refers to the traditional Catholic devotion to Mary – as in the gift of an uttered, recited rose – and also to the string of beads used in praying that devotion. The “beads” constituting this particular human rosary on January 20 were many,

and of various colors, those who either were pressed together by the tensed string of fear, or more plausibly, strung along on the gold thread of fervent devotion . . . All of them went along as if the occasion had strung them together: white and black; men who count, and with them others who count not at all; men of the country, and from abroad; small, and large, of ecclesiastic and secular estimation; in short of one material, and strung together under one Cross in one Rosary with lights in their hands, [doing] at the least the good work of her cult.<sup>122</sup>

In Cabrera’s evocative imagery, the procession, made up of diverse sectors of the population, moved in devout unison to form a single luminous rosary through the heart of downtown Mexico City.<sup>123</sup>

The nine-day devotion began the following day at dawn. In subsequent days the faithful and the sick filled the temple of the Casa Profesa to unburden themselves and to be consoled (*desahogarse*).<sup>124</sup> Archbishop Vizarrón attended on the final day, donating 100 pesos for candles. Monetary donations for the purchase of wax and donations of wax itself were common: while Cabrera neglected to provide exact sums, there was silver enough in the coffers to renovate the chapel under the college’s rector that year.<sup>125</sup> On December 10, 1737, the new chapel premiered to less than critical acclaim: some complained its brighter light threw strong shadows that detracted from the beauty of Loreto’s face, lamenting that she had looked better in the old chapel’s softer light.<sup>126</sup>

This is the extent of the procession’s description in *Escudo de armas*. In addition to showcasing the power and wealth of prominent officials and civilians, the act made a powerful statement about unity and the coordinated efforts of church and state, while

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<sup>122</sup> Cabrera y Quintero, *Escudo de armas*, 103. [“. . . varios eran, y de varios colores los que o ya apretados con la tirante cuerda del temor, o lo que es más creíble, ensartados en el hilo de oro de una devoción fervorosa, componían indistintamente este Rosario: iban todas como las había ensartado el acaso: allí blancas, y negras: hombres de cuenta, y con ellos otros de ninguna: del País, y ultramarinas; chicas, y grandes, del cálculo Eclesiástico, y Seglar; bien que todas de una materia, y ensartadas bajo una Cruz en un Rosario con luces en las manos, y al menos la buena obra de este culto.”]

<sup>123</sup> Mexico City’s gazette described participation in similar terms: “. . . habían sido más las que salieron alumbrando, que las que vieron la Procesión.” January 20, 1737, *Gacetas de México*, vol. 2.

<sup>124</sup> Instead of ending on Tuesday, January 29, as it should have, devotion was extended to Friday, and thus overlapped by two days with Guadalupe’s *novenario*.

<sup>125</sup> Three of the city’s principal guilds each donated fifty pesos a day for wax during the *novenario* for Loreto. If accurate, this series of donations alone summed some 1,350 pesos for its duration. What remained of the wax, as well as the income generated, was handed over to the Jesuit College upon Loreto’s return. Cabrera calculates remaining wax based on a procession for Remedios in 1616: 300 *arrobos* of wax (7,500 pounds) used on the first leg of the procession, with perhaps eighty-seven *arrobos* remaining afterwards. Cabrera y Quintero, *Escudo de armas*, 104-5.

<sup>126</sup> Cabrera y Quintero, *Escudo de armas*, 106: “. . . algunos se han quejado de la luz, que por más copiosa, y cortada por los arcos de la fabrica, y cristales, desperece el bellissimo rostro de la Imagen, que dicen se veía mejor con menos luz.”

allowing residents to carve out a channel of purified air as the cord of people snaked its way through the infested streets of the capital. It also ultimately produced a great deal of wealth for the Jesuit College and served as an important source of identity for the Society of Jesus and the students and confraternal groups associated with it.<sup>127</sup> It is this local dimension within Cabrera's uniform description that is more difficult to see, but something can be gleaned by briefly considering the role of the Jesuits in the city and the social makeup of those associations affiliated with them in 1737.

At the time, the institutions in the city run by the Society of Jesus included the Casa Profesa, the Colegio de San Pedro y San Pablo (a merger of several colleges intended primarily for Spaniard and *mestizo* residents, though by 1737 the distinction was not entirely sound), and the Colegio de San Gregorio, initially founded by Jesuits in 1588 for the instruction of the sons of Nahua nobles.<sup>128</sup> By the time of the epidemic, the Jesuits had established their usefulness as educators and were well known for work in the healing arts, most recently playing a prominent role in helping to facilitate measures of damage control and spiritual aid during the 1727 epidemic of measles.<sup>129</sup> They were embroiled in an ongoing controversy over the collection of the tithe owed the Spanish Crown on the Society's vast cattle estates. Though it was resolved, political rivalries eventually led to the suppression of the Jesuits in the Spanish, French, and Portuguese empires, and the Jesuits were at last expelled from New Spain in 1767.<sup>130</sup>

The devout who insisted on bringing Loreto out in procession would have had close ties to the various associations sponsored by the Society, such as the Congregación de la Buena Muerte, or Good Death Society, which was one of many organizations that provided financial support and spiritual benefits to members in times of great

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<sup>127</sup> I suggest below that worship at Guadalupe's shrine established boundaries of a different order in the epidemic, one related to disease and contagion, a less fully explored dimension of her worship.

<sup>128</sup> Félix Osores y Sotomayor, *Colegios de la ciudad de México* (México: Talleres Gráficos de la Nación, 1929), 45-6.

<sup>129</sup> Jesuits attended to the last confessions of the sick and to the bodies of those who had already perished, and distributed alms of food, medicine, and clothing through private donations and funds from Jesuit colleges. See Gerard Decorme, S.J., *La obra de los jesuitas mexicanos durante la época colonial, 1572-1767*, vol. 1 (México: Antigua Librería Robredo de J. Porrúa e Hijos, 1941), 341.

<sup>130</sup> Translation of Georgius Haberl to Bernardo Just, November 15, 1730, *Transcripts of selected documents relating to Jesuits in America and the Philippine Islands, 1653-1752*, Bancroft Library.

On October 8, 1736, the *audiencia* of New Spain confirmed a royal cédula charging that religious administrators of Jesuit haciendas regularly refused to disclose their harvests, which had resulted in the excommunication of "religious and secular alike" in the city and its surrounding provinces. The cédula provided for the dispatch of collectors to ensure that tithes correspond to the value of harvests, emphasizing that the Orders were obligated to pay "all of the *diezmos* of all of the estates, possessions, and taxable things that they have acquired..." ["... *todos los Diezmos de todos los Predios, Posesiones, cosas diezmales, que habían adquirido . . .*"] *Real Cédula sobre diezmos en el pleyto contra las jesuitas*, Spain 1736, f. 12. Simultaneously, the decree struck a conciliatory tone: it charged that *juezes hacedores* had used unconventional and indiscreet collection methods and in the process heaped scandal and discredit on the Society, while the city had refused to hear its defense. The ambivalent placement of blame in this matter suggests the Crown's willingness to tolerate disruptions from Jesuits, at least for now, given their role in education and general usefulness to colonial society.

mortality.<sup>131</sup> Founded in 1710 at the Jesuit's San Gregorio College, it was, according to Susan Schroeder's study of the group's registers, profoundly impacted by the *matlazahuatl* epidemic. The record for 1737 shows many vacant offices, with names on the 1737 list struck through. "As a sort of personal code and tribulation on the part of the sacristans, the dash, the double dash, stars, crosses, duplicate crosses, and crossovers on the register's pages reveal repeated efforts to maintain continuity of the Buena Muerte officer hierarchy during hard times."<sup>132</sup>

Did members of this association have a hand in organizing the novena, or in insisting on the procession following the failed *novenario* at the chapel? The initial act was followed by three additional processions and *novenarios* that winter, for Remedios, then Loreto again, and finally Guadalupe, in ten-day segments, one following with nearly perfect precision the last. It would appear that purposeful coordination of these processions was aimed to ensure that devotees of Remedios, Loreto, and Guadalupe – perhaps the three most important Marian advocations in the city at the time – could pay respects to each in turn. It likely produced efficiency and efficacy in worship, foreclosed the possibility of competition, and allowed for a neat escalation to Guadalupe, with implications for the reception of grace and divine intercession in the epidemic.

While clearly a concern, coordination with the processions of Remedios and Guadalupe may not have been the only factor in Loreto's planning. Participants in the Buena Muerte society, all Indian residents, included members of the adjoining barrios of Santiago Tlatelolco, San Pablo, Las Salinas, San Sebastián Atzacolco, and a number of sub-districts.<sup>133</sup> Their members served the community by providing alms to the poor, looked after Our Lady of Sorrows and the Blessed Sacrament, and probably also labored around the Jesuit image of Loreto, which was located in the church adjoining the College of San Gregorio.<sup>134</sup> Residents living, working, and socializing in and around the college included not only the members of the Good Death Society, but also those from the adjacent barrio of Atzacolco, whose patron saint, San Sebastián, was especially renowned as a protector against pestilence. His feast day was January 20 – the day that marked the beginning of the procession, which may indicate that the selection of this date held further resonance for residents of that part of the city.

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<sup>131</sup> Good Death Societies became especially popular in Spain in the sixteenth century, where an *Ars Moriendi* (Art of Dying) literature had increased and proliferated widely. The genre addressed a long-standing concern with the provision of correct ritual measures for ensuring passage into heaven or purgatory during the *agonía*, the crucial moment of struggle at death. In Europe, Jesuit authors took over the production of such literature, with over 139 texts on the subject in the seventeenth century and 101 in the eighteenth. Often these were simple pamphlets containing correct procedures for the last rites: a final, sincere, and thorough confession to a priest; the Viaticum, or nourishment to accompany the deceased to the afterlife; and extreme unction, intended ideally only for the final hours preceding death. The literature sometimes recommended the presence of family or members of confraternities to pray for the soul of the dying at his or her *agonía*. Increasingly, *Ars Moriendi* literature emphasized living well as appropriate preparation, as when Alejo de Venegas concluded in *The Agony of Crossing Over at Death* that the antidote to fear is "good, constant preparation for death." Carlos M.N. Eire, *From Madrid to Purgatory: The Art & Craft of Dying in Sixteenth-Century Spain* (Cambridge: Cambridge University Press, 1995), 28-32.

<sup>132</sup> Susan Schroeder, "Jesuits, Nahuas, and the Good Death Society in Mexico City, 1718-1767," *Hispanic American Historical Review*, vol. 80 no. 1 (Feb. 2000), 64.

<sup>133</sup> Schroeder, "Jesuits, Nahuas, and the Good Death Society in Mexico City," 63-74.

<sup>134</sup> Schroeder, "Jesuits, Nahuas, and the Good Death Society in Mexico City," 64-66.

These considerations reaffirm the conclusion that the organization and planning of the grand devotional act was more than an opportunity for the city's elite, who participated in large numbers, to showcase their status. Although serial devotion was important, local groups adjusting to the official schedule proposed for Remedios were key in the details and preparation of the procession. Some members of the Buena Muerte Society and residents of Sebastián Atzacolco lived and worked regularly in Loreto's presence, benefiting personally from her charisma. It makes sense, as Cabrera reported, that "the constant devotion of some persisted in taking out [in procession] the remedy of Loreto," and that devotees pressed for January 20 as an appropriate compromise.<sup>135</sup> A closely protected and revered figure, embedded in the community even or especially when she appeared for days at the center of city-wide devotion, residents would find special grace in their battles against contagion by enlisting the aid of the image and accompanying it (and possibly also Sebastián) in procession, and consequently, additional mercy in that feared and omnipresent moment of *agonía*.

Seeing one of the city's major public acts as the result of the joint sponsorship of the city council, the viceroy-archbishop, the Society of Jesus, religious sodalities, and local communities, we are reminded that in coming together under its banner groups could find multiple meanings at once. The record of other uses of images at the time, to which the remaining section turns, suggests that physicians and laypeople alike behaved as though contagion could be visualized and smelled, strictly *sensed*, just like the smoke from fires, incense, and gunpowder used as countermeasures to cleanse contaminated vapors in the air. In bringing her image out through the pestiferous air with candles, incense, and bells, Loreto also cut through the contagion, and residents could find refuge from the spreading disease at her shrine.

## **Negotiating Public Response II: A Catholic Kinetics**

Though some physicians recommended that individuals stay at home rather than participate in religious processions that "heated up" the air in the center of the city and mixed healthy with sick, the record of processions suggests this advice was mostly ignored.<sup>136</sup> A good deal of constant devotional activity took place beyond officially sponsored processions, as residents across the city set out on their own and with friends and family to visit shrine images. In order to partake of the fresh air in Loreto's chapel, for example, or to worship within the seemingly resilient perimeter of Guadalupe's shrine, residents went to those places, often in large numbers. Accompanying Loreto to the Casa Profesa, devotees had sought to purify "the vapors that infested Mexico," effectively carving out safe channels by means of light, prayer, and images. The unavoidable impression left by Cabrera's chronicle is that notions of distinctly clean and diseased areas shaped the provision of medicine, sacraments, and other aid during the epidemic.

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<sup>135</sup> According to the *Gacetas de México*, San Sebastián was in fact at the center of a procession on February 28, although I have not found evidence that he accompanied Loreto, or was processed alone on his feast day; the argument here is that a significant alignment of religious figures and days – personality and time – may have increased the efficacy of the procession for some of the faithful.

<sup>136</sup> Molina del Villar, *Por voluntad divina*, 68.

The purest of all places was Guadalupe's shrine at Tepeyac, which stimulated a number of pilgrimages to it. With fifteen stations to the rosary's Marian mysteries along the causeway that linked it to the city, this route often became a "highway for pilgrims."<sup>137</sup> The stations urged travelers to pause, pray, and leave tokens commemorating their passing or promising future gifts in return for answered prayers. Celebrants often congregated at Tepeyac on and around her feast on December 8 and 12, or during special events, such as the transfer to her new sanctuary on April 30, 1709, and on many other occasions throughout the year.<sup>138</sup> The shrine was an important stage for the narration and dramatization of the colony's history, facilitating at the same time commerce, ceremony, and social interaction and distinction.<sup>139</sup>

Especially during epidemics, the shrine enjoyed further fame as a site of purity *par excellence* in the eighteenth century, a miraculously sanctified place somehow immune from the vapors infesting the rest of the city. In 1737 the shrine saw more devotees than ever converge after Mexico City's council proposed that the populace accompany Guadalupe in procession to the Cathedral, following processions for the Virgins of Remedios and Loreto. When considering the council's proposal, Archbishop Vizarrón cited Guadalupe's natural immobility (ignoring her trip to the city during the floods of 1629-34) and proposed instead devout supplications at the Tepeyac shrine, a compromise made in view of the fact that her image could not, in his opinion, possibly be brought to the Cathedral in procession.<sup>140</sup>

On January 26, in the midst of a *novenario* for Loreto, Vizarrón ordered officials to convene for planning, and devotion began at Tepeyac the following Wednesday, January 30, a day on which, according to Cabrera, the entire city "left its many crowded residences, with citizens enough remaining to settle deserts and mountains, so that they

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<sup>137</sup> Taylor, "Mexico's Virgin of Guadalupe in the Seventeenth Century," 289, gives 1676 as the date of completion, relying on Antonio de Robles's *Diario de sucesos notables*. James Early states 1685 – indicating that it took ten years to complete rather than several months – without indicating his source. Early, *The Colonial Architecture of Mexico*, 72.

<sup>138</sup> The event is depicted in a painting from around the same time. From the right, a procession of saints on litters is portrayed passing in front of the sanctuary, preparing to greet Guadalupe, with Santiago on his white horse in the lead; the space in front of the side portal, adjacent to Guadalupe's image, bursts to overflowing with spectacle, with a *tarasca* dragon pulled by men in devil costumes menacing the crowd behind eight giants representing various continents, or perhaps New Spain's *castas*. For Manuel de Arellano's painting, see *Painting a New World: Mexican Art and Life, 1521-1821*, eds. Donna Pierce et al. (University of Texas Press, 2004), 190-3.

<sup>139</sup> The author of a 1754 account described the theatrical dimensions of these congregations, emphasizing at once the fervor of Indian devotion, the performance of significant episodes from New Spain's conquest history, and the wide catchment area of devotees. On Saturdays throughout the year devotees traveled from remote places to honor Guadalupe, danced for hours, performed allegories of "the apparition of La Señora, the conquest of Mexico, Montezuma's reception of Cortés, the feats of La Marina, whom they call Malinche, and others of the like," and mingled, dressed "according to the regions from which they hail, and the class of person to which they belong." Mariano Fernández Echeverría y Veitia, *Baluartes de México. Descripción histórica de las cuatro milagrosas imágenes de Nuestra Señora que se veneran en la muy noble, leal, e imperial ciudad de México . . .* (México: Imprenta de A. Valdés, 1820 [1754]), 61.

<sup>140</sup> "Y en fin que moviesen los ruegos, lo que no era permitido a las manos." Cabrera y Quintero, *Escudo de armas*, 133. In this respect the frontispiece of Cabrera's chronicle, in which the image appears hovering among suffering victims and patrons in the streets of the city, makes possible what had been denied during the epidemic (see Figure 1-1).



crowded into nearby hills, plazas, flats and roads [as well], the causeway and other roads becoming cordons of people, a restless village that linked Mexico City with Guadalupe, and united the City with its environs [*extramuros*].” Residents were drawn by the “good smell” of the place and its fame and experience fighting pestilence in the past, a place where “contagion dispersed, encircling the circumference without entering it.”<sup>141</sup>

Thus Tepeyac became a sanctuary in another sense – a place of refuge where the faithful could take shelter from contagion and putrefaction. Cabrera’s attentiveness to smells and his assumption that holy places naturally smelled good reflected an olfactory sensibility that included the set of ideas, discussed above, about the corruptibility of the air in the city center. These descriptions were in turn influenced by the fact that Guadalupe was beginning to transcend her local origins to become universal in New Spain. The epidemic of 1737 was remarkable for the impulse it gave her worship, and it is to be expected that in Cabrera’s text, commissioned to commemorate her role, the purity of her shrine would transcend that of any other.<sup>142</sup> After thousands converged at the sanctuary in February of 1737, individuals of all backgrounds interrupted their routines on May 24 to celebrate her election as patroness of the capital; at least in Mexico City, Guadalupe probably attained unprecedented popularity after the epidemic’s conclusion, perhaps signaling a “watershed” moment in colonial Mexico.<sup>143</sup>

Examining other rituals, however, we see that activities of all kind were concerned with space and the sensual ordering of Mexico City’s pestilential atmosphere. Their study breaks down the barriers by which we conceive of healing practices as folkloric belief, on the one hand, and rational or empirical knowledge, on the other. In 1737 at least, residents of many backgrounds perceived the overwhelmingly rapid transmission of disease to behave according to mechanisms of transference, which subsequently required the intensification of ritual measures to contain corrupted vapors and to make spaces clean, safe, and sacred – in other words, to consecrate, to purify a contaminated environment. On such occasions, the properties of the city’s consecrated

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<sup>141</sup> Cabrera y Quintero, *Escudo de armas*, 135. [“*A sufrir la numerosa México, aun sin la mitad de su gente, falta alguna, se hubiera creído en esta ocasión despoblada, por solo poblar a Guadalupe. Revertíase una Ciudad entera de sus muchas, apretadas viviendas, y como que sobraban vecinos para poblar desiertos, y montes, apiñaban sus cercanos cerros, sus plazas, llanos y caminos, siendo su calzada, y demás sendas cordones de gente, y como poblados movezidos, que enlazaban con Guadalupe a México, y unían la Ciudad y el extramuro. Tanto atraía el ámbar de sus Rosas, y tantos la fama, y experiencia de la preservación del contagio, y buen olor de aquel lugar, que como ya apunté, y se admiró, ni en estos, ni en muchos mas días de la plaga, había muerto mas, que uno, u otro; aquel cansado de vivir a su espacio, y otro que apresurándose más que debiera, cayó, y rodó del cerro al sepulcro. Desvaneciase en términos de Guadalupe el contagio, que rodeaba en contorno, y no entraba.*”]

<sup>142</sup> In the months and years following her election as patron of the city, prominent members of the city discussed the need to acquire the support of Rome and its Congregation of Rites, which required justification of Guadalupe’s miracles and devotion before lending its support. Given that the tradition of her appearance to the Indian Juan Diego was undocumented, evidence of Guadalupe’s irrefutable role in the epidemic of 1737 would have greatly enhanced this miraculous tradition.

<sup>143</sup> William B. Taylor, *Our Lady of Guadalupe and Friends: The Virgin Mary in Colonial Mexico City* (Berkeley: UC Regents, 1999), 11, 18. In addition to an association with disease, other characteristics of Guadalupe’s worship included her role in times of flood in a city whose inhabitants were relentlessly attuned to of the ebb and flow of water and the fixed position of her image in the shrine at Tepeyac relative to other more mobile images. (An important exception was during the floods of 1629-34, when her image was brought from Tepeyac to the cathedral in Mexico City for the duration of the emergency.)

“containers” – wafers, smoke from fire and incense, candles, words of praise and propitiation, and vinegar, among others – were transferred by nearness to whatever happened to be impure or infested, which demanded much human movement and personal contact with the most critically affected regions and people.

Only a few examples of this activity can be cited here. In the performance of Catholic mortuary rituals, consecrated men with access to holy oil, the viaticum, and the expiating power of confession played important roles in the struggle, especially among the sick in the infested barrios, lower-class huts, and textile workshops in the city. Pastors from the parish of Vera Cruz made trips to three textile workshops and several barrios to administer the rite of extreme unction to individuals without hope of recovery. The amount of work required exhausted the clergy laboring in the church and hospital of Saint Catherine, where they “nearly lived with the sick.”<sup>144</sup> In the Indian parish of Saint Joseph, Franciscans were drawing dangerously close to the dying and dead in order to confess or administer sacraments, “holding the sacred Viaticum in one hand, and in the other a vessel to collect the blood that appeared as discharge in nearly all of the sick, and which impeded, at the moment when it was in greatest demand, the aid of the confessions they administered.”<sup>145</sup> Pastors from this parish joined forces with those from the parish of Santa Vera Cruz to administer sacraments to the sick in the charitable hospital of Nuestra Señora de Guadalupe, an institution intended for parishioners of Saint Joseph.<sup>146</sup> San Sebastián Atzacolco, the Indian community adjacent to the Jesuit College of San Gregorio, found its clergy so fatigued that it called on members of the neighboring Jesuit colleges to help confess the sick. Atzacolco’s parishioners, in turn, felt compelled to take up the slack themselves: they made a *novenario* to San Sebastián, efficacious defender against the plague, carrying him in procession to encircle the entire barrio and bringing him to particular residences in order to comfort the afflicted.<sup>147</sup> Cabrera singled out Jesuit priests from the College and Casa Profesa and mendicants from the nearby Discalced Carmelite convent for their zealous administration of sacraments and other remedies to combat the epidemic: for nearly nine months, “they were able to achieve in this district alone up to 11,000 *estaciones* [rogations or prayers] and 24,000 *óleos* [anointings] and confessions of the sick (without those that were being done in other

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<sup>144</sup> “. . . los abochornaba el trabajo, y casi vivían con los enfermos.” Cabrera, *Escudo de armas*, 248. Members of this parish engaged in a lively struggle with those of Tlatelolco, who were hesitant to relinquish their Christ of the Column for the former’s procession due to the scarcity of miraculous sculptures in the city. See *ibidem*, 243-4.

<sup>145</sup> Cabrera y Quintero, *Escudo de armas*, 251. [“*Teniendo . . . el sagrado Viático en la una mano, y en la otra la vasija para tomar la sangre que se precipitaba en flujos a casi todos los enfermos, e impedía, cuando más lo pedía, el auxilio de la confesión que estaba haciendo.*”] Contrast the depiction of this proximity to bodily fluids with the labors of monks of St. Mary’s in Barcelona during the plague year of 1651: “Each carried a torch, for when confessing the sick the torch was held between the priest and the sick person, and they kept their distance because it is said that the plague is carried by one’s breath. Thus they stayed far apart and they did not spend a long time with the confessions. When giving Communion they extended the Holy Sacrament on the end of a silver rod in order not to touch the sick person, and they gave him Communion and the last rites at the same time in order not to have to return.” Miquel Parets, *A Journal of the Plague Year*, trans. James Amelang (New York: Oxford University Press, 1991), 48.

<sup>146</sup> Cabrera y Quintero, *Escudo de armas*, 252.

<sup>147</sup> Cabrera y Quintero, *Escudo de armas*, 262.

districts, where daily the administration of 100 *óleos* and as many confessions and forty to fifty *estaciones* in the nighttime and daytime reach and perhaps surpass this district).”<sup>148</sup>

Allowing for exaggeration on Cabrera’s part of the heroism of Mexico City’s inhabitants in the interest of demonstrating a “Christian commonwealth,” nevertheless his depiction of events suggests that a clean place, a cleansed conscience, and the familiar, personal, comforting presence of a beloved saint were often at stake simultaneously.<sup>149</sup> Holy men, saint images, the consecrated host, oil, candlelight, and fragrant incense wafting from the censer and boat of the priest were just some of the objects that circulated by the attentiveness of many individuals organizing healing strategies. Their efforts produced, to use Kevin Lynch’s term, nodes of purification and junctures of ritual activity, and the cleansed environments that resulted promoted the integrity of sick bodies, souls, and infected spaces. Whether authorities were entirely resolved to limit such movements, their inevitable failure stems in part from the sensory, tactile, and visual requirements of healing in a Catholic society, where the touch administered by priests and laypeople became a common means of putting pestilence in its place. Such continuous movement was itself contagious, generating other patterns of movement among those parishioners who took up the cause for their neighbors.<sup>150</sup> If containment and isolation generally failed as official strategies, they also failed because they lacked the full support of the city’s physicians, at least some of whom, according to Cabrera, were also interested in exploring the salubrious effects of the clean air in and around shrines, in addition to the physiological predisposition of the city’s *indios* to disease or the risk to the circulatory system of ingesting impure fluids and changes in temperature.

By placing images and their various uses at the center of the epidemic, Cabrera’s exceptional work suggests that these were the fulcrums about which many solutions turned. It is a story of widespread participation and a window onto a dense symbolic field of illness in which intimate “clinical settings” involved priests, families, and physicians and appeared across the city, settings that drew on fumigants, saint images, and the sacraments with as much frequency as medications. With some exceptions, these ritual contexts are often absent from studies of healing and health in colonial Mexico.<sup>151</sup> Yet

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<sup>148</sup> Cabrera y Quintero, *Escudo de armas*, 242. [“*En este movimiento continuo, y continuado, sin otra mutación que de aumento, casi por nueve meses, llegaron a hacerse en solo este distrito hasta once mil Estaciones, y veinte, y cuatro mil Oleos, y Confesiones, sin las, y los que se hacían en aquellas: que a tanto llega, y quizá más la regulación de cien Oleos, y otras tantas Confesiones cada día, y de cuarenta a cincuenta Estaciones entre día, y noche diariamente.*”]

<sup>149</sup> David Brading notes Cabrera’s eagerness to evoke “a powerful image of a Christian commonwealth, a Catholic city, where both priests and laymen exposed themselves to the danger of infection in order to minister to the needs, both physical and spiritual, of the sick and poor.” Brading, *Mexican Phoenix*, 120-3.

<sup>150</sup> As Robert Desjarlais has noted in the context of shamanic healing in Tibetan societies, sensual healing rituals produce a new awareness of the environment and an awakening to the possibilities and necessity of participation in it. “Ritual sentience, by whetting the senses, helps to renew a villager’s felt participation in the world.” On “ritual sentience,” the importance of cognitive and perceptual faculties to the individual, and the renewal of the world in Yolmo spirit-calling, see Robert Desjarlais, “Presence,” in *The Performance of Healing*, ed. Carol Laderman and Marina Roseman (New York: Routledge, 1996), 159.

<sup>151</sup> The exceptions draw on Inquisitorial documentation, which has offered the most promising glimpses of these intimate ritual settings. See Noemí Quezada, *Enfermedad y maleficio: el curandero en Mexico colonial* (Mexico: UNAM, 1989), and Laura Lewis, *Hall of Mirrors: Power, Witchcraft, and Caste in*

sickness always took place in a ritual space: if it is possible to speak of health care in the abstract, healing acts were anything but, involving sustained manipulation and awareness of a diseased or healthy environment.

A focus on the purifying aspects of religious practice is ultimately too mechanistic, since amulets and astringents, which were indeed used to fend off contagion, lacked the important figurative properties and transformative possibilities inherent in an image. A sculpture of Santiago, in the last analysis, was not only or mainly a shield: if he were, a bottle of vinegar in procession might have done the trick just as well. The same can be said of the image that Cabrera credited with helping to bring a decisive end to the epidemic, the famous Cristo Renovado in the care of the city's Discalced Carmelites. This crucifix had a long miraculous history, having in the past restored itself, cured the blind and crippled, and saved Mexico City from sickness in 1697, proving its capacity for wonder working in times of epidemic.<sup>152</sup> On April 28, 1737, it was brought to the Cathedral for a further *novenario*, during which Vizarrón granted plenary indulgences to those who visited and prayed for it and other "necessities of the Christian pueblo." Cabrera added a wrinkle to the history of this miraculous crucifix (or more likely solidified a growing tradition in Mexico City) when he noted that the coincidence of its mobilization on the day following Guadalupe's swearing in, in conjunction with its prior propensity for miracles in Mexico City, demonstrated its role in bringing about a definitive return of the city's health.<sup>153</sup> He deemed April 28 the official end of the epidemic, thus reaffirming miraculous image's relation to the city in need *as a personality*, generous and charitable, and not just another shield against contagion.

That devotion to certain miraculous saints should have received strong impulses during epidemics comes as no surprise given the ways their histories as intercessors and advocates were interwoven with sickness and disaster. Archbishop Vizarrón could hardly believe that the epidemic had persisted after months of sustained effort on the part of the entire city: with over a dozen processions and public acts of devotion in addition to the constant ministrations of priests and physicians, something seemed remiss. In a report to the Spanish crown on April 16, 1737, he stressed the high mortality of the Indian population and the lower classes and noted provisions in health care, including the six temporary infirmaries established for Indians; the five pharmacies destined to treat the

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*Colonial Mexico* (Durham: Duke University Press, 2003). Sherry Fields, *Pestilence and Headcolds: Encountering Illness in Colonial Mexico* (New York: Columbia University Press, 2008), holds out the possibility of some fresh insights from a handful of primary sources, including sets of sixteenth- and eighteenth-century letters to Spain, a series of ex-voto images in public and private collections, and the sections on health in the sixteenth-century *relaciones geográficas*. The most persuasive point is that laypersons and professionals shared many ideas about healing, but as she acknowledges, much evidence comes in the form of prescriptive texts directed at a small group of urban elites in New Spain; if there was a connection between these ideas and the rest of the urban or rural population, it is not explained.

<sup>152</sup> A devotional pamphlet on the self-renovation of the Cristo Renovado had reached a fifth edition eight years prior to the epidemic, suggesting widespread popularity in the city for its devotion. Early, *The Colonial Architecture of Mexico*, 70. On the popularity of the miraculous crucifix and other Christocentric devotions in the eighteenth century, see William B. Taylor, "Two Shrines of the Cristo Renovado: Religion and Peasant Politics in Late Colonial Mexico," *American Historical Review* 110:4 (2005): 945-974.

<sup>153</sup> Cayetano y Cabrera, *Escudo de armas*, 454-6. On the procession of the Cristo Renovado and Archbishop Vizarrón's offer of plenary indulgence, see the entry for May 3, 1737, Sahagún y Arévalo, *Gacetas de México*, vol. 2.

poor for free; and the four physicians assigned to barrios to heal the sick in their homes, along with the charitable assistance provided by the clergy.

Besides these human measures, the spiritual aid of divine providence has been solicited as well, with supplications, novenas, and supplications to God, His Holy Mother, and the special saintly advocates of this city and its people, seeking to calm His justified rage with processions and public penance. It has not been enough. The number and gravity of our sins must be great, or repentance of little merit, when with all of this His immense mercy pays no heed.<sup>154</sup>

### **Conclusion: An Epidemic in Retrospect**

Using the 1737 epidemic as a point of departure, we can explore subsequent disease crises and their management in Mexico and glimpse what is still rather poorly understood: the interaction of the rituals of medicine and religion on the ground as practitioners of the former grew more confident in their medical training and professional organization in the eighteenth and nineteenth centuries. Modernization was not a zero-sum game, with a “scientific method” assuming a life of its own and ultimately able, in and by institutions, “to rebel.”<sup>155</sup> Yet it remains to be seen what did, in fact, happen to processions and saints, local healers, bleeding, sweat baths, and pilgrimages once doctors trained in the latest methods from universities in Europe and Mexico City made their way into barrios and villages, armed with degrees, tools, and their own brand of ritual knowledge. While medical services have historically been concentrated in Mexico City, enlightened reforms in health care would bring some major changes in the ways even rural communities coped with epidemic crises. How were innovations and new, anomalous experiences fit into a prior scheme of cultural classifications? Whether speaking of atonement, confession, deprecation, expiation, flagellation, penance, propitiation, purification, or sin, a world of Catholic obligations and values, to which communities held themselves and others in isolating the threat of disease, took shape at the nexus of a vibrant ritual complex, about which we still know very little.

Within this complex, the notion of baroque practices and processes becomes invaluable. For one, it aids in resisting, at least at the outset, neat classifications of the kinds of activities discussed above. Were processions against pestilence official, secular,

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<sup>154</sup> AGI Audiencia de México leg. 504, Mexico 16 abril 1737, Juan Antonio Arzobispo de Mexico to Crown. [*Fuera de estas humanas providencias, se ha solicitado también el socorro espiritual de las Divinas con plegarias, novenas, rogativos a Dios, su Santísima Madre, y Santos especiales Abogados de esta Ciudad, y Pueblo, procurando aplacar su justísima ira con Procesiones, y públicas penitencias; no ha bastado; mucho debe de ser el numeroso y mucha la gravedad de nuestras culpas, o poco eficaz el arrepentimiento cuando con todo esto se hace sorda su inmensa clemencia.*”]

<sup>155</sup> See Voekel, *Alone before God*, 190. In analyzing wealthy testators and their celestial advocates there is an elision of the character of the relationship in favor of a neat narrative of religious change over time. Voekel acknowledges, but moves quickly past, the importance of proximity to the saint’s power in burial in order to treat at greater length the “hidden agenda” of such burial practices, namely the display of social position and distinction. The urge to find the real, hidden meaning of religion has a long and distinguished history, but here that meaning happens to be the same aspects highlighted by critics of ostentatious burial practice in eighteenth- and nineteenth-century Mexico. There must be a way to appreciate the ways rituals intersect with and bring into play societal hierarchies without reducing them to the latter. On hidden agendas, see pp. 36-42.

or religious? Because they were obsessively practiced, were they pathological? An issue of sanitation that belongs to the realm of public health and science, but not properly the realm of religion? Were they classificatory and thus rational empiricism, idiosyncratic and thus cultural, decorous and thus the behavior of a good, moral Christian, or superstitious and thus magic? Placing these kinds of behavior squarely within one sphere or another, to call them scientific, religious, or hygienic, obscures the very collaborative and interactive nature of the epidemic context, the conversations that took place across professions and institutions, and the relation of administrative center to social periphery. Binaries of practice in healing force the “popular” to close in on itself, in constant opposition to the allegedly informed and educated residents of the city, when in fact the reality, and the divide between these ostensibly distinct realms, was far less clear.<sup>156</sup>

Although many divisions are prominent in Cabrera’s text, they tend to center not on the possibility of propitiation and divine intervention in crisis, on one side, and the priority given to physiological explanations, on the other, but on the aesthetics and propriety of devotional performances deemed essential to survival by all. Social boundaries, as I suggested above, had as much to do with the relatively secure viewpoint of the inexperienced outsider as any inherent, irreconcilable differences between cultures.

Cabrera’s chronicle was very much of a baroque time and place, meeting and exceeding the conventions his readers expected of him. It represented Mexico City as a structured city of sacred places and imposed a temporal progression – beginning, middle, and end – that seems to have been common in natural disasters. Cabrera was most interested in the ways human activity constantly refigured the physical landscape, the way human agency was compelled to meet divine agency everywhere in the city. What was particularly baroque in the text’s composition was the way its descriptions activated the senses, the words in a way merely an extension of Mexico City’s purified or putrid spaces. Activation of the senses was an integral part of an age when the goal of rhetorical writing was to move, *movere*, in the classical sense of persuading by argument, and in this it was far from an age when texts were expected to be transparent in their signification, when rhetoric began to be looked on with suspicion and, eventually, denounced as propaganda.<sup>157</sup>

In the twentieth century, the historical discipline was formed out of this deep suspicion toward the relationship of language to the empirical world, tending, as Carlo Ginzburg wrote, to disparage the linguistic or poetic dimension as incapable of containing facts, reality, or truth beyond surface ornamentation.<sup>158</sup> To follow these suspicions and assumptions about the function of language would be to miss the meaning

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<sup>156</sup> For early modern Europe William Christian has voted in favor of discarding the elite/popular dichotomy, highlighting the salient overlaps in religious practice of kings and commoners in sixteenth century Spain. “In Toledo women who wished to be cured of *çiçiones* (probably malaria) would sweep the church of Santiago on Saturdays. When Charles V had malaria, he too swept the church . . .” In accepting that Hapsburgs, as Christian puts it, “shared the religious outlook of their subjects,” one need not ignore the possibility that such gestures communicated or instantiated the solidarities and divisions of their participants, practices never being socially evacuated containers for one or another “worldview.” See Christian, *Local Religion*, 157.

<sup>157</sup> For a thorough discussion of these issues of rhetoric and aesthetics, see Evonne Levy, *Propaganda and the Jesuit Baroque* (Berkeley: University of California Press, 2004), especially Chapter Two.

<sup>158</sup> Carlo Ginzburg, *History, Rhetoric, and Proof* (Hanover: University Press of New England, 1999), 15.

of baroque healing in 1737. Artifice and what appears to be a mere façade of rhetorical flourish of ornamental embellishment cannot simply be peeled away to uncover an underlying reality because residents in Mexico City so often looked to surfaces, which were not fixed and static but contained meaningful reflections, in a literal sense, especially in a time of epidemic: a community looking for signs of transformation and animation in a saint looked to his dress and posture and saw its own predicament projected back. It involved a reading of signs facilitated by a sensibility that was baroque in the sense that the environment became a formal aid to movement, organization, and understanding, rather than a tool for social control and legitimate rule.

What I propose for the remaining chapters is a different way of speaking about illness, health, and medicine. Scholarly conceptualization of the healing arts in Mexico as syncretic, whether as a mixture, a *mélange*, or a hybrid of some other kind, is by now a commonplace intended to account for the complexity of cultural interactions or encounters between medical systems, usually two, usually Mesoamerican and Western.<sup>159</sup> This characterization implies the dual origins of practice, which is particularly difficult to confirm or sustain. Yet there are other, more immediately relevant objections to its application for epidemics: first, that it leaves unaddressed the most central issues, including the spatial and embodied ways of knowing illness that drove the resolution of the episode and battles against contagion; and second, that it implies finality or resolution where none existed. Meaning came retrospectively, in the aftermath, while in the midst of crisis strategies of healing and worship were improvised according to considerations of the nature and structure of the epidemic. Models of syncretism, though acknowledging the complexity of cultural practice, gloss over the ways contemporaries struggled to make sense of illness as it was occurring. A more adequate approach, it seems, would account for the issues that arose and were debated within the structure of the event itself.

Attentive to these considerations, the following chapters consider some of the problems raised in the healing arts as reforms in preventive medicine were implemented in the final decades of the century. What were the moral and spatial considerations of intellectuals and physicians as they diagnosed disease and measured contagion, and how did this influence the practice of medical science? How did rural communities think about a sick person, and what effect did this have on a new program of enlightened health management? What ritual performances were appropriated to introduce immunization, and what does this tell us about medical empiricism and the Mexican Enlightenment? How were medical methods “translated” for lay consumption, and how did laypeople

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<sup>159</sup> The study of medicine has a curious history in Mexico, often tinged with the ideology of cultural *mestizaje* that constitutes one especially powerful vision of the modern Mexican nation. For example, the earliest and probably most famous compendium of pre-Conquest medicine, the *Codex Cruz Badiano* (1552), has been signaled as the beginning of *mestizo* culture because it reflects both a coherent system of Mesoamerican thought and its imbrication with European medical concepts, or perhaps better put, reveals the result of a process of incorporation, integration, and borrowing of European knowledge, especially as the work was translated from the origin Nahuatl (written by a physician of noble Indian descent) into Latin. For the pursuit of this thesis, see Carlos Viesca Treviño, “El Códice de la Cruz-Badiano, primer ejemplo de una medicina mestiza,” in J.L. Fresquet Febrer and J.M. López Piñero, *El mestizaje cultural y la medicina novohispana del siglo XVI* (Valencia: Instituto de Estudios Documentales e Históricos Sobre la Ciencia, 1995), 71-90. For a more recent application of the medical mixture framework to the Guatemalan context, see Martha Few, “Medical Mestizaje and the Politics of Pregnancy in Colonial Guatemala, 1660-1730,” in *Science in the Spanish and Portuguese Empires, 1500-1800*, eds. Daniela Bleichmar et al.

assess their viability and relevance? And how did communities organize, socially and politically, to make decisions about which practitioners and emergency measures to admit into a village? In the final chapter, particular therapeutics such as bleeding and bathing are discussed, along with the issue of whether they are best understood as hybrids.

To return to the aftermath and legacy of Mexico City's 1737 epidemic: how were the scars of a prolonged epidemic revealed in its aftermath – in memory, in its institutions, in reforms and renovations? In the view of officials, nothing threatened order and cleanliness in the urban environment more than water spilling over into streets full of pedestrians, foodstuff, and animals; disease infiltrating homes and bodies without regard for conventional distinctions of social hierarchy; the poor congregating around the doors of churches and other sacred places to plead for alms or to expire; or multitudes of rural peasants in search of aid in the city. Officials sought to restructure the city and, in some cases, limit the activities of priests, saints, and atoning communities. Rather than surrender, residents only intensified efforts with new processions, drawing on saints more familiar with disease, or increasing the workload of familiar figures (transformed, like Santiago, to adapt to new circumstances). Yet it remains the case that official attitudes toward disease could have the effect of isolating the very communities trying to contain it.

For Italy, Brian Pullan describes a dark consequence of disease crisis. Rather than lead to systematic, preemptive transformations in social policies by governments, sixteenth-century plagues produced a degree of elation or relief resulting from the connection made between disease and the elimination of poverty, commonly through the elimination of the poor. For many, plague was a blessing in disguise.<sup>160</sup> In New Spain, Cabrera similarly approved of a new awareness of the Indian population made possible by the *matlazahuatl* epidemic when he wrote that God had done with the lashings dispensed by the plague what had been attempted following the insurrection of 1692 in Mexico City, removing Indians from the center of the city and returning them to their barrios. Cabrera noted that in the earlier attempt more than seven hundred Indians, scoundrels “who had given neither to God nor to Caesar what was owed them” surfaced from various hiding places in the city, and the prolonged epidemic lured out many more (*rastreó el contagio*), “occasioning happiness by their misfortune, making good with God, receiving the Sacraments . . .”<sup>161</sup> Even if in 1737, as in 1692, reform was temporary, Cabrera's optimistic summation of the consequences of the epidemic raises questions about the perception of the plague by residents. For whom was the epidemic a disaster? In what ways was society “renewed” by the infestation and subsequent mobilization?

Mexico City's epidemic provided many other opportunities for renovation. These ranged from those understood literally, as in the renovation of Loreto's chapel, or the transformation of Santiago's dress, to revivals in worship, as in the exemplary case of Guadalupan devotion, or Nuestra Señora de la Bala, located in the church attached to the

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<sup>160</sup> Brian Pullan, “Plague and Perceptions of the Poor in Early Modern Italy,” in *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, ed. Terence Ranger and Paul Slack (Cambridge: Cambridge University Press, 1992), 121.

<sup>161</sup> Cabrera y Quintero, *Escudo de armas*, 265. [“. . . se hallaron más de setecientos de los que anidan en estos escondrijos, que ni a Dios, ni al Cesar habían dado en muchos años lo que debieran . . .” “Muchos más parece que rastreó ahora el contagio, con la felicidad que les acarrió su desgracia, en que se pusiesen bien con Dios, recibiendo los Sacramentos . . .”]



isolation hospital of San Lázaro, which saw the renewal of both cult and image.<sup>162</sup> They included rebirths of self, as when throughout the epidemic residents confessed the sin in their souls, preparatory to what must have appeared an inevitable death. For some, renovation entailed eliminating Indians from the city center and subjecting them to the authority and policies of the Church. Religious and secular authorities, along with the Protomedicato, expressed a desire for greater control, but achieved only limited success in implementing programs to cope with the poverty and dirt that seemed to exacerbate the epidemic, or in controlling alcohol consumption.

In taking matters into their own hands, residents for their part revealed experience with prior epidemics and the images that had and had not worked wonders in the past. If, as Cabrera suggested, and Durkheim would insist centuries later, miraculous images such as Guadalupe could function as proxy containers for a society and its sentiments, society's memories adhered in them: they became "durable" in images, in Durkheim's word, and within the urban landscape came to recall former crises and triumphs, to define certain places over time, and to direct activities in the present. Images provided the colonial city with sight and geographic orientation while making present for many the reassurance and comfort of powerful, miraculous emblems of recovery. It is no wonder paintings and statues were frequently touched up in the aftermath.

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<sup>162</sup> Like Loreto, devotees took Bala's statue to the cathedral for a *novenario*, "*sanando, si no a México de su fiebre, a el desfrío que parece ha tenido en su culto . . .*" Cabrera y Quintero, *Escudo de armas*, 158.

## CHAPTER TWO

### **The Fashion of Science: Social and Symbolic Foundations of Late Colonial Medicine**

Elite residents of New Spain became enamored of innovations in medical science decades before health care became an official pillar of Bourbon reform. The writings of Newton and Bacon, the medical treatises of the Spaniard Benito de Feijóo and the Dutch physician Herman Boerhaave, as well as numerous journals covering the discoveries and debates of European academies and scientific institutions traversed the Atlantic Ocean and stimulated the minds of those with access to books, pamphlets, and periodicals. They made it possible for the most optimistic to believe they could locate disease in the environment and the human body, slow or halt its transmission, and eradicate its deleterious effects on the human race.

One of the best examples of this interest was a series of literary journals specializing in scientific learning and research published throughout Spanish America beginning in the 1760s. The pages of these journals reveal how complex, multifaceted, and active investigations into disease could be. Modeled in part on the journals then fashionable in Europe, they were made possible by the opening up of transatlantic channels of communication and by the implicit support of enlightened absolutists for progressive pursuits of learning.<sup>163</sup> Equally important, this enlightened press satisfied the need among an educated class of Creoles for “useful” technical knowledge in the mining and agricultural industries and helped “popularize” the results of research and experimentation.<sup>164</sup> “Through the press and the use of Spanish and Portuguese – rather than Latin – enlightened Latin Americans made clear that secrecy is not one of science’s

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<sup>163</sup> See Alberto Saladino García’s study of the enlightened press in Spanish America, *Ciencia y prensa durante la ilustración Latinoamericana* (México: UNAM, 1996), especially 63-81, where he stresses that public utility was one of the shared features of these publications. Publications specializing in scientific matters gave way, at the beginning of the nineteenth century, to those of a broader sociopolitical nature, for reasons that are perhaps obvious (e.g. the tumultuous political context, the creation of a free press with the temporary abolition of the Inquisition).

<sup>164</sup> Juan José Saldaña’s studies of the Latin American Enlightenment stress the initiative of American Creoles aiming to further economic modernization in a context of dynamic markets and growth. Enlightened learning acquired widespread relevance for Latin American societies only once its applications in mining, agriculture, and medicine became clear. “*Este interés por las ‘artes útiles’ es característico de los ilustrados americanos en el último tercio del siglo, en el momento en que las Luces fueron ya asimiladas y se busca utilizarlas para conocer y transformar el propio país. ... Éste es ya el momento en que los científicos encuentran un papel social que desempeñar e interlocutores entre otros sectores: artesanos, mineros, comerciantes, burocracia virreinal, etcétera, con quienes negociarán estrategias que hagan viables sus propósitos cognoscitivos y prácticos.*” Juan José Saldaña, “Ciencia y felicidad pública en la Ilustración Americana,” in *Historia social de la ciencias en América Latina*, 151-207, quotation on 167-8.

qualities, that communication is essential to scientific learning.”<sup>165</sup> While commercial and imperial interests were a major motivation for their publication, however, the publications that appeared in Mexico City over three decades show that they involved many more besides scientists and Creoles with economic interests: health care, as a matter of interest to everyone in a pestilential city, meant that science took on meanings for even parents and children in the impoverished barrios of the capital.

On one hand, then, the publications were restricted affairs, controlled and read by a handful of clerics, physicians, merchants, miners, and bureaucrats in Mexico City, and thus reflected a narrow vision of what science in the viceroyalty was or could be.<sup>166</sup> In the absence of public spaces for scientific experimentation, demonstration, and debate comparable to those popular in European cities at the time (salons, cafes, and lecture halls), the printed page satisfied a need for new learning, as residents depended almost entirely on periodicals for news of discoveries. The page became a virtual space for debate theoretically open to a more or less homogenous, usually male, reading elite.<sup>167</sup> These sectors, by consuming and debating technology, anatomy, industry, astronomy, and medicine in the pages of these journals, further distinguished themselves as belonging to a refined and enlightened class.

On the other hand, several aspects of these journals – their prospectuses, the ways they treated medical matters, the responses received from readers, and the issues debated, specifically medicine and health – suggest that they were intended to reach and teach a far more diverse group. Despite increasing specialization of knowledge (e.g. in mathematics, geography, astronomy) and the appearance of sophisticated instruments of measurement, these publications actively solicited and reproduced contributions from laypeople and medical professionals alike in and around Mexico City. In this collaborative dimension, they reveal shared ideas and assumptions about health that allowed them to imagine a novel domain of popular science in colonial Mexico.

This chapter analyzes these publications as a vantage point onto the formation of a sphere of scientific culture in Mexico City, in which a few enthusiasts engaged a potentially far larger public. Specifically, the journals show how medical discourse, as part of a broader science of humankind, perpetuated a number of moral, theological, and

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<sup>165</sup> Saladino García, *Ciencia y prensa*, 324-5. [“*Los ilustrados latinoamericanos hicieron palpable, a través de la prensa y con el uso del español y del portugués en vez de latín, que el secretismo no es cualidad de la ciencia, que al conocimiento científico le es esencial su comunicabilidad.*”]

<sup>166</sup> Reliable subscription figures for these journals, to say nothing of trustworthy estimates of their entire print runs, are scarce. The *Gazeta de México* had as many as 400 subscribers during its final incarnation (1784-1809). The *Diario de México* peaked when it appeared in 1805 with a subscription base of nearly 700, but this number declined steadily thereafter. These figures can be misleading: the daily, for example, was also sold individually, for a half real, at a dozen locations around the city. For data on the *Diario de México*, see Susana María Delgado Carranco, “Un acercamiento a la segunda época del *Diario de México* (1812-1817),” in *Historia de la prensa en Iberoamérica*, ed. Celia del Palacio Montiel (México: ALTEXTO, 2000), 83-94, and for the *Gazeta de México*, Saladino García, *Ciencia y prensa*, 72.

<sup>167</sup> On the printed page as a substitute for other arenas of debate and scientific performance, see Achim, *Lagartijas medicinales*, 167-169. The studies documenting the variety of these scientific demonstrations in Europe have proliferated wildly over the last decade. For a recent sampling, as well as suggestive discussion about the ways public experiments brought together establishment and amateur, professional and popular, see the contributions to Bernadette Bensaude-Vincent and Christine Blondel, eds., *Science and Spectacle in the European Enlightenment* (Burlington, VT: Ashgate Publishing Co., 2008).

class assumptions already prevalent in colonial society. In some ways this was inevitable. Most of the savants who participated in investigations, debates, and publishing were far from expert in their field, a common feature of scientific practice at the time. Unlike the human and social sciences of the nineteenth and twentieth centuries, with their rigid disciplinary divisions, the natural sciences of the eighteenth century constituted a “science of man” that took an anthropological interest in the object of study, helping define what it meant to be human.<sup>168</sup> The nascent medical disciplines were among the sciences of man contributing to enlightened revolutions in understandings of humans and societies, and as part of an overarching impulse toward improvement, health could hardly be contained to matters of anatomy and disease.<sup>169</sup> Insofar as domains of science and expertise lacked definition, studies of the environment and the human body became opportunities to reflect on human difference, on social, cultural, and political phenomena, in short on things we imagine as lying beyond the sphere of a proper science – affect, intellect, customs, morals, and the passions.

This chapter considers the creation of this domain of practice in ways of speaking, writing, and thinking about sickness and health in the pages of these journals. Who could take responsibility for health and who, by extension, could participate in enlightened discussions? By contrast with libraries of books, forbidden and otherwise, that provide evidence of the reading tastes of an upper class, these periodicals articulate a broadening interest in science and the study of health. They sought to convince a larger public of the utility of a new scientific language and draw many more into conversation. In this, they demonstrate the broader relevance some contemporaries thought the learning tucked away in libraries could have. If the public they imagined never actually came into being, the fact that some considered the possibility nevertheless suggests the centrality of a popular, informal, non-governmental sphere of public health.

### **Forging Science’s Public**

Unlike the technical scientific and medical treatises published in Mexico City, which were usually consulted by chemists, physicians, technocrats, and bureaucrats, the literary journals specializing in the sciences, broadly defined, meant to be seen by many more. They appeared for the first time in the 1760s, and because only a minority of the population in late colonial Mexico could actually read them – estimates of literacy hover around ten percent for the entire population at the turn of the nineteenth century – those

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<sup>168</sup> Sergio Moravia, “The Enlightenment and the Sciences of Man,” *History of Science* 18 (1990), 247-268. Recent studies of this period have drawn attention to the “sensibility” of the empirical sciences, arguing that scientists and other empiricists took part in a wider cultural fashion or “sensibility” that trained the senses to be open to the world, and as such seemingly distinct realms of knowledge (e.g. the natural sciences and the literary arts) had more to do with one another than we might think. See Jessica Riskin, *Science in the Age of Sensibility: The Sentimental Empiricists of the French Enlightenment* (Chicago: The University of Chicago Press, 2002), which examines “how scientific and moral arguments interacted during a period in which the same people framed both sorts of argument and applied them to projects of political administration and activism.” (5)

<sup>169</sup> For an overview, see Roy Porter, “Medical Science and Human Science in the Enlightenment,” in *Inventing Human Science: Eighteenth-Century Domains*, eds. Christopher Fox et al. (Berkeley: University of California Press, 1995), 53-87.

who could enter the conversation were few.<sup>170</sup> Nevertheless, the realization on the part of a creole elite that one could speak in the language of this new science was exciting, and they felt that their way of speaking could and should be used by everyone.

This would require certain adjustments, simplifications, and translations for a lay public less familiar with science's conditions, methods, and tools. The foremost figure to undertake this novel scientific production and periodical translation in Mexico City was the creole cleric, polymath, polemicist, and natural scientist José Antonio de Alzate y Ramírez (1737-1799), who edited, over the twenty-five most prolific years of his life, four distinct periodicals on scientific matters.<sup>171</sup> Much has been written on this central figure of the Mexican Enlightenment, with one scholar recently representing him as an antiquarian and patriot, suspicious of European builders of philosophical and classificatory systems and committed in his writing to a defense of creoles and their homeland from disparaging representations.<sup>172</sup> Perceived slights inevitably brought out Alzate's polemical side, but his publications were not always so controversial.

In all four publications, Alzate y Ramírez introduced subscribers to translations, extracts, and his own research on topics that included astronomy, botany, electricity, geography, chemistry, engineering, medicine, and Mexican antiquities. He did it in a manner he hoped or felt all could comprehend and for the "general good of the Spanish nation" (*bien general de la nación española*), as he put it in the prospectus of his 1768 *Diario literario de México* – Spanish America's first periodical dedicated specifically to scientific topics. In the same issue he signaled his intention to make the works of European authors available to a reading public in New Spain, and deemed periodicals such as his "useful to the republic of letters" (*útil a la república de las letras*). It would also provide critical commentary, promising to eschew favoritism, and summarize works written in Spain and New Spain, though fewer in number, and save them from oblivion. Alzate y Ramírez promised to pay special attention to agriculture, which was in need of many technical improvements; mining, dominated by men with a blind commitment to

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<sup>170</sup> Literacy rates were higher in a cosmopolitan center such as Mexico City, but even here they fell far short of a place like New England, where the vast majority of the population could read. For these statistics see Eric Van Young, "The Limits of Atlantic-World Nationalism in a Revolutionary Age: Imagined Communities and Lived Communities in Mexico, 1810-1821," in *Empire to Nation: Historical Perspectives on the Making of the Modern World*, eds. Joseph Esherick et al. (New York: Rowman & Littlefield Publishers, 2006), 35-67 (statistics on 46f), and his *The Other Rebellion*, 479.

<sup>171</sup> Following an early formal education, Alzate y Ramírez remained an autodidact for the remainder of his life, applying himself to learning the most recent discoveries in the natural sciences and seeking to share what he had learned as a self-taught dilettante (much of his knowledge not yet available in the unreformed universities of Mexico City) with his contemporaries. After studying at the Jesuit's Colegio de San Ildefonso, Alzate y Ramírez matriculated at the Real y Pontificia Universidad de México, where he obtained bachelors degrees in arts and theology. In 1758, Alzate y Ramírez's father endowed a *capellanía* with 3,000 pesos, which allowed him to pursue his interests in science and publishing for the remainder of his life. He appears to have financed his publications with his inheritance (upon the death of his mother in 1788 he was able to switch to the costly printing house of Felipe de Zúñiga y Ontiveros, and thus improve the quality of his final publication, the *Gaceta de literatura de México*). For further biographical details, see Alberto Saladino García, "José Antonio de Alzate y Ramírez: Figura de la cultura novohispana del siglo XVIII," in *Periodismo científico en el siglo XVIII: José Antonio de Alzate y Ramírez*, ed. Patricia Aceves Pastrana (Mexico: UAM Xochimilco, 2001), 37-55. Saladino considers Alzate y Ramírez to be the ultimate symbol and exemplary figure of the Mexican Enlightenment.

<sup>172</sup> Cañizares-Esguerra, *How to Write the History of the New World*, 281-286.

old habits; geography and natural history; and medicine. He promised to make available to New Spain's public any relevant medical remedies he encountered in foreign publications, limiting himself to translating the curative recipes and leaving to physicians the reasons for their good effects. (He imagined that discoveries in foreign languages could be of use to colonial physicians, as well).<sup>173</sup> Finally, in a gesture to "less cultivated persons" (*las personas menos cultivadas*), he promised to receive and gladly publish whatever observations and notices they provided, "having dedicated myself to serving not only the literary public, but also the most unlucky country people."<sup>174</sup>

Following this early effort, the format of his publications remained basically the same. The *Asuntos varios sobre ciencia, y artes* (thirteen issues published between October 26, 1772 and January 4, 1773) again promised readers translations of extracts of European works of public utility. Recognizing the limitations of his learning, Alzate y Ramírez reiterated his desire to be useful to his *patria*, and his conviction that "we were born not only for ourselves, but also for our fellow man."<sup>175</sup> His dedication to informing his compatriots of useful discoveries motivated his final two publications: *Observaciones sobre la física, historia natural y artes útiles*, which after a fourteen-year break began publication in March 1787 and was succeeded a year later by the long-lasting *Gaceta de literatura de México*, which ran until 1795.<sup>176</sup> In the prologue to this fourth and final effort, Alzate y Ramírez again lamented the conspicuous paucity of literary periodicals in the "Metrópolis del Nuevo Mundo" dedicated to disseminating "la voz Méjico." He promised to cover similar topics as in the past and, referring to European periodicals covering health and medicine, suggested that methods of cure used successfully within a household or a community, and even by physicians, remained forgotten if not divulged in some kind of public paper.<sup>177</sup> He announced that the periodical was a medium to

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<sup>173</sup> At this early date he promised as well to correct certain misconceptions about the Americas, but this polemical dimension would come to predominate only in his final periodical. *Diario literario de México* no. 1 (March 18, 1768), in José Antonio Alzate y Ramírez, *Gacetas de literatura de México*, vol. IV (Puebla, 1831), no pag.: "estimo muy deveras a todas las personas beneméritas que por sus estudios y trabajo procuran servir al público." "Y porque se hallan en los libros y jornales extranjeros algunos remedios muy especiales, los comunicaré por el bien de V. en lo que me parece no invado jurisdicción ajena, cuando limitado únicamente a traducir aquellas recetas, dejo a los señores médicos en su quieta posesión de determinar el porqué, cuándo, y cómo se obran semejantes efectos: ciñéndome únicamente a exponer lo que es para el bien del público, y aun de los mismos médicos, porque estos descubrimientos se hallan en idiomas extraños."

<sup>174</sup> ". . . habiéndome dedicado, no solo a servir al público de los literatos; sino también a la gente mas desdichada del campo."

<sup>175</sup> "Prólogo del autor," no. 1 (November 2, 1772), in Alzate y Ramírez, *Gacetas de literatura*, vol. IV, 85-88. [" . . . que no solo nacimos para nosotros, mas también para nuestros semejantes."]

<sup>176</sup> The *Observaciones* opened with a translation of a 1729 text on the utility of mathematics and physic by the great French popularizer of scientific learning Bernard le Bovier de Fontenelle (it was presented on the occasion of the reform of the Parisian Academy of Sciences). Alzate then encouraged the application of the text's discoveries to increasing the efficiency of silver extraction from New Spain's mines (at the time, the industry was the backbone of the Spanish Empire's economy).

<sup>177</sup> "Prólogo del autor," no. 1 (January 15, 1788), in Alzate y Ramírez, *Gacetas de literatura*, vol. I, 1-4. "La sanidad y su restablecimiento, estos dos polos de la medicina, en Europa logran grandes ventajas a causa de que por medio de las Gacetas de sanidad, de salud, de medicina (con estos títulos se divulgan en varios países): se presentan al público aquellas curaciones particulares, aquellos métodos que empíricamente permanecen como misterio entre las personas de una familia, o de algún pueblo, y aun los

disseminate good ideas of those who were too humble, or who because of impracticality or high printing costs were prevented from sharing their ideas by any other means. He warned his readers, however, that he would not accept submissions that satisfied “self love, irreligion, vengeance, etc.”<sup>178</sup>

This relationship to the reader thus worked in two directions. By soliciting useful texts, Alzate y Ramírez spurred contributions from those who felt they had something to contribute to the store of learning. A learned resident of the capital responded by submitting a text that clarified the mechanical effects of bathing in hot and cold water on the human body, which Alzate y Ramírez reproduced in full in the December 14, 1772 issue of his *Asuntos varios*.<sup>179</sup> In the June 12, 1788 issue of his *Gaceta de literatura*, he was more specific, soliciting a “memoria instructiva” that addressed why the city had recently been suffering from bouts of tertiary fever, given that it had been fairly uncommon in the past – he stipulated that the instruction should be based on facts, not theory. The response was published in full in the issues of April 25 and May 12, 1789.<sup>180</sup> When not reprinting contributions from compatriots, Alzate y Ramírez was most comfortable publishing his own research and translations of European journals, with a preference for articles originally appearing in French.<sup>181</sup>

The second scientific journal and the first dedicated specifically to medical matters appeared simultaneously with Alzate’s *Asuntos varios*. The *Mercurio volante, con noticias importantes y curiosas sobre varios asuntos de fisica y medicina*, was edited by the creole physician José Ignacio Bartolache (1739-1790) and ran a mere sixteen issues – from October 17, 1772 until February 10, 1773 – before high printing costs (and by implication, low demand) forced Bartolache to cease publication.<sup>182</sup> Its first issue

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*mismos médicos, por semejante práctica, consiguen grandes ventajas, o mucha fama, porque la resulta favorable de una curación, permaneciera olvidada si no se divulgase en obra del carácter de las que expreso.” (3)*

<sup>178</sup> Ibidem, 3. “Una obra del carácter de esta, les ministra conducto inocente por donde puedan divulgar aquello que juzgan útil, aquello que no divulgaran por otra vía . . . .

“Ya se les proporciona arbitrio para que sin más gastos, sin más fatiga que remitir al editor sus producciones, se impriman bajo su nombre, o como gusten, en la inteligencia, de que la *Gaceta de Literatura de Méjico*, se emprende no para publicar producciones dirigidas a satisfacer a el amor propio, a la irreligión, a la venganza, etc. etc. La sumisión a las potestades, la obligación de ser útil a sus semejantes, son los caracteres que promueven la ejecución de la obra que se proyecta.”

<sup>179</sup> Alzate y Ramírez, *Gacetas de literatura*, vol. IV, 131-137.

<sup>180</sup> Ibidem, vol. 1, 134-151.

<sup>181</sup> He was a corresponding member of the French Academy of Sciences and apparently proud of his status, see Fiona Clark, “‘Read All About It’: Science, Translation, Adaptation, and Confrontation in the *Gazeta de Literatura de México*, 1788-1795,” in Daniela Bleichmar et al., *Science in the Spanish and Portuguese Empires, 1500-1800*, 147-177.

<sup>182</sup> Alzate y Ramírez and Bartolache were close acquaintances: the former eulogized the latter in 1790 (and less than two months later published the text in his *Gacetas de literatura* as “Elogio histórico del doctor don José Ignacio Bartolache”). Much like his more renowned acquaintance, Bartolache was critical of the scholastic school of learning that still reigned in Mexico City during his formative years. Expelled from the Colegio Pontificio Semanario for reading the “modern” works of authors such as Melchor Cano, Bartolache subsequently helped introduce the new mathematics and astronomical learning in New Spain, collaborating with Alzate y Ramírez and the enlightened scientist Antonio de León y Gama on astronomical observations in 1769 and 1771, respectively. For further biographical details, see the introductory essay to Bartolache’s

informed the reader why the name of the courier of the gods had been appropriated for the periodical, “a loose sheaf of paper that will bring news to all parts, like a swiftly moving messenger.” Like his more famous contemporary, Bartolache promised to facilitate the diffusion of useful medical information, using the publication to “communicate to the public” any curious or important matters in this eminently useful science. For this, Bartolache stressed, he would employ “our ordinary Spanish,” the vernacular a critical component of the medium’s accessibility. The regrettable lack of affordable printing in the city was not the only obstacle to popular understanding; “the mysterious ceremony that everything to do with the sciences comes out in Latin” had in the past deprived the public of useful reports, but Bartolache intended to dispense with this affected practice in favor of translated excerpts from worthy authors, not only Latin and Greek (revered “superstitiously” in the periodicals), but also Spanish. Bartolache was proud of past accomplishment of the Indies, but also realistic: the periodical would help precipitate needed future reform of university curricula in New Spain.<sup>183</sup>

In these publications, the use of the Spanish language as a lingua franca helped forge connections with a broader lay public. Both worked under the assumption that science could effect change in society if *translated*, figuratively and literally, into the language of lay people. Alzate y Ramírez, an outsider to medicine, repeatedly insisted that this should not limit his right to participate in scientific discussions. As will be discussed further below, the pages of his journals addressed laypeople and trained physicians alike, indicating that colonial medical knowledge in print form could be pitched at and envelope popular and professional at once.<sup>184</sup> Bartolache, himself a trained physician, challenged his readers to challenge him and insisted that no received wisdom or medical truth could not be overturned by a better one.<sup>185</sup> He was adamant that he could reach a non-trained, non-professional public, who though uninformed possessed the potential for enlightenment, and pitched his journal at

what we call commoners, people who the world over are considered ignorant and coarse by profession, although not entirely by their fault. Because a common countryman, even of the lowest plebes, finding in his hands some document by which he can easily be instructed in matters of interest or

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works by Roberto Moreno, *Ensayos de historia de la ciencia y la tecnología en México* (México: UNAM 1986), 49-91.

<sup>183</sup> *Mercurio volante, con noticias importantes y curiosas sobre varios asuntos de física y medicina*, no. 1 (October 17, 1772), reprinted in Roberto Moreno, ed., *José Ignacio Bartolache: Mercurio Volante (1772-1773)* (México: UNAM, 1979), 3-11. The next issue remarked that Latin “*sólo es necesario para entender libros latinos, pero no para pensar bien, ni para alcanzar las ciencias, las cuales son tratables en todo idioma.*” *Mercurio volante* no. 2 (October 28, 1772), in Moreno, 14.

<sup>184</sup> Roy Porter makes a similar argument for a contemporary British journal, seeing a commonality and a conviviality that, he speculates, were typical of interactions between practitioners and patients in this period before medical professionalization. “Laymen, Doctors and Medical Knowledge in the Eighteenth Century: The Evidence of the *Gentleman’s Magazine*,” in *Patients and Practitioners: Lay Perceptions of Medicine in Pre-Industrial Society*, ed. Roy Porter (Cambridge: Cambridge University Press, 1985), 283-314.

<sup>185</sup> *Mercurio volante* no. 1 (October 17, 1772). “*Quien destruyere con buenas razones lo que yo hubiere asentado por cierto, no puede menos que ser mi amigo, pues me ayuda a servir al común, sacándome de error; mi enemigo sería, quien tirase a precipitarme en alguno.*”



concern, without fail will apply himself and achieve it; it is certain that the desire to know is equally breathed into all men.

If said learning had immediate relevance, who would not naturally pursue it? Despite this, Bartolache lamented that many of this lowest class had in the past, been left “buried in ignorance” and “even tacitly assumed incapable.” With respect to women he would say nothing – the topic had been treated before, he wrote – except to stress that they too had been all but abandoned as useless for the sciences for no other reason than men wished it that way. “Women and simpletons can console themselves with having in their bodies a soul endowed with the same potentialities, perhaps greater than the souls of those university graduates so respected for the repute by which they are held . . .”<sup>186</sup>

This spirit of optimism infused the early enthusiastic overtures to Mexico City’s reading public. Although the reality might have been otherwise, there can be no doubt about the diverse array of readers the physician hoped to reach.<sup>187</sup> There was a tension in these publications, however, that opposed the expertise on which these literary endeavors were founded to this impulse toward popularization. The ability to reason, which was assumed to be innate, was still perfected through experimentation and practice. This is reflected in the manner in which Bartolache justified his own qualifications to take up problems of medicine in his journal: he had “acquired beforehand certain learning in these materials and plenty of practical study of my books, which are very exclusive [*selectos*] and suitable for my education [in medicine].” He promised to treat only those matters of “physic and medicine” announced in the title (unless someone sent him news from another of the sciences worthy of print). An apparent gesture of humility, it was also a way to establish his authority in “these materials.” Departing from the Spanish, he reproduced his guiding dictum in the original Latin and thus made clear his point of view: *perito in arte credendum* – the expert is to be trusted in his art.<sup>188</sup> If every man and women could in theory aspire to this scientific authority, in practice only those with social standing, connections to prestigious academies of science, the support of

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<sup>186</sup> *Mercurio volante* no. 2 (October 28, 1772), in Moreno, 13-14. [“. . . solamente miro . . . a lo que llamamos vulgo, gente que pasa en todo el mundo por ignorante y ruda de profesión, aunque no todo por su culpa. Porque un paisano vulgar, sea de la última plebe, hallándose a la mano algunos documentos en que pueda instruirse con facilidad en asuntos que le interesan o atañen de alguna manera, indefectiblemente se aplica y lo consigue; siendo certísimo que el deseo de saber es con igualdad inspirado a todo hombre. . . . Nada diré en particular (porque ya otros lo han dicho) de las mujeres, sexo inicualemente abandonado y despreciado como inútil para las ciencias no más que por haberlo querido así los hombres, y no por otra razón. Ellas y los sencillos ignorantes podrán consolarse con tener alma en el cuerpo, dotada de las mismas potencias, tal vez quizá mejores que las de aquellos estudiantes graduados, a quienes tanto respetan por la reputación en que se tienen . . .”]

<sup>187</sup> There is a discrepancy between intention and reality, but Bartolache, at least, would seem to have been partially successful in achieving his intent. The use of accessible analogies when describing scientific concepts and tools such as the thermometer, for example, is noteworthy: he compared its components with the more familiar stems of pens and strings of a violin. He explained this use of analogies in the following way: “*De intento voy evitando voces facultativas, por emplear las más vulgares y servirme de ejemplos asimismo muy triviales, para que todos me entiendan . . .*” To what extent the lower classes would have understood the analogies he selected is debatable. *Mercurio volante* no. 3 (November 4, 1772), in Moreno, 27.

<sup>188</sup> *Mercurio volante* no. 5 (November 18, 1772), in Moreno, 48.

authorities, and perhaps an income for publication, had their art amplified, reproduced, and debated.

Still, both were open to a seemingly limitless range of knowledge. Alzate y Ramírez, always eager to print translations of relevant learning from France, but also London, Madrid, and Berlin, demonstrated as well his capacity to appreciate good learning, no matter its provenance. He supported the indigenous method of cultivating cochineal, for example, and sought to salvage the common indigenous use of *pipiltzintlis*, the cannabis plant, by defending its medicinal value (even if, he admitted, its associations with the devil made for potentially harmful spiritual consequences).<sup>189</sup> He echoed the opinion that chemists had yet to extract useful medications from natural remedies and averred that recourse to simple pharmaceuticals readily available in one's own backyard was the best route to virtuous medicines (stressing that the dosage had to be adjusted to the climate of the territory in which it was prescribed and suggesting that local practitioners, if available, be consulted to this end).<sup>190</sup> His most famous defense of indigenous knowledge came when the Bourbon Crown attempted to impose the Linnaean system of classification of flora and fauna on American specimens in Mexico City's Royal Botanical Garden when it opened in 1788. Alzate y Ramírez launched a prolonged defense of the indigenous system of nomenclature as richer and more meaningfully derived from practical uses and medicinal applications.<sup>191</sup>

Was his defense of the knowledge of New Spain a product of his creole identity, a symptom of his proud patriotism? In part, but perhaps other factors, including an appreciation of local learning attained through practical application and his personal relationships with indigenous people played important roles, too.<sup>192</sup> Whatever the reason for this willingness to collect and preserve local learning, the tendency places these journalists at odds with a state seeking uniformity over a wide expanse of territory. Periodical literature is evidence of a scientific culture that existed, to a degree, apart from

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<sup>189</sup> *Asuntos varios sobre ciencias y artes* no. 2 (November 16 and November 23, 1772), in Alzate y Ramírez, *Gacetas de literatura*, vol. IV, 95-102.

<sup>190</sup> "Observación sobre la práctica de la medicina" (March 22 and April 7, 1790), in Alzate y Ramírez, *Gaceta de literatura*, vol. I, 316-323: ". . . ¿por qué en Nueva España casi se ha olvidado el uso de los medicamentos que la experiencia de tantos siglos tenía enseñados a los meicanos? Las expediciones botánicas que en el tiempo por una sabia determinación de nuestros soberanos se ejecutan, contribuirán a renovar la práctica de la farmacia americana." He added that, because New Spain's Indians had forgotten their customs and practices, other sixteenth-century publications on American pharmaceuticals would have to be consulted.

<sup>191</sup> His assault on the Linnaean system was pursued in the pages of the *Gaceta de literatura* over the course of several months in 1789 and is summarized in Patricia Aceves Pastrana, "Átomos y luces en los periódicos de Alzate y Ramírez," in *Periodismo científico en el siglo XVIII*, ed. Aceves, 221-250.

<sup>192</sup> Of his formative years in Ozumba, for example, Alzate y Ramírez wrote of his exposure to the vernacular of his playmates: "*Parte de mi niñez la pasé en una hacienda perteneciente a mis padres; en aquel retiro (libre de otras castas) en mis pueriles diversiones me acompañaba de los pequeños indios, mis coetáneos; en aquella edad en que tanto se fijan las primeras impresiones, me embebí de lo que veía y oía; con esto puede decirse pasé una especie de noviciado para hablar con algún conocimiento . . .*" José Antonio de Alzate y Ramírez, *Memorias y ensayos* (México: UNAM, 1985), 155, cited in Saldino García, "José Antonio de Alzate y Ramírez," on 40. Alzate y Ramírez might have welcomed the knowledge of a diverse social mixture, but he did not value every member of society equally, famously denigrating mestizos and the value of their testimony as evidence.

the official institutions responsible for education, regulation, health care, and administration (e.g. hospitals, universities, the military, the medical board), which perhaps allowed the articulation of a more idealistic vision of its practice. These publications expressed the hope that scientific systems need not override local learning, that a new patois of science would enfold within it as many vernaculars as possible.

### **About Contagion: A Science of Epidemics in Print**

How did this approach to useful knowledge work in the study of epidemic disease? Though Bartolache's training as a physician made the themes he considered natural and obvious, Alzate y Ramírez was no expert in medicine. His participation in medical debates and allowance for the participation of others rested on the premise that learning was accessible to all rational beings, whether or not they enjoyed prior experience in a field. He sought to gather useful knowledge – pharmaceutical, potions, observations of epidemics, experiments on air quality – in one convenient place, perhaps believing that those institutions responsible for education, research, and regulation in health (e.g. universities and the Royal Tribunal of the Protomedicato) were executing their responsibilities poorly.<sup>193</sup> In this context, private residents stepped forward to fill the void in the interest of social utility, convinced they could benefit the community in which they lived. In this era of frequent disease epidemics, medicine and public health carried as much potential to improve society as any other topic.<sup>194</sup>

In January 1772, Alzate y Ramírez began to investigate an epidemic of typhus that had yet to spread beyond the outskirts of the city in the predominantly Indian barrios to the north. His findings and speculations appeared in the twelfth installment of his *Asuntos varios*, where he narrated his journey to the Indian *parcialidad* of Santiago Tlatelolco in full. Traveling there to address the causes of the epidemic, he observed the decimation in the barrio of San Miguel Nonoalco, its houses shuttered and hearths cold. He had sought someone who could explain the abandonment and had come across an Indian, *muy ladino* (a detail that suggested to readers his reliability), who confirmed that *matlazahuatl*, or typhus, had struck again. It had carried away all the inhabitants of a household within two to four days without respect for age, there as well as in the pueblo of San Juan, in the parish of Azcapotzalco. When Alzate y Ramírez wondered why other populations in the vicinity had not succumbed, his Indian informant explained that in the parish of Santa Ana the deceased were no longer being interred inside the church, but rather in a cemetery. A sound measure against the spread of contagion, this cemetery, Alzate averred, posed other problems: it lay along the causeway that connected the city to Guadalupe's famous shrine, now "the most heavily traveled thoroughfare of this city," he wrote. "Could this not contaminate [*contagiar*] many who walk there?"<sup>195</sup>

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<sup>193</sup> See Achim, *Lagartijas medicinales*, Chapter One passim, especially 29-33, 43-44, and 50.

<sup>194</sup> Bartolache, a physician, reflected in one of the issues of his periodical that medicine was the most practical of the natural sciences, and good health attainable by poor and rich, noble and commoner, old and young alike. As such he would publish "popular" matters relevant to the self-preservation and health of the reader. As opposed to philosophy, the art of medicine relied for verification on "tangible experiments," which fulfilled the natural reason with which each individual was endowed. *Mercurio volante* no. 5 (November 18, 1772), in Moreno, 45-54.

<sup>195</sup> *Asuntos varios sobre ciencias, y artes* no. 12 (December 28, 1772), "Noticia importante al público por el autor de los Asuntos, etc.," in José Antonio de Alzate y Ramírez, *Obras I. Periódicos* (México: UNAM,

Alzate's skepticism served to alert his readers the dangers of these provisions. The journal became a vehicle in this regard, a way to circumvent the government, the city council, and the medical institutions supposedly responsible for the public's health, which could not be relied upon to intervene. Anticipating a shortage of certified physicians to treat the sick when the epidemic spread to the rest of New Spain, he again took the initiative. He addressed the city's trained physicians, imploring one of those who had plied his trade in the prior *matlazahuatl* epidemic of 1762 to publish the method he had found most useful, or to send it directly to him for publication. Alzate y Ramírez warned that it should be "free of any kind of erudition that does not serve to alleviate the sick . . ." <sup>196</sup> Medical science, though practiced by a colonial elite, was not for that reason elitist, but should find fulfillment in straightforward prose and practical application. If useful strategies for healing were known, why not make them widely available?

In the meantime, Alzate y Ramírez reprinted a simple "Receta contra la peste," taken from a December 1754 issue of the *Jornal Económico*. The authors called this infusion "vinegar of the four thieves" (*vinagre de los cuatro ladrones*), which referred to four men who plied their trade during an epidemic and confessed, at their sentencing, that when pillaging homes and murdering their pestiferous inhabitants, they had been saved from contagion through its use. The recipe called simply for handfuls of common herbal remedies, including rue, sage, mint, rosemary, sagebrush, or sawworm, and lavender (*ruda, salvia, yerbabuena, romera, estafiate, aluzema*) mixed into several quarts of *vinagre de Castilla* and cooked in a covered pot over hot ashes for four days. The infused vinegar was strained, a quarter ounce of camphor added, and the solution stored in covered glass jars for use in times of pestilence, when it was to be rubbed on the lower back, temples, and forehead, used to rinse the mouth, and inhaled through the nose when going outside. A rag or sponge soaked in it could be carried for periodic inhalations when approaching an infected person or residence. <sup>197</sup> As the authors admitted, it was the same method used with success by the Dominican friar Thomas Gage over a century earlier.

Given that these recipes were simple folk remedies, it appears change had taken place in the medium, rather than the message. When the *Gazeta de México* resumed publication in 1784 (its third incarnation following a lapse of several decades), <sup>198</sup> it also

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1980), 139-143. [" . . . la más transitada de esta ciudad. . . . No podrá esto contagiar a muchos de los que caminan por allí?"]

<sup>196</sup> "La caridad de los habitantes de México es bien conocida; pero aquel barrio está distante para que experimente los efectos de su liberal mano. Hágase un paralelo respecto de los pueblos sumergidos en los montes y de los distantes de todo socorro, y la imaginación se perderá entre ansias y aflicciones; publíquese el modo proporcionado para la cura, que no faltarán personas condolidas que suplan la falta del médico . . ." ". . . libre de toda aquella erudición que no sirve para el alivio de los enfermos . . ."

<sup>197</sup> Alzate y Ramírez first speculated briefly, following a Dutch physician who had observed the illness in Zealand, a region "muy sujeta a las humedades corrompidas," that the disease was a corruption of choleric bile. As was common when writing on medical issues, he reminded his readers that he was not a physician and denied wanting to play the role, even though he was always more than willing to bring his "science" to bear on medical issues. ". . . con esta preparación se lava todos los días la boca, se untan riñones y las sienas y se respira un poco por las narices, cuando se sale al aire; es muy conveniente traer consigo un pedazo de esponja, u otra cosa equivalente, embebida de dicho licor, para olerla a menudo, principalmente cuando es necesario acercarse al lugar infeccionado o a una persona acometida por la peste."

<sup>198</sup> Published by subscription (at a cost of twenty *reales* for twenty-four issues), the periodical served to disseminate noteworthy news, including advertisements, sales of goods, urban ceremonies, scientific

made available such popular remedies, which reflected a do-it-yourself approach to healing. With the capital in the midst of another epidemic, Alzate y Ramírez – a frequent contributor of scientific topics to the gazette – submitted one such remedy, which appeared in the March 24, 1784 issue. Advertised as an antidote against smallpox and other contagious diseases, it referred to the manuscripts of a physician from Besançon, France, who through years of experience curing “pestíferos” had managed to avoid infection. The antidote consisted in boiling equal parts water and sulfur in a clay pot and soaking articles of clothing in it and wearing the articles of clothing as prophylactics once they had dried.<sup>199</sup> The next issue included another curative method published for the benefit of Mexico City’s plagued residents (with a warning on its use – the editor, presumably Alzate y Ramírez, could not say whether this one had been sent by a certified physician).<sup>200</sup> This one consisted of a poultice of bran, horse manure, chamomile, and salt boiled in a white wine base (vinegar or human urine could be substituted for the wine), applied to aching regions of the body.<sup>201</sup>

While these reproductions of popular therapies tended to emphasize the approval of trained physicians, in this case a treatment was published in the gazette without full confirmation of the author’s credentials. These publications made good medicine directly available to a reader in a time and place when the dearth of medical practitioners and the scarcity of hospitals were painfully obvious, and only exacerbated during epidemics. The need for clear, accessible strategies for coping with disease is well illustrated by the difficulties posed in Mexico City’s 1779-1780 smallpox epidemic. At the archbishop’s suggestion, the viceroy established a provisional hospital in the College of San Andrés and asked the Protomedicato to appoint to physicians, as well as a surgeon and bleeder, to make daily visits to care for its patients.<sup>202</sup> The city council voiced doubts, however, arguing that all of the city’s hospitals together could not hold the number of sick residents that would soon appear and that the utensils needed to furnish these hospitals and assist patients could in any event not be fabricated quickly enough to make the hospitals useful. They identified two kinds of impoverished residents, moreover, who would never see the benefits of these institutions: the “shamefaced” (*avergonzados*) poor of honorable descent, who could not and should not enter such a public hospital, and those poor “*de*

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debates, and marvels of all kinds (the birth of deformed children, the advanced ages of residents, and public rogations for relief from natural disasters), from major cities but also smaller towns across New Spain.

<sup>199</sup> *Gazeta de México* no. 6 (March 24, 1784). In an annotation, Alzate y Ramírez remarked that this method worked equally well for smallpox and measles.

<sup>200</sup> *Gazeta de México* no. 7 (April 7, 1784): “*Siendo público quanto se han propagado a otros Lugares las enfermedades que han afligido a nuestra México, ha parecido comunicarles cuantas noticias se nos han dirigido sobre el particular, y se cree puedan conducir al exterminio de ellas. Se ignora si el siguiente Método curativo es comunicado por alguno Profesor de Medicina; y así para usar de él es absolutamente necesario consultar previamente con quien lo sea, pues de ninguna suerte salimos por fiadores de sus buenos efectos.*”

<sup>201</sup> Donald Cooper considered these treatments published in the *Gazeta* “bizarre,” but they fit nicely with contemporaneous cures and conceptions of disease. Cooper, *Epidemic Disease in Mexico City*, 73f.

<sup>202</sup> AGN IV 2796 exp. 5, Mexico 20 octubre 1779, Viceroy to Protomedicato, 87r-v.

*baja extracción*” whose debilitating illnesses often left them abandoned at home.<sup>203</sup> The municipal body recommended instead that a resident of means, in cooperation with parish priests, make daily visits to the sick in order to provide spiritual and temporal assistance: “in addition to the fact that each is more familiar with the families of his barrio and their caste, he is also exercising charity, and would surely perform acts of holy imitation that would be of advantage in getting the sick to accept God, and thus alleviate His ire against this public.”<sup>204</sup> Days later, the city council notified the viceroy of complaints from residents in charge of assisting the sick poor that physicians, surgeons, and barbers were allegedly neglecting their duties, primarily by refusing treatment without “exorbitant payment, dispensing with Christian charity and breaking the oath they made at the time of their examination to visit the poor without pay . . .”<sup>205</sup> In light of these obstacles and the large number of sick now without assistance, they suggested publishing a brief method for cure and recommended one penned by Doctor José Ignacio Bartolache, who had been busy advising the city on ways to halt the spread of contagion.

A handy set of instructions in a journal or pamphlet clearly performed an immediate service for residents of an ailing cosmopolitan hub such as Mexico City. The 1780 smallpox epidemic suggests the ad hoc manner in which an unofficial science of epidemics and health could occasionally intersect with governmental institutions and official policy in New Spain, as authorities became desperate to have help in times of epidemic.<sup>206</sup> These instructions had to be simplified or translated for the public, which

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<sup>203</sup> “. . . antes se crucificarán a morir en un rincón destituido de todo auxilio espiritual y temporal que de gradarse de aquel grado de extensión o con que nacieron o que sus intereses le proporcionaron; teniendo a su mayor deshonra curarse en el Hospital.”

<sup>204</sup> *Ibidem*, Mexico 22 octubre 1779, Ayuntamiento to Viceroy, 3-6r. [“. . . pues además de que cada uno en su Barrio conoce mejor las familias y sus calidades se ejercita también la caridad, y ejecutara seguramente una santa emulación, que sea muy proficua a los enfermos acepta a Dios, y por este medio se mitiga su ira contra este público.”]

<sup>205</sup> *Ibidem*, Mexico 30 octubre 1779, Ayuntamiento to Viceroy, 7r-v. [“Son repetidas las quejas que dan varios vecinos encargados de la asistencia de los pobres enfermos, sobre que los Médicos, Cirujanos y Barberos, no quieren asistirles sin una exorbitante paga, faltando a la caridad cristiana, y al juramento que hacen al tiempo de su examen de visitarlos sin ella . . .”]

<sup>206</sup> Bartolache, who had been appointed an assayer at the royal mint in 1777, offered advice in his capacity as one of the city’s certified physicians, presenting a plan to Viceroy Mayorga in October 1779 in which he recommended, among other things, a continuous bonfire along the dike that ran beside Lake Texcoco as a preservative against contagion. The viceroy consulted with the city council, and both agreed that Bartolache’s recommendation should be adopted. It was among several: burial in camposantos and maintaining clean streets, which the city council had already ordered, but also use of perfumed luminaries in the streets; ventilation of burial grounds in parish churches; that organ music be played while medications and foods were administered to the sick in the city’s hospitals; and a plan that would allow bands of musicians to play in the streets at night to minimize the fear or dismay of residents. In addition to the confluence of private, corporate, and royal, the role of music and the importance of sound in general in securing the health of the city’s population are noteworthy. When the city council later wrote the viceroy requesting an order that all who died in the epidemic be interred in the recently consecrated camposanto, they asked that the archbishop be informed of the dangerous exhalations in churches from previous burials and arrange for the burning of bonfires for purification of infected air, and also that something be done about the ringing of church bells: the clamor increased the sadness (*contristación*) of the pueblo, “*cuyo abatimiento es una apta disposición a la enfermedad . . .*” For the viceroy’s approval of the bonfire and the firing of canons (the gunpowder would purify the air), see AGN IV 2796 exp. 5, Mexico 25 octubre 1779, Viceroy to Ayuntamiento, 22r-v; on the ringing of bells as a disposing factor in sickness, see *ibidem*,

might include rural as well as urban residents.<sup>207</sup> In Bartolache's instruction, the author reiterated his commitment to making useful news pertaining to medicine available to a wide range of *capitalinos*, to this end promising an accessible, "popular style" to facilitate understanding by those not trained in medicine.<sup>208</sup> Its main feature was to emphasize a "natural" course of treatment. In concise, clear clauses, smallpox was presented not as a sickness but as nature's remedy, useful for purging bad humors that had been acquired from "the bosom of our mothers."<sup>209</sup> Though the physical effects would vary, with few exceptions everyone could expect to acquire this "remedy," which was transmitted from person to person.<sup>210</sup> The treatment for this contagion/evacuation was minimal, the medications consisting of a few substances that would have been readily available (water, sugar, feathers, etc.).<sup>211</sup> As if the precaution were too common to require mentioning, the author added, "I forgot to say that dry vinegar, applied to the mouth and nose, is a good protective against contagion . . ."<sup>212</sup> Prescribing ingredients as simple as vinegar and herbs, it placed patients and their caretakers in direct contact with a virtual physician, imagined to be of great potential benefit for the poor person who could not afford one with training and a degree.<sup>213</sup>

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Mexico 15 noviembre 1779, Ayuntamiento to Viceroy, 88r-v; and for a transcription of the city council's summary of Bartolache's recommendations, see Moreno, *Ensayos de historia de la ciencia*, 67-8.

<sup>207</sup> Bartolache's Instruction would be sent to villages in the vicinity of Mexico City. See AGN IV 2356 exp. 22, Mexico 25 diciembre 1779, Fiscal orders that copies of Bartolache's instruction be sent to Toluca for the epidemic that recently appeared there.

<sup>208</sup> Again, he justified his qualifications for this venture into the realm of public health: "the public will do me the favor of taking my word, as I am a graduated physician, although I am unable to perform visits to patients, and in another era I was a public professor teaching medicine in the Royal University." José Ignacio Bartolache, *Instrucción que puede servir para que se cure a los enfermos de las viruelas epidémicas que ahora se padecen en México, desde fines del estío, en el año corriente de 1779* (Mexico City, Zúñiga y Ontiveros, October 26, 1779), in Moreno, 193-199. "Y como tengo que darme a entender con el pueblo hablaré de propósito en un estilo popular, liso y llano . . . Todo lo trataré por cláusulas breves a manera de aforismos y el público me hará el favor de creerme sobre mi palabra por cuanto soy médico graduado, aunque no me acomoda el ejercicio de visitar enfermos, y he sido en otro tiempo profesor público enseñando la medicina en esta Real Universidad."

<sup>209</sup> ". . . para purgar y evacuar cierta cantidad de mal humor que sacamos del seno de nuestras madres."

<sup>210</sup> Presumably Bartolache was referring to the pustules that formed, through which the extraction of bad humors ultimately benefited the victim (on this extractive mechanism underlying healing see Chapter Eight). It is also possible that he took note of the inoculations taking place in the capital, in which the pus of a smallpox victim injected into a patient was the "remedy."

<sup>211</sup> For example, as a purgative the patient was to consume lukewarm water with salt and feathers, which provoked vomiting; hollyhock water as an enema; and sweetened hot water. Gargling with vinegar water, consumption of simple *atole* and light massages with oil were also prescribed. The room was to be kept clean and free of stifling heat and people. When the time came, the pustules could be broken one by one and emptied with a bit of thread to speed recovery, and to avoid the scars and pockmarks that deformed the face. "Es obra de paciencia y que podrá servir de entretenimiento al mismo enfermo."

<sup>212</sup> [" . . . se me olvidaba decir que el vinagre fino, aplicado a la boca y narices es un buen preservativo para no contagiarse; y sobre todo el buen ánimo y el no tener aprensión."]

<sup>213</sup> On the other hand, "Los que tienen facultades y quisieren curarse a todo costo hagan lo que más les acomodaré." Certified physicians were always to be consulted in the event of complications, but ideally these instructions would be carried out without such intervention: "si ocurre algo de extraordinario o

This instruction, printed by New Spain's viceroy in 1779, was a harbinger of a less invasive, homegrown style of medical practice. But medical learning at the time, which continued to rely to a great extent on the olfactory sense to identify and pursue contagion, had to be substantiated by the new sciences. As Alzate y Ramírez announced in his journal, medicine rested on the two pillars of physic and anatomy and was oriented by sciences of observation, quantification, and experimentation.<sup>214</sup> The quality or healthfulness of the atmosphere had to be quantified, for example, as evidenced by a surge in the practice of eudiometry, the science of measuring “good” or “virtuous” air. This science was evolving simultaneously in Britain and Italy from chemical pneumatics and experiments on the aerial etiology of epidemic fevers. The quality of the air was determined by measuring the diminution in a volume of normal air when it was mixed with nitrous air, which was thought to release combustible phlogiston when in contact with the atmosphere.<sup>215</sup> In New Spain the collection of eudiometric data, along with the use of other meters and apparatuses, would help reconcile a young science with received remedies, including vinegar, quantifying what residents knew to be true through their senses. Alzate y Ramírez enthusiastically embraced eudiometry and other sciences of quantification, believing that mechanical observation and measurement of the quality of atmospheric air, principally by overriding the unreliable senses, would allow unprecedented management of sickness.<sup>216</sup> In addition to eudiometers, weather vanes, barometers, thermometers, and hydrometers made possible precise quantification of air speed, weight, water content, and temperature. The consequences were revolutionary: in agriculture, more resistant seed could be introduced and the variability of harvests controlled, thus feeding more people; in mining, ventilators eliminated the noxious airs that weakened the bodies of miners; and if the virtue of air could be gauged in various places, inhabitants could be shielded from the devastating spread of epidemic disease.

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*intervienen particulares circunstancias, consúltese a un médico. Pero tengo confianza de que será raro el caso de esta necesidad.”*

<sup>214</sup> *Asuntos varios sobre ciencia, y artes* no. 1, “Prólogo al autor” (November 2, 1772), in Alzate y Ramírez, *Gacetas de literatura*, vol. IV, 87: “La medicina, aquella facultad tan preciosa a la humanidad, cuando se maneja con sindéresis, estriba en el día en sus dos polos, la física, y anatomía, sirviéndola de brújula la observación, habiendo los reformadores de ella, desterrado los sistemas a los países de la imaginación. Lo mucho que han avanzado la química, botánica, cirugía, y anatomía, hermanas inseparables de la medicina, lo testifican bien los descubrimientos importantes que continuamente se publican en Europa.”

<sup>215</sup> In Europe this science ultimately facilitated a new atmospheric management, applied by enlightened states convinced of the benefits of healthful air during epidemics at the end of the eighteenth century. Simon Schaffer, “Measuring Virtue: Eudiometry, Enlightenment and Pneumatic Medicine,” in *The Medical Enlightenment of the Eighteenth Century*, eds. Andrew Cunningham and Roger French (Cambridge: Cambridge University Press, 1990), 281-318.

<sup>216</sup> For example: “The thermometer is what indicates to us true hot and cold with a certainty that we cannot tell by means of our senses, which are extremely subject to deception. As proof of this, I shall cite the well known experience found in all of the works of the physicists: place one hand on snow and water will seem hot, and on the contrary seem to the other hand very cold.” [“*El termómetro es lo que nos indica el verdadero calor y frío con aquella seguridad que no podemos contar por medio de nuestros sentidos, los que están muy sujetos a ser engañados. Para prueba de ello, referiré la sabida experiencia que se halla en todas las obras de los físicos: póngase una mano sobre la nieve, experimentará la agua como si estuviera caliente, y la otra al contrario, la experimentará muy fría.*”] *Asuntos varios sobre ciencias y arte* no. 13 (January 4, 1773), in Alzate y Ramírez, *Obras I. Periódicos*, 144-150.



The example of continuous observation executed in all of Europe proves the necessity of an exact accounting of the state of the air, which is the principal auxiliary of the machinery of our body, to which we owe great benefits, but which occasionally causes us serious harm. Even if we ourselves do not experience the benefit of these observations, is it of no significance that those who live in the next century should thank us for it?<sup>217</sup>

Like his contemporaries in Europe, Alzate sought to locate the origins of disease in “*la tierra que pisamos*” and saw the new medical science as a matter of observation. But it was not an endeavor best carried out in isolation: for him, as reflected in his journals, scientific practice consisted in communities of the informed observing, measuring, and making improvements that accumulated over time, which allowed him to look to the best discoveries of Europe, such as the bellows pump, without contradicting his commitment to learning produced through experimentation and observation in New Spain.<sup>218</sup>

This obsession with foul airs, their measurement, and their effects on health and human settlements was widespread and immediately relevant to the management of disease and hygiene.<sup>219</sup> The same issue of the *Gazeta de México* that advertised a poultice of bran, horse manure, chamomile, and salt, related an unusual experiment performed by a Professor of Medicine at the University of Leiden. He had left out a pot of pure water

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<sup>217</sup> Ibidem. [“*El ejemplo en las continuas observaciones que se ejecutan en toda Europa, prueba lo necesario que es llevar una exacta cuenta con el estado del aire, que es el principal agente de la máquina de nuestro cuerpo y a quien debemos grandes utilidades; pero en ocasiones nos causa gravísimos daños: ¿aunque nosotros no experimentamos el beneficio que resulta de las observaciones, será poco que los que vivieren en el siglo venidero nos lo agradezcan?*”]

<sup>218</sup> Alzate y Ramírez enthusiastically recommended the bellows pump: not only would it remove corrupted air from hospitals for the benefit of patients, it would also potentially make them less despised places, for patients and physicians alike. “*Los buenos efectos que se han experimentado en los hospitales y prisiones de muchas ciudades de Europa por el uso del ventilador, cuyos elogios vemos muy recomendados por muchos sabios médicos en sus escritos y por todas las obras periódicas, nos hacen desear que se establezca en los hospitales de esta ciudad; no es dudable que por su establecimiento en ellos se verificaría menor número de muertos y se desterraría aquel pestífero aire que tanto coadyuva en agravar las enfermedades de los que entran en ellos a solicitar su salud, y en poner en peligro la que gozan los que se ocupan en la asistencia de los enfermos, careciendo éstos de muchos efectos caritativos, de las personas de delicada naturaleza que no se atreven a visitar hospitales, por aquel fetor que tanto fastidia a nuestra delicadeza. Su establecimiento es de poco costo, pues se puede disponer de manera que con sólo el enrarecimiento del aire causado por el fuego necesario a la preparación de los alimentos pueda practicarse.*” *Asuntos varios sobre ciencias y artes* no. 6 (November 30, 1772), in Alzate y Ramírez, *Obras I. Periódicos*, 97-104. Although he viewed the air of Mexico City as generally healthy, volcanic eruptions, subterranean fires and other natural phenomena released particles that corrupted air, and he suspected, like many contemporaries, that the atmosphere in the vicinity of lakes was a cause of many of Mexico’s health problems (although he vacillated on this last point in his lifetime).

<sup>219</sup> For Europe, this connection is well documented. Richard Etlin has traced the contentious debates over the cemeteries of Paris that began roughly in the 1760s. If buildings and neighborhoods were aired out, it was believed that the air’s virtues could be restored. This conviction would be chemically confirmed by the discoveries of Lavoisier and others in the following decade. Broad swathes of the population, from civil servants to clergymen, architects, and neighbors in the vicinity of the Cemetery of the Holy Innocents, concerned themselves with the transmission of exhalations, and the cemetery was finally condemned to close in 1780. Richard Etlin, *The Architecture of Death: The Transformation of the Cemetery in Eighteenth-Century Paris* (Cambridge: MIT Press, 1984), 17-34.

for a night and observed the next day that “*espuma de varios colores*” had risen to the surface. Collecting the precipitate, the physician had administered it to his dog, which killed the animal in a few hours. The editor of the *Gazeta* speculated that if this same experiment were performed in the city’s hospitals, with their more potent “malignant exhalations” (*exhalaciones malignas*), enough miasmatic material could perhaps be collected to serve as an antidote if first neutralized with an acid or alkali (by means of inoculations, perhaps).<sup>220</sup>

To see this broad interest in contagion, one can look in numerous places beyond the pages of these journals. In part as a result of a royal order mandating it, official correspondence arriving from various infested parts of the Viceroyalty of New Spain in these years was sprinkled or sprayed with vinegar. Stained where the drops landed, these documents are the material remains of an understanding of illness particular to a time when disease was invariably sensed, before contagion became a matter of microorganisms and disease vectors. Contemporaries imagined that by subjecting the paper to the pungent acid before it left with a mail carrier it was purified of contagious vapors, part of a larger universe of health care in which doctors, bureaucrats, priests, and laypersons requested sulfur or Spanish vinegar for use on contaminated parchment, in foods, textiles, graveyards, streets, sacred vessels, thresholds of homes, and as medicine. Like early modern Europeans, residents of New Spain thought its properties could cut through miasmatic air and heal the sick when consumed; it was a fumigant, but also an astringent, an aromatic, and an amulet.

Alain Corbain has observed that in France a “perceptual revolution” was taking place toward the end of the eighteenth century, in which the olfactory sense came to dominate and determine what scientists and intellectuals deemed healthy and unhealthy.<sup>221</sup> In New Spain, notions of contagion were funded and supported by a good deal of scientific expertise, but measurements and classifications did not simply flow from top to bottom. As argued in the previous chapter, many who did not necessarily possess a foundation in scientific learning held powerful ideas about putrid places and the power of cleansing acts.<sup>222</sup> When writing on virtuous and vitiated air, then, scientifically

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<sup>220</sup> *Gazeta de México* no. 7 (April 7, 1784): “*Me parecía que esta experiencia sería mas decisiva si se practicase en las Salas de un Hospital; y para lograr mayor cantidad de exhalaciones malignas sería muy útil llenar con nieve, u otro licor frío, una garrafa de vidrio; en poco tiempo, raspando lo que se apebase a la garrafa, se colectaría cantidad suficiente de material miasmático. Este se podría mezclar con ácidos, con álcalis, con absorbentes, o con otros antídotos, y sería el verdadero método para reconocer y vencer la epidemia que se experimentase, ya aplicándolo por medio de un alimento a un animal, o por inoculación.*”

<sup>221</sup> Alain Corbain, *The Foul and the Fragrant: Odor and the French Social Imagination* (Cambridge: Harvard University Press, 1986), 15, 44f, and 49. Corbain shows that in weighing, measuring, and classifying exhalations, science and its communities of experts in early modern France contributed to an elimination of vagueness in the olfactory realm, introducing precision and heightened attention that he thought filtered down to the population at large.

<sup>222</sup> See Chapter One. In a 1631 Guatemalan epidemic the Dominican priest Thomas Gage wrote that while visiting the sick and deceased he “used no other antidote” to protect himself against *tabardillo* “save only a handkerchief dipped in vinegar to smell into, and thank God I escaped where many died.” Thomas Gage, *The English American: A New Survey of the West Indies* (London: Routledge, 1928), 290-298. Vinegar was widely used in seventeenth-century Italian epidemics, as in Tuscany, where the seventeenth-century instructions of Florence’s Magistracy of Health addressed the therapeutic benefits of vinegar, lime, smoke, chamomile, oil, onions, and pomegranate. See Carlo Cipolla, *Faith, Reason, and the Plague*, 87-92.

inclined creole intellectuals drew on concepts already in wide circulation. Their contribution consisted in their ability to quantify sensual experience – to test the pH levels of a substance such as vinegar through experimentation, for example, and classify it as acidic or alkaline. Familiar understandings of the transmission of disease through space were now confirmed on the basis of a new empiricism, but these studies simultaneously drew on implicit “folk” knowledge. Journals, in effect, brought an untrained reading public into conversation with a composite science cultivated on American and European soils.

In sum, when reading of the public utility to which Alzate y Ramírez and Bartolache hoped their writings would contribute, we do well to recall that they wrote in a time when much of good governance and scientific practice took place outside the official apparatus of the state. Their counterparts in London at the same time wrote furiously on the conditions of jails, lazarettos, and hospitals, reaching some of the same conclusions on ventilation, employing bellows and windmills to help circulate air, and measuring populations through statistical calculations and censuses.<sup>223</sup> Health care and other matters of government, in New Spain as in Germany, Prussia, and England, could not simply be left to bureaucrats, and a great deal of “counting” was actually carried out by amateurs, public intellectuals, and *aficionados*, rather than in universities or by public officials. So much of this science of human health and population was informal that, by the 1770s and 1780s, it appeared to many contemporaries that the time had arrived for the education of the masses outside of the halls of universities and amphitheatres of hospitals, where scholastic training had traditionally held sway. Instruction would instead be carried out in the pages of New Spain’s literary journals – suggesting that certified medicine and its practitioners could be circumvented in more ways than one.

The best evidence of the appearance of a virtual classroom for medical science comes from Bartolache, who was even more generous than Alzate y Ramírez in his vision of an expansive audience for this science. Bartolache’s *Mercurio volante* indicates that he considered many more residents capable of wielding science’s specialized instruments for measurement and purposes of health, as in the third and fourth installments, where the physician described in detail the principles and uses of a basic thermometer and barometer and provided detailed instructions for their fabrication.<sup>224</sup> Despite this general optimism, there was a clear limit to the scope of popular healing and

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<sup>223</sup> The health of the population came to be taken by modernizing states in the Enlightenment as indicators of the social health of nation states, a highly useful index of power. See Dorothy Porter, *Health, Civilization and the State: A History of Public Health from Ancient to Modern Times* (New York: Routledge, 1999), 49-52, 55-6. In England it was a man of faith, the Reverend Thomas Malthus, who provided the impulse for a science of demography and whose studies would later definitively shape governmental relief strategies.

<sup>224</sup> Both were deemed indispensable for anyone wishing to know the daily state of the atmosphere, “most necessary instruments” of scientific measurement and also of relevance in medical matters. Readers were enjoined to make use of them for the sake of the public good and “the furtherance of studies beneficial to the nation . . .” Neither instrument was as readily available in New Spain as in Europe, and although Bartolache admitted that significant improvements had been made to Torricelli’s simple barometer, he thought it would be extremely difficult for anyone in New Spain to reproduce or import the refined version from Europe. *Mercurio volante* nos. 3 and 4 (November 4, 1772 and November 11, 1772), quotation from Moreno, 32. [“. . . por el amor de la propia y común utilidad y del público y para el adelantamiento de los estudios provechosos a la nación . . .”]

research. Evidence of this comes in a critical response to these new scientific publications, which Bartolache reprinted in full. It was a letter from a reader addressed to him and to Alzate y Ramírez, forwarded by a cleric acquaintance and ostensibly penned by a cacique named Pascual Ángeles de los Reyes. Serving as intermediary, the priest explained its origins: the author was a well-educated Indian *ladino*, about forty years old, who had been serving as fiscal when the priest arrived in the parish ten years earlier. Don Pascual had attended college and in addition to fiscal occupied all the positions of honor in a republic of Indians (schoolmaster, scribe, alcalde, governor). The priest explained that among the many publications he read were the *Mercurio volante* and Alzate y Ramírez's *Asuntos varios*, which he consumed thoroughly. Don Pascual had composed what he called oppositions (*animadversiones*) and brought them to the pastor for correction, and to inquire whether he should send them. "After correcting one or another lowly or trivial expression, I encouraged him to publish it . . ." <sup>225</sup>

Bartolache took the submission to be satirical. He doubted that the author was who he said he was, as he wrote in a postscript, apparently convinced that don Pascual, whom the parish priest described as talented and well read, considered a "Seneca" by those in the community who knew him, was a fiction, created tongue-in-cheek by the priest himself. <sup>226</sup> But he published the critique anyway, which began by thanking the authors for making curious news items available in an accessible language for the benefit of all who cared to read them. (The author claimed that he had picked up the first two issues when returning his son to seminary in Mexico City and had ordered the boy to send copies every eight days of all the issues that subsequently appeared.) It objected to some of the contents of the five issues of the *Mercurio volante* and four of the *Asuntos varios* appearing by then, which were being discussed by friends and acquaintances in a local store. Of the former, the author charged that first issue lacked faith in the capabilities of Americans, vis-à-vis those of the French. The second underestimated the physics practiced on this side of the Atlantic and disparaged Aristotle, Hippocrates, and Galen, the latter two "princes of medicine." Of the third and fourth issues – on thermometers and barometers – he wrote the following: "I have already told my wife and daughter-in-law that they should not bathe in the *temazcalli* [sweat bath] until I can measure, with my *thermometer*, how many degrees of heat the water contains so that the *temazcalixtli* can be well regulated, to prevent their blood from overheating." He requested more information on these baths, apparently curious about their efficacy, and begged that they not be discredited: he rented out two to the village's pregnant women, "and I have seen them work miracles, although it is true that on some occasions the sick are left worse off." <sup>227</sup>

<sup>225</sup> ["Yo, después de enmendar una u otra expresión baja y trivial, le animé a la empresa . . ."]

<sup>226</sup> "Nota: Si este don Pascual es un verdadero cacique de carne y hueso no me cansaré de admirarlo. Su candor, su ingenuidad, su discreción y la templanza con que escribe le recomiendan infinito. Pero a mí se me trasluce algo de superchería y así lo declaro con la venia de mi amigo íntimo D.N. [the priest]." It is possible Bartolache had good reason to suspect subterfuge on the part of his friend. (And because the priest claimed he had corrected any colloquialisms, a textual comparison of the two letters is made difficult.)

<sup>227</sup> *Mercurio volante* no. 7 (December 2, 1772), in Moreno, 65-75. ["Ya le dije a mi mujer y a mi nuera que no se bañen en el temazcalli hasta que yo mire, cuando tenga mi termómetro, cuántos grados de calor tiene allá dentro del agua y se componga para regular bien el temazcalixtli; no sea que se les vaya a calentar mucho la sangre." ". . . porque yo tengo dos para alquilar a las paridas del pueblo y me va bien; y tengo

In the absence of more convincing evidence, I am inclined to follow Bartolache's suspicions about the author of the letter.<sup>228</sup> If the priest/acquaintance was in fact behind it and intended a kind of practical joke, the point might have been that it was absurd to believe that anyone using a sweat bath would stop first to measure the temperature with a homemade thermometer. In this case, how a lay public was expected to apply the complex methods and tools being deployed by scientists in the capital depended on the estimation that this parish priest made of the capacity of his parishioners, on his own disposition toward the enlightened science, and on his experiences with things such as sweat baths. Whatever the reason for his low opinion, the implication of the letter, if read as a farce, was fairly straightforward: the time for general appropriation of novel scientific techniques had not yet arrived, and possibly never would.

### ***Vida Desarreglada and the Transmission of Epidemic Disease***

The desire to base medical practice in enlightened experimentation and to make its knowledge and methods available to readers of Mexico City's enlightened journals came up against the practicality of these translations. Further contradictions in this genre of scientific writing arose from the inspections of the patients. In order to explain epidemics, intellectuals, physicians, and bureaucrats tended to wield a rhetoric and etiology that was cast in terms of an orderly (or disorderly) lifestyle, which included moderate or immoderate eating habits, appropriate and inappropriate manner of dress, and clean, ventilated living spaces. As journalists sought to create new consumers of enlightened science, on the assumption that all had the same innate capacity to reason about their health, they faced (and often perpetuated) the tendency to blame the victims of disease for their own misfortune. This logic dictated that people lacking general restraint or not living and eating according to their occupations and stations in life could contribute to the spread of disease. In these ways, an ostensibly objective "science" of difference built on class and caste distinctions already prevalent in colonial society.

On January 6, 1773 members of the Protomedicato carried out an investigation into the epidemic of fevers that had appeared in the northern suburbs of the city (the same outbreak that Alzate y Ramírez would set out on his own to investigate and write about several weeks later). In their official report, the physicians concluded that the fevers were still confined to the Indian neighborhoods in the *parcialidad* of Santiago Tlatelolco and warned that the sickness could become epidemic and spread to the rest of the city. Their comments centered on a differentiation of susceptibility on the basis of living habits. For days, residents of the city had been suffering from a general cold (*una general*

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*por imposible que no sean buenos estos baños siquiera para sudar mucho; y yo he visto milagros con ellos, aunque otras veces (valga la verdad) quedan peores los enfermos . . .”]*

<sup>228</sup> Some of its content carries a whiff of absurdity. For example: 1) the author's "compadre," a storeowner named don Santiago, became so incensed over the fact that Bartolache had thrown doubt upon anything the venerable Fr. Benito de Feijóo had written that he burned the issue in which Bartolache's criticisms appeared and ordered another five or six dozen from Mexico City so that he might set those aflame too ("*para hacer una luminaria*"); 2) in the same store setting, a student who joined their conversations – allegedly carrying a volume of Cervantes' *Quixote* under one arm – said that he would stamp the following at the foot of each page: "I tell you, Sancho, that if you took a pulpit in your hand and went out in the world, with your good nature and discretion you would preach beautiful things." ["*Dígote Sancho, que si como tienes buen natural y discreción, pudieras tomar un púlpito en la mano e irte por ese mundo, predicaras lindezas.*"]

*constitución catharral*), and they noted that those subjects “not badly complexioned” (*no mal acompleccionados*) and living an orderly life (*de vida arreglada*) suffered only a mild case, their condition improving with warm clothes and beverages. In those with “some morbid disposition” (*alguna disposición morbosa*) or living a disorderly lifestyle (*de una vida desarreglada*), the fever effloresced into the malignant variant (*tabardillo*, typhus) that was now threatening the city, and of the sick many of all castes and classes were dying from it. In sum, the sick suffered because of a propensity for careless living. “Señor Eminentísimo,” the report continued,

what group is more reckless than the plebeians of this City? Their foods are crude, among them the pepper they call chile, which is exceedingly harsh and abundant; many reside in close quarters beside the *tecuile*, or coal hearth in the center; their nakedness is glaring; they treat their illnesses with a thousand absurdities, others are without medicine or food, and on top of all this is their daily drunkenness. Only the infinite Mercy of God can liberate us of continuous epidemics, which could only be the necessary result of the depraved life of these unhappy people.

The medical precautions that needed to be taken to avoid the spread of illness were difficult, the physicians opined, but they proposed several measures, including fumigations (*sahumerios*) with resinous wood, aromatic herbs, and continual fires, which would halt the movement of noxious miasmas through the air. Above all else, they recommended use of gunpowder and proposed that the militia could increase performances of artillery drills and move them into the affected neighborhoods.<sup>229</sup>

In these seemingly absurd but familiar solutions and assessments, the city’s elite physicians reproduced and projected bourgeois notions of proper lifestyle into the spaces of the Indian barrio they visited. The continuities in this program of treatment, remarked on above, are a reminder that medicine as practiced in eighteenth-century epidemics was not radically different – the physicians drew on centuries-old miasmatic concepts.<sup>230</sup> Clearly, the senses continued to rule the day, even if the most progressive enlightened savants were introducing new instruments of measurement. The elements of social control appearing in the report, on the other hand, seem to have been contiguous with a broader bourgeois project of social reform being implemented in the capital at the time, a program that sought elimination of the “disorders” and “excesses” of Mexico City’s lower classes. Juan Pedro Viqueira Albán has admirably documented the various facets

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<sup>229</sup> [“Señor Emô, que gente ai mas desarreglada que la pleve de esta Ciudad? Sus alimentos son groseros, entre ellos el pimiento que llaman Chile, es sumamente acre y abundante, sus abitaciones estrechas, en las que moran muchos juntos con el *tecuile*, o brasero en medio: la desnudez es notable sus enfermedades las socorren con mil absurdos, y otros sin Medicinas ni alimentos, y lo que es mas su diaria embriaguez. Solo la infinita Misericordia de Dios nos puede libertar de tener continuas epidemias que devian ser necesarias resultas de la perverza vida de esta gente infeliz.”] Mexico City 8 enero 1773, Tribunal del Protomedicato, Bancroft Library, M-M 135, folio 13.

<sup>230</sup> This despite the fact that the regulating board had already introduced reforms in the certification of the city’s physicians. On the reforms of the Protomedicato, see “Arancel de el Protomedicato,” in *Aranzeles de los tribunales, juzgados, y oficinas de justicia, gobierno, y real hacienda, que comprehende la ciudad de México capital de Nueva-España* (New Spain: Junta de Aranceles, 1759), 150-1. Since Mexico City’s 1737 typhus epidemic, surgeons, for example, were now required to pass three evenings of exams on theory and practice in surgery, anatomy, and algebra.

of these changes in the regulation of public entertainments (e.g. theatrical performances, consumption of *pulque*, ball games), which sought to impose strict social boundaries on these diversions in accordance with an enlightened bourgeois sensibility that stressed above all decorum, decency, virtue, and education.<sup>231</sup> That physicians took care in their own diagnosis to differentiate and describe orderly and disorderly ways of living suggests that attempts to cope with disease engendered a similar array of ideas about social problems, especially those of sanitation, cuisine, and lifestyle, now encountered in the domestic sphere in the midst of an epidemic.

In this case, there are intriguing clues as to the source or at least the extent of this particular commentary. Days before the Protomedicato's report appeared, a narrative of personal redemption trumpeting precisely these ideals of healthy, orderly living began to appear in the pages of Bartolache's periodical. It was a translation of *La vita sobria*, the sixteenth-century tract by the Venetian Luis (Luigi) Cornaro on how to live a long life. The Venetian related numerous afflictions he had suffered at the age of thirty-five or forty. Believing he was dying, he had been attended by the best physicians of Italy, who had concluded that the only remedy was to leave behind the *holgazanería* to which he had been accustomed his entire life and adopt instead a temperate and orderly life (*sobria y arreglada*). "It seemed to me quite natural," he wrote, "that a different manner of living would likewise produce different effects, knowing that health [*arte*] can efficiently supplement, correct, and perfect nature, and also debilitate and destroy it, according to the good or bad use made of it."<sup>232</sup> It was a story of conversion in a distinctly Christian mold – at one point Cornaro called it "my resurrection"<sup>233</sup> – a turning from wayward impulses that took place at the hands of the anonymous attending physicians. They prescribed a moderate diet, and Bartolache as editor approved the recommendation, calling it the "*regla de oro*" and "*precepto más saludable*."

That this manual, originally written and published at the height of anti-Lutheran sentiment in Padua, appeared in a medical journal in the seemingly anachronistic setting of eighteenth-century Mexico City suggests that the city's bourgeois projects were not, in fact, so new. The document's concerns and its context of religious vulnerability were just as relevant two centuries later: what one ate, and how much, still had moral implications that could affect one's physical health. One had to live temperately, which included exercising restraint in eating and drinking against a disorderly appetite (*apetito desordenado*). The lesson assumed that good customs had a direct effect on nature,

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<sup>231</sup> Juan Pedro Viqueira Albán, *Propriety and Permissiveness in Bourbon Mexico*, trans. Lipsett-Rivera and Rivera Ayala (Wilmington, DE: Scholarly Resources, 1999).

<sup>232</sup> The author of the discourses, first published in Padua in 1558, died in 1565 and was himself (naturally) supposed to have lived to the old age of 100. Though at least the first discourse was subsequently translated into French and Latin and was in European libraries, Bartolache was not aware of a Spanish translation, suggesting that the widely circulated manual was less well known in the Spanish world at the time. The first segment appeared just two days prior to the Protomedicato's report, and the remainder over the course of the following three issues. *Mercurio volante* nos. 11-14 (January 6, 1773 to January 26, 1773), in Moreno, 109-152, quotation from 121f. ["*Parecióme muy natural que una diferente manera de vivir produjese efectos asimismo diferentes; sabiéndose que el arte puede muy bien suplir, corregir y perfeccionar a la naturaleza; como también debilitarla y destruirla, según el buen o mal uso que se hiciera.*"]

<sup>233</sup> *Mercurio volante* no. 12 (January 13, 1773), in Moreno, 124.

contributing to a vigorous and healthy body. That such an etiology of disease, with its concern with order, would have been reproduced in the pages of a periodical dealing with health and medicine makes sense in light of the nature of bourgeois reform in this period: health was a matter of sober, virtuous living, something for which the reader could and should take responsibility through a daily awareness of basic lifestyle choices.

But the meaning of this message shifted as it was appropriated in clinical settings. If in the *Mercurio volante* these critiques of lifestyle were addressed to the excesses of the upper classes, in the hands of those physicians who visited the sick Indians in their barrios in January of 1773 the same principles – perhaps borrowed directly from the pages of the journal – were transformed into a harsh lesson about lower-class fashions and living conditions. Though slippery when used for diagnosis, this enlightened ideology had deep roots and a consistent logic, whereby the onus of the illness was placed on the patient. Put otherwise, sick patients, though partially incorporated as agents of medical science, would nevertheless be held accountable and ultimately blamed for their illnesses. There was little room for pampering.<sup>234</sup>

This discourse, worthy of St. Augustine's disciplining of the appetites, reveals the continuity of the religious and moral sentiments underpinning diagnosis and treatment in colonial Mexican medicine. This morality in turn acquired a material basis in the anatomical realities of patients' bodies. Two examples illustrating the ways anatomical experimentation and social policy cyclically reinforced one another in enlightenment Mexico can be cited here, one dealing with a "female" ailment and the other with a 1762 dissection of a mulato's cadaver to discern the cause of an epidemic and find a cure. The sixth issue of the *Mercurio volante* addressed an epidemic outbreak of *mal histérico*, or hysteria, among women in Puebla and Mexico City. The illness was spreading so quickly, according to Bartolache, that six out of ten laywomen and an incredible eight out of ten religious women would soon experience its symptoms.<sup>235</sup> At the outset of the illness, the women – no mention is ever made of men – suffered from hunger, cold, exhaustion, and confusion, with symptoms soon transforming into a more troubling presentation of tremors, difficulty breathing, sighing and weeping, acute headaches, fainting, *saltos*, convulsions, contortions and other gestures resembling "a spell's effect" (*obra de encantamiento*). The origin was an irritation of the uterus, Bartolache averred, which spread to the nerves and muscles and became extremely difficult to cure. Women of the

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<sup>234</sup> América Molina del Villar has argued that epidemics tended to generate sustained interest in cleanliness and hygiene among governing and medical bodies in Mexico City. She sees elite policies, attitudes and criticisms toward the poor, their living conditions, their consumption of alcohol, and their "idolatrous" religious practices anticipating the transition to enlightened sanitation policies. I am arguing that enlightened programs as they appeared in periodical literature suggest that the lower classes were being made responsible for their own health, and not just converted into objects of new sanitation and social control. For her thesis, see Molina del Villar, *Por voluntad divina*, 73-4, and *La Nueva España y el matlazahuatl*, 136.

<sup>235</sup> The appearance of hysteria was not limited to these places and seems to have surged or coincided with attempts by reforming archbishops to impose the *vida común*, shared living arrangements, on women in convents – perhaps as a manifestation of protest or dissent or a way of exercising agency by women subjected to unfavorable regulations, although the sickness was not limited to religious women. For a full contextualization of an epidemic of hysteria that appeared in the 1760s among some of the nuns in the convent of La Purísima in San Miguel el Grande, see Margaret Chowning, *Rebellious Nuns: The Troubled History of a Mexican Convent, 1752-1863* (New York: Oxford University Press, 2005), 105-118.



upper and middle classes were most prone, and religious women more susceptible than laywomen, but the condition was also inheritable from mothers. Despite this, three principal causes having nothing to do with inheritability were isolated: 1) abuse of alcohol and sweets; 2) tight clothing, which produced inactivity and lack of exercise; and 3) the custom of going to bed and rising late.<sup>236</sup> Bartolache deemed prevention the best course, proposing that women could control their health by eating fewer sweets, ventilating their rooms, particularly in convents where many lived together, and exercise.

It is tempting to see in the isolation of causes an example of an assault on a type of religious conduct unbefitting participation in an enlightened, virtuous republic, or on the lavish acquired tastes of upper-class women in Mexico City, or both. It has been argued that the designation “hysteria” was reserved almost exclusively for religious women in New Spain, who were said to suffer disproportionately from it. The symptoms of this newly classified medical disease resembled the behaviors of female mystics; now defined as a disorder, however, it fell out of the regulating purview of the Catholic Church and into that of medical treatment.<sup>237</sup> Yet religious women were not hysteria’s exclusive victims. What was consistent and widespread was a willingness to see, and suffer from, this illness in gendered terms. Bartolache concluded his article by reiterating the point that women were constitutionally weaker and more prone to ailments in general, and recommended that physicians and others in charge of public health would do well to take this into consideration when treating. The matter highlighted religion and class, in other words, but went beyond these to reiterate basic assumptions about gender: what was at issue in such diagnoses and prescriptions was the scientific creation of a difference, here in gendered and anatomical terms (hysteria’s source was often located in the uterus), that required even greater vigilance on the part of physicians and women themselves.<sup>238</sup>

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<sup>236</sup> Minor causes in the conditions of the atmosphere were also cited, though not stressed in the same way as those circumstances the women could control themselves. *Mercurio volante* no. 6 (November 25, 1772), in Moreno, 55-64.

<sup>237</sup> On diagnoses of women mystics, see Nora E. Jaffary, *False Mystics: Deviant Orthodoxy in Colonial Mexico* (Lincoln: University of Nebraska Press, 2004), 139-144. Curiously, Jaffary strictly distinguishes epilepsy from hysteria, when contemporaries used these terms interchangeably to describe similar symptoms. If anything, physicians were simply more likely to use the first term.

<sup>238</sup> There is a large literature on the science of difference in the European Enlightenment. Londa Schiebinger’s work on women’s contributions to scientific knowledge in the eighteenth century stands out, showing how gender differences were identified and described, and thus naturalized, in terms of human anatomy, an ostensibly neutral and unbiased pursuit. See *The Mind Has No Sex? Women in the Origins of Modern Science* (Cambridge: Harvard University Press, 1989), especially Chapters 7 and 8, and “The Anatomy of Difference: Race and Sex in Eighteenth-Century Science,” *Eighteenth-Century Studies* 23:4 (Summer 1990), 387-405, which argues that fascination with racial difference (in addition to gender) was rooted in skeletal studies, with the physiognomy of European men as the norm or “standard of excellence.” Thomas Laqueur’s work similarly points to the strong “extrascientific pressures” in studies of the body in the eighteenth and nineteenth centuries, calling bodies the “gold standard of social discourse” and the “battleground for redefining” relations between men and women. “In a world in which science was increasingly viewed as providing insight into the fundamental truths of creation, in which nature as manifested in the unassailable reality of bones and organs was taken to be the only foundation of the moral order, a biology of incommensurability became the means by which such differences could be authoritatively represented.” See his “Orgasm, Generation, and the Politics of Reproductive Biology,” in *The Making of the Modern Body: Sexuality and Society in the Nineteenth Century*, eds. Catherine Gallagher and Thomas Laqueur (Berkeley: University of California Press, 1987), 1-41, quotations from pp. 18 and 35, and *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge: Harvard University Press, 1992).

The new science of anatomy, which relied on chemistry and the tools of the surgeon, did little to challenge and much to perpetuate the tendency to view diseases such as hysteria in such terms, looking for the cause in physiology but seemingly unable to restrict diagnosis to anatomy's supposed facts.

The second example comes from 1762. In the midst of a spreading typhus epidemic, the viceroy, hopeful to find a remedy and limit damage, ordered the city's Protomedicato to perform a dissection on the cadaver of a deceased victim and report its findings. On March 22, the surgeons and physicians sliced open the abdomen of a mulato, inspected the liver and the gastrointestinal lining, and carried out a series of experiments on the exceptionally yellowed bile (*cólera*) of the gall bladder (choleric bile was considered at the time the source of many common illnesses). Separating it into four parts, they mixed in nitric acid, sodium carbonate, lime juice, and lastly, pulque. The first two had the effect of dissolving the bile, respectively turning it black and heightening its orange color to an almost ruby red. The lime juice significantly lowered the saturation of the color, turning it straw colored and slightly crusty. The pulque had a similar effect, but did not alter the color as much as the juice. The medical men briefly considered the effects of the season and the conjunction of Saturn and Jupiter as factors before reasoning that there was no need for recourse to such remote principles when they had sufficient "sublunar" causes at hand to explain the illness. They pointed to a lack of natural vigor in the subject himself, apparently on the basis of his race, and concluded, citing their experimental observations, that not only was an acidic fermented beverage that contained volatile sulfuric particles, such as pulque, not suitable for use as medication, but that it could actually produce illness in a patient (as medicine, they deemed the lime juice preferable).<sup>239</sup>

This anatomical experiment marked the beginning of a new era in medicine. Dissections proliferated over the course of the following decades, as the viceregal government turned to the rising surgical profession to perform them not only for training, but also to determine the causes of disease and to discover effective treatments.<sup>240</sup> As the above report on an early dissection suggests, however, they would teach contemporaries little about epidemic disease that they did not already know. In this case, the chemical and physical observations carried out simply allowed practitioners to reiterate the harms of pulque consumption, justifying a determined and ongoing effort to prohibit this practice among the city's lower classes.<sup>241</sup> Studies of anatomy and of the living habits of

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See also Sander Gilman, *Difference and Pathology: Stereotypes of Sexuality, Race, and Madness* (Ithaca: Cornell University Press, 1985).

<sup>239</sup> AGN Hospitales 144, Mexico 26 marzo 1762, Doctor Nicolás José de Torres and Doctor Juan Gregorio de Campo to Viceroy, in Rómulo Velasco Ceballos, ed., *La cirugía mexicana en el siglo XVIII* (México: Archivo Histórico de la Secretaría de Salubridad y Asistencia, 1946), 411-413.

<sup>240</sup> In 1770, a College of Surgery was established at the Royal Indian Hospital for this purpose, and patients of the hospitals occasionally used as anatomical subjects until the college was transferred, in 1833, to the building of the defunct Mexican Inquisition. For details on the college's establishment, see David A. Howard, *The Royal Indian Hospital of Mexico City* (Tempe: Center for Latin American Studies, Arizona State University, 1990), Chapter Four passim.

<sup>241</sup> For a discussion of attempts to restrict the consumption and sale of alcoholic beverages during Mexico City's 1737 typhus epidemic, see the previous chapter. For a list of "general indictments" of drink as the source of vice among Indians, see Taylor, *Drinking, Homicide and Rebellion*, 40-41.

residents allowed for an ostensibly scientific foundation of difference and reveal the limitations of new projects of enlightened experimentation, diagnosis, and treatment. Physicians simply could not help but engage with the debates and stereotypes in wider circulation in Mexico City at the time.<sup>242</sup> The superimposition of ideas about virtuous living on understandings of pathology and disease transmission ultimately made those who suffered responsible, suggesting they would have to work especially hard to overcome the limited natural faculties with which they had been endowed. In a society beset by social distinctions and privileges, how difficult it would be to translate the participatory vision of elite intellectuals into a feasible program for individuals whose physiology, susceptibility, and living habits marked them irredeemably as different. The irony, remarked before but no less significant here, is that the intellectual atmosphere of the Enlightenment engendered a science of difference that contributed to perpetuating social inequalities well into the next century.

## Conclusion

This seeming inability to overcome older habits of perceiving health and disease, and the willingness to perpetuate ingrained ideas about social difference, begs an important question: which aspects of Mexico City's enlightened scientific culture were in fact new? Much contained in literary journals, such as discussions of miasmas and putrid exhalations, could already be found in the sixteenth century, though new discoveries in the eighteenth century were making it possible to hope that these harbingers of illness would be effectively combated.<sup>243</sup> An interest in natural wonders and physical deformity, as reflected in reports published in the *Gazeta de Mexico* in the 1780s and 1790s, was also widespread in the seventeenth.<sup>244</sup> And advice to live, eat, and exercise in moderation, as Steven Shapin writes, "proved remarkably stable over a great span of European history."<sup>245</sup> Perhaps this period of enlightened science is best understood in terms of its continuities rather than as an abrupt departure from what had come before.

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<sup>242</sup> Referring to the women mystics at the center of her study, Nora Jaffary points out that much of the literature consulted by physicians "bears a strikingly close resemblance, despite its derivation from new sources, to the spiritual directives the Catholic church had traditionally issued concerning women's means of achieving virtue and distancing themselves" from vice and moral decadence. Jaffary, *False Mystics*, 159.

<sup>243</sup> For an English-language overview of these discussions as they appeared in the sixteenth century, see Guenter Risse, "Medicine in New Spain," in *Medicine in the New World: New Spain, New France, and New England*, ed. Ronald L. Numbers (Knoxville: The University of Tennessee Press, 1987), 12-63.

<sup>244</sup> One scholar takes natural history writing in the seventeenth century as the example of an earlier "baroque science," arguing that works of this genre, often Jesuit-authored, were characterized by the same fascination with the strange and monstrous that underlay baroque art and literature, an interest in deciphering the mysteries of nature as revealed not only in natural phenomena but also in scripture, and a belief that nature pointed to divine order. Juan Pimentel, "Baroque Natures: Juan Nieremberg, American Wonders, and Preterimperial Natural History," in *Science in the Spanish and Portuguese Empires, 1500-1800*, eds. Bleichmar et al. (Stanford: Stanford University Press, 2009), 93-111. Natural history resembled biblical exegesis in its procedures and assumptions and should be located "halfway between the emblematic and allegorical natural history of Renaissance humanism, and the morphological and taxonomical discipline that was to impose itself in the age of Linnaeus." (Quotation from p. 101.)

<sup>245</sup> Steven Shapin, "The Philosopher and the Chicken: On the Dietetics of Disembodied Knowledge," in *Science Incarnate*, eds. Lawrence and Shapin, 21-50, quotation from 30. Shapin continues: "Tweaked, tuned, and idiosyncratically interpreted by individual writers, balance, stability, and moderation remained the dominant dietetic counsel from Antiquity to the modern period."

Yet among other things, the media that transmitted discoveries and debates worked in unprecedented ways. Journals now allowed a constant accumulation of data in weekly and sometimes daily iterations. Even if the genre did little to effect real change in the art of healing, and certainly did not stand in for or always faithfully reproduce debates on medicine appearing elsewhere, periodical literature condensed and propelled learning, changing the way scientific discussions were conceived and executed.<sup>246</sup> Periodicals were collaborative, building on the knowledge of numerous colonial and transatlantic communities. It helped that creole intellectuals like José Antonio de Alzate y Ramírez were fluent in two languages, appreciating the significance of instrumentation and mathematical sign systems as well as the American signs that revealed nature's secrets to local populations, as Miruna Achim argues: "Their wide-ranging skills – technical, linguistic, anthropological – enabled them to straddle the boundaries between apparently incommensurate systems of knowing, to traffic with popular secrets and with technological novelties, and, ultimately, to re-write observations of indigenous practices into the languages of contemporary science . . ."<sup>247</sup> They did not work alone; their correspondents formed a public that shaped the endeavor in ways that would have been impossible before widespread use of printing technologies, which helped make periodical literature popular, especially in the last two decades of the eighteenth century.

A less frequently acknowledged dimension of this publishing activity was the interest in translating in the opposite direction – to make learning accessible to a lay public – which journalists and others interested in public health took quite seriously. How successful were publishers in this endeavor? The problem of audience and the nature of a public shaped by and complicit in these new scientific productions is seemingly intractable. Mexico City, to say nothing of the rest of New Spain, was a place of diverse languages, and it is difficult to say, for example, how many used the recipes prescribed for epidemics. As suggested above, moreover, at least some residents doubted the relevance of science's specialized instruments to laypeople. In this light, the characterization of Mexico City's periodical literature as a restricted venue for informed, literate males captures the spirit of scientific exchange: attempts to elicit the contributions and participation of a more geographically and socially diverse public produced few tangible results. Put otherwise, if the printed page of a newspaper functioned as a kind of theater in which science could be debated and performed publicly, in flamboyant and aggressive manner and in the absence of other public spaces for demonstrations (lecture halls, scientific societies, anatomical theaters), the lower classes were not invited.<sup>248</sup> Perhaps the most that can be said is that other actors were present as an imagined future

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<sup>246</sup> The possibilities of the medium have been appreciated for the Republican period, but the significance of the press in earlier years has been relatively ignored. For a collection of essays detailing the influence of pamphlets and newspapers on the political culture of nineteenth-century Latin America, see Paula Alonso, ed., *Construcciones impresas: Panfletos, diarios y revistas en la formación de los estados nacionales en América Latina, 1820-1920* (Buenos Aires: Fondo de Cultura Económica de Argentina, 2003). Those studies that do treat periodical literature in the earlier period, such as Francois Xavier-Guerra, tend to posit a teleological progression toward Independence. On this, see my discussion in the Introduction.

<sup>247</sup> Miruna Achim, "Making Lizards into Drugs: The Debates on the Medical Uses of Reptiles in Late Eighteenth-Century Mexico," *Journal of Spanish Cultural Studies* 8:2 (July 2007), 169-191, quotation from 179-80.

<sup>248</sup> On performances of science, see Achim, "Making Lizards into Drugs," 183.

audience, a community of interested participants that this literature tried earnestly to bring into being.

There were other changes in the air, so to speak, that paralleled the growth of periodical literature as a new medium of scientific practice. The experiments carried out during and after disease emergencies in New Spain, including inspections of cadavers and analyses of the atmosphere as a conduit for disease, preceded by several years the more systematic reforms that would take place in medical training, textbooks, and hospitals in Spain.<sup>249</sup> In this informal colonial sector, which selectively appropriated the latest medical theories of Feijóo and Boerhaave, the limitations of state institutions become clear. Although the Protomedicato might have consistently sought, in licensing procedures, to fortify the barrier between professional and untrained, enlightened periodicals were not of the same nature, and only a restricted reading of this rich and complex genre could support the claim that journals merely served to reproduce or further this impulse.<sup>250</sup> In translating medical knowledge for a broader (if not infinitely broad) public and responding to a need for medicine in the absence of sufficient numbers of competent, charitable physicians, they attempted to close this gap.

The most significant consequence of the medical research reported in these journals may be the way it confirmed social differences and justified social reform. Though Renaissance humanists, friars, and natural historians had reflected intently on human difference in the past, these reflections and stereotypes were now undergoing systematic theorization in unprecedented ways. Impressions about eating, drinking, and lifestyle acquired a deceptive precision in numbers, instruments, and anatomy. A conclusion centering on social control, racism, and sexism would exaggerate certain elements of this program at the expense of others, such as the attempted incorporation of patients, the objects of science, as co-participants in their own health (as much as the limitations of literacy would allow). Yet, in disseminating this science, scientific literature largely reproduced certain ideals of the upper classes, simply grounding social difference in a science of physiological difference. This went beyond the difference between men and women so carefully studied in Europe at the time to incorporate that between Amerindian and African populations and residents of European descent.

In a critique of the scholarly literature on the physiology of difference, Sylvana Tomaselli notes that biological representations, though authoritative for some, were not the only discourses available to represent difference.<sup>251</sup> Without a doubt, medical

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<sup>249</sup> Burke, *The Royal College of San Carlos*, Chapter Two. Burke similarly argues that for most of the eighteenth century improvements in medical practice in Spain took place away from the major universities – in academies, new colleges (including surgical schools affiliated with the military hospitals of Cádiz and Barcelona), and individual research. According to him, the reform of the medical curriculum at the University of Salamanca in the 1770s (reordered around anatomical demonstrations and a curriculum based on the system of Boerhaave) and the 1787 establishment of the Royal College of San Carlos in Madrid (on the forceful recommendation of the Count of Campomanes) revolutionized medical education, the latter institution the culmination of the Crown's efforts to reform medicine over a period of years that coincided with its more active intervention in the prevention of epidemics in the colonies.

<sup>250</sup> Cf. Voekel, *Alone before God*, 174f.

<sup>251</sup> Tomaselli points out that non-medical disciplines in the early modern period actually provided hope for the liberation for women, and other realms of experience (e.g. female saints and mystics who serve as models of piety) even reversed hierarchies, providing a corrective to the notion that the medical sciences, with their reduction of difference to anatomy, sexual or skeletal, were privileged sites of discourse. Sylvana

discourse hardly reflected all social stereotypes. Neither is it the case, however, that its evaluations and assumptions existed in isolation. The scientific practice reproduced in the journals of a creole elite had imbrications with other discourses and colonial practices; the analogies and symbolic underpinnings that informed their scientific studies of difference were widespread.<sup>252</sup> We see this in the analogies in common currency – among them, disease as moral lassitude and moral lassitude as a disease; physician as savior; victim as sinner – which were readily adapted and salvaged despite the appearance of new techniques and methods of study. Medical practice thus hewed to the same moralizing discourse of theology, which in the past centered on the unwashed, intimate bodies of sick patients and their families. If there was no longer any redemptive hope in their suffering (for that, doctors looked to medical progress, individual enlightenment, and the promise of industrialization, to which the new science would soon be harnessed), a sea of cultural assumptions roiled beneath the surface of scientific objectivity, which helped make possible the translations elite intellectuals desired.

If science's analogical underpinnings meant that scientific discourse had its origin in other social realms, it is also true that analogical thought was not the exclusive purview of trained scientists. Other communities had their own metaphors. Looking for these, it becomes possible to see how analogy allowed laypeople to make sense of new policies of containment and disease eradication as these appeared in the provinces. For a clearer picture of the extent of popular participation in epidemics and their study, other kinds of sources, particularly those created by non-scientists, become central. In the following chapter, and again in Chapter Seven, consideration of the role of analogy in the reception of new scientific programs allows us to view the similarities between scientists and laypeople from another perspective. It is to these other "publics," more heterogeneous than those of the Mexico City's periodicals, that the remainder of the dissertation turns.

In sum, at least a few among the intellectual elite in New Spain believed that a more heterogeneous group of people would participate in enlightened health care than those who ordinarily appear in the historical literature documenting it. Did laypeople fail to consummate this promise, or have we conceived of scientific culture too narrowly, at the expense of these other participants? Just as intellectuals adapted sophisticated and sometimes simplistic European theories and systems of classification to local criteria, laypeople took umbrage at the assumptions and simplifications of the enlightened program of disease management imposed by the Bourbon Crown. In January 1788, New Spain's viceroy circulated copies of what he referred to as a "sure method" for protecting villages from smallpox to all of the administrative jurisdictions of New Spain, along with

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Tomaselli, "Reflections on the History of the Science of Women," *History of Science* 29 (1991), 185-205, especially 188f and note 63.

<sup>252</sup> Analogies in science make certain aspects more salient and obscure others, dictating future research by directing the attention of intellectuals to particular aspects of experience, and by directing research help disseminate new vocabularies that restrict or frame the kinds of research possible. See Nancy Leys Stepan, "Race and Gender: The Role of Analogy in Science," *Isis* 77 (1986), 261-277, which provides a useful overview of the literature and acknowledges the resemblance of this function of analogy to the scientific paradigms put forth by Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

orders to put it into effect in the event of an epidemic.<sup>253</sup> By contrast to the custom of most of the eighteenth century, when the Crown offered little intervention in epidemic outbreaks (more or less content to delegate responsibility to viceregal, municipal, and provincial institutions), the new program mandated isolation and preventive measures across an exceedingly diverse territory.

The plan, essentially a summary of a treatise first published in 1784 by Francisco Gil, surgeon of the Royal Monastery of San Lorenzo, explicitly rejected inoculation on the grounds that it only weakened the effect of smallpox without halting its spread.<sup>254</sup> Instead it revived measures used as early as the fifteenth century in places like England and Italy for leprosy and other “pestilential” diseases such as plague.<sup>255</sup> Within parameters of vigilance and isolation, it prescribed precautions to be taken with patients, caretakers, and community members. If the physician had to visit the patient in the home, he was to wear a full-body linen gown covered in a layer of wax, “the hands washed with watered vinegar, which should always be done with everything that touches the patient, with the goal of eliminating in this way any cause for transmission to the other members

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<sup>253</sup> Acknowledgments of receipt are filed in AGN IV 2796, exp. 5. In responding most local administrators wrote simply that they would make the royal resolution and its utility known to parents, with several also mentioning medical practitioners (physicians and surgeons), and a few referring to civil bodies, such as ayuntamientos, hospitals, parishes, convents, and the Church hierarchy. Only the alcalde mayor of Tacuba complained of the few medical practitioners available to execute the provisions, *ibidem*, Tacuba 5 abril 1788, 57r-v, although he may have voiced an opinion many more felt.

The bishops in the viceroyalty received copies as well and reported passing them on to their subordinates: e.g. the bishop of Durango writes on February 27 that he has distributed the sixty-four copies he received to all of his parish priests, and that “*procuraré que en todo mi obispado se instruyan los Padres de familia del importante beneficio de observar un Método que prescribe el Dro. de humanidad y el interesante objeto de la conservación del Estado, y población de estas Provincias.*” *Ibidem*, Durango 27 febrero 1788, 49r-v. In January 1788 Mexico’s archbishop circulated copies to his parish priests with orders to follow their instructions in the event of appearance of smallpox, encouraging priests in a cover letter to proceed with magistrates to construct the provisional hospitals mentioned in the instruction. It is doubtful any were actually built before an epidemic arrived in a given parish. AGN Epidemias 7 exp. 1, México 11 junio 1788, 15-16.

<sup>254</sup> *Extracto de la obra publicada en Madrid el año pasado de 1784 con el título de Disertación Físico-Médica ... compuesta por Don Francisco Gil, Cirujano del Real Sitio y Monasterio de San Lorenzo*, México 28 mayo 1788, in AGN Epidemias 7 exp. 1, fs. 9-14. After an original printing of 4,000 copies, the extract was reprinted in New Spain in 1786, with additions, which included descriptions of some successes had by the prescribed method. For example, in Madrid’s Real Convento de la Visitación, in seventeen years under the watch of its physician no smallpox outbreaks had occurred despite a large number of noble girls between four and fifteen years old. As reported in the extract, parents, relatives, and dependents of the *señoritas educandas* had been asked not to visit the women in the event that smallpox existed in any of their homes or any had recently contracted the sickness, at least not until they had passed quarantine (of forty days) to eliminate the possibility of contagion. Though anecdotal, bits of evidence such as this were important in the adoption of invasive measures by administrators and the public.

<sup>255</sup> Pesthouses or simple isolation in marked homes appeared, for example, in Newcastle, Liverpool, Oxford, Cambridge, and York after about the middle of the sixteenth century, with more widespread use in the seventeenth. England’s policy appears to have been borrowed from the older ordinances in place in Italy and France in the fifteenth century. See Paul Slack, *The Impact of Plague in Tudor and Stuart England* (Boston: Routledge, 1985), 44-50 and 199-226, and for ordinances in Italy, Carlo Cipolla, *Public Health and the Medical Profession in the Renaissance* (Cambridge: Cambridge University Press, 1976).

of the population.”<sup>256</sup> Garments of wool or cotton were to be avoided, and any bedding and articles of clothing washed, bleached if possible, and fumigated with sulfur, incense, rosemary, marjoram, and juniper (depending on availability).<sup>257</sup> The patient’s room was to be scoured with quicklime and plaster and the doors and beams washed with vinegar, “burning some of the said ingredients to perfume them.”<sup>258</sup> No one other than the caregiver (the presence of a physician, along with a priest for burials, was assumed) was to approach the patient.<sup>259</sup> Healthy and especially non-immune residents were to be encouraged to flee from contagious members and discouraged from entering homes with patients, “for which it is advisable to place at the door a red cross or other sign to indicate the sickness within that house . . .”<sup>260</sup> Once the scabs separated, the patient was returned to his family after being bathed in hot water scented with rose, rosemary, and juniper and dressed in new clothes (the scabs themselves buried in deep pits outside).<sup>261</sup> The deceased were to be interred in chapels or houses in uninhabited fields.<sup>262</sup>

These provisions, an extreme embodiment of the principles of contagion in circulation at the time, prescribed uniform, undifferentiated isolation of the sick, and as such were antiseptically cleansed of any appreciation of human difference, physiological or otherwise. In this, Bourbon reforms in emergency medicine were analogous to those being undertaken in the realm of religion in New Spain, such as the imposition of *vida común* in convents and the strict control of confraternities and their wealth, which stressed the productive potential of the individual and elided distinctions between high and low, Indian and Spanish, men and women. In epidemics too, all were now to be dealt with in the same manner.

This regularization of treatment flew in the face of colonial distinctions with regard to physiology and susceptibility of Indians, women, and others to disease and challenged the conviction that inhabitants of New Spain from a variety of backgrounds would participate in the pursuit of health. A wave of objections in the province of Oaxaca soon followed as parents, priests, and administrators discovered for themselves that the program was largely oblivious to the realities of communal health care, social difference, and parent-child relationships.

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<sup>256</sup> Gil, *Extracto*, Article VII. [“...y se laven las manos con vinagre aguado, que siempre estará prevenido para todo el que toque al Violento, con el fin de evitar de este modo todo motivo de contagiar a los demás habitantes del Pueblo.”]

<sup>257</sup> *Ibidem*, Articles VIII, XIV.

<sup>258</sup> *Ibidem*, Article XV. [“quemando algunos de los ingredientes dichos para perfumarlas.”]

<sup>259</sup> *Ibidem*, Article X.

<sup>260</sup> *Ibidem*, Article XVIII. [“...para lo que convendrá poner a la puerta una Cruz encarnada u otra señal que indique la enfermedad que hay en aquella casa...”]

<sup>261</sup> *Ibidem*, Articles XII, XIII.

<sup>262</sup> *Ibidem*, Article XVII: “La Ermita, Capilla o Casa de Campo donde hubiere muerto se dejará cuanto sea posible con sus Puertas y Ventanas abiertas, para que el aire purifique la habitación; y en este caso será lo mas seguro enterrar para siempre en un hoyo profundo la ropa con que le hubiese cogido la muerte.”



### CHAPTER THREE

#### **A Family Affair: Broken Bonds and the Bad Mother in Oaxaca's 1796-1797 Epidemic**

The previous chapter argued that medical debates in enlightenment New Spain's capital involved the bodies, domestic spaces, and living habits of residents. Whereas the absolute difference between women and men was central in European discussions of physiology at the time, in Mexico, the indigenous underclass also appeared as "naturally" more emotional, disorderly, and susceptible to disease. Within this context of experimentation and philosophizing, intellectuals were forced to contend with a new imperial program of disease management, which eroded these notions of difference in favor of attentive governmental intervention in epidemics by means of a uniform law. Instead of inoculation, rejected as too unreliable, the program called for the separation of hospitals and nucleated settlements; a rigorous surveillance of the population so that the sick could be reported and isolated; and restricted interaction with the infected.<sup>263</sup> Following Mexico City's 1785-1786 epidemic, what had once been occasional practices rarely enforced, including quarantines and *cordons sanitaires*, were to be quickly and uniformly enacted in epidemics.

This new philosophical universalism, translated into medical practice, engendered many local critiques from peasants and other laypeople, who were more attentive to its repercussions than imperial policymakers. This chapter examines these responses in the intendancy of Oaxaca, in southern Mexico, where the new policy was first put into place over several months in 1796 and 1797. Specifically, the following pages analyze a riot in Teotitlán del Valle, a weaving village fifteen miles to the east of the provincial capital, where parents and other residents stormed the town's hospital and violently removed the children being treated there. This reaction to what the intendant of Oaxaca referred to as the "new project" was the only recorded instance, one that was preceded by days of sustained planning and political negotiation in the town over a policy that paid little heed to the potential dangers of cordons and isolation. In response, many women, with the support of civil authorities, priests, and male relatives, stressed their rights as mothers and construed the order to isolate sick children as a challenge to this natural prerogative. Put otherwise, two rather different understandings of illness, health, and disease came together in the crucible of the epidemic. Not necessarily inflexible, the two positions were reconciled as administrators in Mexico City, following months of accumulated complaints, reoriented official policy toward less objectionable measures.

The consequences of the extension of this policy to rural areas in the realms of worship, healing, politics, and family life were dependent on local circumstances and attendant geographic, ecological, and cultural particularities. Protests against cordons and

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<sup>263</sup> *Extracto de la obra publicada en Madrid el año pasado de 1784 con el título de Disertación Físico-Médica ... compuesta por Don Francisco Gil, Cirujano del Real Sitio y Monasterio de San Lorenzo, México 28 mayo 1788, in AGN Epidemias 7 exp. 1, fs. 9-14.*

quarantines in Oaxaca were common: artisans, representatives of guilds, and agriculturalists all insisted, for a variety of reasons, on the inherent openness of the capital and the importance of free movement to and from markets in the capital. Territorial disputes erupted with renewed vigor as landed communities sought to protect crops and plots of communal land from invasion by neighboring villages, which revealed ongoing social and ethnic antagonisms.<sup>264</sup>

Nevertheless, in part because of this unwieldy complexity, focus here is primarily on healing and the problems of identity and family relations it raised. The chapter draws primarily on three archival sources corresponding to three regions and moments in the crisis. The first is the criminal dossier of testimony and legal statements assembled after Teotitlán's riot. A reading of the language of the parents' defense shows that to excuse their actions villagers played on an exalted notion of motherhood, accusing the government of desecrating this ideal relationship in mandating the isolation of their infected children.<sup>265</sup> The second source is a cluster of eyewitness reports from the capital of Antequera. Submitted by the city's cathedral clergy at the bishop's request, the reports document a disturbing scenario in which relatives of sick patients were concealing evidence of affliction from priests and physicians out of fear of forced removal and punishment. Along with two "seditious" papers supposedly circulating in the city, Oaxaca's bishop forwarded these testimonials to Mexico City for review by the viceroy's legal advisers. The third is a set of letters from priests in the administrative district of Villa Alta, the mountainous region east of Oaxaca's Central Valleys, responding to an attempt to implement emergency measures. By May of 1797, the district remained free of smallpox, and the local subdelegate hoped that the epidemic would run its course without further mortality. He sent a circular letter to the twenty priests in his jurisdiction, overseeing some 110 pueblos, to obtain their support in compelling parishioners to follow specific precautions in healing, burial, and contagion avoidance.<sup>266</sup> The responses

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<sup>264</sup> These disputes between villages could go on indefinitely, "like smoldering embers that flared up from time to time but were never completely extinguished." Francie Chassen-López, *From Liberal to Revolutionary Oaxaca: The View from the South* (University Park, PA: The Pennsylvania State University Press, 2004), 442. On the wide dispersal of a community's plots of land and typically aggressive defense through litigation and force see the remarks in William B. Taylor, *Landlord and Peasant in Colonial Oaxaca* (Stanford: Stanford University Press, 1972), 195ff. A good example of the racial antagonisms underlying such disputes can be found in Archivo Historico Judicial de Oaxaca (hereafter AHJO) Villa Alta Criminal 21 exp. 19, where the construction of a shelter to house guards along a cordon ignited a longstanding dispute over a contested plot of land, with Mixe-speaking villages arresting and whipping aggressors from a nearby village and referring to them as "wild Zapotecs."

<sup>265</sup> For an earlier treatment of the incident in Teotitlán del Valle, see William B. Taylor, *Drinking, Homicide, and Rebellion in Colonial Mexican Villages* (Stanford: Stanford University Press, 1979), 137f.

<sup>266</sup> After stating the necessity of beseeching divine mercy by means of rogations and the intercession of the Virgin Mary and saints, Ruiz de Conejares enumerated six specific goals to which the priests responded: 1) provide a suitable house to contain all of the sick in each pueblo, sufficiently distant and downwind from it; 2) keep him informed of all sick who appeared, separating men from women and appointing capable nurses to attend continuously to them; 3) divide the larger pueblos into smaller barrios, with the distinguished members of each pueblo assigned to care for the public's health; 4) see that the same honorable residents take responsibility for guards assigned to prohibit communication between the healthy and sick within and between communities; 5) see that all the infected who died of smallpox be buried in a spot removed from the population in order to avoid spread of contagion from cadavers; and 6) see that *temascales* or sweat baths be avoided as harmful for smallpox patients. (Comments made by priests on this final point are dealt

describe communal reactions and offer explanations for delays in implementing the new policy.

Ranging across these regions, one sees that the emotions and logic articulated in the unique and uniquely documented uprising in Teotitlán were not exceptional. Neither were residents simply of one view on the new policy. By asking about the different ways parents and other laypeople participated in and experienced enlightened notions of disease it becomes clear that communities throughout Oaxaca confronted the state not as individuals in isolation but as landed communities, producers, consumers, and parents. Through the mediation of secular and religious authorities, they would ultimately oblige the viceregal state to revise its sterilized emergency program.

### **About a Hospital: The Politics of Sanitation in Teotitlán del Valle**

The two mountain ranges of the Sierra Madre, running parallel from the southern United States through Mexico, form a high central plateau that ends in the Valley of Oaxaca as the ranges taper, with the rugged mountains surrounding the valleys creating a fractured ecological zone that splits the population into several ethnicities and dozens of linguistic groups. In such a territory, surveillance was difficult and costly, if not impossible, for the state, to say nothing of those residents of agricultural communities asked to abandon their fields to build shelters and patrol the roads, or the many who made a living from local markets and were now subject to restrictions on inter-village movement.<sup>267</sup> On one hand, officials attempted a degree of surveillance without precedent in New Spain, with those returning sick from Antequera placed in isolation out in fields, or the deceased buried in consecrated cemeteries or an unused chapel outside of the village.<sup>268</sup> On the other, separation always proved difficult if not impossible.<sup>269</sup>

The reason was that production and commerce, which formed the material basis of subsistence in colonial Oaxaca, required constant activity. The Spanish capital of Antequera was the commercial hub and judicial and administrative center of the region, but the lack of an industry catering to international markets (with the exception of cochineal, the red dyestuff made from local insects, cotton along the coast, and mining in the mountains) meant that trade was restricted to commerce between the capital and a network of markets, towns, and cattle ranches. Typically, fewer workers than elsewhere

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with in the final chapter.) Ruiz de Conejares referred to his jurisdiction as populated “*de solo indios en las montañas más escabrosas donde todas son dificultades para caminar y conducir lo necesario por que toda falta, y no hay otro recurso inmediato que hasta Oaxaca,*” twenty-six leagues distant from Antequera. AHJO Villa Alta Civil 32 exp. 4, Villa Alta 15 mayo 1797, 2-5.

<sup>267</sup> The fact that administrators, priests, and representatives of pueblos in Oaxaca were engaged in weeks and then months of negotiation over these measures calls into question the capacity of a centralized, newly vigilant state to unilaterally locate, care for, and isolate diseased patients deemed fit for hospitalization.

<sup>268</sup> Both measures were reported in Choapam, in the Zapotec region to the east of Villa Alta: AHJO Villa Alta Civil 31 exp. 15, Choapam 24 mayo 1797, Antonio de Zúñiga to Conejares, 42r-v.

<sup>269</sup> Concealments of patients were reported in Teotitlán even after the uprising and subsequent arrival of the militia. Barely two weeks after the riot, Melgar reported that in the course of conducting home inspections he had found three recovering patients hidden with the utmost cunning (*cautela*) – apparently they were being passed from one house to another to avoid the eyes of troops. Clearly irritated, he lamented the lack of subordination and rationality (*racionalidad*) of the residents. AGN Epidemias 12 exp. 7, Teotitlán 20 octubre 1796, Melgar to Intendente, 367r-v.

were drawn from corporate communities to work and live on *haciendas*, the large landed estates specializing in cattle raising, which ensured the population's independence in matters of production and consumption and the strong corporate identities of indigenous villages. Weekly indigenous markets, or *tianguis*, formed the backbone of local trade and one of the axes of inter-village interactions, while every Saturday in the capital surrounding villages converged to sell food surpluses, pottery, salt, fish, cochineal, and *pulque* (an alcoholic beverage from fermented cactus). What communities could not produce, they purchased there, and what they produced in excess they traded or sold to pay tribute and other obligations.<sup>270</sup> Among other reasons, then, seemingly arbitrary boundaries imposed by officials were so often ignored because the work required to maintain the state's simplified divisions of space, often imposed on entire villages, disrupted a community's pursuit of this production and exchange.<sup>271</sup>

The cotton textile industry was flourishing in Oaxaca in the eighteenth century.<sup>272</sup> Supported by some powerful commercial interests, including the cotton guild in Antequera (which had ties to Mexico City's), many depended on this trade. For a government anxious about disease contagion, however, it was especially dangerous. Trade in mantles, rugs, and other woven goods put into circulation numerous cotton fibers thought to attract and carry contagious particles, which could potentially propagate an epidemic to distant human settlements. Quarantines and even full *cordons sanitaires* would have devastating effects on income and subsistence of many producers.

Despite the risk of a backlash, when in September 1796 smallpox arrived in the village of Teotitlán del Valle, which specialized in the production of these textiles, the intendant severed its ties to the outside world.<sup>273</sup> The manner of introduction of the

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<sup>270</sup> On trade and local economies, see William B. Taylor's revisionist study of the land tenure system in Oaxaca, *Landlord and Peasant*.

<sup>271</sup> Tehuacán's subdelegate remarked that the Indians assigned to guard the cordons lived from their work and that, given an unbearable *tequio* – tasks imposed by communities or authorities in Oaxaca – they would look after only the most public roads and detain muleteers, as happened with the quarantines on the border between Oaxaca and Puebla. The implication was that the numerous other passages through which residents traveled on foot simply went without guards. AGN Epidemias 10 exp. 4, Tehuacán de las Granadas 11 junio 1797, José González to Manuel de Flon, 198-200.

<sup>272</sup> Around the middle of the eighteenth century the region experienced a small weaving boom that included Antequera and the communities situated in the Tlacolula Valley, the least fertile of three radiating outward from the capital. In this branch, the towns of Teotitlán, Tlacolula, and Mitla were especially active in the industry, with weaving traditions dating to the pre-Conquest era. Demand for the cotton mantles worn by Indians grew with the population in the Central Valleys in the eighteenth century, helping feed the growth of a textile industry in Antequera as well, where by 1792 over a quarter of the male non-Indian population was engaged in some aspect of textile production (out of a total population that had bloomed to over 18,000). On these changes, see John Chance, *Race and Class in Colonial Oaxaca* (Stanford: Stanford University Press, 1978), especially 144-151.

<sup>273</sup> As early as June 1795 restrictions on commerce and orders for isolation were dutifully put in place when Tehuantepec's subdelegate notified Oaxaca's intendant of the arrival of smallpox from Tonalá, in Chiapas. Beginning in January, mail carriers from Tehuantepec were ordered to dress in linen and pass their bags to other carriers, with the purpose of preventing contagion from arriving in the capital. A year later, the intendant proposed taking the same precautions with mail leaving Antequera, now infested as well, for Mexico City. AGN Epidemias 10 exp. 1, Oaxaca 7 febrero 1797, Mora y Peysal, 40r. Reviewing this proposal, the Protomedicato agreed that the letters leaving Oaxaca did carry contagious particles and deemed that, before bagged, they should be fumigated with sulfur and covered in paper moistened with the

epidemic had confirmed the fears of authorities: a weaver from the village named Balthasar Ruiz was thrown in jail after his son was discovered ill with smallpox. Ruiz had left Teotitlán at the end of August with the boy to sell some mantles and other goods, traveling to the district seat of Quiechapa, forty-five miles as the crow flies straight into the heart of the spreading epidemic, and returned after twenty-three days. He was accused of purposefully taking circuitous roads in order to avoid the quarantine in place.<sup>274</sup> As a result Teotitlán was fully closed off: authorities used *salvaguardias* to prevent passage along roads into the adjoining district of Villa Alta, to the northeast, and residents of the capital, fifteen miles away, were ordered to be especially vigilant now that the smallpox infestation had arrived nearby.<sup>275</sup>

Questions of survival immediately came to the forefront. How would residents make a living if they could no longer leave to attend markets? As the administrator in charge of the district, Esteban Melgar, pointed out to his superiors, cordons stopped not only smallpox but also the town's suppliers, an unacceptable situation given that maize was a staple and had to be supplied in a situation in which members could not leave to procure food.<sup>276</sup> He proposed and ultimately settled on a novel arrangement whereby funds would be released to villagers as a loan guaranteed by rugs and other woven articles, which would be taken by an intermediary, who would properly fumigate, quarantine, and sell them in Antequera. Funds from their sale were then returned to the

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same. Ibidem, Mexico City 11 febrero 1797, Tribunal del Protomedicato, 13-14; ibidem, exp. 3, Oaxaca 28 mayo 1796, Intendant to Subdelegate of Huamelula, 112r-v.

As smallpox crawled westward, the intendant sent the viceroy's instructions and copies of Gil's dissertation to the districts of Chontales and Huamelula, ordering that smallpox patients be isolated in a "*casa de curación*" at least a quarter league and downwind from the population, AGN Epidemias 12 exps. 2 and 3. In addition to Gil's dissertation, the intendant sent Huamelula's subdelegate a copy of the "Instruction" composed by José Flores for Guatemala and approved by Antequera's physicians, with strict orders that the part on inoculation was to be practiced on a voluntary basis and only in the event that separation of the sick proved impossible or ineffective. This document is discussed below and in more detail in the following chapter.

<sup>274</sup> The itinerary followed by father and son is in AGN Epidemias 15 exp. 9, ff. 240r-v. After arriving in Quiechapa, he continued on his southeasterly route another fifteen or so miles through the pueblos of Santiago Lachivia, Santo Tomás Quieri, San Pedro Leapi, and Santiago Liarijuli, arriving at last in Santa María Guegolani in the infected zone of the Chontales district, where he finished selling what he had brought. He then returned through towns along a route slightly to the west of the one he had taken on the way there. Assuming at least 120 miles traveled in all, then, they would have walked an average of over five miles a day through some of the roughest mountain ranges in the province. Months later, this individual continued to be blamed for the introduction of smallpox in Teotitlán.

<sup>275</sup> In a last ditch effort to save the provincial capital, the intendant (in consultation with Antequera's physicians) split the city into eight sections (*cuarteles*) so that commissioned residents could perform inspections and isolate any smallpox victim uncovered. Residents there were ordered to report immediately any infected individual – noncompliance risked a fifty-peso fine for those who could afford it, two months in jail for those who could not. Those who denounced, meanwhile, were promised anonymity and a share of the fine. AGN Epidemias 12 exp. 3, Oaxaca 26 septiembre 1796, Mora y Peysal, 162-164.

In May authorities in New Spain had become especially vigilant with ships arriving from the port of Lima and other infested places, placing any such vessels in quarantine and prohibiting its passengers and cargo from reaching land. For these measures and a notice sent to intendants of the "south" – Oaxaca, Puebla, Guadalajara, Acapulco, and Valladolid (Morelia) – see AGN Epidemias 15 exp. 5.

<sup>276</sup> AGN Epidemias 12 exp. 5, Teotitlán 28 septiembre 1796, Melgar to Intendant, 195r-v.

royal coffers, with excess amounts distributed to villagers.<sup>277</sup> This system functioned for several months, although by the beginning of the new year Melgar was writing to request more funds: what had been sold was no longer adequate for the town, which though nearly recovered was still prohibited from travel to Antequera, its main market.<sup>278</sup>

Melgar and other colonial administrators, loyal to the viceregal government and compelled to comply, suspected from the outset that the provisions contained in Gil's treatise were unreasonable and repeatedly sought to make its shortcomings clear. The entire community of agriculturalists appeared before Melgar early on to express their need to move in and out of the village, which Melgar dutifully reported to his superiors.<sup>279</sup>

I was just beginning to issue rulings to contain these natives [*naturales*] in the precincts of their pueblo when the entire community, men and women, came to these municipal buildings possessed with the greatest distress, begging me to permit them to care for their sown fields and go out to the countryside, because otherwise their oxen would perish from necessity in their plots of

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<sup>277</sup> The final expense report for Teotitlán's epidemic included 1,203 pesos for the hospitals, beds, and medication for the sick, 659.5 pesos to pay the troops guarding the cordon, and roughly 2,900 pesos for purchase of woven goods from the community's weavers. Once the goods had been sold, the entire amount was subsequently returned to tributary coffers. AGN Epidemias 15 exp. 2, Oaxaca 24 julio 1801, Bernardo José de Rioja to Señores Contadores Mayores del Real Tribunal y Audiencia de Cuentas del Reino, 74-5.

This was initially a form of poor relief, intended only for those who could not make it through the epidemic without assistance, with each individual given a proportion of the market value of his goods (the large quantities spent appear to suggest it was eventually extended to everyone). "*En consecuencia de haber adaptado V.S. el pensamiento de que a los Naturales de este Pueblo se les reciban sus tejidos, para subvenir de esta suerte a sus necesidades: y a vista de que, ayer se me presentó una porción de gente pobre pidiéndome en prenda de sus manufacturas algún dinero prestado, para comprar maíz, se las recibí con proporción a las urgencias de sus respectivas [sic] familias, socorriéndoles de esta manera: al que trajo una fresada cuyo valor corriente en ese mercado es de dos pesos, le di doce reales: al que trajo otra de valor de doce reales, le di diez, y así proporcionalmente a los demás según la clase y valores de sus tejidos.*" AGN Epidemias 12 exp. 7, Teotitlán 3 octubre 1796, Melgar to Intendant, 337-338.

<sup>278</sup> Sure enough, two weeks later, guards along the cordon at Ixtaltepec apprehended a villager trying to reenter the village after leaving to sell mantles in Antequera's *tianguis*. Although he placed the weaver in jail, Melgar realized the urgency of the situation – funds had run out and residents were again compelled to seek out markets simply to eat. AGN Epidemias 10 exp. 6, Teotitlán 9 enero 1796 [1797], Esteban Melgar to Intendant, 231; *ibidem*, 12 enero 1797, Melgar to Intendant, 232-233r; and *ibidem*, 22 enero 1797, Melgar to Intendant, 236r-v.

<sup>279</sup> Melgar originally raised the problem of residents being allowed to leave to visit their cultivated fields several days earlier: "*es fácil que en las colindarias se vean, y traten unos, y otros, y acaso de este modo se propague la viruela: conozco que es duro ocasionarles la pérdida de sus sementeras; pero V.S.<sup>a</sup> juzgará si será aún más duro que su conservación origine la extensión de la epidemia por otras partes, y me prevendrá lo conducente.*" AGN Epidemias 12 exp. 5, Teotitlán 1 octubre 1796, Melgar to Intendant, 204-5. The physicians in the capital, concerned with spreading contagion, advised the intendant that Indians should be absolutely prohibited from going to see their *milpas*, and the intendant proposed as a compromise placing the fields under the care of the adjoining populations. "*Atendiendo a esto [the objective of the cordon] por una parte y teniendo consideración por otra a que el estado actual de los sembrados no exige ya ningún beneficio, pues para que se logren y no experimenten pérdida los interesados, bastará únicamente que se cuide de que nadie los robe y de preservarlos del daño de los ganados, me parece que podría ocurrirse a todo, encargándose a los Naturales de los Pueblos inmediatos el que cuidasen de las Milpas de los de ese . . .*" *Ibidem*, Oaxaca 4 octubre 1796, Intendant to Melgar, 206-7.

land, and their crops, many of which still require care because of the late season, would be lost; many families maintained themselves from the corn, zucchini, and green beans they picked daily from their fields, of which they would be deprived if they could not leave from the leaky roofs of their homes; and last, [they told me] that residents of the neighboring pueblos would carry out the orders poorly, and perhaps take advantage of the orders to harm their interests.

Although the request to leave was refused, Melgar personally addressed the concern of residents that their cattle and crops would be left to perish or stolen by neighboring villages. He left the next morning on horseback to survey the village's plots and determine their position relative to neighboring properties and attempted, as best he could in the circumstances, to secure their boundaries against encroachment.<sup>280</sup>

The most objectionable parts of the new program for many members were not those of territorial boundaries and subsistence, but those that treated the smallpox victim, which ultimately led to what authorities labeled a riot (*tumulto*) on October 8. General expressions of discontent began while the isolation hospital was still being constructed: as Melgar later recounted, nearly fifty *indias* headed by Sebastiana Vásquez – the daughter of the Indian governor, who worked selling tortillas in the main plaza of the capital – arrived at the construction site on the morning of Thursday, September 29 where several male villagers were working. The group of women announced that they could not allow their children to be brought there, or to be buried in the *camposanto*, the consecrated cemetery being prepared, in the event of death. The subdelegate, with twelve years of experience in the district, claimed that he had carefully explained to the dissatisfied women, with the help of the pastor Manuel Antonio Martínez, the provisions' benefits for children and other uninfected residents. Not easily persuaded, the women threatened not to pay tribute or religious fees,

arrogantly and scandalously, so that I saw myself having to tell the men who were working there to contain the women, which the men did, threatening them that if they did not obey, soldiers from Oaxaca would be sent to bring them to reason. The women answered with greater insolence, spewing very obscene things and saying that if troops came, they would be content with them, at whose pleasure they would prostitute themselves.

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<sup>280</sup> He had found that they were indeed contiguous with two pueblos (Santa Anna del Valle and Maculsuchil) and had stationed guards there to register the boundaries and discourage residents from congregating. He added that these fears were well established and acknowledged (*canonizado*) among Indians (“*con el carácter de los Indios*”). AGN Epidemias 15 exp. 2, Teotitlán 7 octubre 1796, Esteban Melgar to Intendant, 23r-v. [“*A penas empezaba a dar Providencias para contener a estos naturales en el recinto de su Pueblo, cuando todo él, hombres y mujeres, vinieron a estas casas, poseídos de la mayor congoja suplicándome, les permitiese cuidar de sus sembrados, y salir al campo; porque de lo contrario dentro de sus solares, sus bueyes morirían de necesidad: sus siembras que muchas de ellas aún necesitan de beneficio por lo tardío del año se perderían; que muchas familias se mantenían de los Elotes, Calabacitas, y ejotes que diariamente cortan de sus sembrados, de cuyo beneficio se privarían impedidos de salir de las goteras de sus casas, y por ultimo que los vecinos de los Pueblos comarcanos desempeñarían mal las ordenes, y a caso se valdrían de su ocasión para perjudicarles.*”]

At this, Melgar and the priest led the women away from the work site, trying again to convince them, but to no avail. The women departed greatly aggravated.<sup>281</sup>

Following this, when he arrived to remove the patients from their homes Melgar brought along an officer of the provincial militia, the *cabo* Félix Confite, as well as the priest and a soldier stationed at one of the cordon's checkpoints. It was an authoritative coterie intended to bolster his own attempts at persuasion, but apparently unnecessary. Melgar expressed surprise to find many children already prepared for transport on straw mats and planks, their parents overwhelmingly deferential. The following day he reported sixteen patients in the hospital, estimating that another 700 susceptible residents remained for hospitalization.<sup>282</sup> On Wednesday, October 5, however, when he and the priest were working in the hospital, two *indios*, a man named Francisco Ruiz, whose children were inside, and his fiancé, approached asking to see the children. They boldly ventured past the boundary established for visitors, retreating only after repeated warnings from the official. This unprecedented act led Melgar to anticipate further transgressions, confirmed the following day when parents stopped cooperating with the indigenous representatives who daily went to homes to pick up the sick.<sup>283</sup> Melgar had no way of knowing that members of the community had by that time made contact with an attorney in Antequera, a Spaniard named Diego de Villasante, who had begun advocating on behalf of the community.<sup>284</sup> The attorney had reassured them, according to later testimony, that the emergency orders came from the intendant, not the viceroy, and thus could be overturned.

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<sup>281</sup> AGN Epidemias 15 exp. 9, Teotitlán 30 diciembre 1796, Certificación de Esteban Melgar, 244r-v. [“... con altanería, y escándalo, de manera que me vi precisado a decir a los Yndios que se hallaban trabajando, contuviesen a las mujeres, y ellos así lo hicieron, amenazándolas con que si no obedecían vendrían soldados de Oaxaca, a reducirlas a razón; pero las Yndias contestaron con mayor insolencia, profiriendo especies muy obscenas, y diciendo que si venía tropa, estarían más contentas con ella, a cuyo gusto se prostituirían.”]

<sup>282</sup> AGN Epidemias 12 exp. 5, Teotitlán 1 octubre 1796, Melgar to Intendant, 204-205. Susceptible residents meant those who had not contracted smallpox in the past, primarily children. After a visit to the village, the intendant provided more precise numbers on November 1: with 213 total families, he estimated that if three in each family, for a total of 639, had not contracted smallpox, then 483 remained at that point (by then 156 patients had passed through the hospitals). AGN Epidemias 12 exp. 7, Oaxaca 1 noviembre 1796, Mora y Peysal to Viceroy, 375r-v.

<sup>283</sup> AGN Epidemias 15 exp. 9, Teotitlán 30 diciembre 1796, Certificación de Esteban Melgar, 245v-246r.

<sup>284</sup> The first contact with Villasante took place on October 4, 1796, when Pascual Hipólito, a thirty-five year old *indio* from Teotitlán del Valle (he was described as having a rash over one half of his face, from his beard down to the scruff of his neck) fled the village in the company of two other men in the early hours of the morning. They were armed with a page of complaints and instructions to consult with a lawyer in the capital about the situation in the town, but apparently not one lawyer in particular. They arrived at daybreak and met in the cathedral's cemetery with Sebastiana Vásquez, the daughter of the village's governor. Clearly involved in formulating the complaint (she had appeared at the construction site in Teotitlán accompanied by other women to protest the hospital), she was employed in the main plaza of the city as a *tortillera*, later described by the lawyer as dressed in petticoats and a blue shawl and behaving very *ladina* and Castilian as a result of having lived in the city for some time (he said she was the only one who ever communicated directly with him). With Sebastiana translating, Pascual was introduced to an intermediary who apparently had no prior involvement with the community's affairs – a sixty-year old Indian widower, formerly a translator in Oaxaca's court and at the time earning his living by making and selling ceramic pitchers in the capital, named Marcos de los Ángeles. Pascual explained his village's situation to Marcos, who took them to the home of Villasante, an attorney and member of the royal court. After hearing their predicament, Villasante advised them to return with a statement written in the name of all the officials and



The legal statement Villasante wrote on the village's behalf likened their situation to being in prison, an apt analogy that expressed the community's almost total isolation in the interest of public health.<sup>285</sup> Descriptions of the hospital in which the town's children were being held suggest it was in fact small, although not entirely without charm, according to the priest and subdelegate: situated a kilometer outside of the town, it measured approximately twenty-two feet on each side. Its door opened to the north, letting in the driest and most purifying winds, Melgar wrote, the interior walls adorned with layers of green palm (some of which were removed to provide more ventilation), "which refresh the infirmary and please the sick patients." In a separate space off to one side there was a kitchen and rooms for nurses. Each patient had his or her own straw mat with a sheet and cotton blanket. Leafy tree cover surrounded the building, providing shade and brightening up the atmosphere. It was all Melgar could manage, he said, with limited resources and time.<sup>286</sup>

Nevertheless, the care being provided within the hospital left much to be desired. Melgar's early correspondence reveals the administrator in a near panic as he pondered his own inadequacy for the healing tasks he found himself performing. When patients arrived, he had them dressed in clean clothes and burned the "rags" they previously wore or left them soaking in the river. They were given daily rations of *atole* (a drink of corn gruel) and broth of mutton cooked with lettuce.<sup>287</sup> On the morning of the riot, he wrote his superior to report having requested a woman who worked as a *curandera* from the neighboring village of Santa Cruz Papalutla to help manage the infirmary and "administer enemas." In the same letter he requested medication from the capital and an additional

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elders of the town, which would form the basis of the legal petition he would send to his agent in Mexico City. On Friday afternoon, the group returned to the lawyer's home, where they were read what had so far been written and instructed to return for news of its receipt in Mexico City in one week, and in two for a final ruling. The lawyer assured them they would soon be allowed to leave to sell their textiles as they saw fit. Villasante's statement was never sent to Mexico City: Friday's mail was delayed, and by Sunday morning word reached the capital that Teotitlán had stormed the hospital and removed their children the night before. This disturbing news dissuaded him from further involvement, and he tucked the statement away, along with the forty pesos he had received for expenses, for in the event, he testified, that the villagers returned to collect them. AGN Epidemias 15 exp. 8, Antequera 13 octubre 1796, Declaration of Marcos de los Ángeles, 174-176; *ibidem* exp. 9, Declaration of Pascual Hipólito, 223r-v; *ibidem*, Declaration of Licenciado Don Joaquín de Villasante, 168v-171r.

<sup>285</sup> AGN Epidemias 15 exp. 8, Oaxaca 7 octubre 1796, Licenciado Don Joaquín de Villasante to Thomas Antonio Paradela, 166-167. In the legal document, to be sent to his agent in Mexico City, Villasante stressed their inability to tend to their fields and sell goods in Oaxaca and noted that even the village *tianguis* held on Sundays and Mondays had been abolished. Children were being removed to the hospital without parental consent; parents were prevented from visiting them until their condition improved or they died; when they died, they were buried in a consecrated field in the middle of nowhere. ". . . y así se hallan en su Pueblo como en una cárcel llegando a tanto rigor de esta providencia que algunos Padres y Madres que tienen sus hijos en el jacal que han formado para Hospital, a el que quieran, o no quieran llevan a los enfermos, no se les permite el que los vean hasta que sanen, o mueran, y sucediendo esto ultimo los echan en un corralón cercado de espinas que hace veces de zanja o camposanto . . ."

<sup>286</sup> AGN Epidemias 12 exp. 5, Teotitlán 1 octubre 1796, Melgar to Intendant, 204-205, and also the *certificación* provided by the priest, AGN Epidemias 12 exp. 7, Casa Parroquial de Teotitlán 16 noviembre 1796, Manuel Antonio Martínez, Ministro de la Doctrina, 381r-v. ". . . que refresquen la enfermería, y diviertan los enfermos . . ."

<sup>287</sup> AGN Epidemias 12 exp. 5, Teotitlán 1 octubre 1796, Melgar to Intendant, 204-205.

*curandero*, perhaps to take charge of the male patients or to relieve the local woman healer. More sick entered daily, but there were so few to care for them, he complained, that I find myself in the hospital the entire day, observing novelties in the patients and prescribing medicines, instructed by professors Gil and Flores, of whose treatises I make a singular study. It is true that until now I have attended to all of the signs successfully, but I am persuaded that this is a risky case for which I cannot trust myself . . . in the event that I alone am assigned to the house of healing, other responsibilities would be overlooked . . .”<sup>288</sup>

Along with the surgeon Gil’s instructions, discussed in the last chapter, he had found time to study a second treatise on inoculation and healing of smallpox patients, one authored in Guatemala two years earlier by the president of its Protomedicato, José Flores. This work had been recommended by Oaxaca’s intendant as perhaps better suited than Gil’s – quoting the title of the work – to the “nature and way of living of the Indians and rustic folks” in Melgar’s district, and it appears the latter dutifully followed it.<sup>289</sup> Melgar mentioned, for example, purging with *cañafístula*, recommended in Flores’s work, and added that he was following the recommendation of both doctors in sending patients home once their scabs had separated, bathed and following a washing and fumigation of their clothing.<sup>290</sup> Both Gil and Flores were anxious about contagion, like many of their contemporaries, which perhaps influenced Melgar’s own preoccupations. “A great part of treatment,” Flores had written, “consists in the cleanliness and purity of the air. The house or room must always be open, swept, and watered down, and the patient covered with little clothing.” The best thing that could be done for Indians and

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<sup>288</sup> AGN Epidemias 15 exp. 2, Teotitlán 8 octubre 1796, Esteban Melgar to Intendant, 24-25. [“. . . *que me veo en la necesidad de estarme todo el día en el Hospital, observando las novedades de cada doliente, y recetando medicinas ilustrado de los Profesores Gil, y Flores de cuyos tratados hago un singular estudio. Es cierto que hasta ahora he ocurrido con felicidad a todos los indicantes; pero yo me persuado que este es un acaso de que no debo fiarme . . . pues destinado yo solo a la casa de curación, haría falta a otras atenciones . . .*”]

<sup>289</sup> José Flores, “Instruction on how to practice smallpox inoculation and method for curing this sickness, adapted to the nature and way of life of Indians and other castes of rustic folk from pueblos of the Kingdom of Guatemala” [*Instrucción sobre el modo de practicar la inoculación de las viruelas y método para curar esta enfermedad acomodado a la naturaleza y modo de vivir de los Indios, y demás castas de Gente rústica de los Pueblos de el Reino de Guatemala*], Nueva Guatemala 25 octubre 1794, in AHJO Villa Alta Civil 31 exp. 14. The intendant sent Melgar a copy, along with Gil’s *Disertación*, recommending the former as better suited to the infested district seat as it had been written for the “rustic” inhabitants of Guatemala, who “*con poca diferencia casi viene a ser el mismo en todas partes.*” Oaxaca’s physicians had approved it for use except for the parts that prescribed chocolate, cacao, annatto, and *contrayerba* (*Flaveria trinervia*), the last a potentially harmful stimulant, the other three “*oleosos y aumentativos de la putrefacción . . .*” AGN Epidemias 12 exp. 5, Oaxaca 30 septiembre 1796, Mora y Peysal to Melgar, 200r. (Copies were sent to several other jurisdictions, including Villa Alta’s parishes in July 1797, but most probably did not use it; see the responses of its parish priests in AHJO Villa Alta Civil 31 exp. 14, 26r-28r.)

Flores played an important role in the practice of inoculation and, later, vaccination in Guatemala as well as in Madrid. His writings on this theme are discussed in the following chapter.

<sup>290</sup> From Flores, “Instruction”: “*Finalmente cuando las viruelas se han secado, y comienzan a caer las costras, se les dará agua de tamarindo, endulzada con azúcar y un poco de Cañafístula para que se purguen y se les seguirá cuidando por seis u ocho días, para que convalezcan y que se vayan enteramente buenos.*”

other “poor folks,” Flores wrote in his instruction, was to prevent infection of other pueblos, best achieved by patrolling movement, sweeping, washing streets, and frequent sulfur fumigations.<sup>291</sup> It is unlikely that Melgar followed all of the prophylactic measures of either tract – as he confessed, he was having a difficult time carrying out their prescriptions in addition to his official duties. Yet even a partial implementation effectively created a social as well as physical cleansing of the patient, who became no more or less than a diseased, infectious individual isolated from family and anyone else who wished to visit and provide care.<sup>292</sup> The program would have powerful emotional effects as it was put into practice in Oaxaca.

Before any of the proposed improvements to the running of the hospital could be made, residents of Teotitlán took matters into their own hands. On Saturday at one in the afternoon, after the first child in the hospital died, women left their homes en masse for the church, having been notified by word of mouth of plans to prevent the boy’s burial in the objectionable *camposanto*.<sup>293</sup> In his home, Melgar received word that a guard witnessed a procession of Indians go past, the women carrying rocks wrapped in their *huipiles*, saying they were going to obtain from the priest a burial in the church and if not they would riot. Violence was clearly a possibility, if not yet an inevitability, and Melgar, called by the priest’s anxious aunt, rushed to the church to investigate the matter.

He arrived to find 200 *indias* thronging the door to the priest’s personal quarters. Threading his way into the room, Melgar found it was full of women cornering the priest, who was apologizing that he could not countermand the decisions of his superior. When Melgar inquired into the commotion, Jacinta Zarate and Dominga Gutiérrez, two elder widows represented as ringleaders, informed him that they wished the deceased buried in the church. Because the gathering included the majority of the village, and he suspected many of them were drunk, Melgar proceeded cautiously, proposing as a compromise burial in the chapel at the outskirts of the village, which would not have violated the emergency provisions. This was rejected by the women, who, “all looking at me with an air of wrath and contempt, told me that the Indians had built the church and that they were not animals, to be buried in the countryside . . .” The orders came directly from the viceroy and could not be revoked, Melgar objected, proposing that while notice was given they would be allowed to bury the boy in the church cemetery. Some agreed, and others, intent on a burial inside the church, refused.

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<sup>291</sup> Flores, “Instruction.” [“*Una gran parte de la curación consiste en el aseo y pureza del aire. La casa o cuarto ha de estar siempre abierto, barrido y regado, y el enfermo cubierto con poca ropa.*”]

<sup>292</sup> In part, this was simply an inevitable consequence of contemporary understandings of the epidemiology of smallpox. Contemporaries knew that some immunity was conferred on those who lived through a case of smallpox, but they also thought these individuals could still carry it on their persons and clothing and thereby infect others. Transmission resulted from a confluence of two factors: first, the mechanism of contagion, which was why control of commerce and other modes of human interaction was deemed so important (Gil’s extract attributed advancement of smallpox during the Spanish Conquest to Pánfilo de Narváez’s black slave), as well as the natural disposition of the individual to receive it (a form of humoral theory; see Chapter Eight for more on the prevalence of hot and cold attributes in sickness). It was clear to Gil and others that this second aspect played a role because certain individuals were observed to live their entire lives without ever contracting smallpox, despite repeated exposure.

<sup>293</sup> AGN Epidemias 15 exp. 9, Declaration of Josefa Ximenes, 208r-v.

The crowd then departed for the small makeshift morgue that had been built for the epidemic. They retrieved the boy and returned triumphantly to bury him at the door of the church, where his father and uncle, Matías and Gaspar García, had broken ground. Residents ignored Melgar when he recommended sprinkling a layer of lime, “to consume the body more quickly,” and in full view of the priest and official performed an improvised memorial service at the grave, their rite mournful and celebratory, death commemorated “with the most insolent merrymaking and expressions of contempt and ridicule . . .” They had achieved their ostensible purpose, but violence followed anyway.

Melgar reported that from the standoff at the church, Francisco Ruiz, the father who had asked to see his child at the hospital days earlier, declared “that he was going to accompany his son, who is sick with smallpox . . .”<sup>294</sup> A female resident later testified that while still at the church Santiago Vásquez, likely Sebastiana’s brother, son of the Indian governor, first raised a call to arms (*levantó la voz*), along with Francisco Ruiz and Magdalena Gutiérrez, “saying that once they were together and the fire had been lit, they should not stop until everything was burned, and that they should go and remove the sick [from the hospital], which inspired [the others], and they put it into practice.”<sup>295</sup> Antonio López, one of those who left to Antequera to seek legal counsel and with sick children of his own, confirmed that when others left to retrieve the deceased boy Santiago Vásquez had said to the assembled “that supposing they were together, they could easily remove the sick from the hospital, that there would not be consequences because the lawyer [in Antequera] had promised to fix everything,” with which the women agreed.<sup>296</sup>

Once at the entrance of the hospital, the assembled crowd turned violent. The women were credited with most if not all of it (witnesses recalled at least one man, José Lorenzo, a councilman (*regidor*), leading entry into the hospital). It was recalled that at the door the town’s Spanish schoolmaster, José Aragon, who was working inside as a nurse, had been given a strong shove (*fuerte rempujón*) by Gerónima Gutiérrez, a married twenty-five year old resident, who then entered the hospital followed by the others.<sup>297</sup> In

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<sup>294</sup> AGN Epidemias 15 exp. 9, Certificación de Esteban Melgar, 247r. [“. . . *que iba a acompañar a un hijo suyo enfermo de viruelas . . .*”]

<sup>295</sup> AGN Epidemias 15 exp. 9, Declaration of Petrona Chavez, thirty years old, through interpreter, does not sign, 207v-208r. [“. . . *diciendo que una vez que estaban juntos, y se había prendido el fuego no parasen, hasta quemarlo todo, y así que fueran a sacar los enfermos, con cuya sugestión, se animaron, y lo pusieron por obra.*”] Petrona implicated several women, calling Jacinta Zarate, Josefa Ruiz, Juana Lorenzo, and Dominga Gutiérrez “*principales cabecillas de todo lo acaecido en este Pueblo*” and describing their failed attempts to gather men and women to impede the blessing of the *camposanto*. She testified that the same group of women had much better luck gathering many women and a few men on Rosary Sunday, and that Sebastiana Vásquez had in fact left from the town in the company of Pasqual Hipólito to take the statement to Oaxaca. (Others confirmed this alternate account of events.)

<sup>296</sup> If Santiago was in fact Sebastiana’s brother, as other testimony suggests, he would have been well positioned not only to receive updates from ongoing legal efforts in Antequera, but also, as a son of the Indian governor, to wield some influence as a leader. For their alleged roles, Santiago and Francisco later received fifty and twenty-five lashes respectively in the pillory before the community and the militia company sent to contain the uprising. AGN Epidemias 15 exp. 9, Declaration of Antonio López, 199-201. [“. . . *que supuesto estaban juntos, bien podían sacarse los enfermos del Hospital de que no habría resultas, pues el Abogado, tenía prometido componerlo . . .*”]

<sup>297</sup> AGN Epidemias 15 exp. 9, Declaration of Antonio López, 199-201. AGN Epidemias 15 exp. 9, Declaration of Manuel Bazan, 196-197. If José was the brother of Juana Lorenzo, it means he also had a niece in the hospital, whom he may have sought to retrieve when entering.

his own statement, the nurse referred only to women and recalled having to throw himself against the door “to prevent the *indias* [sic] from entering to remove the sick; but these women, who came loaded with rocks, shoved and slapped the witness, threatening him that if he spoke they would kill him, and entered and removed the sick patients, most of them stark naked, some carried and others dragged in their reed beds.”<sup>298</sup> Melgar was still in the parish when he received word from the governor and an *alcalde* that residents had stormed the hospital and dragged their children out into the elements.<sup>299</sup>

Repercussions were severe. Oaxaca’s intendant sent two battalion companies to apprehend the ringleaders (*cabecillas*) and close off the district seat from its neighbors, with orders that the soldiers not harm any Indians unless unavoidable.<sup>300</sup> News arrived from a resident of the neighboring pueblo of Santa Anna that 200 soldiers were on the march, and the villagers prepared to greet them. Shortly before eight o’clock Sunday night, whistling and shouts ringing through the air assembled raucous villagers – drinking a good deal of pulque, according to one witness – along the road that from the capital.<sup>301</sup> When sounds of the commotion reached him, the subdelegate had still not received the order (news traveled quickly when not consigned to paper). Suspecting that the drunken revelers intended to burn down the hospital and break the cordon, he retreated with Félix Confite and another soldier to the administrative building. By the time the troops arrived, at two in the morning, residents had dispersed, but men and women reappeared at sunrise in the plaza. Melgar, feigning interest, invited the group into the patio of the administrative building under pretense of hearing their complaints. The residents entered, seemingly without fear of the company of guards before them, and doggedly raised their concerns (*inquietudes*) yet again: “they began, not stripped of the spirit of insurrection, to talk about mantles and the state of their children in the hospital . . .” Informing them of the intendant’s order for their arrest, Melgar then pointed out the most unruly (*díscolos*) to the guards for arrest. That day, twenty-two sick children were returned to the isolation

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<sup>298</sup> AGN Epidemias 15 exp. 9, Declaration of José Bernardo Aragon, 212r-v. The schoolteacher specifically cited Gerónima Gutiérrez, as well as Petrona Santos and María Martín, whose defenses are discussed in the final section. [“ . . . para impedir que las Indias [sic] entrasen a sacar los enfermos; pero estas que venían cargadas de piedras rempujaron, y abofetearon al que declara, amenazándole, que si hablaba, le quitarían la vida con lo cual se metieron, y sacaron los enfermos los mas encueros, unos cargados, y otros arrastrados en sus mismas camas.”]

<sup>299</sup> Except where otherwise indicated, the foregoing account comes from Melgar’s official statement, AGN Epidemias 15 exp. 9, Teotitlán 30 diciembre 1796, Certificación, 246r-247v: [“ . . . para consumirlo mas breve.” “ . . . mirándome todas con un aire de ira, y desprecio me decían que el Templo lo habían hecho los Yndios, y que no eran bestias para ser enterrados en campo . . .” “Todo el Pueblo se mantuvo en el cementerio mientras duró el entierro, que solemnizaron con la más insolente jácara, y expresiones de desprecio, y mofa, que estábamos oyendo este Padre Ministro, y yo . . .”] Also *ibidem*, exp. 2, Teotitlán 8 octubre 1796, Félix Confite to Melgar, and *ibidem*, Esteban Melgar to Intendente, 26r.

<sup>300</sup> AGN Epidemias 15 exp. 2, Oaxaca 9 octubre 1796, Auto of Antonio de Mora y Peysal, 26-27. [“ . . . no hieran ni maltraten indio alguno, si no fuere en algún lance que se considere inevitable . . .”]

<sup>301</sup> AGN Epidemias 15 exp. 9, Teotitlán 24 noviembre 1796, Declaration of Lucas Sosa, indio soltero, 229v-230r.

hospital, although residents succeeded in concealing many others in spite of the presence of armed men.<sup>302</sup>

As weeks became months and the fifteen alleged ringleaders lingered in jail, Teotitlán was subjected to undeclared martial law. The remaining members of the provincial militia, whose presence Melgar continued to deem necessary for cooperation, were unruly and insubordinate. They pilfered crops and deserted for Antequera as early as the end of October, which compounded the headaches of officials and multiplied the hardships of villagers.<sup>303</sup> By November, all but twenty-one had been dismissed, and those who remained were kept busy at the insistence of the subdelegate: three worked in the hospital under Félix Confite, another three in the new inoculation hospital, and the remaining patrolled the cordon in *garitas* at the entrances and exits to the town.<sup>304</sup> Melgar reported a second attempted extraction from the hospital on November 6. It allegedly involved more than 100 women, but the guards contained it without further incident.<sup>305</sup> Clearly converted to the newly ascendant medical doctrine, Melgar had those troops stationed at the jail bring its prisoners outside for occasional relief in the sun so that they

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<sup>302</sup> AGN Epidemias 15 exp. 2, Teotitlán 10 octubre 1796, Esteban Melgar to Intendant, 31-32; *ibidem*, exp. 9, Teotitlán 30 diciembre 1796, Certificación de Esteban Melgar, 248v-249r. [“. . . empezaron no desnudos de espíritu de insurrección a tratar sobre mantas, y estado de sus hijos en el Hospital . . .”]

<sup>303</sup> AGN Epidemias 15 exp. 2, Oaxaca 28 octubre 1796, Intendant Mora y Peysal to Viceroy, 33-34. Companies of trained military police appeared in New Spain following the 1786 administrative reforms and were the subject of disdain and numerous complaints in Oaxaca. For a litany of grievances against abuses, desertions, and general incompetence, see Rodolfo Pastor, *Campesinos y reformas: La mixteca, 1700-1865* (México: Colegio de México, Centro de Estudios Históricos, 1985), 198: “Para añadir insulto al agravio, el cuerpo de la milicia está formado por conscriptos indios, forzados a servir sin pago, que los comuneros tienen la obligación de mantener con un fondo especial cuyo principal ingreso proviene de siembras impuestas a los pueblos.” In Oaxaca’s epidemic, there were reports that guards were charging passengers one real for permission to move through the cordons they were supposed to be patrolling. AGN Epidemias 12 exp. 7, Oaxaca 5 octubre 1796, Intendant to Tomas Martinez Carrillo, 340r. The fact that some residents of the capital blamed the deserting soldiers for the arrival of the epidemic there suggests that many of these conscripts arrived in Antequera, with their presence acutely felt. See AGN Epidemias 10 exp. 2, Oaxaca 7 febrero 1797, Teniente Letrado de Oaxaca y demás capitulares comisionados, 42-47 (they blamed the arrival of smallpox in the capital on the deserting troops from Teotitlán).

<sup>304</sup> Once it became clear that cordons were not producing results, the intendant of Oaxaca and Esteban Melgar turned to inoculation, at the urging of the physician working in Teotitlán, don Rafael Briones. It was decided that another hospital would be constructed specifically for inoculated children from families of less means and that all others would build large subdivided *jacales* in the vicinity. As an incentive to participate, Melgar offered residents permission to bury their deceased in the church cemetery once again (rather than in the *camposanto*), and many agreed to this exchange. By November 23, 125 inoculations were reported, with fifty-seven recovering in the galleys of the new hospital and the other seventy-eight in the *jacales*, where thirty families had voluntarily taken up lodging for the duration of treatment (separation was necessary because the inoculated patients were considered contagious). For more on these compromises and negotiations in inoculation, see Chapter Five. AGN Epidemias 12 exp. 5, Oaxaca 11 noviembre 1796, Intendant to Branciforte, 219-220, and *ibidem*, 25 noviembre 1796, Intendant to Branciforte, 215-216.

<sup>305</sup> AGN Epidemias 15 exp. 2, Teotitlán 17 noviembre 1796, Melgar to Intendant, 44r-v: “. . . los yndios por desgracia, ni la más viva elocuencia, ni la práctica de las cosas es capaz de distraerles de sus añejas costumbres, ni que prefieran un método racional a sus ignorantes, y perjudiciales usos; y así sucedió el Domingo seis del Corriente que se agolparon más de cien mujeres al Hospital con el objeto de llevarse a sus enfermos, y fueron contenidas por la Guardia, sin daño, ni perjuicio de nadie.”

would not perish in “these deadly places of deposit” (its conditions, according to Melgar, were then under review in the intendancy). Others he kept busy sanitizing the village, ordering period fumigations with “anti-pestilential materials” for purification of the air.<sup>306</sup> Oaxaca’s revived and recently professionalized provincial militia, sent to occupy Teotitlán and discipline the population, was thus transformed into a corps of enlightened sanitation workers during its stay.

Officials in Oaxaca and Mexico City would later blame commercial interests in the province for stirring up the unrest and expressions of dissatisfaction that erupted in the months of the smallpox epidemic. As these details of the riot suggest, however, there were other matters at stake. Why insist on burial within the church, an especially privileged spot, after being offered space in the graveyard? Were the seemingly mediocre performance of the administrator in the hospital or the program of treatment more broadly cited as issues resulting in the removal of the patients, and if not, what about the hospital made it the object of such apparent disdain? And how was it that women came to play an active and even dominant role in the events that transpired?

### **Severed Entrails: The Anatomy of a Village Protest**

The dossier of transcribed testimonies sheds light on the strategies employed to rally members of the weaving village to action in the days leading up to the hospital extraction. It provides a uniquely detailed glimpse of creative applications of emotions toward particular political ends and a convincing performance of guilt, innocence, suffering, shame, and violation. If reconstruction of events is difficult – the record is a tangle of knots, with pages of testimony and petitions full of contradictions, denials, redirections, evasions, and instances where residents genuinely saw and recollected things differently – some preliminary effort yields insights into the way villagers perceived the enlightened measures, for some merely annoyances, for others more traumatic violations. Although residents ended up targeting the hospital and its personnel, discussions in the weeks leading up to the riot centered on a wider universe of ideas about health, including what it meant to be human and a good parent, norms on which the state’s enlightened sanitation policies had impinged in objectionable ways.<sup>307</sup>

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<sup>306</sup> Ibidem. Melgar concerned himself with the inoculation hospital, where mothers were allowed to remain with their children but had to be prevented from leaving or bringing clothing and other “dangerous” effects in and out. [On the jails: “. . . *estos mortíferos depósitos* . . .” “. . . *para que esté aseado y se hagan las humaradas de materias antipestilentes con que se purifica el aire.*”]

<sup>307</sup> When studying ideas of illness, or the cultural construction of disease, one is simultaneously considering a suffering individual, his or her family, a wider community, and a society and the terms in which members understand their participation in it. In colonial Mexico, patients often sought the cure of a patient or community – an *illness* and not merely *disease* – and it was in this fuller dimension as symptomatic of deeper pathologies and disruptions of a society, race, polity, or universe, that disease was most often addressed. A pain in the stomach transcended the biological, for the patient, the priest, and many treating physicians. *Oaxaqueños* similarly remind historians that household, community, and cosmos came into play simultaneously in assessments of illness and health. For an extended discussion of these issues, see Lawrence E. Sullivan, “Religious Foundations of Health and Medical Power in South America,” in *Healing and Restoring: Health and Medicine in the World’s Religious Traditions*, ed. Lawrence E. Sullivan (New York: Macmillan Publishing Company, 1989), 395-448.

Related to this is the warning of medical anthropologists against the “biological fallacy,” where illness and its causes are reduced to the biological component – microbes, neurochemistry, valves, neurons, organs, and genes, all those things that, owing to advances in microscopy, can be seen and are more

The testimony suggests that the sixty-five year old widow Jacinta Zarate was most responsible for gathering men and women Saturday afternoon when she learned of the death of the first smallpox victim, perhaps attuned to a favorable atmosphere following news that the community had secured legal counsel and been informed that the superior orders could and would be overturned.<sup>308</sup> On this residents were in agreement. Esteban Melgar reported that he had anticipated her influence on the basis of two prior episodes in his twelve years as administrator, occasions when, according to his report, convocations of women had had an especially corrupting influence in communal affairs. It was well known, he wrote, that in each case Jacinta had been the forewoman, *capataza*, about which she subsequently boasted. In light of this precedence the official had personally informed male villagers that the smallpox provisions were not of the same nature as the others and that the men would not be treated so equitably if superior orders were flaunted, instead held solely responsible for any “excesses” committed by the women. He claimed to have received assurances in return from the men that they would cooperate and said he had never encountered any aversion or resistance from them.<sup>309</sup>

Though residents did not agree on details, certain patterns of activity emerge from the documents. Josefa Ruiz and Juana Lorenzo, both middle-aged widows, testified that they ran into Jacinta in the town’s chapel after returning from a visit to their sick daughters in the hospital a week prior to the extraction. Jacinta “strongly abused” them for consenting to the removal of their children, saving the harshest words for Josefa, who was told “that as the first who had permitted that her daughter be brought to the hospital, she was a bad mother to her children,” and had persuaded them to join her and other residents to try to block the consecration of the new cemetery and find a legal advocate. Newly recruited, both mothers helped convene other residents to Saturday’s meeting in

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empirically real for us today. See Nancy Scheper-Hughes and Margaret Lock, “The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology,” *Medical Anthropology Quarterly* 1:1 (1987), 7. In Oaxaca, where idioms of health were layers of elaboration on the essential material grounds of religion and science (intestines, hearts, etcetera – see below), the health of the organs opened up onto the health of the family and society: each reflected the other, providing the vocabulary and mechanisms for a partial restoration of health or normalcy. Reductive measurement of these things, by scientists, physicians, and savants in the eighteenth century, did not always shear away these dimensions.

<sup>308</sup> Gaspar García, one of those who went to Antequera in search of the lawyer, testified that Villasante had said, “*que no tuviesen cuidado, que bien se podía ocurrir al Señor Virrey, pues las Providencias de tener cerrada la comunicación de este Pueblo, y de haber formado Hospital, y Campo Santo eran solo del Señor Intendente de Oaxaca, quien no podía darlas y lo hacía únicamente por temor de que las viruelas llegasen a Oaxaca, y se enfermasen sus hijos.*” He had personally informed Jacinta of the death of his nephew (the son of his brother), and said that she began to gather residents to prevent his burial in the *camposanto* “*respecto a que ya habían ocurrido a México, sobre este asunto . . .*” AGN Epidemias 15 exp. 9, Declaration of Gaspar García, 197-199.

<sup>309</sup> AGN Epidemias exp. 9, Teotitlán 30 diciembre 1796, Certificación de Esteban Melgar, 225r-v. On one occasion, an ecclesiastical official arrived to restrain musicians in the church and had been mocked by the women; the second instance was the secularization of the *doctrina*. “. . . *me encaminé a persuadir a los Yndios, que las Providencias de viruelas, no eran de aquella especie, ni de aquella espera, de las de músicos, y secularización de doctrineros, y que no porque en estos asuntos se les miró con equidad, podían prometerse lo mismo en el de que se trataba, y que ellos serian responsables de los excesos de sus mujeres a quienes debían contener: así me prometieron todos, a una voz ejecutarlo, y que no faltarían en nada a mis órdenes y es verdad que en los Yndios jamás advertí el menor disgusto, ni resistencia.*”



Jacinta's home. As Josefa recounted the scene (through interpreters), she arrived to witness men and women, many fathers and mothers of patients, being rebuked:

Jacinta scolded them sharply for consenting to bring their children to the hospital, but all excused themselves, saying they could not resist it, since the priest, the subdelegate, all the officials of republic, and two soldiers had arrived to remove the children, and Jacinta, not saying more about this, directed the discussion to the men, telling them they were shameless [*eran unos sinvergüenzas*] and had gone to construct the hospital just to drink the pulque that I, the justice, gave them in those days, falling all over the jugs like vultures on a dead animal, and that if they were so eager to drink, why had they not gone to her house, and she would have given them pulque for free? With which they were all shamed and promised Jacinta they would contribute money and do what she wished.<sup>310</sup>

Though filtered by an official eager to make Jacinta appear to be the sole agent in the affair, the detailed depictions of these women suggests that some of the men, many of whom toiled on construction of the buildings in which their children were now held, had been rebuked, painted as a bunch of drunkards no less complicit in their current condition than the mothers. Although many in Teotitlán resisted involvement in the legal activities that would follow, even the male abstainers were forced by Jacinta to wage a battle with their conscience, and several were in fact incorporated into the nascent movement.<sup>311</sup>

The problems of health thus polarized residents of the village along gender lines. Of the men cited as leading or participating in the hospital extraction, Santiago Vásquez, in a comical, elaborate self-acquittal that stressed his inebriation (a proven strategy of defense in colonial criminal cases), made the most direct mention of the influence of

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<sup>310</sup> AGN Epidemias 15 exp. 9, Declaración de Josefa Ruiz, 214-215r, and *ibidem*, Declaración de Juana Lorenzo, 215v-216r. Both women subsequently received permission from the subdelegate to work in the hospital's kitchen, where they stayed for the entire week leading up to the extraction; Jacinta seems to have known that some guilt or longing was there to be drawn upon, if necessary. Afterwards, both were placed in jail as ringleaders, likely because they were at the hospital when the uprising took place. (They claimed to have extracted their children only after everyone else had left with theirs.) [*... que como era la primera que había permitido que su hija se hubiese llevado al Hospital, que era una mala madre de sus hijos . . .*” “. . . riñó ásperamente porque habían consentido llevar sus hijos al Hospital; pero todos se disculparon diciendo no pudieron resistirlo, pues para sacarlos, fue Padre Ministro, el presente Juez, toda la República y dos soldados, y la expresada Jacinta, no tratando mas de esto, dirigió la platica a los hombres, diciéndoles, eran unos sinvergüenzas que habían ido a hacer los jacaes, para Hospital, solo por beber el pulque que yo el Justicia les di en aquellos días cayendo sobre los cántaros como los zopilotes, caen sobre bestia muerta, y que si tanta necesidad tenían de beber por qué no fueron a su casa, y les habría dado pulque de balde con cuyo razonamiento se avergonzaron todos, y prometieron a Jacinta contribuir con dinero, y hacer lo que ella quisiese.”]

<sup>311</sup> According to another widow in attendance, Jacinta touched on the conditions of the hospital as well, saying “that the sick in the hospital were not being given anything other than broths and *atoles*” and suggested that all should contribute to forming a statement to overturn such maltreatment. AGN Epidemias 15 exp. 9, Declaration of Pascuala de la Cruz, 210r-v. The witness said she had been called to subsequent meetings on Sunday and Monday but had refused to attend because her son “*se lo estorbó, diciéndola, no se metiese en tales enredos, que al fin, pararían en mal . . .*” She also described Jacinta sitting in her home Thursday evening, two days before the extraction, receiving contributions to pay the lawyer's expenses (Jacinta ultimately succeeded in collecting the necessary fifty pesos). [*... que a los enfermos no se les daba en el Hospital otra cosa, que caldos, y atoles . . .*”]

women on his own behavior that evening.<sup>312</sup> Claiming to spend more time on his ranch than in the pueblo, Santiago said he only happened to be in town because the following day was Sunday (presumably he was there to attend Mass) and reported arriving so inebriated, that he cannot remember what he did that evening, and although he does not recall if he issued forth the speeches and seditious shouts attributed to him, neither can he state that he did not do it; because as loaded as he was with drink, *and the persuasions of the women, screaming that they would help him*, they could have made him commit such an offense.

Then, when informed that he could not have been so drunk if he remembered being pressured by the women, he backtracked, saying “he does not doubt that he could have moved the pueblo to commit the removal of the sick, which he accompanied, since that evening he acted without reason . . .”<sup>313</sup> Although immediately retracted, the statement implied that one could be, or at least that he had been, intoxicated by the persuasions of the women in addition to the alcohol. Santiago’s fumbling defense confirms what Pedro Alavés, a twenty-five year old weaver employed washing laundry at the hospital (his means of livelihood likely restricted since the imposition of the cordon) later testified: that when he ran into Jacinta in church the Rosary Sunday prior to the uprising she had severely reprimanded him for not joining the women on the hospital and burial issues, “saying that he was not a man.”<sup>314</sup>

As a strategy, shaming works if the agent points to an ideology of values held in common, signaling what women *ought* to do with respect to their children, or how men *ought* to behave in support of certain political issues, and how patients and children *ought* to be treated in matters of health. These are moral imperatives, and the regret, anger, frustration, and guilt that appeared in hindsight in the village symptoms of some breakdown, on which Jacinta repeatedly insisted: having abandoned these values, residents were mocked by the elder, who sought to return villagers back to them. In disease crisis, mockery was a useful response to overly eager cooperation with superior orders, a tool for shaming and thus influencing that reiterated the abandonment of values held in common. In the district of Villa Alta months later, for example, after Antonio de Zúñiga was commissioned to cut off travel between Villa Alta and Veracruz by the road through Huastpaltepec, he reported that residents of Latani, the district seat, converged on neighboring Choapam’s plaza to mock its residents for allowing a hospital to be built in

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<sup>312</sup> Strategies of defense before colonial courts often included explanations based on alcohol, anger, and unruly passions and suggest a familiarity with and even deep understanding of the institutions and mechanisms of the Spanish legal system. On these strategies among peasants in central Mexico, see Taylor, *Drinking, Homicide, and Rebellion*, 111.

<sup>313</sup> AGN Epidemias 15 exp. 9, Declaration of Santiago Vásquez, 222r-v, emphasis added. [“. . . *tan ebrio, que no se acuerda de lo que hizo aquella tarde, y aunque no tiene presente, si prorrumpió en los discursos, y voces sediciosas, que se le atribuyen, tampoco afirmará que no lo ejecutó; pues lo cargado que estaba de bebida, y las sugerencias de las mujeres, gritando que le ayudasen, pudieron hacerle cometer tal atentado.*” “. . . *no duda que él hubiese conmovido al Pueblo al atentado de haber extraído los enfermos a que le acompañó, pues en aquella tarde obró como un desatinado . . .*”]

<sup>314</sup> AGN Epidemias 15 exp. 9, Declaración de Pedro Alavés, 194-195. [“. . . *diciendo que no era hombre.*”] He claimed he responded that such things, having been ordered “by the king and the bishop,” could not be resisted, but his participation over the next several days belies these carefully chosen words.

the village, calling them fools (*tontos*) and encouraging them to refuse to relinquish their children to it. Juan Sanchez, an especially bold resident, allegedly arrived personally at Zúñiga's home, declaring: "I have a son, and I warn you that if he contracts smallpox you will not remove him from my arms until he is dead, no matter who the official may be." Zúñiga responded cautiously, suspecting that Sanchez had been sent by others to see how the declaration of noncompliance would be received and worried that that "they would ride roughshod over me personally, as they have already done with my commission and its honor . . ." <sup>315</sup> As a public statement, pronouncements such as these were provocations in more than one sense: they riled the official, but like name-calling they also were a verbal performance for the benefit of the overly cooperative subject town, whose members watched Sanchez reiterate values held in common, but that had been lost.

In Teotitlán, mockery as a means of political persuasion was extremely effective, if the speed with which things moved after the initial meeting is any indication. Two witnesses testified that forty women and thirty men attended Monday's meeting at Jacinta's home, where they were again rallied and made donations for the cause. A stumbling block was reached when the organizers attempted to transfer their complaints to paper, the formal medium of the colonial legal system: because Jacinta refused to allow residents to compose the statement in her home, they had to secure another residence after both Lorenzo Gutiérrez and Gabriel Santos (the latter an official of republic) declined. <sup>316</sup> The statement touched on the opening of the roads, the hospital, and the *camposanto*, but because it initially lacked the names of the elders and officials of the town, the lawyer asked the go-betweens in Antequera to rewrite it. <sup>317</sup> The next

<sup>315</sup> AGN Epidemias 10 exp. 2, Choapam 13 marzo 1797, Antonio de Zúñiga to Conejares, 123-124. ["Yo tengo un hijo, y le prevengo a Vm. que en dándole las viruelas no me lo sacarán de mis brazos, mas que muerto, sea el Juez que se fuese."] [ ". . . me atropellen en mi persona, ya que lo han verificado, con mi comisión, y el honor de esta . . . "] The priest played a role, as well: Zúñiga reported encountering serious doubts in the clergyman responsible for Santo Domingo Latani's *doctrina* Mariano de Castro, who instead of cooperating (by persuading his parishioners of the wisdom of the measures) was actively opposed, sowing "*mala voluntad*" among them. He told Zúñiga "*que todo lo operado era muy perjudicial a sus Yndios, y que él osaría de sus ocursos, bien que allí nada se pondría en práctica de lo mandado, que no se haría lo que en Choapam, acerca de poner el Hospital . . .*" See *ibidem*, Choapam 10 marzo 1797, Antonio de Zúñiga to Conejares, 121-122.

<sup>316</sup> AGN Epidemias 15 exp. 9, Declaration of Manuel Bazan, 196-7r, and *ibidem*, Declaration of Antonio López, 199-201. It was finally written in the home of Gerónimo López.

<sup>317</sup> AGN Epidemias 15 exp. 9, Declaration of Pedro González, twenty-two, married, through interpreter, 203v-204v. The same witness claimed that Sebastiana Vásquez, the governor's daughter resident at least part-time in Oaxaca's capital, initially offered to contact the city lawyer and in fact accompanied Pascual Hipólito with the complaint, remaining in Antequera when the latter returned. When she was called to testify in Antequera, the interpreter Marcos found her in the plaza and brought her before the intendant: at first she refused to take an oath, claiming she had nothing to confess, then testified that she had been living (*avecindada*) in the city for an incredible thirty-five years, a widower, and claimed not to know the men from her natal village. Sebastiana was placed in the Casa de Depósito in the city, and when called a second time, vehemently denied attending meetings in Jacinta's home: she had been sought out in Antequera, she said, and did nothing more than accompany those from the town to see the lawyer. AGN Epidemias 15 exp. 9, Antequera 13 octubre 1796, Declaration of Sebastiana Vásquez, 177-178, and also 256v-258. According to Marcos's original testimony, when Pascual expressed doubts that he could manage to gather the required sixty pesos, Sebastiana had asserted her willingness to draw on her influence with her father, telling Pascual "*que a bien que su Padre era Gobernador actual del expresado Pueblo . . .*" AGN Epidemias 15 exp. 8, Antequera 13 octubre 1796, Declaration of Marcos de los Ángeles, 174-176.

iteration, the version on which the lawyer based his petition to Mexico City, is the only existing statement. It contains the names of forty-seven individuals – all men, *naturales* of the district seat, employed as producers of woven mantles (*oficial de mantero*) – and focuses on the prohibition on sales of woven articles in Antequera. Its author(s) request the opening of roads to the capital on Saturdays and, at the end, request burial of children in the church or its cemetery and an allowance for residents to remain at home for treatment, “as always, since ancient time, when said smallpox or sickness has arrived . . .”<sup>318</sup>

The appearance of the issues of church burial and healing along with weaving interests would indicate that these men incorporated several common concerns at once, but the question of authorship is in doubt. A statement sent to Melgar after the uprising, claiming to represent the opinions of elected officials, elders, and other community members, blamed the uprising on the ill-advised political organization and interaction with the lawyer, excusing them from any involvement. They claimed that those who attended the meeting in Jacinta’s home Monday night were primarily “plebeian women” along with a handful of men (it listed thirteen by name and reported that these attended silently, only as witnesses in the statement [*parecer*] made to the lawyer).<sup>319</sup> In fact, when Marcos de los Ángeles, an Indian translator working in Antequera who accompanied residents to the lawyer’s home, was shown the statement, he recognized the writing as his own – he had composed it from notes (*apuntes*), he said, that Pascual Hipólito brought from the town, which included, at the request of the lawyer, a list of names of all of the officials of the republic and elders (*principales*) so that the petition to the viceroy could be composed in the name of the entire community.<sup>320</sup>

Lacking these names, any formal complaint would have carried little weight when it arrived at the viceregal center, which posed a problem given that the organizers were principally women, many of them widows. On one hand, access to the official discourse that authorized a legal petition was restricted for this sector. On the other, the consent of the entire community – many of whom risked a great deal as officials – was not likely forthcoming in such a contentious matter. Is it the case then that these organizers, then, many of whom were female, knowingly misrepresented the men whose names they used, in the interest of expediency or persuasive force?

The attribution of authorship remains a complex question, but one that is crucial for the issues raised in Oaxaca during this epidemic. Who voiced complaints? Who shared these values in healing, ostensibly held in common? There is no straightforward answer. Most likely, in Teotitlán as elsewhere, a select few helped shape a more nebulous constellation of ideas about what was right, healthy, and just in the town. The broader

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<sup>318</sup> AGN Epidemias 15 exp. 8, 168r. [“ . . . *que se entierra Nuestros hijos dentro la Iglesia o en cementera por si se muriera de las virguelas [sic] si Dios ha sido servido conformarse la voluntad suya y que estemos en Nuestra dicha casa a curarnos, como siempre desde ajénisimo tiempo que a venido dicha virguelas o enfermedad . . .*”] It noted that the prohibitions carried a punishment in the event of their violation of two months in jail or twenty-five lashes, and advised that residents typically left to sell their goods at nine in the morning and returned at three in the afternoon on Saturdays.

<sup>319</sup> AGN Epidemias 15 exp. 9, Teotitlán 11 octubre 1796, Escrito presented to Captain Esteban Melgar, signed Pedro Vicente, Gabriel Martínez, Pedro Sosa, 193r-v.

<sup>320</sup> AGN Epidemias 15 exp. 8, Antequera 13 octubre 1796, Declaration of Marcos de los Ángeles, 174-176; *ibidem* exp. 9, Declaration of Manuel Bazan, 196-197r.

scope of these feelings is suggested, for example, in a letter from several elders of republic to the subdelegate that absolved them of any role. They made sure to remind him how well he knew “that we have not created any harm or disturbance in all the twelve years that you have been in our government, and also that we have been quick to obey you when you issued the order to construct the *jacales* and buildings for the infirmary and others, and also that when the *camposanto* was being consecrated we obeyed everyone,” but despite all this evidence of compliance they could not resist requesting “that you grant us the opening up of the road so we can go to care for our fields . . .”<sup>321</sup> That is to say that even as these men distanced themselves from political organization, they revealed that they, too, had an interest in it, sharing the same concerns espoused by the organizers. The statement written in Oaxaca and the notes on which it was based likely embedded real concerns and anxieties of many more, speaking in an effective act of ventriloquism for those leaders who, owing to their high position, could or would not publicly speak and act themselves.

In epidemics and other crises that required immediate attention, it can reasonably be assumed that many more communities responded adaptively by organizing at sites beyond the municipal building, such as streets, chapels, and especially private residences, where there was less danger that activities would implicate male officeholders. The situation in Teotitlán suggests that ad hoc committees of women and men managed to circumvent, in this case, not only the troops stationed along the cordon, but also the slower, formal channels of political action. This is a facet of political activity that remains less well known for Mexico owing precisely to the fact that so much of it was carried out orally and failed to enter the historical record.<sup>322</sup>

It is important to stress what this does not mean: while much political activity on these occasions took place independently of the male-dominated republics and formal cargo systems, it did not take place independently *from men*. In a time and place where legitimacy in public politics implied the voices of male power holders, a presentation of unity was desirable, even indispensable, if the legal system was to be harnessed to the community’s ends, and such alternatives nodes and modes of activity accordingly included sustained efforts to incorporate male relatives and in-laws in the process. Those

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<sup>321</sup> AGN Epidemias 15 exp. 9, Teotitlán 11 octubre 1796, Statement presented to Captain Esteban Melgar, signed Pedro Vicente, Gabriel Martínez, Pedro Sosa, 193r-v. [“ . . . *que en todo el tiempo de doce años que se haya en nuestro Gobierno no hemos dado ningún perjuicio ni alboroto alguno y también como hemos estado prontos a los obediencia [sic] de Vuestra Señoría cuando se nos publicó el que hiciéramos los jacales y casas de la enfermería y demás y también consta de que cuando se bendicieron el campo santo obedecimos a todos, y así en esta inteligencia Vuestra Señoría como nuestro padre que es hará lo que fuere conveniente . . . y también, que nos conceda la providencia de que se nos abra el camino para ir a ver nuestras Milpa [sic] . . .*”]

<sup>322</sup> It might also have been more common after 1786, when Bourbon meddling in local administrative units created the sensation that such representative bodies had become, if not illegitimate, then calcified, in some respects less effective or capable of carrying out responsibilities. The consequences of this process of increased interference for local government have been studied elsewhere: Rudolfo Pastor argues that interference followed a prior decadence in the functioning of these local governments, but was nevertheless vocally protested. *Campesinos y reformas*, 199: “*La política borbónica fue una limitante real de la autonomía de los pueblos a fines del XVIII. Los indios la resentían vivamente y denunciaron ante la audiencia los ‘funcionarios odiosos’ impuestos por los alcaldes españoles, que se han visto obligados a aceptar ‘para conservar la paz’.*”

men who were constrained by official duties and formal responsibilities were replaced by other weavers with more latitude in this respect, and so, as parents lost children to the hospital, younger men, many with nieces and nephews or their own children, joined the widows in adopting other solutions. In view of this, the cutting dismissal of “plebeian women” (*mujeres plebes*) by male officials of republic may have been simply an attempt to avoid disciplining, or a reaction to a perception that the women had indeed infringed on their sphere of activity. The record supports little speculation.

For their part, men contributed to shaping these sentiments, values, and concerns. This is best seen in the way they appeared in the legal discourse of the few who remained in jail in Antequera six and a half months later. Reflecting on the injustice that had befallen the town, the seven imprisoned men sent a legal petition to the viceroy in which the evocative image of a mother estranged from her child was prominent, again suggesting the assumption that mothers, if not solely responsible for the health of the town’s children, were more greatly affected by the governmental decrees. After recording the public lashings received at the hands of the subdelegate, the petition noted that the hospital was well outside of the town and under the care of the Spanish schoolmaster, stressing that the patients’ “fathers, mothers, grandparents, uncles, or other relatives” (“*los Padres, Madres, Aguelos [sic], tíos, ni demás Parientes*”) could not visit or care for them there. It then compared the pain caused by this separation to Herod’s biblical slaughter of the innocents. “May Your Excellency look with accustomed beneficence at the pain the fathers and mothers would be caused not to be allowed to see or feed their children, what ingratitude, it resembled Herod’s massacre.”<sup>323</sup>

The same metaphor appeared in the “seditious verses” sent by Oaxaca’s bishop to Mexico City, discussed below. Its appearance in multiple contexts indicates either that it was circulating, in written or verbal form, around the jail in Antequera, or simply was part of the province’s ether – a suitable, familiar, and appalling biblical story through which to understand and represent a predicament in which a malicious king (intendant / subdelegate / officer / Spanish nurse) had gathered up the innocent children of Bethlehem (Antequera / Teotitlán) for isolation. The maternal connections severed in the act were in elaborate detail:

Your Excellency sees how the subdelegate placed Teresa Hernández and other women in prison for no reason other than having gone to visit their poor children in that hospital, and as a result of this [imprisonment] her son, who had survived the epidemic and been put in the convalescence hospital, died weeping because he did not see his grief-stricken mother. This is a shame, Your Excellency, parts of their entrails, yet [the mothers] unable to aid or feed them.

The insinuation was that the provisional hospital had ruptured this intimate tie between mother and child; the storming the hospital was not, the petition insisted, an armed

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<sup>323</sup> AGN Epidemias 15 exp. 2, Real Carcel de Oaxaca 24 abril 1797, Francisco Ruiz, Santiago Vasquez, Baltasar Ruiz, Pasqual Ypolito, Pedro Gonzales, Domingo Matcheo, y Lucas Sosa, presos en esta Real Carcel, 65v. (Pedro Gonzalez signed while the other six made crosses, forming a small cluster on the page.) [“*Excelentísimo Señor mire con la caridad que acostumbra que dolor no les causaría a los padres, y madres, no, permitirles ver, ni alimentar a sus hijos, que ingritud, ya se parecía la degollación de Erodes.*”]

uprising, or an attempt by the women to persuade their husbands to rise up, but simply the execution of an instinctual maternal reaction to restore a disordered universe, the women “ignorant of the orders transmitted to our superiors” and interested only in seeing those “pieces of their hearts” who had been placed in the care of “sinister hands . . .”<sup>324</sup>

Again, authorship poses problems, but whether this document reflected the legal defense devised by a lawyer, or the reflections of one or more of the prisoners, it was shrewd.<sup>325</sup> Days of political organization were elided as it represented the women as apolitical mothers who stormed the hospital without premeditation. The rift produced by placing healthy mother and sick child in distinct categories was not to be endured stoically, the defense stressing that mothers in Teotitlán had reflexively sought restoration of an ideal relationship.<sup>326</sup> If some parents in fact believed they would lose their children in the act of separation, severed entrails were also metaphorically powerful, formulating

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<sup>324</sup> Ibidem, 66r-v. [“*Mira Excelentísimo Señor cómo el subdelegado puso en la cárcel, a Teresa Hernández y otras, porque concurrían a visitar a sus pobres hijos en aquel Hospital no habiendo otro motivo, y fue causa de habersele muerto un hijo, ya salido de la Epidemia, y puesto en la convalecencia de tanto llorar, por no ver a la afligida su madre, estas son lástimas Excelentísimo Señor, ser pedazos de sus Entrañas, y no poderles socorrer, ni alimentar . . . ignorantes de lo que son las ordenes comunicadas a los superiores . . . pedazos de sus corazones, que se hallaban fuera de su cuidado, y asistencia, cuidados por siniestras manos . . .*”]

<sup>325</sup> The history of lawyers and their role in the colonial courts of Mexico has yet to be written. Some clue to the possible role of an *abogado* or a scribe in this case can be gleaned by a closer look at the language of the petition. It begins by introducing the men to the viceroy as prisoners, in third-person plural. It then switches to first-person plural momentarily (*hallándonos presos*) before reverting to third person, in which it remains for the majority, referring to the “supplicants” and other residents of the village as it elaborates on the hospital, the public lashings received by Francisco Ruiz and Santiago Vázquez at the hands of the subdelegate, the incident of burial at the church, the storming of the hospital, and the arrival of the battalion soldiers. Then abruptly, mid-sentence, it shifts to first-person plural when appealing and appearing (*reclamamos y ocurrimos*) before the viceroy. The petition then ends definitively in first-person plural, as the prisoners refer to their inability to do anything to care for themselves or their families, their utter abandonment, and appeal, once more, to the piety that moves the viceroy to favor *los pobres*.

These intrusions of the first-person voice of the prisoners lead me to believe that it, like the legal statement composed in Antequera, embedded a number of perspectives in a defense strategy crafted by the collaborative effort of several actors. Even if one or two individuals were responsible, there remain several possibilities that explain why and how the document switches voice: 1) one of the prisoners, perhaps Pedro González (the only one who makes his rubric), composed it, referring to his fellow prisoners for most of the document in third-person plural as “*los suplicantes*” and including himself when appealing to the viceroy or listing the inconveniences suffered by villagers – this would explain why switches in voice occur so easily and account for the likely collaboration that took place (it would not necessarily preclude the active presence of a lawyer helping devise the defensive strategy); 2) an attorney, perhaps from the region (if not necessarily from the town), authored many of the arguments and included himself when appealing to the viceroy, or patched the voices of the prisoners into the document for effect; 3) most likely, a scribe formed the document from the dictated complaints and arguments of the prisoners, inserting their voices where appropriate.

<sup>326</sup> The ideal relationship bears a remarkable resemblance to the physical intimacy condemned by medical observers who in this period expressed aesthetic and moral aversion to the crowded living conditions they witnessed among peasants in their homes (see chapters Two and Eight). The formulation of desire in biological realities and biblical themes underscored the unnaturalness of both the attempted rupture and the medical schema on which it was based, which classified clean and unclean and placed the latter apart as infested. The image of children as entrails insisted that mother and child could not properly be held in separate and opposed categories.

the natural order of maternal desire in a particular idiom, a mother's innards conjuring up the site of will, emotion, and life – but not, notably, reasoned, deliberate calculation.

Parts of the body such as the heart, also mentioned in the petition, had a long history of meanings, connotations, and uses in colonial Mexico beyond the scope of this chapter. Alfredo López Austin's study of Nahuatl ideas of the body has shown that the heart was an animistic and vital center, with meanings equating it to the soul, or *ánima*, a center of both thought and feeling.<sup>327</sup> The heart was the locus of passions in the eighteenth-century commentaries of priests: the symbol of the person's essence, but also cause of moral instability, irrationality, and mercurial temperament.<sup>328</sup> Perhaps the most that can be said here is that language tying the child to the mother belonged to a society in which children were particularly vulnerable, when it was not uncommon to lose at least one child at a tender age to gastrointestinal infections or respiratory ailments, where newborns were swaddled tightly in a shawl and bound to a mother's back as she worked.<sup>329</sup> Smallpox epidemics, which disproportionately affected susceptible children, only multiplied and stressed acutely this vulnerability.<sup>330</sup>

Life and death in pre-industrial societies conditioned not only reproductive practices, in other words, but also the language of reproduction, which like the colonial shawl sutured mother and child as one continuous, natural whole, forming a bond at once human, healthy, and sacrosanct. The innards were offered up as the reason why the women had behaved so apparently irrationally, emotionally, passionately, but also to organize relations, drawing a boundary around both mother and child that became, in a word, taboo; men and women understood that when it was violated, villagers had a right and even responsibility to act. It is in this scenario that Jacinta's mockery and allegations of "bad mothers" and men who did not act like men best fits, as both initially failed to protect this bond and had quickly been reminded of their duty as men and women. It was also this familiar trope, whether authored by the prisoners, a scribe, or an attorney, to which legal defense naturally retreated. In connecting biology to society and culture, residents left a trail toward a fuller appreciation of the components of illness and health.

This biological notion of motherhood validating a particular way of thinking about health appears one last time in the documents. Interrogated by the subdelegate,

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<sup>327</sup> *The Human Body and Ideology: Concepts of the Ancient Nahuas*, vol. 1, trans. Thelma Ortiz de Montellano et al. (Salt Lake City: University of Utah Press, 1988), 174f, 229ff. "In regard to the organ as a center of consciousness, Sahagún's texts state that the human being feels in his heart, that in his heart he does foolish things, and that fainting is the swooning of the heart."

<sup>328</sup> William B. Taylor, "'...de corazón pequeño y ánimo apocado': Conceptos de los curas párrocos sobre los indios en la Nueva España del siglo XVIII," *Relaciones* 39 (summer 1989), 28.

<sup>329</sup> Dorothy Tanck de Estrada, "Indian Children in Early Mexico," in *Children in Colonial America*, ed. James Marten (New York: New York University, 2007), 13-32. For the Mixteca of western Oaxaca, Rodolfo Pastor calculated that thirty-five percent of the deceased in the eighteenth century were aged three years and under and fifty-one percent under the age of twelve, *Campesinos y reformas*, 404-7: "*Los niños de pocos meses se morían por parvadas, año con año, independientemente de la suerte de la cosecha.*" Pastor speculated that these uncertain circumstances of death had psychological effects on parents, preventing them from forming strong emotional bonds with their offspring until some time had elapsed, when what they stood to lose was no longer so great.

<sup>330</sup> Dr. José Flores acknowledged the special susceptibility of children who had not acquired immunity in prior epidemics when he declared it unnecessary to immunize anyone else. Flores, "Instruction," in AHJO Villa Alta Civil 31 exp. 14.



Jacinta, the elder widow who contributed so much of her own knowledge and ideals of parenthood to the organization of protests against the dispossession of the village's children, insisted through an interpreter that others from the village had solicited her help ever since construction began and denied acting as sole head of the movement. She was reminded of testimony to the effect that she had "moved their spirits" to disobey orders during meetings at her home, appointing herself treasurer, director, and ringleader at once. "With admirable tranquility of spirit, she said: what is attributed to her is false, and that in the matter she has not participated beyond having allowed some people in her home to try to appeal the measures closing the road and establishing the hospital and *camposanto*."<sup>331</sup> She added "that once everyone, including her own children, condemns her, she will pay the penalty of her crimes." The strategy here was the same: aligning her fate with the judgment of her familiars, drawing her own children toward her, Jacinta made clear that even isolated before the official, she was anything but alone, and she kept silent as Melgar read several more times the declarations of other villagers against her.<sup>332</sup>

### **Paternal Love's Ploys: Villa Alta and Antequera**

With a clearer view of articulated sentiments in Teotitlán, we can turn elsewhere and ask to what extent these sentiments were shared. It is a challenging proposition given that the members of Indians communities were often interacting with religious and secular institutions, whose representatives shared to a greater or lesser extent an elite notion that when illiterate peasants resisted, it was due to some general aversion to modern things. Put otherwise, what we know of popular methods and knowledge of healing often arrives through a glass darkly.

Belief in an inherent, incorrigible rusticity, backwardness, and conservatism that would make any innovation unlikely if not impossible appears, for example, in the many reasons given by Zochila's priest in response to the initiatives of Villa Alta's subdelegate. He wrote that he thought the measures wise but nearly impracticable among his stubborn parishioners, who viewed the extraction of children from their homes "with an inexpressible horror" (*con un horror indecible*), despite attempts to persuade them of its advantages since smallpox first struck Teotitlán. He gave as an example the afflicted subject pueblo of Santiago Laxopa, where

two boys, having fallen ill, where being hidden by their parents, and if not for my vicar . . . who entered the house to confess the older boy (knowing he did not attend church functions, with the father making the excuse that he was a little sick), they might have let him die without the sacraments, as will happen

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<sup>331</sup> Though Jacinta of course had been present, Melgar again vividly described to her the women arriving at the church in a drunken state, the pastor surrounded by Jacinta and principal leaders (*cabezas*) "*de su pandilla*" telling him that if he did not cooperate they would pay neither tribute to the king nor fees to God's ministers. Melgar blamed her for the death of five smallpox patients who perished after being taken out of the hospital, and also for the drunken gathering the next day to await the arrival of troops from Oaxaca and the costs incurred in bringing the troops to the village.

<sup>332</sup> AGN Epidemias 15 exp. 9, Teotitlán 24 noviembre 1796, Declaration of Jacinta Zarate, 232-235. [*Con admirable tranquilidad de ánimo, dijo: es falso cuanto se le atribuye, y que en el asunto, no tiene más participio que haber consentido en su casa algunas gentes a tratar de ocurrir contra las Providencias de estar cerrado el camino y de haberse establecido Hospital, y Campo Santo.*" ". . . que una vez que todos, hasta su mismo hijos la condenan, pagará la pena de sus delitos."]

with many whenever one puts into practice extractions of the sick to other houses.”

From this reasonable fear of discovery he went on to deem his Indian parishioners, “even the most *ladinos*,” or acculturated, incapable of taking charge of the public’s health, as their commitment to savage remedies (*remedios bárbaros*) rarely allowed the adoption of others, and as a result the sick were poorly cared for. Knowing his parishioners’ ways, he insisted that even bringing *gente de razón* or non-Indians to care for them would prove difficult: they too were viewed with horror, “as all of us who live among them know . . .” He reiterated his objection to the new policy and proposed that because the homes in his *doctrina* were already dispersed, the sick could safely be left as they were so long as no one else was allowed to enter, “because after all, the parents look upon their children and care for them better than any other, whoever he may be.”<sup>333</sup>

The response presents a number of interpretive conundrums. On one hand, it was a rejection of the proposal, or at least a solid justification for much foot dragging. Like local administrators, priests acted to throw the switch on the tracks, when appropriate, to ease social relations, which helps explain the contradictory insights he offered into the nature of his Indian charges, basically calling on every imaginable excuse and a constellation of common stereotypes to keep outsiders out and eschew the implementation of orders. The stereotypes boil down to the view that Indians were simply too rustic, on which Ruiz de Conejares himself insisted when anticipating problems months earlier. In a letter to the intendant, the subdelegate referred to Gil’s “little book,” which first arrived in April 1793 for use in epidemics, and argued that it would be much more difficult to standardize its regulations among “the most rustic Indians,” of which his entire district was full. Even using interpreters to explain matters in their languages, he found it impossible, without troops, to convince them to do what they chose not to. This was a poor district; it lacked barbers, *curanderos*, and medications; the meat was from old bulls, the chickens skinny, and food very expensive, even the “*fructo del País*,” maize, and “in a word one lives as if in the most uncultured desert . . .” When it came to the proposed hospital, he anticipated the same problems as Melgar. “Who will take care of them? Who will recognize the moments pointed out by the cited author [Gil]? Who will instruct, and who will prepare the *jacal*, without doors or anyone here to make them? . . . from the difficulties experienced in the cities, where one lacks nothing, it will be seen what will happen in these pueblos, distant and with poor roads.”<sup>334</sup> In his view, the

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<sup>333</sup> AHJO Villa Alta Civil 32 exp. 4, Zochila 17 mayo 1797, Nicolás Pelayo to Ruiz de Conejares, 6-8. [“. . . habiendo caído enfermos dos muchachos, los tenía ocultos sus Padres, y a no ser por mi vicario Bachiller Don Juan José Salas, que entró en la casa (sabiendo que el mayorcito no concurría a las Funciones de Yglesia disculpándole su Padre, con que estaba algo enfermo) para confesarlo, quizás lo hubieran dejado morir sin sacramentos, como sucederá con muchos, siempre que se ponga en práctica la extracción de los enfermos a otras casas.” “. . . aun los mas ladinos . . .” “. . . como sabemos todos los que vivimos entre ellos . . .” “. . . pues al fin los Padres miran a los Hijos, y los cuidan mejor, que cualquier otro, sea el que fuere.”]

<sup>334</sup> AHJO Villa Alta Civil 30 exp. 2, Villa Alta 8 octubre 1796, Ruiz de Conejares to Intendant, 1v-4v. (A copy is also in AGN Epidemias 12 exp. 3, 153-156.) [“. . . y en una palabra se vive como en un desierto el mas inculto . . .”] [“¿Quién los cuidará? ¿Quién conocerá los tiempos que señala el citado Autor [Gil]? ¿Quién instruirá, y quién se dispondrá el jacal sin puertas ni quien las haga? . . . por las dificultades de las ciudades donde nada falta, se echará de ver lo que sucederá en estos Pueblos distantes, y de malos

project's declined in proportion to distance from the cosmopolitan city, "where one lacks nothing," presumably in matters of health care, medicine, and civilization in general.

Contradictions and patronizing assessments of the competence of Indians in matters of health filled objections by priests and administrators. On one hand, Indians were unable to grasp Spanish medicines, but on the other also too eager to embrace them.<sup>335</sup> Indians were fearful of outsiders, furthermore, or too prone to states of lethargy and negligence to be trusted to look after the health of the "public" (construed as any individuals not of the same family), or unlikely to carry out responsibilities because, as one priest plausibly noted, they were onerous, impossible for agriculturalists in the middle of the harvest season.<sup>336</sup> Aware of the reasons for these generalizations and treading softly, it is possible to recover some of the actual complaints, fears, and perceptions of communities through the representations of pastors and other officials. The residents in Teotitlán contradicted some of the stereotypes, as their cause for complaint was not modern drugs – no one argued that their own remedies were more efficacious – but rather the existential distance created between themselves and their offspring. This perception of distance between the sick, or deceased, and the rest of a community appeared as a source of consternation for residents throughout the province, which provides the occasion for a reconsideration of stereotypes of peasants and their ambivalent relationship to medicine and other enlightened things.

In Tavaa (a Zapotec community five miles west of Villa Alta's district seat) residents complained about the conditions in the proposed hospitals, specifically about the awkwardness of its restrictive spaces and the dangers involved in transporting the sick. According to the priest, he had seen that fifteen patients were brought to a home converted into a hospital at the edge of the village.

I am in the midst of this when the entire pueblo appears to describe the current circumstances in the isolation ward to me, noting that one can barely move inside, since in addition to the fifteen mentioned there are at least as many more mothers of patients, and that it is not even possible to find two men or women who might attend to them with the same charity and love, even if trained by intelligent people. And even when not actually involved in healing their children or dependents, the constant travel and interactions [*comercio*] in that ward simply with the administration of foods that each must bring from home makes for total confusion. This is in addition to the lamentations and pleas that they do not know whether they are prohibited interaction with the sick, their dependents, as normal.

Parishioners had also informed him that a number of children were still nursing and could not feasibly be separated from their mothers, "and recently, that they believe that when

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*caminos.*"] Oaxaca's intendant dutifully reported these objections to the viceroy and his advisors, who in turn placed the onus of their resolution back on him.

<sup>335</sup> Tavaa's priest reportedly assigned a Spanish resident to heal in one of the pueblos, "of sufficient understanding for whatever sickness," but in addition to the remedies this *aficionado* prescribed, its residents now demanded that numerous other medications be brought from Antequera.

<sup>336</sup> On the critical harvest time: AHJO Villa Alta Civil 32 exp. 4, Yahuiwe 29 mayo 1797, Joseph Mariano de Velasco to Ruiz de Conejares, 27-28.

other, somewhat older children find themselves without their parents and ruled by strangers they will be stricken with a terrifying panic, which without doubt will be enough to cause their death.”<sup>337</sup> The town officials and elders did appear in person before Ruiz de Conejares in Villa Alta the following day to file their complaint, as he wrote, “explaining that fifteen had been separated in the hospital and many more remained in the pueblo, whose parents were clamoring that they be left in their homes . . .”<sup>338</sup>

One of the overriding questions for residents, priests, and secular administrators was this question of treatment. Who was best able to provide it? If Indians were deemed by priests to be ill suited to the responsibilities involved in looking after the health of the public, most could agree that they were themselves especially suited to the care of their own children. The anxieties reported from Tavaa provide a glimpse of ideas about certain passions, including horror, fear, and panic, that resulted from the confusing rearrangement of this tie. Dangerous emotional states, for example, such as panic, but notably not smallpox, produced death, and panic was the result of a disruption in family ties and the provision of care at the hands of a complete stranger. In other cases, the dangers of exposure to the environment were given as reasons for concealment, as in San Pedro Yaneri (a Zapotec pueblo subject to Yagavila, northwest of Villa Alta, with a population of around 500), where the priest reported that a thorough search of homes by justices uncovered eight or more smallpox victims, “whom their parents hid in the most interior parts of their homes out of fear they would be brought to the mountains, where I ordered them to construct a house [for a hospital] from the first of May . . .”<sup>339</sup> The justices insisted they had not heard of new cases until entering to inspect the homes, but their petition to the subdelegate suggests complicity in acts of concealment: “we implore

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<sup>337</sup> AHJO Villa Alta Civil 32 exp. 4, Tabaa 17 mayo 1797, Ignacio José Ximenez to Conejares, 9-10. [*“Aquí voy cuando se me presenta todo el Pueblo haciéndome ver las circunstancias en que está ya la casa de separación, y que apenas se puede mover dentro de ella, pues a los quince mencionados se agregan otros tantos por lo menos que son las madres de aquellos, y que ni es capaz hallar dos hombres o mujeres que les asistan con la caridad y amor que ellos propios, aunque se instruyan por inteligentes; y que aunque no tengan que entender en la curación de sus hijos o deudos es una confusión el continuo viajar, y el comercio en la referida casa con solo la administración de alimentos, que cada uno tiene que conducir de la suya; fuera de los lamentos y súplicas de que no se entienden si se les prohíbe, como es regular, el comercio con los enfermos sus deudos.” “. . . y que últimamente que otros niños de alguna más edad al verse sin sus Padres y regidos de Extraños, creen les sobrecogerá un terror pánico que sin duda les será bastante para causarles la muerte.”*]

The objection that it was impossible to separate nursing infants (*a los pechos*) from their mothers was echoed far to the east in the Mixe-speaking community of Puxmetacan, *ibidem*, 28 mayo 1797, 24-25. Another example is Atitlán, where the priest convened the village elders demanding to know why they had not given him notice of the many sick in the pueblo; they responded “*que como eran chiquitos* [the sick] *por eso no habían dado parte . . .*” Presumably, it was feared they were too small to be taken away from their mothers. AHJO Villa Alta Civil 31 exp. 15, Atitlán 27 mayo 1797, José Antonio Meneses to Conejares, 46r-v.

<sup>338</sup> *Ibidem*, Villa Alta 18 mayo 1797, La República y Principales del Pueblo de Tabaa . . . , 38r. [*“. . . expresando tener separados 15 virolentos en el hospital y quedar muchos en el Pueblo cuyos padres clamaban por que se los dejasen en sus casas . . .*”] [*“. . . de bastante inteligencia para cualquiera enfermedad . . .*”]

<sup>339</sup> AHJO Villa Alta Civil 31 exp. 15, Santa Cruz Yagavila 28 mayo 1797, Mariano Marlanzón to Conejares, 49r. [*“. . . que los ocultaban sus Padres en lo más interior de sus casas con el temor de que no se los llevaran al monte en donde les mandé fabricar una casa desde primero de mayo . . .*”]

you that the sick children do not go outside the pueblo because they will die of *fríos*, as here there are different temperaments, because others [children?] lack even the basic clothes with which to cover themselves . . .”<sup>340</sup> Here the elements and an absence of care, not smallpox contagion, were the greater dangers: by petitioning and concealing victims as best they could, residents objected to a disruption in the social order that might subsequently render the individual susceptible to life-threatening illnesses.

Concealments such as these fueled a common concern of priests that anxieties about imposed isolation in hospitals would lead parishioners to delay requests for last rites. A common refrain was that Indians would prefer to let their sick die without communion than allow them to be discovered and removed from homes. In June, when Yae’s pastor was called to confession in one of the homes of the head town, he discovered that the family had waited as long as possible to notify him. Sure enough, he found the patient, a fifteen-year old boy, suffering from smallpox, and two other small boys in the same hut who had been feverish for days.<sup>341</sup> The older boy, whose pustules were already drying, was apparently not near death, “and what he asked me to confess him for, was because he had a stomachache . . .” The pastor concluded that the only way superior orders could be put into practice was if the subdelegate sent a minister to notify the justices of each pueblo in person and with them designate a house for separation of the infected, “because it is a matter that strains them greatly, and they find the removal of the sick from the home for another enormously repugnant, no matter how much I may persuade them.”<sup>342</sup> This was the reality of a chain of command that required displays of obeisance: the audience of these protests, Villa Alta’s subdelegate, was well aware of the impracticality of the provisions and that intrusions into homes would be met with suspicion and contempt, perhaps one reason why the documentary record is silent on any further attempts to implement the “new program” in his district.

In the capital, delays in the request of sacraments began earlier, toward the end of January 1797, after the intendant made an early miscalculation by sending an Indian girl of thirteen or fourteen, who had been found sick in one of the city’s *barrios* the day after Christmas, all the way to Teotitlán’s isolation hospital.<sup>343</sup> In January, two more were sent to the hospital, but an outcry from residents and the city’s clergy forced the intendant to come to terms with the eventual failure of these measures. Flight of patients to haciendas, ranches, and pueblos in the vicinity, the result of measures intended to halt contagion, was actually increasing the risk of the spread of smallpox. Desperate, the intendant

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<sup>340</sup> Ibidem, Yaneri 28 mayo 1797, Justicias to Conejares, 51r. [“. . . le rogamos mucho de que no vayan los muchachos enfermos afuera del Pueblo por que se morirán de fríos por que aquí corre otro temperamentos por que hay otros [ILLEGIBLE] que no tiene ropas ni con que taparse . . .”] They also requested that he not block the road to Ixtlán “por que es de nuestro comercio y a donde sale el real tributos [sic] ya le rogamos muchiscimos [sic] de que nos conceda este favor . . .”

<sup>341</sup> It was not uncommon for all of the children in a particular home to become sick with smallpox at once. See the detailed list submitted by the justices of the pueblo of Lachirio (three children of Tomás Velasco, five of Cristo Balmen, etc.), AHJO Villa Alta Civil 31 exp. 15, 69r.

<sup>342</sup> AHJO Villa Alta Civil 32 exp. 4, Yae 10 junio 1797, Joseph Clemente López to Conejares, 31r-v. [“. . . y por lo que pidió confesión, fue por estar malo del estomago . . .” “. . . porque es asunto, que les hace mucha fuerza, y repugnan grandemente les saquen a sus enfermos de su casa, y la lleven a otra; por mas que yo quiera persuadirlos.”]

<sup>343</sup> AGN Epidemias 10 exp. 1, Oaxaca 30 diciembre 1796, Mora y Peysal to Fiscal, 3r-v.

repeated his orders to guards that no one with a susceptible child be allowed to pass the cordon stations (ordering inspections of any kind of carriage in which a patient might be hidden).<sup>344</sup> Yet he knew that increased vigilance had not borne fruit and established an isolation hospital in the Aguilera hacienda, only a kilometer from of the city in the barrio of Jalatlaco. He placed it in the care of the Bethlehemites and ordered that any other patients found be sent there with those who wished to treat them.<sup>345</sup>

It was a fair solution, but descriptions of activities in the capital, written by priests of the cathedral chapter and compiled by Bishop Omaña (b. 1739 - 1797), indicate that it came too late.<sup>346</sup> At the start of February the bishop insisted that no one had yet appeared for burial in his or any other parish, suggesting to him that victims were foregoing Christian rites.<sup>347</sup> The *teniente de cura* Manuel Antonio Moreno reported that two men and a woman had approached him as he returned from administering the sacraments in a nearby pueblo. They begged that he grant proper church burial to a boy who recently died on the road. Moreno learned that they had fled the city with the boy hidden in a cart in order to return him to his village, “and although they saw me pass at the time that he was about to die, they feared my discovering them, and . . . let him die without the sacraments

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<sup>344</sup> AGN Epidemias 10 exp. 1, Oaxaca 2 febrero 1797, Antonio de Mora y Peysal, 35r-v.

<sup>345</sup> AGN Epidemias 10 exp. 1, Oaxaca 3 febrero 1797, Mora y Peysal to Fiscal, 6v-7r, and *ibidem*, exp. 2, Oaxaca 8 febrero 1797, Bando, 66-67. On futility of efforts, he reported that Antequera’s residents refused to reveal the source of contagion, “*habiéndose propuesto estas gentes que hacían un acto de religión en ocultar todo cuanto pudiese dar en el asunto alguna luz . . .*” And investigating himself, “*me desengañé del dolor con que se conducían estas gentes,*” realizing how many were hidden and suspecting that the general aversion of the prominent residents in the city and regular and secular clergy members would render the provisions useless if contagion did arrive.

As for the new hospital, it created its own problems: the priests of the cathedral’s *sagrario* wrote the bishop to ask whether the sacraments and other parochial duties were to be administered by the priests of Jalatlaco’s parish, owing to the temporary residence of the sick there, or whether their spiritual care was to remain the responsibility of the priests of the parish to which they belonged. AGN Epidemias 10 exp. 3, Curas del *sagrario* Manuel Anselmo Quintana and Antonio Fernández to Bishop, 166-167.

<sup>346</sup> Several items of news reported as evidence by the priests seem to have arrived by word of mouth, e.g., “*siendo esto tan sensible aún es más lo que he oído decir . . .*” and “*es voz común . . .*” Rumors provide an invaluable source of information, suggesting how knowledge of medical matters circulated among the general population in the late-colonial period (for more on this, see Chapter Seven). Nevertheless, because I use this group of reports for a different purpose here I have mostly passed over such secondhand information, some of which strikes me as apocryphal – usually, it referred to vague news that residents were burying the deceased in pens and bedrooms or that dead children were being abandoned out in the open, without mention of places or numbers – in favor of those episodes the individual appear to have witnessed firsthand. (These were probably also exaggerated for effect; the intendant’s failure to include ecclesiastic authorities in his plan for the province seems to have generated some resentment among the hierarchy, at least in Antequera, and they were eager to illustrate its negative effects.)

<sup>347</sup> The bishop said those who had been removed to Teotitlán suffered nine or ten hours of travel. He described the hospital as a large shack (*jacalón grande*) lacking protection from the elements, beds, pharmacy, physicians, or nurses. The intendant, in his opinion, should have followed the provisions of “*naciones cultas*” by providing for a hospital outside of the city at a reasonable distance where the sick could be cared for, subsidized by the charitable donations of the city’s inhabitants (who, as it was, were not contributing in support of the distasteful measures). AGN Epidemias 10 exp. 3, Oaxaca 3 febrero 1797, Gregorio José de Omaña to Viceroy, 163-165.

. . .” He reported being called with great reluctance to confessions in the city and had been begged not to report the convalescing children he had seen in his work.<sup>348</sup>

The priest responsible for the barrio of Xochimilco, to the north, wrote that the previous day when trying to register the sick parishioners he had found the majority hidden, the parents “either rolling them up in a straw mat and placing it at the foot of a corner, or raising them onto the roofs . . . or placing them in crates while the registration was carried out.” When a mother who had absconded with her three children to Jalatlaco returned, she came to him to confess and ask what she should do and what would result from this concealment. And three little girls not over four years old had taken refuge with him, of their own volition, he speculated, or sent by their parents; he consoled them and sent them back, explaining to their parents that the registration’s purpose was not to remove the children but to help priests carry out their ministerial work. Parents feared that if their children were collected and sent to Teotitlán, “without doubt they would die, either because under the open canopies by which they were brought they would catch a chill with the winds that have blown so harmfully, or, if they went well covered, they would become corrupted with an untreatable cancer from the burning heat of the ulcers with the sun and roughness of the long road . . .”<sup>349</sup>

If unable to flee the scene, families took shelter in the intimate spaces of homes, cowering in fear of discovery and delaying last rites out of belief that confessors, who in performing their work had to enter the domestic space, would denounce them. When Friar Pedro Joseph Frasqueri entered a ranch asking to see a patient, after some initial refusals was he shown a bedridden girl, thirteen or fourteen years old,

her face monstrous and her body full of pustules, and asked if she wanted to be confessed, with a very tender voice and great fervor she told me that was what she wished for and wanted and was asking; and when I reprimanded the parents, asking them why they had not called for her confession, they responded: Father, they say priests also have been obligated with penalties to report immediately if they are called to confess a smallpox victim. I dissuaded them from such nonsense, and having convinced them to allow the girl to be confessed, they [sic] told me: but Father, the Holy Sacrament doesn’t come and I don’t go to request it because of the escort and sacristans, because they

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<sup>348</sup> AGN Epidemias 10 exp. 3, Antequera 4 febrero 1797, 170r-v. [“. . . y aunque es verdad, que me vieron pasar a el tiempo que ya estaba para morir, temieron que yo los pudiera descubrir, y por esto motivo lo dejaron morir sin sacramentos . . .”] Moreno sent them to the parish priests to resolve the matter, who sent them to the intendant, who (he heard) sent the cadaver to Teotitlán for burial and placed the father in jail.

<sup>349</sup> AGN Epidemias 10 exp. 3, Oaxaca 4 febrero 1797, Francisco Bernardo Galindo to Promotor Fiscal, 168-169. He added that “as proof I brought to their attention the fact that Aguilera [the ex-hacienda] still does not have one sign of a true hospital.” He noted that the hospital had no beds, clothes, assistants, or food, and doubted that the shaman (*curandero*) of Teotitlán, who it was rumored was being sent to care for the hospital, would suffice for the number of sick. [“. . . sin duda habían de morir, por que o en los toldos en que los conducían, se constipaban con los vientos que han corrido tan acerbos, o si iban muy cubiertos el bochorno de las ulceras, con el sol, y movimiento de el camino largo, había de corromperlos para un cáncer sin remedio . . .” “. . . ya enrollándolos en un petate, y poniéndolos en pie en un rincón, ya subiéndolos a las azoteas, extrayéndolos por lo alto, y ya depositándolos en las cajas mientras pasaba el registro.” “. . . y en prueba de ello, quise traer a la vista el no tener Aguilera [the new hospital] hasta ahora ni una señal de hospital verdadero.”] The jurisdiction of Xochimilco is assumed, fitting the priest’s description of his parish as the largest and most populated barrio the city.

will have to see her, then at once it will be seen that my daughter has smallpox, and I don't know what I'll do if they want to take her from me . . .

Persuaded, the friar consented to send one of his priests furtively to confess the girl after evening prayers, at which hour no one would see him coming or going. (After confession, the priest had reportedly tried to turn on a small lamp he had brought with, but the parents protested that someone could see him leaving.) The parents were similarly cautious when seeking out medication: the sick could go to a pharmacy, but if the apothecary noted that the remedy was for smallpox he was supposed to denounce the patient, the friar remarked. So when the same mother saw her daughter could not swallow or eat, she told him, she went in pursuit of a remedy; without knowing which was appropriate, she went to the pharmacy with a towel around her neck, explaining that she had a sore throat. She later administered the medicine she was given to her daughter.<sup>350</sup>

Reports from civilians commissioned to perform home inspections confirm this picture of clandestine treatments and panicked concealments, which produced a kind of closing off of domestic spaces in the interest of protecting it from disintegration. A councilman in charge of one of the city's eight quadrants reported finding seventy patients, about half of whom had been hidden under beds, on top of roofs, or in corners, and others fleeing to the countryside (the mothers, he said, preferring to see them lose their remaining life in this way than die in one of the hospitals). The worst was that they were forgetting their obligations as Christians, abandoning the deceased in the city's churches in order to avoid punishment and allowing their children to die without sacraments or spiritual nourishment (news he may have obtained from the city's priests).<sup>351</sup> The resident responsible for another quadrant found twenty-six sick and two deceased, estimating this represented only a fifth of the true number. Though he and his assistants had tried to prevent this deceit, most homes were from poorer areas, which

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<sup>350</sup> AGN Epidemias 10 exp. 3, Antequera 4 febrero 1797, Fr. Pedro Joseph Frasqueri Procurador General y Prior to Promotor Fiscal, 171-172. He reported that the girl was better but the father in jail because someone, after so many precautions, had squealed on him ("*dieron el soplo*"). [*" . . . echa un monstruo su cara y llena de viruelas la muchacha preguntándole si quería confesarse con una voz muy tierna me dijo con gran fervor que eso era lo que deseaba y quería y estaba pidiendo; y reprehendiendo a los Padres y diciéndoles el que por qué no habían llamado que la confesara me respondieron: Padre dicen que los Padres tienen también puesto pena para que si llaman a confesar algún violento den luego parte; los disuadí de tal disparate, y habiéndolos convencido para que la muchacha se confesara me dijeron: pero Padre N. Amo no viene ni voy [sic] a pedirlo por que el acompañamiento, y los sacristanes, que es preciso que la vean, luego al punto se divulga el que mi hija está con viruelas y yo no sé que haré si me la quieren sacar . . ."*]

<sup>351</sup> AGN Epidemias 10 exp. 2, Antequera 7 febrero 1797, Regidor Decano Diego de Villasante to Intendant, 49-50. The methods he reported were the same: parents were "*envolviendo a algunos en Petates para que puestos tras de las puertas de sus habitaciones no pareciesen gentes de este modo,*" others placed in crates or buried in yards and covered with straw, etcetera.

On abandonment at church doors: one of Antequera's priests cited an occasion on which the sacristan had opened the doors of the church to find a child, dead from smallpox. Although references are usually vague, in this case the priest describes the child being brought inside, the inspectors sent by the intendant exhibiting extreme boldness by entering the church to seek out the *angelito*, and allegedly fleeing the church just before the priest could be notified of the situation. AGN Epidemias 10 exp. 3, no date, Pedro José Gomez Priego to Protomor Fiscal, 173r-v.



were still in ruins from earthquakes. And as the entire world knew, it was not easy to avoid the ploys (*astucias*) devised by paternal love.<sup>352</sup>

What kind of paternal love would allow a parent to abandon a deceased child at the door of a church? As evidence of activities, these documents require caution. For example, some pointed to careless burials in homes and a variety of other places, and yet no one claimed to have witnessed one; the composite picture was purposefully apocalyptic, designed to describe with vividness what many construed as a virtual Armageddon, when parents were forced to sit by as their children suffered and died, dispensing in some cases with the sacraments that were supposed to bind a Catholic society together and neglecting the medicines that sustained it. Allowing for exaggeration, the eyewitness reports are better evidence of an underlying suspicion that loved ones would be lost, isolated in unfamiliar surroundings and overtaken by fear once they were discovered. As in Villa Alta, it was not primarily contagion, pestilence, and disease at stake, but the healing power of social bonds and the potentially disastrous consequences of their rupture.

This conviction ultimately engendered some imaginative shifts in practice. Foremost may be the one observed in sacramental use, an elusive dimension given the private or domestic nature of their performance in times of illness.<sup>353</sup> As belief in the importance of familial integrity led to strenuous efforts to ensure that no one die alone, priests continued to be called, but the sacraments took a back seat to the crucial bonds between parents and children, with each delay underscoring the rift that was imagined if the children were discovered. What else were parents to do in the face of so many contradictions of practice, where calling the priest meant, if not necessarily death, then civil punishment and the separation of patient from home and family? The reports evince a modified practice aligned with the necessities of preservation of the self and family, with a flexible religion part and parcel of questions of survival and health. The request for “confession” for a stomach ailment in Villa Alta also suggests a more mechanical view of the sacrament, perhaps a more widely held expectation among Oaxaca’s faithful that confession was a tonic suitable for the body as well as the soul.<sup>354</sup>

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<sup>352</sup> AGN Epidemias 10 exp. 2, Antequera 7 febrero 1797, Francisco de la Riba to Intendente, 53-54: “. . . el mundo entero conocerá no ser fácil prevenir, y eludir en semejantes ocurrencias las astucias, que puede inventar, y sugerir el amor paterno . . .”

<sup>353</sup> For an effective analysis of sacramental adjustments in the preservation of family structure, see Anna Brown and David Hall, “Family Strategies and Religious Practice: Baptism and the Lord’s Supper in Early New England,” in *Lived Religion in America: Toward a History of Practice*, ed. David Hall (Princeton: Princeton University Press, 1997), 41-68.

<sup>354</sup> Is it also possible that some parents hoped that by delaying confession they could delay the end for their loved ones – a willful deferral of resignation and holding out of hope? This is suggested by an incident in 1786, when French physician Esteban Morel, acting as head doctor for Juan Lucas Lassaga, president of the Royal Mining Tribunal, repeatedly resisted administering last rites to his patient, pointing out that he was responsible for health and insisting that if he did authorize the sacraments, it would grieve the patient, alter his state, and render the medications ineffective. (According to a witness, the other physicians, nurses, and friends of the patient persisted, and when Morel found out, he grew very upset, running around the rooms like a crazy man and saying he had understood only that they were going to resolve his estate – not administer sacraments – and that “*con haberlos recibido se había agravado la enfermedad . . .*”) For this episode, see Patricia Aceves Pastrana, ed., *Medicina, minería e inquisición en la Nueva España: Esteban Morel, 1744-1795* (México: UAM, 2002), 54f.

If strategies for the pursuit of social preservation were private, domestic affairs, they also became public. The bishop sent two “anonymous and seditious papers that in these days have flooded the city” to Mexico City along with his priests’ reports. Both were written in the same uncertain hand, containing orthographic peculiarities that reflect the lower status of the author (or copyist, more likely). The first was a cleverly rhymed verse about the woman sent to Teotitlán, the second a provocative call to arms.<sup>355</sup> After an opening invocation citing the goodness of God and calling for death to “bad government” and long life to “God’s law,” the first referred to the death of the woman, who was portrayed as pregnant and walking to Teotitlán, where she perished without “sanctuary” after the intendant, “imitating Herod in his justice,” ousted her from the city. It called for an imitation of “New France” by rebelling against heretics, with salvos “on the arranged day,” specifically against the intendant, “who is trying to finish off the royal coffers.” Similar in tone, the second page of verses summoned the masses (*la plebe*), “in the event that they remove some child” from its, home to take up arms, and called on priests who wished to escape the “invasion” with their lives to do the same, in order to finish off with the bad government “for going against God’s law.” It ended with a battle cry: “Everyone with one voice, death to the relative of Gálvez, long live the law of God.”

The verses raise several puzzles. Was the patient in fact pregnant, as they claim? Did she *walk* the fifteen miles to Teotitlán? The reference to Herod’s ritual slaughter, seen above in the statement of defense from Teotitlán’s villagers, referred to Oaxaca’s intendant, whose harsh policies and “untidy industries” were having the effect of emptying the royal treasury of income (from silver production, the textile industry, and tribute, which did not arrive in many district seats as a result of cordons).<sup>356</sup> The compositions, insistently global in perspective, paired circumstances in the Valley of Oaxaca (the ungodly ejection of patients from the capital) with revolutionary and

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<sup>355</sup> The same themes, phrasing, and orthographic peculiarities are repeated in both pages (contar = contra, echo = echo, lell = ley, rell = rey), suggesting these were read together as one (the bishop’s statement notwithstanding) and produced (or reproduced) by the same person. Originals are in AGN Epidemias 10 exp. 3, 183-184. [“. . . papeles anónimos y sediciosos que en estos días han inundado a esta ciudad . . .”] The original orthography has been maintained here:

1) *Digo que dios es benigno y todo es eho por dios / de que muera el mal gobierno i biba la lell de dios.*

*El yntendente imitando / a erodes en su gusticia / pues quito bida propicia / aquella muger preñada / que a teutitlan caminaba / donde enterada quedo / donde remedio no allo / ni sagar rrio [sic] que le balga / luego señores que asemos / imitar a nuebo far, ansis [sic] / bienes que nos retornemos / no contar dios contar eregees / ni contar el rell que no manda / yndustiras [sic] desordenadas / solo contar quin yntenta / a cabar las cagas reales / gastando polvora en salbas / para el dia sitado.*

2) *Sito a toda la pelbe [sic] por si sacaren alguna gruitura, al punto se dara cinase como ten[go] diho para acabar con el mal gobierno por ir contar la lell de dios sito a todos los señores saserdotes queu [sic] tiren a escapar la bida en esta invasion porque, emos de acabar con el mal gobierno en juego, o en sanger [sangre] como tengo diho y esta perbenido digan todos a una bos muera, el pariente de gal be[s] y biba la lell de dios.*

<sup>356</sup> Comparisons with King Herod’s biblical slaughter of the innocents were leveled in other contentious historical contexts, as in the 1750 Paris uprisings following rumors that the city’s children were being abducted. In this case, the charge was actually brought against France’s king, who suffered from an especially tenuous relationship with his subjects at the time. See Arlette Farge and Jacque Revel, *The Vanishing Children of Paris: Rumor and Politics before the French Revolution*, trans. Claudia Miéville (Cambridge: Harvard University Press, 1991), 108-113.

counterrevolutionary events taking place in France and New France. The reference to the Gálvez family is odd, seeming at first to be an anachronism, as José de Gálvez (1720-1787), perhaps the most famous and influential of the family of Bourbon reformers, had long since left New Spain. One possibility is that, in 1797, his memory remained alive as the architect of policies that had disrupted the lives of many *oaxaqueños*, first as Visitor General in New Spain and then as Minister of the Indies.<sup>357</sup> He was responsible for carrying out the expulsion of the Jesuits in 1767, restructuring village politics, distancing the religious orders from involvement in daily life in Oaxaca (through secularization of parishes), and suppressing the protests that followed with new militia companies.<sup>358</sup>

This interpretation would provide one clue to references to irreligion, heretics, bad government, and godlessness, the more immediate emergency measures viewed as an extension of the same enlightened impulse. Clearly the removal of children from the city to Teotitlán was presented as an act of sacrilegious aggression by a godless state, but what about burials in *camposantos*, which many communities, including Teotitlán, condemned? The verses stated that the pregnant woman had “remained buried” in Teotitlán, “without sanctuary.” As opposed to cities, in the countryside consecrated burial sites in distant fields primarily appeared during epidemics and generated reactions of displeasure within these emergencies.<sup>359</sup> In Teotitlán, at least, some sense of ownership of the church building and its dispossession was at stake: in the churchyard, according to Melgar, some of the assembled had said that “the Indians had built the church and that they were not animals, to be buried in the countryside,” indicating this sense of communal possession and the conviction that such an act was inhuman, something for animals. Miles away, in the Mixe village of Atitlán, the priest similarly reported that “many Indians came together telling me that the church was theirs, and why did they have to bury him outside, that they would go to see you [the intendant], and with a rebellion on my hands I consented,” after he had done no more than attempt to bury a

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<sup>357</sup> A second possibility is that parts of the rhymed verses were composed during a previous epidemic, in 1784 or 1786, when the family achieved a minor dynasty with the appointment of the brother of the famous minister, Matías de Gálvez (d. 1784), as viceroy of New Spain, who was then succeeded by his son, Bernardo de Gálvez (d. 1786). It is less likely, however, if only because this epidemic struck Oaxaca much less severely than the prior smallpox epidemic (in 1780).

The *Real Ordenanza de Intendentes*, conceived by the Gálvez brothers and promulgated in Oaxaca in 1786, attempted to reform the entire administrative system, implementing more efficient taxation and tribute collection, limiting the independence of indigenous *repúblicas*, replacing *alcaldes mayores* with French-style subdelegates, and prohibiting the commercial activities that had formerly been carried out from that office with indigenous communities. It was a centralizing scheme in which much remained the same, yet protests against perceived meddling and innovations were widespread and often intense.

<sup>358</sup> In this interpretation, the “relative” might have referred to Antonio de Mora y Peysal or Viceroy Marqués de Branciforte, neither of whom was actually related by blood.

<sup>359</sup> Burial in churches beside altars was, for the socially powerful in places like Mexico City, an index of status and corporate privilege in the eighteenth century, but it was on the decline, it has been argued, because the new piety of a rising middle sector in cities frowned upon such privilege, turning to *camposantos* as alternatives. See Voekel, *Alone before God*, passim. In rural Mexico, the role of a cemetery in relation to the community was as much an issue of ownership and of proper shelter as an opportunity for displays of status.

smallpox victim, allegedly arrived from Antequera, in the new cemetery.<sup>360</sup> When Yahuive's priest instructed the justices of each of the three pueblos in his *doctrina* to bring the deceased from each community to consecrated grounds outside of their populations – “even if it is no more than an enclosure of sticks, with a cross in the middle” – the representatives reacted skeptically, “asking me, whether this was being observed in the city and in the other populations.”<sup>361</sup>

As in Yahuive, little care appears to have been taken with the selection of sites and the preparation of *camposantos*. Despite this hurriedness and disrespect, it may be that any arrangement in which the deceased were placed at such a great distance from the living community, as prescribed in Gil's original treatise, would have been perceived as a violation. In one of the few documents from Teotitlán to address the issue directly – the petition sent by the seven imprisoned men to the viceroy – the supplicants referred to the new *camposanto* as even more distant than the hospital, “in the mountains” and hedged with thorny shrubs. They suspected that the priest had been ordered *by the subdelegate* not to bury any virulent corpses in the church, suggesting they imagined that only a secular authority could have ordered such a breach of sacred tradition, even if priests were simply following the orders of their prelates.<sup>362</sup> If death for peasants was an opportunity for showy display of prestige, social position, and wealth, it was also the moment when a perennially mobile people came to rest, and it could not happen in a wilderness: the burial site had to be at once a respectable place that could keep the deceased close to sacred grounds – often, not incidentally, the property of the community – and also close to its living members. From the perspective of the provincial capital,

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<sup>360</sup> AHJO Villa Alta Civil 31 exp. 15, Atitlán 27 mayo 1797, José Antonio Meneses to Conejares, 46r-v. [“. . . se juntaron muchos indios diciendo que la iglesia era suya que por qué lo había de enterrar afuera que irían a ver a V. yo teniendo una sublevación asentí . . .”] The officials and elders did in fact write the subdelegate, but their protest centered on the guards they had been forced to place on the roads during the epidemic, which caused them and the subject pueblos delays and humiliations (*vejaciones*): for baptisms, parishioners were made to come to the town, where they were kept for quarantine, “*como lo detenemos aquí tres personas del Pueblo de Tepantlale,*” or else the confessing priest was detained in the pueblos. On the reverse of their letter, the subdelegate noted that there was no quarantine in place, but rather a prohibition on travel for anyone who had not had smallpox; clearly these villagers understood otherwise, and focused on disruptions in the smooth practice of the sacraments as an effective illustration of its deleterious effects. The fact that their complaints were wholly different than those reported by the priest is a good example of how numerous issues could be taken up by (perhaps different) members of a single community. AHJO Villa Alta Civil 31 exp. 15, Atitlán 27 mayo 1797, Alcaldes, Principales, Común y Naturales to Ruiz de Conejares, 47r, and *ibidem*, Villa Alta 29 mayo 1797, 47v.

<sup>361</sup> AHJO Villa Alta Civil 32 exp. 4, Yahuive 29 mayo 1797, Joseph Mariano de Velasco to Ruiz de Conejares, 27-28. [“. . . aunque no sea más que cercado de palos, con una cruz en medio . . .” “. . . preguntándome, que si esto se observaba en la Ciudad, y en las demás Poblaciones.”] He had also stressed the benefits of a deep grave for public health.

<sup>362</sup> AGN Epidemias 15 exp. 2, Real Carcel de Oaxaca 24 abril 1797, Francisco Ruiz, Santiago Vasquez, Baltasar Ruiz, Pasqual Ypolito, Pedro Gonzales, Domingo Matcheo, y Lucas Sosa, presos en esta Real Carcel, 66r-v. “. . . es de creer Exmo. Señor que el vicario tendría alguna orden del subdelegado para no dar sepultura a ningún birguelento [sic], esto todo sería por disposición del Yntendente.” It is possible that this was the opinion of a lawyer assigned to assist in the writing of the petition, as discussed above.

anything else was an act of sacrilege, the church a sanctuary (*sagrario*), according to the author of the seditious verses.<sup>363</sup>

To approach the charge of godlessness from another angle, it is also possible that it referred to the prohibitions on religious celebrations that had been enacted as a precaution against spread of contagion. Oaxaca's intendant had decided, in consultation with the bishop, that the yearly festival in Tlacolula's sanctuary on the second Sunday of October for its miraculous image of Christ (*nuestro Redentor Crucificado; el Señor de Tlacolula*) would bring hordes of people into proximity with Teotitlán (the shrine was only miles from the infested weaving village). There was no way, it was decided, to prevent the mixture of healthy and unhealthy, and the festival was consequently suspended. All of the vendors who regularly sold their wares at the shrine – gatherings inevitably drew a good deal of profane commerce along with crowds of faithful – were notified.<sup>364</sup> And although the written record is silent, it is possible that others perceived emergency provisions such as these as an assault on worship at a sacred place. The obsession with contagion had too many consequences, any of which may have produced denunciations of godlessness and bad government as articulated in the verses because all seemed unnecessarily to alter the conventions of healing.

The ultimate result of these episodes and protests was an outright suspension of policies. Authorities in Oaxaca took the verses and reports of concealment of patients very seriously. The *promotor fiscal* who received them expressed his concern when replying to the bishop, condemning the conditions in the new hospital (the Aguilera hacienda) as deplorable.<sup>365</sup> He took no consolation either in reports of a new edifice

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<sup>363</sup> That the intendant continued to send cadavers from Antequera to Teotitlán suggests he had not yet resolved the issue of a separate burial site, which it appears was being broached for the first time in Antequera during this epidemic: the priests of the cathedral's *sagrario* wrote the bishop to ask what to do about church burials, seeing as there was no *camposanto* or other consecrated spot destined for the internment of infested cadavers. In the margin, the bishop directed them to ask the intendant about a field on the outskirts of the city that might be consecrated for the internment of victims of smallpox and any other epidemic, but apparently the intendant had done little more than appropriate Teotitlán's for the city's use. On February 4, these clergymen were repeating their request for an adequate burial site. Several days later, Fiscal Borbón recommended that the bishop be instructed to choose and bless a well-ventilated, separate site for use as a *camposanto*, but I have not come across the documents that speak to the issue's resolution. AGN Epidemias 10 exp. 3, Antequera 5 octubre 1796, Curas del *sagrario* de esta Santa Iglesia Catedral Manuel Anselmo Quintana and Antonio Fernández to Bishop, 161-162; *ibidem*, 166-167; and *ibidem*, exp. 1, Mexico 12 febrero 1797, Borbón, 16v.

<sup>364</sup> For correspondence of authorities contemplating the logistics of the festival and its postponement, AGN Epidemias 12 exp. 7. According to Melgar, the temptation to break cordon to attend would be too great: "*Aquella fiesta alborota a los Pueblos más lejanos; por consiguiente los cercanos la miran con el doble entusiasmo de interés, y diversión: van a ella a vender sus frutos, y manufacturas, y a disfrutar de una alegría única en el año: vea V.S. que alicientes tan poderosos para que estos naturales tirasen a eludir todas las providencias tomadas para que no comuniquen con sus vecinos; si la hay, o la hubiera yo comprendo que aun cuando la circunferencia de este Pueblo se rodease de Tropas, que desempeñasen las ordenes con todo rigor militar, estaríamos expuestos a la infección. La salud pública interesa mucho, y yo entiendo que Dios miraría con desagrado unos cultos, que podían ocasionar la desgracia de muchas de sus criaturas.*" *Ibidem*, Teotitlán 6 octubre 1796, Melgar to Intendant, 345r-v.

<sup>365</sup> AGN Epidemias 10 exp. 3, Antequera 7 febrero 1797, Promotor Fiscal Doctor Mantecon to Bishop, 174-182. The owner of the hacienda had merely provided a room in the middle of a field that was far too crude for the purpose to which it had been designated. ". . . desde el día primero del presente mes pasó el Bachiller en Medicina Don Juan de Mata, y Figueroa a disponer un Hospital: es decir un xacalón, en que

supposedly being built at the same site, providing, as it did, no other ventilation than a single door.<sup>366</sup> Citing the bishop's evidence and a well known incident ("*tan público, que no hay quien lo ignore*") involving councilman don José Antonio de Larrainzar, who when he arrived on the morning of the second of February to register the sick in a barrio was met, on the corner of the church of Nuestra Señora de las Nieves, by a crowd so riotous that he had been forced to abandon his commission, the fiscal thought this abrupt revolt in the pueblo (*repentina sublevación*) good reason to try a new approach.<sup>367</sup> He recommended that Oaxaca's bishop propose to the viceroy that the sick be cared for in their homes, "as has always been observed in similar circumstances," so that they could notify their parish priests without fear of separation and thus partake of the sacraments.<sup>368</sup>

A consensus seems to have been reached among Oaxaca's officials and civilians based on the experiences of the prior weeks. The *teniente letrado* and justices commissioned for the epidemic were called to meeting by the intendant the same day to report on the situation in the city, where they recommended a similar resolution, pointing out that inoculation had already been tested in Teotitlán and Tehuantepec.<sup>369</sup> Also called to meeting, the city's physicians agreed that the government's plan had been rendered unattainable and that separation of the over 100 residents who had been found sick would be impractical without resulting in great harm. They also recommended that the intendant extend to all residents permission to cure the sick in their own homes and enthusiastically endorsed inoculation, a practice used in Teotitlán at the epidemic's apogee, with only nine deaths of 400 inoculations (when something more like a fourth should have died,

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*se recogiesen los enfermos; tan poco se podrá negar, que apenas habrá habitación menos proporcionada al fin a que se prepara; por que esta es una pieza formado en el campo por el dueño de la Hacienda, tan tosca, y grosera como para el objeto a que se dirigía, y de que estaba sirviendo, separada como era regular de la demás habitación, para que no perjudicasen a los habitantes de la casa. Era, y es un xacalón en que estaba encerrada porción de cal, con tantas aperturas, y rajaduras, que no cubriéndolas, sería lo mismo, que permanecer a los cuatro vientos, y sin otro preparativo, que el de extraerle la cal, se puso, allí a un enfermo con tanto desamparo, que su mismo Padre se vio necesitado a venir desde aquel lugar hasta la Ciudad en solicitud del pobre alimento de atole de maíz para su hijo, y una vela para que no estuviere abscuras [sic] . . ."*

<sup>366</sup> The Indians of the pueblo of San Felipe had been contracted to build the shack, but had reportedly been neither paid nor fed for their efforts. See *ibidem*, 178r-v.

<sup>367</sup> *Ibidem*, 181v.

<sup>368</sup> *Ibidem*, 182r. ["... como ha sido siempre observado en iguales ocurrencias . . ."] He also referred to the reactivation of charitable activity: "y que todos se socorran con los auxilios de las Limosnas públicas a proporción de las necesidades, y arbitrios, que se meditaren para socorrerlas."

<sup>369</sup> AGN Epidemias 10 exp. 2, Oaxaca 7 febrero 1797, Teniente Letrado de Oaxaca y demás capitulares comisionados, 42-47. They had been moved by the excessive fear they observed and the cries and pleas of parents in the homes they entered not to remove their children, and they suspected that rumors about parents delaying confession and viaticum until the final moment would become reality. They cited in particular the belief among residents that extraction meant certain death. "*Todos claman que este es uno de los actos más horrorosos de inhumanidad, y aun la plebe ha llegado a tal exceso de fanatismo y extravagancia que considera las providencias como opuestas a la voluntad de Dios y que envía todo genero de enfermedades.*" They cited the many tactics employed to hide children when they and sixteen others were commissioned to count the number of sick in homes to show that their arrival had clearly been anticipated. They concluded that, in such circumstances, the provisions could not be adopted, and even if the sick could be removed, many relatives would remain to infect others.

they thought, given what was known of smallpox mortality).<sup>370</sup> The intendant's legal advisors noted these statistics and endorsed a decree giving the public the freedom to care for the sick in their homes and inoculate the non-immune, and the following day, with few other options, Mora y Peysal complied.<sup>371</sup>

How to explain the subterfuge and evasive measures that appeared in the months of Oaxaca's smallpox epidemic? Despite numerous attempts at reform, hospitals in colonial Mexico were overcrowded places that continued to be used mainly by the poor and destitute, with the upper classes usually receiving professional care in their own homes.<sup>372</sup> Hospitals were perceived as insalubrious places of last resort where one went to die, primarily for those who did not have people or a clan or the means to provide care.<sup>373</sup> This situation was reflected in the deliberations on Oaxaca's situation carried out in Mexico City four days later, when the Protomedicato, in reviewing the case, recommended that only the poor who could not care for themselves, "whose misery and filthiness are the principal fuel for contagion," be removed to the hospitals in the likely event that these could not fit everyone indiscriminately, while those of means be allowed to remain in their homes with corresponding precautions.<sup>374</sup> Fiscal Borbón agreed that *vecinos decentes* could maintain their sick in the home and that only the poor, "who in

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<sup>370</sup> AGN Epidemias 10 exp. 2, Antequera 7 febrero 1797, signed Juan Antonio Figueroa, Mariano José Carranza, Joseph Valerio Fernández, Josef Fernández Darela, 55-59. They lamented that many residents, fearful that physicians and chemists would denounce them if they sought help, were allowing loved ones to die without medicine, and spoke of *ahugeros subterráneos* where the sick had been placed, into which the "spies" sent by the intendant could not peer, possibly meaning the makeshift holes in yards to which others had referred. ["... *aun fabricando ahugeros subterráneos a donde no pudiese llegar la penetración, y astucia de los espías que V.S. tenía repartidos por esta Ciudad, con el objeto de su inquisición.*"]

<sup>371</sup> AGN Epidemias 10 exp. 2, Oaxaca 7 febrero 1797, Promotor Fiscal Manuel Fernández Pantaleón, Letrado Licenciado Manuel Mimiaga, Letrado Licenciado Mariano de Castillejos, 60v-62v. For the decree, see the "Epilogue" below.

<sup>372</sup> Although hospitals were places for the sick poor, experiences within them were not uniform, even among the hospitals run by a single religious order such as San Juan de Dios, as revealed by the archbishop of Mexico's 1775 overview of the order's convent hospitals of San Juan del Río and San Lázaro (for syphilitics) in Mexico City and establishments in Toluca, Texcoco, and Pachuca – where the only patients were *pobres infelices* who had no other recourse, "*porque los indios le temen tanto, que antes se dejan morir en sus pueblos sin socorro alguno, que entrar en él, aunque les hayan brindado.*" See AGN Hospitales México 23 octubre 1775, Núñez de Haro to Viceroy Bucareli y Urzúa, in Rómulo Velasco Ceballos, ed., *Visita y Reforma de los Hospitales de San Juan de Dios de Nueva España*, vol. II (México: Archivo Histórico de la Secretaría de Salubridad y Asistencia, 1945), 139-146. (The archbishop concluded that the quality of care in each institution any moment depended greatly on the prior in charge, and he speculated that Indians would fear them less if quality of care were more consistent.)

<sup>373</sup> As in Britain, Germany, and France, clinical settings in Mexico City especially had become places for instruction, testing, and recording – more laboratory than place for convalescence. Even in traditional hospitals, confinement of the patient tended to result in a considerable shift in the power relationship with caregivers, usually to the patient's disadvantage. For the European context, see Guenter Risse, "Medicine in the Age of Enlightenment," in *Medicine in Society*, ed. Andrew Wear (New York: Cambridge University Press, 1992), 178-186.

<sup>374</sup> AGN Epidemias 10 exp. 1, Mexico City 11 febrero 1797, Tribunal del Protomedicato, 13-14. ["... *cuya miseria, y suciedad sirve de mayor pábulo a el contagio . . .*"] Investigation of the bishop of Oaxaca's allegations of mismanagement and the "seditious verses" was postponed for a more opportune time.

any other sickness would go to the hospital,” should be removed.<sup>375</sup> State functionaries reverting to convention thus acknowledged the strong social stigma attached to these places of healing. In Oaxaca, hospitals were still infrequent, if not nonexistent. When hastily constructed, residents had little cause to trust that isolation within them would solve any problems, and many seem to have suspected that some danger could result from transporting the sick in the open air. Beyond exposure, parents feared strangers would have less interest in their children, their children less comfort in a stranger. If these objections were frustrating for priests and civilian administrators, they were not seen as unreasonable. Reading the bishop’s report in Mexico City, Fiscal Borbón was also shocked to learn how the sick had been removed from the city for the hospital outside of Teotitlán. He had assumed it lay at a moderate distance and that only one young woman had been transported, with necessary precautions, and was surprised to learn that the intendant moved them the “scandalous distance” reported by the bishop.<sup>376</sup> Separation may have been an acute anxiety held by rustic Indians, but evidence suggests that others shared this concern for the danger of prolonged exposure.<sup>377</sup>

The fiscal’s solution was to outline a new approach in the capital. It included inoculation, virtually unused New Spain, and a more prominent place for charitable committees of volunteer citizens.<sup>378</sup> Some time-worn strategies were prescribed, as well, including use in settlements lying in the path of contagion (Veracruz, Puebla, and Mexico) of bonfires of wood, shrubs, grass and other combustible materials to purify the air, preferring where possible the branches and trunks of Cypress trees, balsamic, resinous and fragrant. A circular to bishops would reiterate the obligation of seeing that rogations to God and the saints were made in the parishes for relief from the plague – and

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<sup>375</sup> AGN Epidemias 10 exp. 1, Mexico City 12 febrero 1797, Fiscal Borbón to Viceroy, 15-26. [“. . . *que en cualesquiera otra enfermedad irían a él . . .*”]

<sup>376</sup> AGN Epidemias 10 exp. 1, Mexico City 11 febrero 1797, Fiscal Borbón, 10-13.

<sup>377</sup> In a prescient passage, Francisco Gil anticipated such objections when he stressed the importance of pure or fresh air for patients, a feeble attempt to convince families that they could be removed to the proposed hospitals without danger to health. “Physicians shall try in advance,” he instructed, “to relieve the commoner of the frequent error of believing that the transfer of these patients is risky; done with reasonable protection, it cannot harm them, but rather the breathing of fresh and pure air may be helpful.” Gil, *Extracto*, Article III. [“*Procurarán anticipadamente los facultativos desimpresionar al Vulgo del error común que hay en creer que la traslación de estos enfermos es arriesgada; pues haciéndolo con moderado abrigo, lejos de causarles daño, podrá serles útil la respiración de un aire fresco y puro.*”]

<sup>378</sup> AGN Epidemias 10 exp. 1, Mexico City 12 febrero 1797, Fiscal Borbón to Viceroy, 15-26. If one hospital proved inadequate or the epidemic made extraction impossible, the infested city would be divided into smaller units and placed under the care of residents of means, with the city’s physicians obligated to make rounds in particular districts (this was recommended also for Puebla, Guanajuato, Veracruz, and Mexico City). Borbón proposed that the Protomedicato compose a simple, clear instruction for the prevention and cure of smallpox that included a method for inoculation (see Chapter Six), with copies sent to bishops and intendants, justices and *alcaldes*, who might encourage the population to adopt the procedure voluntarily whenever smallpox neared. The Protomedicato responded favorably, anticipating preoccupations but proposing that resistance could be overcome through early success: “*ello [método] es claro, y de hecho constante que son innumerables los millares de niños curados, y salvos de la hostilidad de las viruelas por el proclamado método de la inoculación, por lo que es de esperar, que los sucesos de ella en Oaxaca correspondieran a los observados en ella misma, y en muchas provincias de la Europa.*” AGN Epidemias 10 exp. 1, Mexico City 14 febrero 1797, Real Protomedicato to Branciforte, 28r-v.



also continue to press burial in *camposantos* outside of large populations.<sup>379</sup> Though not as definitive as Oaxaca's suspension, Borbón's plan also signaled a more humane, less invasive style of management, which restored or reiterated some strategies used in the past. Not only a response to charges of irreligion and bad government, it also acknowledged as reasonable the actions and sentiments of many more parents and Indian representatives, who had made reasonably clear their complaints.

## Conclusion

Explanation of a colonial uprising of the sort witnessed in Teotitlán as the defense of communal autonomy – some minimal degree of independence in communal political practice – is valid but also too vague to account for the indignities experienced by this village and others. The notion of sovereignty draws the line only between inside and out, neglecting the ways these boundaries shifted, to say nothing of numerous other boundaries – of gender, ethnicity, families, and generations – within communities. Enlightened medicine in late colonial Mexico caused numerous boundaries to be established where none before existed: between a community and its possessions and plots of food, artisans and buyers, villagers and the resources of larger cities, members of a family in sickness, the deceased and the church, and heaven and earth. The biggest problems of work, love, devotion, health, maternity, sustenance, survival, and the pursuit of justice took ordinary people out of villages and onto roads, familiar and uncharted, level or mountainous, individually or en masse, and require explanation.

By shifting emphasis from nationalist narratives of scientific discovery to the laypeople who experienced medical innovation, it becomes clear that scientific notions, knowledge, and techniques had local consequences that did not obey the neat schema imposed from above. This is true in the case of the family, the moral ballast of colonial societies, the alpha and omega in work, love, religion, and politics. It is this unit that needs further scrutiny before discussing specific strategies employed in pursuit of relief – medicines, bloodletting, bathing, purging, image worship – because it was this historical reality against which modern sanitation and prophylaxis pushed in epidemics. Ultimately, it proved impossible to elide issues of gender, occupation, and corporate society in favor of the ideal bounded, autonomous, universal diseased self because laypeople persisted in participating in modern medical projects on these (gendered, occupational, corporate) terms. What is interesting is not the fact that so many peasants in Oaxaca commented on enlightened medicine – they were bound to – but the terms on which they did so, confronting the state not only as homogenous Indian republics, or as women or men *in general*, but as farmers, mothers, merchants, and fathers. Far from the isolated individuals primed for surveillance and discipline that Michel Foucault imagined, the relational identities they advanced and nurtured go far toward explaining why the socially cleansed, emotionally sterile plan of the Bourbon state drew little support.<sup>380</sup>

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<sup>379</sup> Ibidem, Fiscal Borbón to Viceroy, 21v. “*Que también se encargue a dichos Señores Ilustrísimos, dispongan que por sus Párrocos, y en las Comunidades Religiosas, se hagan rogaciones secretas a Dios y sus santos, implorando de su misericordia la gracia de que nos libre de tan terrible azote y mal, como que este soberano antídoto, ha de ser el primer remedio, si por su infinita piedad se digna concedérnoslo, y bendecir los efectos de las paternas piadosísimas resoluciones de V.E.*”

<sup>380</sup> It may be that application of Foucault's theories of individualization in the early modern period has set back relation studies owing to his reductive treatment of more complex notions of persons, identity, and

The affective bonds and relative ways of defining sick patients traced above open up a potentially fruitful terrain for an exploration of personhood in colonial Mexico.<sup>381</sup> The discussion compels us, moreover, to continue searching for the peculiarly modern ways peasants responded to enlightened programs. Either way, the question of whether peasant reception was reactionary or conservative in the face of innovation feels poorly posed. When a mother wrapped a scarf around her neck and went to the apothecary to solicit medications for her ailing daughter, or engaged the services of a priest but insisted the light in his lantern remain off to maintain secrecy, she was not simply resisting, but creatively resolving an immediate health problem. It is this process of defining and resolving illness that, in accumulated practice, language, and affect contributes to a more complete picture of an art of healing in colonial Mexico.

In sum, residents in Villa Alta and Antequera may not have used the same syntax, diction, or metaphors as in Teotitlán, but by concealing their children and delaying last rites they were insisting in their own way on the inviolability of familial bonds. It was ultimately this colonial unit that a new scientific medicine, founded on principles of contagion and isolation, had to confront, this bond that was violated by the spatial divisions imposed during epidemics, and this whole that was creatively held up as a diagnostic unit for the health of society and proof of the impossibility of the emergency measures. These episodes introduce other ideas about illness into a history of science and medicine, a corrective of sorts to the parsing of time and place into neat units that officials hoped to achieve and that narratives of discipline and state formation reproduce.

On February 8, 1797, Oaxaca's intendant issued the order reversing the provisions in place for the last six months, allowing smallpox patients to be healed in their own homes and putting into practice elective use of inoculation.<sup>382</sup> Two weeks later, he

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identification. To be modern was to be separate, in Foucault's view, defined as an individual and disciplined, even if historical actors insisted otherwise. Foucault's treatment of epidemic emergencies, which he used to introduce Jeremy Bentham's panopticon, could be especially reductive: he saw measures in place during French plagues at the end of the seventeenth century producing a segmentation or fragmentation, "a compact model of the disciplinary mechanism." Foucault had little interest in modifications made to this system of surveillance – the ways people talked back, left the proper places assigned them, rejected quarantine measures – and his analysis ends with these overly-neat prescriptions of power. To do otherwise would have required a more mobile perspective tracing the many ways geographical and social spaces could be configured at any moment. Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage Books, 1977), 195-209.

<sup>381</sup> On this topic, see Marcel Mauss's seminal 1938 lecture, where he traced the Western notion of the individual person to various uses of the Roman *persona*, transformed into a singular embodiment as civil rights and laws found their locus on the autonomous body. "A Category of the Human Mind: The Notion of Person, the Notion of Self," in *The Category of the Person: Anthropology, Philosophy, History*, ed. Michael Carrithers et al. (Cambridge: Cambridge University Press, 1985). For a study of contingent and relational aspects of personhood in medicine, see Lawrence Cohen, *No Aging in India: Alzheimer's, the Bad Family, and Other Modern Things* (Berkeley: University of California Press, 1988). See also Dorinne Kondo, *Crafting Selves: Power, Gender, and Discourse of Identity in a Japanese Workplace* (Chicago: University of Chicago Press, 1990).

<sup>382</sup> AGN Epidemias 10 exp. 2, Oaxaca 8 febrero 1797, Bando issued by Antonio de Mora y Peysal, 66-67v. It was followed three days later by a church edict announcing this concession and the start of a new charity program, including a plan for collecting and distributing alms along with incentives to give. Initially, 5,000 pesos were placed in the hands of the priests of the *sagrario* and the priors or guardians of the convents of Santo Domingo, San Francisco, Carmen, and the Oratory of San Felipe, who were to distribute alms to the poor and destitute in the five districts into which the city would be divided for the purpose. As incentive to

overturned prohibition on free passage between Oaxaca's capital and surrounding "infested" regions. Intended to "soften" the distress caused to the isolated places, the decision was also an admission of defeat, with the official acknowledging that the isolated villages were inextricably tied to the markets and resources of Antequera just as the residents in the capital ultimately depended on the goods that arrived for sale.<sup>383</sup> The colonial state's firm hand had been forced.<sup>384</sup> Henceforth, the weight of emergency measures would fall on the creation of *juntas de sanidad*, associations of wealthier residents to provide charitable relief for the sick in their homes and care for the inoculated.<sup>385</sup> Six days later, the viceroy issued a decree in Mexico City reflecting this shift in emphasis, making legal there, for the first time, the use of inoculation.<sup>386</sup>

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move the faithful to works of charity, 120 day indulgences were offered "*a cuantos de alguna manera los socorran, a los Médicos, que gratis los curen, a los Enfermeros, que los asistan, a los Sacerdotes, que los confiesen, y a los que en el último transe los auxilien, y exhorten.*" This charitable program contrasted with what had come before, harnessing the efforts of the religious orders in the city and the beneficence of wealthier residents to health care. AGN Epidemias 10 exp. 3, Antequera 11 febrero 1797, Edicto, 187-190.

<sup>383</sup> AGN Epidemias 10 exp. 2, Oaxaca 22 febrero 1797, Edict issued by Antonio de Mora y Peysal, 96-96v. "This capital is the common center of commerce and business for the entire province; never will the absolute severing of communication [with it] be possible, however much caution is exercised . . . . The repeated infringements and the unfortunate effects that have followed are indisputable proof of this truth . . . ." ["*Siendo esta Capital el centro común del comercio y de los negocios de todo el distrito de la Provincia, por más cuidado que se ponga, nunca podrá conseguirse el corte absoluto de comunicación . . . . Las repetidas contravenciones que ha habido, y los efectos desgraciados que de ellas se han seguido, son una prueba incontestable de esta verdad . . .*"] Striking a compromise in the continued interest of public health, only those who had been exposed in the past (mostly adults over seventeen years old) would be granted this free passage, and those who came to the capital for its *tianguis* and stayed overnight would be prohibited from taking shelter in residences with sick patients. (Indians, who made up the majority of these overnights, had other *posadas* in which they could be lodged free of contagion, the edict noted).

<sup>384</sup> Months later, having been rebuked by Fiscal Borbón and the viceroy for overturning the provisions without superior orders, the intendant referred in hindsight to Gil's "famous" treatise as an "*empresa imposible*" and reiterated his view that its provisions would cause incomparably greater harm to the capital than the epidemic itself, relying as the city did on surrounding pueblos even for its tortillas, "*cuyo uso es mucho más general en esta Ciudad que en ninguna otra parte del Reyno . . .*" He made a crucial distinction between goods "*de puro comercio*," such as indigo and cochineal, and "*especies de primera necesidad*" such as flour, meat, and other alimentary goods used for daily consumption, which especially the poorer residents of the city could not do without. AGN Epidemias 10 exp. 2, Oaxaca 14 abril 1797, Intendant to Branciforte, 135-140. From a different direction, Fiscal Borbón came to the same conclusion, remarking that "there are many and diverse roads and paths by which to enter those populations, and none of them is walled, or has doors to prevent free entrance at whatever place." AGN Epidemias 10 exp. 2, Mexico 2 mayo 1797, 141v. ["*. . . hay varios y diversos caminos y veredas por donde introducirse en ellas [poblaciones], como que ningunas están amuralladas, ni tienen puertas, para evitar la entrada libre por cualquiera parte.*"]

<sup>385</sup> For the list of members in Antequera's Junta de Caridad, see AGN Epidemias exp. 2, Antequera 10 febrero 1797, signed Mora y Peysal, 69r. By February 17, 1797, the intendant was reporting "general reception" of the new practice among the city's population: "*es tan general la acogida que ha encontrado, que para hacer ver la multitud de niños que conducidos por sus padres y parientes, se apresuran voluntariamente a recibirla, basta decir que, no habiéndose ocupado casi en otra cosa los cuatro Profesores que actualmente hay en esta ciudad, siempre han quedado muchas criaturas, de todas condiciones, sin que con ellas haya podido hacerse la operación en el tiempo que ellas propias y sus principales deudos los solicitaban.*" In an update sent ten days later, he calibrated his initial optimism, noting that all those who wished their children to be inoculated had appeared within the first few days, and everyone else who feared it or wished to observe the outcome was just beginning to vaccinate their own

The solution was not perfect, but it was a more humane and even more modern program, calibrated to realities on the ground and fully embracing immunization. In effect, the development of official policy at the viceregal “center” was the result of weeks and even months of protests from, and on behalf of, dozens of administratively peripheral places throughout the province of Oaxaca, where early experience with the smallpox epidemic and emergency measures produced varied and valid reactions, anxiously watched by policymakers from Puebla to Mexico City.<sup>387</sup> The adjustment, put otherwise, was not the result of a single instance of protest or complaint (although a riot and the spread of anti-government papers were ominous signs), but rather the cumulative effect of a crescendo of doubt voiced by merchants, parents, priests, physicians, attorneys, and bureaucrats, and channeled with surprising efficiency through the appropriate secular and religious institutional chains.<sup>388</sup> For residents of Teotitlán, the revision would arrive too late, but they and many others had contributed to this reorientation across the viceroyalty.

What appeared with renewed force in the aftermath was a paternalistic medicine that abided by a colonial pact between rulers and ruled.<sup>389</sup> This was illustrated in the

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families. A subsequent update reported success in all but eight cases in which the inoculated patient had died, yet he was so certain that the public would see that other factors had caused these deaths that he ordered a thorough investigation into the inoculators, their assistants, and the methods of convalescence used in each case to save the practice from doubt. See *ibidem*, Antequera 17 febrero 1797, Intendant to Asesor General, 70-71; *ibidem*, Antequera 28 febrero 1797, Intendant to Branciforte, 85r-v; and *ibidem*, Antequera 10 marzo 1797, Intendant to Branciforte, 102-3.

<sup>386</sup> Cordons between the Central Valley and the Mixteca region (in western Oaxaca), Puebla, and Mexico City remained in place for several more months. The promotion, distribution, and reception of vaccine are examined in the following chapters.

<sup>387</sup> Tehuacán’s subdelegate warned Puebla’s intendant in the summer of 1797 that no donations were available to fund the construction of a hospital and that, even if built, it would require significant numbers of troops in order to remove the children from their mothers (“*seno de sus madres*”) and place them there. He declared that their entrails would be torn out of their bodies before they allowed their children to be taken from their arms (“*y abiertamente dicen, que antes les arrancarán las entrañas que a sus hijos de sus brazos para conducirlos a ella [hospital] . . .*”), gesturing emphatically to the results of the enactment of provisions in Oaxaca, where “especially women” had complained bitterly, calling the hospital the house of death (“*la Casa de la Muerte*”). Sobering news arrived in the pueblo that for every fifteen who entered the hospital, thirteen had died. AGN Epidemias 10 exp. 4, Tehuacán de las Granadas 11 junio 1797, José Gonzalez to Intendent Manuel de Flon, 198v-199r.

<sup>388</sup> It was not exceptional to find crown attorney Borbón at his desk summarizing and advising the viceroy on a report written in Antequera only three days earlier, a remarkable feat given slow travel times, the rough terrain through which letters passed, and the additional sanitary measures to which they were being exposed. News traveled so rapidly in large part because those in Mexico City were thirsty for knowledge of events unfolding in Oaxaca. (Communication slowed once Mexico City was struck and administrators turned their attention elsewhere; when smallpox arrived in Huajuapán and Teotitlán del Camino, Oaxaca’s intendant was left on his own in relocating the site of the cordon – the administrative center allowed two months to elapse and thus made itself irrelevant. See the exchanges between crown attorneys in AGN Epidemias 10 exp. 2, ff. 141-154.)

<sup>389</sup> I use the term “paternalistic” in a narrow sense to denote a colonial relationship in which a *patrón* and a dependent engaged in a mutually reciprocal relationship of obligation, expectation, and support. In colonial Mexico, Indians were usually accorded special legal and fiduciary considerations, for example, construed as especially vulnerable subjects, and in return they pledged loyalty to the Spanish king. The poor in general were also subject to special considerations, as was true of many Catholic societies in the early modern period. As an example of this kind of paternalism during the epidemic: the order from Oaxaca’s intendant that the city’s physicians take turns attending the sick poor for one hour in each *barrio* daily

deliberations of the crown attorney assigned to advise on Teotitlán's uprising.<sup>390</sup> Citing a number of Laws of the Indies in support of a lenient judgment, he argued that rebellious words without arms did not necessarily make of Indians criminals, that resisters were to be persuaded and made to understand by religious authorities and gentle means (*por medios suaves*), that even in riots the dispatch of armed men to pacify was prohibited by law and that viceroys were expressly given the power to forgive acts of rebellion, even if against the king. The mere presence of troops had been enough to calm residents, he noted, and concluded that there was no need to continue with criminal proceedings against the attorney or jailed *indios*. So while repression had been swift and seemingly harsh, the crown confirmed use of force as a last, highly distasteful measure.<sup>391</sup>

Precisely these paternalistic, charitable, and familial bonds and obligations had been left out of the program adapted from Francisco Gil's dissertation, but at every turn actors remarked on the omission. Attempting to resolve the shortage of income in Teotitlán, Fiscal Valenzuela supported further sales of textiles but stressed that the usual buyers should be prevented from taking advantage of the emergency situation to try to pay the community less than market value, not believing that one could be so oblivious to obligations established by "religion, humanity, and the sacred ties of civil society . . ."<sup>392</sup> The bishop of Oaxaca's *promotor fiscal* noted that just when residents should have been dedicating themselves to the city's urgent necessities, their hands had been tied because of orders to denounce the sick ("*se ve ligado, y como con las manos atadas, para ejecutarlo . . .*"): either the needy were hidden and not discovered in time, or those ordinarily willing to provide charity feared they would aid criminals.<sup>393</sup> The viceroy and his advisors, learning of the split in opinion between Oaxaca's top secular and religious

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focused explicitly on the state's obligations toward impoverished communities, who were thought to need, but also consistently lack access to, medical care (an arrangement we might take as a kind of socialized medicine). AGN Epidemias 10 exp. 2, Antequera 28 febrero 1797, Intendant to Viceroy, 85r-v.

<sup>390</sup> AGN Epidemias 15 exp. 2, Mexico 16 abril 1796, Fiscal de Real Hacienda Alva, 60-64.

<sup>391</sup> For their part, community members implicitly or explicitly knew that the Spanish legal system placed Indian pueblos directly under the protection of the viceroy, the king's representative in Spain's colonies, hoping and even knowing when they subverted the cordon between Antequera and their town that there would be justice and remediation in a legal overture to the benevolent royal figure. This is true even if authorities wanted to see the lawyer behind the insurrection, popular disobedience, and the attempt to petition the viceroy. (Melgar expressed surprise at the actions of his *indios* and blamed the consequences on the influence of the lawyer, citing his words of encouragement and suggestion that the provisions would be overturned. "*Era menester un influjo tan poderoso como lo es el de un abogado para los Yndios a quien miran como a celestial oráculo, para que los de esta cabecera hayan atentado contra las Providencias de la suerte que lo han hecho: yo podré jurar mil veces que antes de tal impresión estos miserables se manejaron con tanta subordinación, que los hombres vivían contentísimos.*" Of course, there had been a good deal of dissatisfaction expressed prior to the lawyer's intervention, but Melgar's was the tidier explanation for the many problems that had recently befallen the town under the his watch. AGN Epidemias 15 exp. 8, Teotitlán 12 octubre 1796, Esteban Melgar to Intendente, 162r-v.)

<sup>392</sup> AGN Epidemias 10 exp. 6, Mexico 15 febrero 1797, Asesor General Valenzuela to Viceroy, 244v. [" . . . *la religión, la humanidad, y los sagrados vínculos de la sociedad civil . . .*"] Crown functionaries such as Valenzuela were expected to keep up tribute and commerce in a time of crisis, and also aid as much as possible the king's vassals. These interests may seem at odds, but they were not necessarily – the first, particularly collection of tribute, actually depended upon successful achievement of the second.

<sup>393</sup> AGN Epidemias 10 exp. 3, Antequera 7 febrero 1797, Promotor Fiscal Mantecon to Bishop, 180r-v.

authorities, were concerned by the lack of cooperation and repeatedly instructed the intendant to proceed in accord with the bishop to avoid “popular rumors,” “so that the public understand that the two authorities are united, as is proper, in such an urgent issue . . .”<sup>394</sup> Perhaps as a result, or because of the growing epidemic, Oaxaca’s intendant wrote just days later that the cathedral chapter, in accord with the bishop, had now resolved to hold a *novenario* for Nuestra Señora de la Soledad, the city’s patron, in her limestone basilica, with members of the city council pledging to attend the processions “according to practice in similar occasions.”<sup>395</sup> The immunization program introduced in the following years, to which the following chapters turn, would make far better use of these “sacred ties of civil society.

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<sup>394</sup> AGN Epidemias 10 exp. 1, Mexico 19 febrero 1797, Viceroy to Intendant of Oaxaca, 33r-v. He restated the importance of harmony and unity of authorities in an epidemic nine days later, *ibidem*, exp. 2, Mexico 28 febrero 1797, Branciforte to Intendent of Oaxaca, 84r-v. [“. . . *en fin que el Público comprenda que estando como es debido unánimes y conformes los dos potestades en una ocurrencia tan urgente y atendible se persuada a que solo se trata de su beneficio . . .*”]

<sup>395</sup> AGN Epidemias 10 exp. 2, Antequera 3 marzo 1797, Intendant to Viceroy, 98r-v. [“. . . *según lo ha practicado en ocasiones semejantes.*”]

## CHAPTER FOUR

### Minerva's Children: Promoting Preventive Medicine, 1780-1804

In the last two decades of the eighteenth century, enthusiasts in New Spain began writing on new methods of protection against smallpox.<sup>396</sup> These works were not mere theoretical or philosophical exercises circulated among members of a restricted elite – the kinds of scientific productions at the center of recent attempts to restore Latin American science to its proper global perspective – but rather programmatic works aimed at producing immediate effects in the practice of medicine.<sup>397</sup> Those who wrote on inoculation, or variolation, and then, beginning in the nineteenth century, on Edward Jenner's cowpox vaccine, were attempting to coax skeptical audiences of officials, parents, priests, and physicians into adopting or submitting their children to a new and still very risky medical procedure. An examination of these overlooked “treatises” (some were actually plans for implementation, some instruction manuals, some pastoral letters, some legal advice) reveals much about the way contemporaries constructed, represented, elaborated, and thought about medical science in general, and its relation to late colonial religion in particular. In these works immunization was “sacralized,” consecrated through a variety of discursive strategies, several of which are analyzed here. I argue that those who supported this modern medical “miracle,” as it was sometimes called, tended to inflect their arguments in favor of it with colonial values, rhetoric, and rituals, with the result that it becomes difficult to separate out professional and lay or science and religion in these moments of promotion and discovery. Immunization campaigns provide a testing ground for the conventional claim that the most persuasive criteria of enlightened medical practice in this period were objectivity, empiricism, rationalism, and experimentation.

The point of departure in this and the following chapters is an interpretive problem arising from the distribution and implementation of immunization against smallpox: if in Mexico, along with other Spanish territories, vaccination was not obligatory until the late nineteenth and early twentieth centuries, how was a medical innovation still viewed as risky and invasive put into practice?<sup>398</sup> Through what media

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<sup>396</sup> Inoculation did not become official policy in New Spain until the smallpox epidemic of 1797. As argued previously, the primary impulse of officials and community leaders during times of epidemic was still toward some form of isolation and quarantine, thanks in part to the royal endorsement of Francisco Gil's *Disertación físico-médica* after 1788. Without rejecting inoculation entirely, Gil presented the operation as risky without appropriate precautions to halt communication of individuals and communities and stressed instead the benefits of isolation.

<sup>397</sup> See Jorge Cañizares-Esguerra, *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World* (Stanford: Stanford University Press, 2006).

<sup>398</sup> Historians have used various criteria to determine this issue of obligation. Mexico's Consejo Superior de Salubridad (Superior Health Council) made obligatory the isolation of smallpox victims and vaccination for children over six months of age on September 30, 1882, but the issue of *enforcement* remains in doubt. See Francisco Fernández del Castillo, *Los viajes de don Francisco Xavier de Balmis* (Mexico: Sociedad Médica Hispano Mexicana, 1985 [1960]), 284.

and by what methods were people persuaded to take up cooperative positions and favorable dispositions? Rather than ask why the massive vaccination campaigns failed or encountered resistance, I examine the process by which residents were encouraged to embrace a new and dangerous procedure at the levels of discourse (in this chapter) and practice (in the following two).

This chapter considers early moments of promotion, beginning with the Spanish context. As intellectuals debated the issue of immunization, many physicians and others seeking to convince the government of its benefits framed the issue in starkly utilitarian terms, a fitting approach as Spain clashed with its imperial rivals over access to trade and mineral wealth in its American colonies. As physicians turned to lay audiences, they structured their medical arguments in many of the same practical and theological registers, best illustrated by Esteban Morel's unpublished "Disertación sobre la utilidad de la inoculación" (1780), written by the French physician to dispel common arguments against it and document the first experiments on residents in Mexico City. Morel's contemporaries would have considered him an expert in his field, an empiricist, and the epitome of enlightened rationalism, things that he clearly valued in his work as in his life. Yet within the treatise he leaned heavily on religion to make his case, which requires explanation given his supposed heterodoxy and eventual demise before the Inquisition.

Not until the 1790s is widespread use of inoculation documented for New Spain. Still a dangerous practice, nevertheless many subjected their children for the first time in this period. I explore the channels through which authorities prepared subjects for this medical innovation and show that the home was being conceived as a safe space of convalescence for the inoculated patient, purposefully far removed from the diseased site of the hospital. Again, I draw on an overlooked document, an "apologia" (as the president of the *audiencia* called it) on vaccination submitted by crown attorney Lorenzo Hernández de Alva to Viceroy Branciforte. Faced with a potentially disastrous epidemic and eager to alleviate fears and, administrators sought to disassociate inoculation from the hospital, which was imagined as a place of sickness and suffering.<sup>399</sup>

Finally, I address some of the more obscure promotional aspects of the Royal Philanthropic Expedition on Vaccination, which left from the port of La Coruña, Spain in November of 1803 and traversed all four continents of Spain's empire to deliver vaccine, instruct local physicians in the method, and establish centers for the maintenance of viable lymph. Francisco Xavier de Balmis, the director of the expedition, was soon forced to come to terms with the realities and complexities of colonial opinion, which stressed the importance of ceremony and ritual in the propagation of vaccination and insisted that practitioners not be restricted to trained physicians, particularly in rural areas where these were scarce or unavailable. Two unpublished documents are analyzed: the original proposals for the expedition submitted by a Guatemalan physician, José Flores, during a layover in Spain, and a pastoral letter (*carta apostólica*) circulated by the regalist bishop of Oaxaca, Antonio de Bergosa y Jordán, to the parishes in his diocese with instructions for, and in support of, vaccination.

Subsequent chapters will draw on other episodes to understand how immunization was put into practice in epidemic crises and health campaigns, how colonial society

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<sup>399</sup> The sentiments are contiguous with those traced in the previous chapter, where hostility toward the provisional hospitals established in Oaxaca revealed that parents perceived these places as dangerous, inadequate, distant, and unnatural, among other things.



engaged with medical practice on the ground, and in what ways these local sites of knowledge production and consumption accommodated and modified the transatlantic processes, conversations, and adaptations analyzed in this chapter. Taken together, this approach shows how experimental science, over time and through several local and imperial initiatives and programs, became saturated with the values of colonial societies.

### **Definition and Debate in the European Context**

Inoculation made its way to England from Turkey and then to England's American colonies as early as the second decade of the eighteenth century. Around that time British doctors and travelers began observing and publishing accounts of the facility of local practitioners in Istanbul with a needle, which was used to make small incisions in the skin, introduce pus material from infected individuals, and provide some immunity against more serious illness in the future. The procedure's invasiveness declined a number of ways over the eighteenth century, in some cases responding to the demands of patients. For example, the preparatory period prior to inoculation, which included bleeding, purging, and a strict diet to improve the patient's constitution, was reduced from a month or even six weeks to just a few days, and at times eliminated altogether. Around 1757, an innovation introduced by Robert Sutton, who used a lancet instead of needle to make a lighter incision just under the surface of the skin, inspired surgeons to follow his lead. As a result of this extended period of trial and error in England, outcomes improved, which encouraged practice by laypeople such as parents and amateur (non-university trained) inoculators.<sup>400</sup>

In Spain and much of the rest of Europe, medical professionals were far less enthusiastic about inoculation with human pox. Critics correctly pointed to the possibility of death, questioned the moral grounds on which disease was introduced into an otherwise healthy person, and tended to prefer to put the operation into practice only when an outbreak of smallpox was imminent or present. As in Boston, in Spain the operation was prohibited during ordinary periods, while in epidemics doctors and surgeons were expected to notify the government upon proceeding, and all involved were prohibited from communicating with anyone outside the infected population while contagious. Among the professionals in Spain who supported inoculation was Miguel Gorman (who studied with Sutton in London) and a pair of Irish doctors, Bartolomé O'Sullivan and Timothy (Timoteo) O'Scanlon, the latter the author of the widely influential *Ensayo apologético de la inoculación* (1792).<sup>401</sup> As O'Scanlon pointed out in

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<sup>400</sup> Peter Razzell, *The Conquest of Smallpox: The Impact of Inoculation on Smallpox Mortality in Eighteenth Century Britain* (Sussex: Caliban Books, 1977), 1-17; Susan and Stanley Plotkin, "A Short History of Vaccination," in *Vaccines*, 4<sup>th</sup> edition, eds. Stanley Plotkin and Walter Orenstein (Philadelphia: Saunders, 2004), 1-15; Donald Hopkins, *Princes and Peasants: Smallpox in History* (Chicago: The University of Chicago Press, 1983); Liliana Schifter Aceves, *Medicina, minería e inquisición en la Nueva España: Esteban Morel, 1744-1795* (México: UAM Xochimilco, 2002), 13-15; and Harry Wain, *A History of Preventive Medicine* (Springfield, IL: Charles C. Thomas, 1970), 173-195. The reduction or elimination of the preparatory period had several causes: patients, especially during epidemics, were unwilling to wait the required amount of time for preparation and demanded the operation immediately, but also because the preparation period was costly in terms of the expertise required and labor lost for the patient.

<sup>401</sup> O'Scanlon spent time as a student in Paris and served in the Spanish army, and had much experience with both civilian and military epidemics. In 1792 he claimed to have devoted himself to studying the practice of inoculation for more than thirty-eight years, and particularly as its benefits redounded to the

this treatise, written as a member of Royal Academy of Medicine (which at the time was attempting to resolve once and for all the question of inoculation's utility), smallpox was "a venomous scythe" (*una guadaña venenosa*) that left blind and broken a quarter of the human race, making them a heavy burden for the state. (XV-XVI) Extrapolating from the numbers of blind he had personally observed in the streets of Madrid, he estimated that 33,000 souls across the peninsula owed their sorry condition to smallpox. "How many men and women, blind as a result of smallpox, are seen in the streets every day, producing horror and compassion, whose death would be less burdensome for the State than the miserable life they enjoy, to their own detriment and of Society?" (XVI) These 33,000, "who increase consumption and expenses without contributing to the cultivation and promotion of the Arts," (XVIII) were along with the many who died a disastrous burden for the Spanish crown.<sup>402</sup> O'Scanlon predicted a sea change to come:

The time will arrive (and even appears not too distant) when Spain, following the example of England, Russia, and other parts of Europe, will adopt generally and without suspicion this very useful operation. By it, all without exception will contribute to the good of Society, the growth of the population, and the promotion of the arts and industry. Each individual, as a member of the same political body, will help bring about this public benefit . . .<sup>403</sup>

The utilitarian mantra in this era of enlightened political philosophy – *fomento, industria, población, beneficio público* – sought to harness the salvific powers of science for economic growth and political prestige, and O'Scanlon revealed himself equally susceptible to the spirit of the age.<sup>404</sup> His optimism may seem callous insofar as he

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Spanish *nación*, "propagando con mis escritos, experimentos, y persuasión, una práctica que en grado superlativo está íntimamente enlazada con la prosperidad del Estado en cuanto conduce al aumento de la población, de que se deriva el de las artes, e industria." Timoteo O'Scanlan, *Ensayo apologético de la inoculación, o demostración de lo importante que es al particular, y al Estado* (Madrid: Imprenta Real, 1792), xxxv-xxxvi.

<sup>402</sup> Noting that Barbastro's ayuntamiento had prohibited inoculation in the city in 1791, O'Scanlan wrote that a prelate, "libre de preocupaciones, quiso favorecerla a fin de preservar estos inocentes de que fuesen víctimas de las viruelas naturales, y que varios Párrocos del Reyno de Aragón, han animado, y persuadido a sus feligreses a practicarla, haciéndoles ver su utilidad. ¡Quién tal creyera!" O'Scanlon, *Ensayo apologético*, xxviii. The practice was in more common use in Spain than in New Spain at the time – O'Scanlon reported more than 31,600 between 1770 and 1792, according to the *Gazetas de Madrid* and other sources.

<sup>403</sup> O'Scanlon, *Ensayo apologético*, xxxiii-xxxiv. ["Cuántos ciegos y ciegas de resultas de las viruelas naturales se ven en las calles cada día, causando horror y compasión, que su muerte sería menos gravosa al Estado, que la vida miserable de que gozan con detrimento propio, y de la Sociedad?" ". . . que sin servir para el cultivo, y fomento de las Artes, aumentan el consumo y el gasto . . ." "Llegará, pues, tiempo (y aun me parece no está lejos) que la España, siguiendo el ejemplo de la Inglaterra, la Rusia, y las demás partes de la Europa, adopte generalmente, y sin recelo esta utilísima operación. Todos sin diferencia contribuirán por medio de ella al bien de la Sociedad, al aumento de la población, y al fomento de las artes, y de la industria. Cada particular, como miembro del mismo cuerpo político, ayudará a promover el beneficio público . . ."]

<sup>404</sup> For a discussion of the economic, scientific, and imperial dimensions of natural history collecting in these decades, see Paula de Vos, "Natural History and the Pursuit of Empire in Eighteenth-Century Spain," *Eighteenth-Century Studies* vol. 40, no. 2 (2007): 209-239, and Cañizares-Esguerra, *Nature, Empire, and Nation*, 56-60.

viewed the decimation caused by epidemics in terms of sheer numbers and wealth lost to the state, but his was a common tactic among promoters, who found themselves struggling to make their case for immunization right up until the end of the century. The consequences of smallpox outbreaks were painfully salient to those in positions of power: the disease tended to strike the youngest of any given population, who lacked immunity, leaving the future producers of the empire disfigured and, as O'Scanlon stressed, sometimes blind. Like O'Scanlon, Francisco Salvá y Campillo, perhaps the most prominent doctor in Barcelona and one of the first peninsular physicians to accept the operation, wrote simply that inoculation ultimately conserved more human life than the alternative, and thus it could not be reasonably said that it contradicted the law of God.<sup>405</sup>

Not until the eve of the appearance of Edward Jenner's vaccine – which replaced human lymph with a more benign form of cowpox that eliminated the dangerous period of contagion – did the Spanish Crown give its support to immunization in a royal *cédula*. Even as the tides changed and enlightened despots embraced an invention seen as beneficial to health and industry, however, debates in Europe would continue to be widespread and voluble precisely because so much was at stake. Some of the same issues repeatedly surfaced. How could rulers justify support of an operation that made healthy people sick? What were the moral implications of this posture? As doubts lingered, the polemic in Spain surrounding inoculation tended to position moralists pointing to the not insignificant risk of death against the increasingly persuasive, utilitarian view. There is an assumption that only reactive traditionalists opposed inoculation; for example, it has been suggested that the influential writers in Spain most strongly opposed to inoculation, such as *presbítero* Vicente Ferrer – historian of the Royal Cabinet of Natural History and former professor of philosophy and theology at the University of Toledo – aligned in the crucial decade of the 1780s with the “general posture of the clergy” despite his “thirst for openness and modernity, in spite of his wish to mimic Feijóo by making the light of reason shine on a superstitious tradition filled with preconceived notions in Spain . . .”<sup>406</sup> The implication is that Ferrer's stance on inoculation was incongruous: backward, superstitious, and suspicious in an age of modern medicine and change.

This assumption that opponents were somehow oblivious to reality ignores the widely shared concern among contemporaries that the operation in fact dangerous, and that citizens of enlightened states had a right to choose to assess and undertake such a risky procedure. Examining more closely Ferrer's 1785 line of attack of inoculation, the *Juicio o dictamen sobre el proceso de la inoculación*, it becomes clear that his critical stance echoed that of some highly influential medical doctors. For example, José Amar, president of Spain's Protomedicato, registered his own objections to inoculation on the reasonable grounds that it could harm the patient, particularly in a country where medical

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<sup>405</sup> Pilar León Sanz and Dolores Baretino Coloma, *Vicente Ferrer Gorraiz Beaumont y Montesa (1718-1792), un polemista navarro de la Ilustración* (Pamplona: Fondo de Publicaciones del Gobierno de Navarra, 2007), 229-232.

<sup>406</sup> León Sanz and Baretino Coloma, *Vicente Ferrer*, 236. [“*postura general del clero,*” “. . . afán de apertura y modernidad, pese a su deseo de remedar a Feijoo, haciendo brillar la luz de la razón, sobre la tradición supersticiosa y llena de ideas preconcebidas que existía en España . . .”] O'Scanlon took on Vicente Ferrer to expose the “*calumnias*” of his major work, O'Scanlon, *Ensayo apoloético*, xxxiv-xxxv.

professionals remained scarce.<sup>407</sup> Amar's objections were practical, centered on circumstances of execution and mastery of the procedure in many of Spain's villages, which lacked physicians, surgeons, pharmaceuticals, and even barbers. As historian and demographer Robert McCaa writes, the aversion of Madrid's cautious Protomedicato "was based not on religion, dogma or tradition [alone], but on its own scientific investigations regarding the merits of inserting live smallpox matter into the bodies of healthy individuals who then might be permitted to expose themselves to the general populous and thereby spread the contagion."<sup>408</sup> The same cautious stance appeared in the criticisms of Menós de Llena, a Catalonian physician with medical experience in the army, who in his *Memoria contra la inoculación* – published the same year as Ferrer's attack – argued that inoculation took as many or more victims as smallpox (unlikely, but possible in instances given the depth to which incisions were sometimes still made in the skin), that it increased the risk of epidemics (possible, since it was difficult to isolate contagious patients), and the inoculated could yet acquire further sickness.<sup>409</sup>

Vicente Ferrer's objections were grounded in not one, but two or more overlapping frameworks: on one hand, the operation was fundamentally a religious and moral question – those opting to undergo it made a choice subject to moral restrictions and could subsequently be accused of sinning by willingly placing life in danger. Yet simultaneously, as he knew, practitioners working and writing within the scientific community were critical of its safety, and so Ferrer resembled Menós de Llena when he pointed out the risk of physical deformity and death and the possible exposure of cities and towns to smallpox epidemics. In uncertain times, a practice rejected as *contra natura* could just as easily be rejected on numerous practical and empirical grounds. It is a point worth stressing, particularly when trying to understand the many lines of argumentation promoters of the practice in New Spain would find themselves refuting when writing in favor of immunization's adoption.

In 1785, the alternative proposed by Vicente Ferrer was the same as that of the Spanish surgeon Francisco Gil, an approach that would remain definitive for at least a decade in Spanish America: both affirmed the necessity of isolation in epidemics and the importance of hospitals or isolation wards where the sick could be placed and treated.<sup>410</sup> Reasonable fears and an overall dearth of experience motivated their cautious approach

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<sup>407</sup> In his 1774 *Instrucción curativa de las viruelas, dispuesta para los facultativos y acomodada para todos*, published in Madrid and cited in León Sanz and Baretino Coloma, *Vicente Ferrer*, 229.

<sup>408</sup> McCaa also criticizes those who champion the operation; he points to the roles of hospitals, sanitation, and eating habits in declining mortality, the numerous deaths resulting from inoculation, and the fact that the "artificial" version could be as disfiguring as *viruelas naturales*. "Strangely," McCaa continues, "medical historians, particularly of Spain and Spanish America, ignore the vigilance of Spanish authorities and instead celebrate each manifestation of the inoculationist's art as a victory for medical progress." Robert McCaa, "Inoculation: An Easy Means of Protecting People or Propagating Smallpox?" in *Boletín Mexicano de Historia y Filosofía de la Medicina* vol. 1, no. 2 (1998), 5.

<sup>409</sup> "Hágame cargo asimismo de que hay en nuestra España muchos pueblos sin médico, que se valen del cirujano, del boticario y aun del sangrador, pareciéndoles que solo por nombrarse tales saben ya curar; y ellos, sin tener presentes los perjuicios que pueden causar, ni que contravienen a nuestras sabias leyes, que expresamente lo prohíben, se arriesgan a dar dictamen, persuadidos de que lo entienden, porque les cubre el velo de la ignorancia." León Sanz and Baretino Coloma, *Vicente Ferrer*, 233-4.

<sup>410</sup> See Chapter Two for the main prescriptions of Gil's work.

and ultimately delayed resolution on the matter, and as a result those promoting inoculation in Mexico were well aware of the necessity of making an especially strong case for their positions. In an era when the prestige of science was still growing, enthusiasts such as Timoteo O'Scanlon became masters of rhetoric, having not only to make their case, but to make it well, and to make it to a lay audience well beyond policymakers. As the tide of opinion ebbed and flowed in the following years in Mexico, scientists, administrators, and priests continued to debate the morality of the practice, the importance of experience, and the right of citizens to submit voluntarily. A survey of the first major treatises and debates on inoculation in Mexico provides a rich territory across which to explore the tactics employed by those officials and physicians who wished, at times desperately, to present the operation as beneficial to the colony and its inhabitants.

### **The First Cut: Divine Benefit and Human Action in Esteban Morel's "Disertación"**

In 1779, shortly after the most severe smallpox epidemic of the century arrived in the viceregal capital, Mexico City's *ayuntamiento* (city council) commissioned Esteban Morel, a French physician recently arrived in New Spain, to write a report on the usefulness of inoculation. A testament to the municipal body's interest in experimentation, one of the halls of the hospital of the convent of San Hipólito, dedicated to the care of mental patients from across the colony, was set aside exclusively for inoculation, with Morel placed in charge of it. Yet despite a notice to the public advertising the availability of the practice for individuals of both sexes aged three and up at the clinic, under the care of "Doctor don Esteban Morel, trained and expert in the matter [*ejercitado y Perito en la materia*]," who had conducted successful experiments in his own home, few came, and relations between Morel and the city council soured when the latter refused to pay him or publish his treatise, titled "Disertación sobre la utilidad de la inoculación, escrita de encargo de la nobilísima Ciudad de México."<sup>411</sup>

Though only a recent arrival in New Spain, Morel betrayed in his unpublished work and in comments in subsequent Inquisition hearings a deep knowledge of colonial society (**Figure 4-1**).<sup>412</sup> He had to convince a skeptical, uneasy, inexperienced public to

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<sup>411</sup> Schifter Aceves, *Medicina, minería e inquisición*, 18-19. The author strikes a tragic note, lamenting the fact that more people did not take note of Morel's document in 1779 and assuming the great extent to which inoculation was responsible for the mildness of the 1797 epidemic. "*Nos invita a pensar que de haber tenido mayor difusión y apoyo en su momento [La Disertación], la inoculación pudo haberse puesto en práctica durante la epidemia de 79 . . .*" As suggested above, the widespread application of the practice in the midst of the 1779 epidemic, without appropriate precautions and training, was not only an impossibility, but could have brought equally serious harm to the population.

<sup>412</sup> Morel graduated with his degree in medicine from the University of Montpellier, which specialized in nosology (the classification of diseases) and launched him into a prestigious professional career in the service of the French and Spanish empires. He first traveled the French Caribbean as court physician, where he worked in the military hospitals of the island of Guadeloupe, certifying surgeons and apothecaries and making visits to pharmacies to inspect medications and prescriptions. Following this official position, he made stops in Venezuela, Cuba, and New Orleans, possibly for reasons of health, before moving to Mexico City in 1778. "*Este 'peregrinaje', como él mismo lo califica, le permitió el ejercicio de su profesión en varios climas y distintas poblaciones, lo cual a su entender era una experiencia invaluable en su vida profesional; en sus propias palabras dice que las peregrinaciones 'hacen al médico más apto para la curación de las enfermedades, por la variedad de ideas que produce la observación de las diferencias y de sus efectos en los individuos humanos; Por cuya razón ha peregrinado Hipócrates ya su ejemplo otros grandes hombres.'*" Schifter Aceves, *Medicina, minería e inquisición*, 37. In his applications for positions,

take notice of a practice with which he was familiar and to submit their children. To that end, he set about leveraging his own experience and the otherworldly in order to make an exotic medical operation somewhat less foreign.

*Disertacion*  
*Sobre la utilidad*  
*de la*  
*Inoculacion*  
  
*Escrita de encargo de la Nob<sup>ma</sup>*  
*Ciudad de Mexico*  
  
*Por el Doctor D<sup>o</sup> Esteban Enrique Morel*  
*Delas Universidades de Aix en Provenca,*  
*y de Montpellier; Medico por el Rey,*  
*que fuè en la Isla de Guadalupe, &c.<sup>o</sup>*

Figure 4-1. Title page of the “Disertación sobre la utilidad de la inoculación” by Dr. Esteban Morel, “from the universities of Aix-en-Provence, Montpellier, etc.” Courtesy of the Archivo Histórico del Distrito Federal.

Morel’s *Disertación* drew heavily from his compatriot Charles Marie de la Condamine’s *Memoire sur l’inoculation de la petite verole*, published in France in 1754 and translated by Rafael Osorio into Castilian three years later (it was denied publication in Spain for two decades). On the first page, Morel conjured the frontispiece that he thought might accompany the published version: a Minerva, goddess of wisdom and medicine’s muse, standing with shield in the portico of the capital’s municipal building, with the city’s coat of arms in the center. In dark shadows below this, Morel envisioned a group of smallpox victims, which “would represent the most outstanding miseries of smallpox and the multitudinous deaths and deformities it causes.” Off to the right would

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we can assume some purification of his motives to practice medicine (especially given his early interest interested in mining, with stops in Guanajuato and Real del Catorce before arriving in the capital).

be another group, this one “in a pleasing light shared with the Mexican Minerva, with toys for children, one of whom in the hands of the inoculator. It would represent the contentment, joy, and absence of risk.” Below this tableau, a verse from Book XV of Ovid’s *Metamorphosis*, in which Aesculapius, the healing god, arrives in Rome during a great plague after all medical skill in the city is rendered useless, “so that by his presence he might end the death of the race.”<sup>413</sup>

Though never realized, Morel’s imagined scene of playing children was intended to convey the absolute accessibility of the practice. Unfortunately residents of Mexico City saw neither Morel nor his operation as Aesculapiuses: the inoculation hospital and beds that had been prepared lay hopelessly empty, as he reminded the city council in a prefatory letter, in which he thanked the members for their support and commented on the Christian piety and acts of charity he had witnessed in the streets of the city throughout the epidemic.<sup>414</sup> The only residents to undergo inoculation were operated on in their homes or in “a small hospital” he paid to have constructed in his own home (probably some beds in a partitioned room). The results of these experiments were largely successful, but he could do no more: in one week alone, ten who had agreed to place themselves under his care and were in the process of being prepared for the operation were lost to the ravages of smallpox.<sup>415</sup>

Perhaps hoping to move members of the council to take further proactive steps, most of the letter contained descriptions of destruction inflicted by the disease. Morel insisted that it was too terrible to describe, and then described it in detail anyway, as in the case of the man, covered in pustules, whose facial deformities exceeded those of the leper, or the mother whose child was so transformed she no longer recognized him, and the afflicted whose throats were so inflamed that they could no longer even express their needs and suffering.<sup>416</sup> More impressive to the man of science was the loss of rational faculties that seemed to accompany illness: Morel portrayed a learned man who had seemingly gone mad from the disease, having lost his sense of self along with his judgment and rationality. No one was exempt: even kings and princes, once masters of

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<sup>413</sup> AHDF vol. 3678, exp. 2, Esteban Enrique Morel, “Disertación sobre la utilidad de la inoculación, escrita de encargo de la nob.ma Ciudad de Mexico,” 1r. [“. . . representaría las mas sobresalientes miserias de las viruelas, y la muchedumbre de muertes y de deformidades que causan.” “. . . en una luz agradable, de que participarían con la Minerva Mexicana, acompañado de juegos de niños, uno de los cuales estaría en manos de el inoculador. Representaría el bienestar, la Alegría, y el ningún riesgo de los inoculados.”]

<sup>414</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 4r-v.

<sup>415</sup> “. . . vimos a muchos hombres distinguidos, desempeñando el concepto de su Cristiana piedad, y de su celo patriótico, hacer distribuir los alimentos, las medicinas y demás socorros temporales a los necesitados, en sus casas; al paso que, vigilantes como buenos pastores, los clérigos, nombrados por el Ill<sup>mo</sup> S<sup>or</sup> Arzobispo . . . ministraban, con un celo Apostólico, el consuelo y demás auxilios espirituales.” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 5v.

<sup>416</sup> “. . . cubierto de pústulas asquerosas, es mil veces mas horrible que el mas abandonado leproso. Que monstruosidad en el rostro! Los ojos se le han cerrado; ya no tiene aquellos espejos de el alma; sus labios regordidos, pálidos o morados, se inundan de una saliva espesa e incesante: ya no se le distinguen facciones; una hinchazón universal de la cara, las borró todas. La madre tierna no reconoce a su hijo; dichosa en algún modo; siente menos el horror que le inspiraría. El infeliz quiere pedir y no puede; impedido en su garganta inflamada, su voz ronca[,] no expresa sus necesidades: los quejidos y los gemidos, los ayes y los suspiros, son las expresiones de sus dolencias y de su martirio.” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 7r-v.

nature, the gods, and man, could barely muster their own faculties of reason.<sup>417</sup> Morel asked the council members to imagine themselves in these circumstances. “An honest passion inclined you to a maiden as lovely as she is well-dressed,” he wrote.

You imagined having a happy life with her in the sacred bonds of matrimony . . . You will not arrive at her chamber, sad *joven!* An intolerable stench, a stench that brings fainting, repels you from the beloved garment you seek: perhaps in a few days you will be able to see her, but then you will find the fury of the smallpox engraved on her once beautiful face, now destroyed.<sup>418</sup>

Everyone, Morel insisted, was a potential victim. Fortunately, they could make the choice not to live to see this grim future reality, in which the faces of marriageable maidens were disfigured and darkened. “The wise author of all has given mankind understanding for his preservation, as to beasts their simple, shabby instinct.” The exercise of this faculty would inevitably turn people to inoculation, and they would flock to Minerva, “laughing and playing in their rooms and courtyards.”<sup>419</sup>

But how to convince the rest of the population to take shelter beneath Minerva’s shield? The body of the treatise, a lengthy affair studded with citations to European experts, began with straightforward definitions of inoculation, depictions of the procedure, and a statement of its purpose.<sup>420</sup> It then turned to a complicated history that may have been over the heads of many and possibly contributed to the council’s decision not to publish the text. Morel first described his own experiences on the Isle de Guadeloupe, where he claimed to have witnessed only four or five die out of more than 8,000 inoculated (of those he supervised himself, not one died).<sup>421</sup> He insisted that the

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<sup>417</sup> “*Veo otro que, furioso, se levanta sobre su cama . . . dónde va? Qué va a hacer? No lo sabe, perdió la más preciosa de sus potencias, el juicio, la razón, ya no es aquel Matemático que sujetaba el curso de los astros a su calculo; no es aquel teólogo que enseñaba las verdades eternas; no es aquel jefe que mandaba a una población o a un Reino, digno tal vez de mandar a un mundo entero: es un viroloso . . . lo dije todo.*” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 7v-8r.

<sup>418</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 8v. [“*Una pasión honesta os inclinaba a una doncella tan linda como bien prendada . . . Pensabais pasar con ella una vida feliz en los sagrados ñudos de el matrimonio . . . no lleguéis a este aposento, Joven triste! Un fetor intolerable, un fetor que desmaya, os ha de apartar de la prenda querida que buscáis: a caso dentro de algunos días podréis verla: mas entonces encontrareis engravado el furor de las viruelas en su rostro antes hermoso, y ya destrozado.*”]

<sup>419</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 9r. [“*El sabio autor de todo ha dado a el hombre el entendimiento para su conservación, como a los brutos el mero y pobre instinto. . . riendo y jugando en sus cuartos y en los patios.*”]

<sup>420</sup> “*La Inoculación es una operación que comunica las viruelas a quien no las ha tenido.*” “*Se hace introduciendo por el cutis, abierta muy superficialmente, un poco de materia de las viruelas.*” “*Su fin es de precaverte de una enfermedad muy terrible y quasi inevitable, por medio de una muy ligera por si, y sin riesgo.*” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 10r.

<sup>421</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 15v, 24r. “*He visto, en la Guadalupe, las escasezes que, en algún tiempo, padecían los ricos, como residentes sobre sus amenas haciendas, por el justo temor de traer de los puertos, con los menesteres que de ellos sacan diariamente, un contagio que podía, comunicándose a sus esclavos, hacerles perder no solamente la esperanza de una cosecha a la cual no se podría ya atender; sino aun los bracos que les habían de dar otras . . . Si se temía por los esclavos, más temía cada uno por su persona, por la de su esposa y de sus hijos, hasta que, establecida generalmente sobre sus aciertos la inoculación liberó el país de una peste que, gracias a la Divina Providencia, no repite en el individuo a quien ha tocado de cualquier modo.*”



wise all agreed on its usefulness, noting that among the *gente distinguida* of all the European states, “it has already become, if I may put it this way, fashionable [*de moda*],” and especially among princes and kings, who submitted willingly to it.<sup>422</sup> Morel mentioned the tender, loving instinct of mothers in Tuscany, who according to Doctor Peverini inoculated their sleeping children while hidden from husbands and fathers, who relied too much on *juicio* rather than their *sentidos* and could not see its benefits.<sup>423</sup> As in his prefatory letter, the general tone was one of urgency.<sup>424</sup> Morel sought to alarm a society in which matrimony and the religious life were the primary paths for women, suggesting that disfigurement limited marital prospects.<sup>425</sup> Finally, he dwelt in the first section at some length on the atmosphere of Mexico City, including its climate and topography, which he deemed as healthy as any city where inoculation had already been put into practice and so equally suitable for its practice.<sup>426</sup>

In a second section Morel raised a series of fourteen objections or misconceptions and addressed each in turn, often by reference to the opinions of international experts.<sup>427</sup> Many of the queries were made by a hypothetical “*padre tierno*” who fears turning a child over to the operation. For example, this imagined parent points out that from 1737 to the present, there have only been three epidemics, and that many people reach the ends of their lives without ever contracting smallpox. Why risk inoculation? The response is that Mexico is less isolated than ever: Bourbon Spain’s introduction of *comercio libre* has now linked Europe and the Americas in unprecedented ways and, with increased direct commerce with Spain, there had been, and would be, more epidemics arriving from every part of the world.<sup>428</sup> Furthermore, physicians unaccustomed to treating smallpox (they had few opportunities to do so in the lapse between epidemics) put patients in danger. “In

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<sup>422</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 11r-v. [“... se ha echo si me puedo explicar así, ya de moda . . .”]

<sup>423</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 12r.

<sup>424</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 11r.

<sup>425</sup> “Si la pérdida de la Hermosura no es tan sensible a todas que les cause una pesadumbre mortal, como la ha causado a algunas la fealdad engravada por las viruelas, ella ha disminuido para muchas las delicias de una vida honesta, y a no pocas ha privado de un afortunado y deseable matrimonio.” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 21v.

<sup>426</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 16r-18v: “Este afortunado clima asegura a la inoculación las ventajas que se le hubieren reconocido en otras partes. Nos debemos animar a disfrutarlas.”

<sup>427</sup> Morel kept abreast of the latest developments in medicine and incorporated them into his treatise. For example, the final reference in a footnote is to the *Journal de Médecine*, published in France in 1779 – one year prior to the completion of Morel’s *Disertación*. He thus resembled his colonial contemporaries, Alzate y Ramírez and Bartolache, in their consumption of medical news arriving from Europe. See Chapter Two.

<sup>428</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 26r-27r. “Un Gobierno esclarecido ha fundado, sobre los mas prudentes motivos, un nuevo plan de relación entre estas Colonias y su Metrópoli. Ya gozamos de un comercio libre, en todos tiempos, a todos armadores Españoles. Las ventajas infinitas que de él resultarán a estos Reinos, hacen mucho más que cubrir el daño de las viruelas; mas nada lo puede precaver, sino es la inoculación.” Morel pointed out that the child would certainly live seventeen years, the lapse of time from the last epidemic to the present, to suffer in the next occurrence. It was a prescient observation, as the following epidemic appeared in Mexico City almost exactly seventeen years after Morel wrote.

Paris, in Montpellier, in London, in Vienna, in Amsterdam, it is observed that fourteen virulent individuals die per 100, even though they are assisted by the most celebrated physicians in the world . . . Many more would perish in Mexico, where the physicians cannot, in good faith, promise success equal to that of those sublime men . . .”<sup>429</sup> It was a candid assessment of the limitations of practitioners in the capital, but the Frenchman’s conclusions on the lack of medical talent in Mexico could not have served him well.

Each hypothetical objection is rebutted in similar fashion. The same anxious father later argues later that even inoculated, the child could later suffer from smallpox. Morel challenges this apparently widespread idea by asking the imagined interlocutor to examine the source of this information and then decide, objectively, whether it amounted to *pruebas autenticas*. “Many anti-inoculists could be asked, who was your source? A man of bad habits, a cheater: judge then his opinions and doubt his proofs.”<sup>430</sup> Morel also discounts the knowledge of many uninformed practitioners responsible for diagnosing in New Spain, people who, he imagines, tend to confuse smallpox with another sickness, called *fatuas*, *espurias*, or *volantes* in France, and in Mexico, *locas*. Female nurses and *curanderos* of all classes, either simply mistaken or wanting the patient to believe assistance is necessary, encourage this confusion, which persists until the patient is struck with smallpox.<sup>431</sup>

Though dismissive of healing practice in colonial Mexico, the fact that the man of science construed the reader or audience in such a way – using a father figure as a primary interlocutor – indicates his belief that lay parents could be reached. If gruesome depictions of the disease served to inspire fear and horror, the question and answer approach represented a different tactic. These conversations may have mirrored many that took place throughout the city, lost now, and to the extent that they relied on a good deal of exhortatory speech shared stylistic qualities with the sermons and pastoral letters of priests. For example, the following rhetorical devices posed self-evident questions, commanded, or revealed the faulty logic of the parent by equating inoculation with other, more familiar colonial practices already in use, breaking the frame of the medical treatise, so to speak, in order to persuade more directly. “Could it be sane to refuse such a remedy?” Or, “Consider that inoculation’s risk is nonexistent! Is it not the case that other active remedies have much more dangerous and immediate risks? You consent on ever occasion to bloodlettings and purges for your children; you solicit them! It is fashionable, you say . . . in the day, inoculation is fashionable as well.” “If you cease thinking of inoculation as a novelty, you will cease being surprised: if by bloodletting one hopes to evacuate the cause of some sickness, or at least part of it, through the veins; if with

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<sup>429</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 30r. [“*En Paris, en Montpellier, en Londres, en Viena, en Ámsterdam, se ven morir catorce virulentos por ciento, aunque estén asistidos por los más celebres Médicos del orbe . . . . Perecerán más en México, donde los Médicos no pueden, en buena fe, prometerse un acierto igual a el de aquellos hombres sublimes . . .*”]

<sup>430</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 37v. [“*Se pudiera decirles a muchos antiinoculistas, quién fue tu Corifeo? Un hombre de malas costumbres, un embustero: juzga pues de sus opiniones y desconfía de sus pruebas.*”]

<sup>431</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 32v-33r. He pointed to all those popular healers who repeatedly exposed themselves to contagion – surgeons, physicians, *sacerdotes*, and *enfermeras* – noting that none contracted smallpox twice. *Ibidem*, 38r. These points suggest Morel’s acquired familiarity with the ways in which healing in New Spain worked on the ground.

emetics, purgatives, caustics, one hopes for the same, in different parts, it is the same with inoculation . . . Not trusting inoculation while trusting in those other remedies is to fall into a clear contradiction.”<sup>432</sup>

These passages suggest the conviction that parents were in most need of convincing (elsewhere Morel turns to address the city’s physicians and officials).<sup>433</sup> Significantly, they acknowledge the risk of the procedure, but ultimately ask for trust, or faith, as the basis of medicine’s acceptance. Invoking the popular use of bloodletting, purgatives, emetics, and *vejigatorios* (caustics, irritants used to raise blisters and thus release dangerous materials), they argue that inoculation was similarly stylish, or *de moda*, elsewhere in the world and that the healing action – “one hopes to evacuate the cause of some sickness, or at least part of it” – is basically the same. It is a reminder that like his contemporaries, Morel based his practice on an erroneous understanding of the body. While much of his practical knowledge was grounded in experimentation and the quantification of its outcomes, he also knew exhalations of materials from the body, propagated through miasmas in the air, to be the source of contagion, and that inoculation worked because it caused humors in the body to be well-disposed to disease (these humoral materials were more or less “spent” through the act of inoculation).<sup>434</sup> These notions allowed for numerous points of overlap between his own knowledge and that of the lay public he sought to convince, and in this case, he made use of these coincidences to sell a medical practice he clearly considered more beneficial than the others.

When refuting other *escrupulos* of the imagined father, Morel joined the strategy of direct, second-person address to another, this one linking the terrestrial to the celestial. Responding to the possibility of acquiring another sickness and losing a child from inoculation, Morel humbly refers to the will of God as he admits the limits of human science, suggesting again his hope that the reader would buy into the practice on the basis of trust. In the absence of a sure antidote, he writes, “inoculation is the indispensable remedy against smallpox, the only one until now sent by the Omnipotent to guard, with

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<sup>432</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 41v-42v. Morel believed these other therapies – bloodletting, purgatives, caustics – to be not only homologous with inoculation, insofar as all functioned by evacuating the cause of sickness, but also more dangerous. (Recall that the cleric Cabrera y Quintero had denounced bloodletting as a barbarous, excessive practice three decades earlier.) [“*Podrá ser cuerdo el rehusar un tal remedio?*” “*Repara vmd. en un riesgo tan nulo como el de la inoculación! Y los demás remedios algo activos, no tienen riesgos mucho mayores, y más próximos? Vmd. consiente, a todas ocasiones, sobre sus hijos, las sangrías, las purgas; vmd. las solicita! Es estilo, dirá vmd. . . . también la inoculación es estilo en el día.*” “*Cese vmd. de mirar la inoculación como una novedad, y cesará vmd. de extrañarla, si, por la sangría, se pretende evacuar la causa de alguna enfermedad, o parte de ella, a lo menos, por las venas; si, con los vomitorios, si con las purgas, si con las vejigatorios, se pretende lo mismo, con diferencia de lugares, con la inoculación se pretende lo mismo . . . No fiar pues de la inoculación, fiando en aquellos remedios, es caer en una contradicción manifiesta.*”]

<sup>433</sup> When Morel turned to address professionals, he shifted person, from second to third plural, suggesting that they were not the primary audience of the work: “*Convido especialmente a los facultativos que quisieren en adelante, oponer alguna dificultad a la inoculación, a que lo hagan con la buena fe y con la cordura que exige una profesión tan decorosa y tan noble como debe ser la suya. Que no se dejen arrastrar la creencia, y con ella el juicio, por invenciones maliciosas, de que serian ellos mismos tenidos por culpables al repetirlos,*” an appeal that implies that many physicians had been persuaded of the failure of inoculation and had themselves contributed to the spread of rumors (and thus to its rejection by the populace). Morel, “Disertación,” AHDF vol. 3678, exp. 2, 62v.

<sup>434</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 16v, 20v-21r, 24v, 46v-47v.

time, against the risk of a sickness that mocks other remedies and alone kills a seventh of those killed by all sicknesses combined . . .”<sup>435</sup> Typical of science in its early modern manifestation was this tendency to attribute one’s rational faculties to the Omnipotent, as Morel put it; God was the basis upon which activity in this world could proceed. The work referred also to “that singular medicine that appears more likely a Divine inspiration than a human invention.”<sup>436</sup> It was “religious zeal” (*el celo de la Religión*) that inspired parents to take responsibility for the health children, and “our sacred Religion” (*nuestra sagrada Religión*) that opened the eyes to “other less sensible, and truer goods.”<sup>437</sup> In the twelfth objection, the interlocutor claimed that if Divine Providence destined someone to die of smallpox, immunization essentially contradicted the designs of God; to use to it would be to tempt His wrath. Morel responded that even a child flees that which can harm him in the interest of preservation. God had created and given mankind medicine, and if medicine did in fact contradict the will of God, parents – turning the argument back onto the speaker – were doing it daily with the bloodlettings, purges, mercurial treatments, and “other innumerable remedies” used to stave off sickness. If inoculation was properly seen as a gift sent by Divine Providence for human preservation, it would be an offence to God to fight smallpox without making use of this merciful remedy.<sup>438</sup> The treatise ends with what can be characterized as a prayer for the acceptance of this medical practice: “May God desire that this public know how to open its eyes to the frivolous objections they may hear against inoculation and that parents, in favor of their children, take advantage of this class of medicine . . .”<sup>439</sup>

<sup>435</sup> “*Le respondo: el remedio infalible y sin riesgo que vmd. desearía contra las viruelas, lo habrá quizá algún día; mas al presente no lo hay. Hemos nacido todos con una disposición a contaminarnos por el virus variólico, como por los venenos de las serpientes.*” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 40r-v, 41v. [“. . . la Inoculación es el remedio indispensable de las viruelas; como el único, hasta ahora destinado por el Omnipotente a precaver con tiempo el riesgo de una enfermedad que se burla de los demás remedios, y mata ella sola una séptima parte de cuantos matan, todas las enfermedades juntas . . .”]

<sup>436</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 10v. [“. . . aquella Medicina Singular, y que parece más bien una inspiración Divina, que una invención humana.”]

<sup>437</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 13r. [“*otros bienes menos sensibles, y más verdaderos.*”]

<sup>438</sup> “*Porqué nuestro hacedor nos ha infundido aquel amor que todos tenemos a la vida? Porqué ha criado la Medicina? Si empleamos esta en la especie de sangría, de vomitorio, de purga, de unciones mercuriales, y de otros infinitos remedios; ya como curativos de las enfermedades formadas y bien patentes; ya a prevención cuando nos creemos amenazados; ya, lo que es mucho más, algunas ocasiones por mero recelo de una enfermedad que no existe, y con el riesgo que trae consigo una curación errada o superflua. Si nadie, en ningún caso de estos cree contrariar a la Providencia, porqué sería contrariarla el usar de un remedio que, como ya se ha dicho, puede más que todos los remedios juntos, y con menos riesgo de ellos? El que, por consiguiente, tiene más caracteres de ser un don de la Providencia atenta a conservar su obra?*” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 52v-53v. This response is reminiscent of Cotton Mather’s, writing in Boston in 1721, when he asked rhetorically whether man did not make himself sick with artificial purges in order to avoid death by a deadlier, natural variety. This man “will give Thanks to GOD for teaching him, how to make himself sick, in a way that will save his Life.” Cotton Mather, *Sentiments on the Small Pox Inoculated*, reprinted in Increase Mather, *Several Reasons Proving that Inoculation or Transplanting the Small Pox, Is a Lawful Practice, and That It Has Been Blessed by God for the Saving of Many a Life* (Cleveland: 1921 [Boston: 1721]), 76f.

<sup>439</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 57v. [“*Quiera Dios que este Público sepa desengañarse de las frívolas objeciones que oyere contra la inoculación; y que, a favor de su prole, los padres se aprovechen de este género de Medicina, tan singularmente privilegiado como lo dicen sus aciertos.*”]

This prayer, like the other rhetorical devices employed by Morel in the course of his work, was a kind of performance for the benefit of his readers, and this poses an interpretive problem. If the language leaves little doubt that for this physician trained in the latest medical methods in France not only the medical technique, but medicine itself, was God's work, it is also the case that Morel may not have believed any of it. How should this affect a reading of this unpublished medical treatise? By the time he was arrested and brought before the Office of the Inquisition in 1794, Morel had been accused of nearly every offense imaginable in Catholic New Spain, including failure to go to church or take communion; consumption of meat with his family on Fridays; co-habitation with a woman; intellectual interest in Voltaire, Rousseau, and Montesquieu; transcriptions of texts tracing the events of the French Revolution; and pronouncements against the Inquisition itself in front of acquaintances. These aspects of his life force the question: could the arguments of his treatise, couched in the language of divine benevolence, have been anything but insincere, opportunistic attempts to coat a bitter pill? What could such talk of a gift from God mean in the work of a French deist?

A remark attributed to Morel by more than one witness indicates how much he had learned about being part of his adoptive country by the time of his arrest. According to these witnesses, Morel had said, on more than one occasion, that though one followed another philosophy, one could live safely under the watch of the Spanish Inquisition by conforming in exteriors to the country's religion.<sup>440</sup> Though he might have done a better job following his own advice – jealous competitors in the mining industry had no shortage of ammunition with which to destroy Morel – the treatise goes well beyond this conviction that conformity to conventional religious discourse and practice is necessary. Morel appropriated the authorizing power of the supernatural to lend legitimacy to his project and simultaneously to dismiss criticism: if God had given the remedy to mankind, then it was in human hands, by human agents, that it could and must be deployed. Pointing to God was the best way to legitimate and bolster his case for urgent, immediate human action.

For this reason, in many ways the most interesting part of the work comes in the Appendix, where Morel documented the results of the experiments conducted in his own home. While this Appendix highlights Morel's experimental method, it is also good evidence that, while God may have been necessary, as Morel knew, references to the supernatural were not sufficient for empirically minded parents of the colony. Morel had simultaneously to show the efficacy of the innovation, to couch experience in observation, or what he called the *hechos*, the favorable results. In his eyes, these data were the most persuasive or conclusive, but they went far beyond raw numbers. Six *indios* and *indias* between the ages of three and ten had been inoculated in Morel's home, where they were subjected to a five-day preparatory period (because of the constant wavering of their parents, he wrote, which suggests that under ideal circumstances he preferred an even longer, more expensive preparation). Of all those inoculated, the most covered with pustules was "Julio," who had fewer than 300 over his body, while none of the others had more than eighty, and some had not even twenty, like "Rita" and "José

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<sup>440</sup> Schifter Aceves, *Medicina, minería e inquisición*, 51-2.

Manuel.”<sup>441</sup> Of eight non-*indios* inoculated, Bárbara Rodríguez de Velasco, whom Morel praised for being the first in New Spain, had less than twenty pustules to show for her symptoms, “not one of them on her pretty face or any other visible part, with barely a short, slight fever.” The *señorita* Maria Marmolejo, eleven years old, suffered an eruption on her face, which Morel deemed normal; she spent three days in bed.<sup>442</sup> A son and daughter of Pedro Lafargue (LaFarge), “my esteemed fellow countryman,” seven and eight years old respectively, suffered about fifty pustules between the two of them. “Except for three or four on the hands, the boy’s were not visible. The girl had only one visible pustule, and that on the face.” A seven-year old girl in don Martín de Egusquiza’s home showed between fifty and sixty pustules, “few of them visible.”<sup>443</sup> A daughter of Sebastian Cantos, aged three, had to be bled twice to lower an elevated temperature during the *preludio*.<sup>444</sup> “About forty pustules erupted, seven or eight on the face.” Finally, a three-year old girl from the Puente de la Merced was given over to Morel for inoculation by don José de Alzate y Ramírez, whose writings were discussed in Chapter Two. She suffered eruptions that discharged pus at the inflamed incision, which came and went for four days, and Morel wrote that he would have re-inoculated her if not for a persistent cough (“*antes que yo hubiese inventado el uso de un jarabe que ha sido después muy útil*”) and the mother’s resistance.<sup>445</sup>

These were the first documented inoculations in New Spain, all successful in the eyes of the physician (with the possible exception of the last). Of interest in themselves, it is their description that indicates precisely where Morel’s attention, and presumably that of laypeople in Mexico City, lay in those years. There is a marked interest in the careful documentation of appearances, especially those of the upper classes, who probably feared scarring and would be better disposed to a practice that could eliminate the inevitable disfigurement that came with smallpox. Morel ranged over the bodies and visages of these first recipients of inoculation to report not only how many lesions appeared, but also where and how grave, and to demonstrate that, in fact, the appearance of these individuals was far more desirable than the alternative. Notable as well was his optimism: he tended to accentuate successes and included only a single operation that can be considered a complete failure – a girl of ten in the house of Don Francisco Chaves, Calle de las Escalerillas, was poorly inoculated by a well-intentioned, but to Morel *inexperto* practitioner.<sup>446</sup> This complaint reflected a problem that would remain urgent for officials

<sup>441</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 59v. In his home, “*en donde los mantuve todo el tiempo necesario, y los acomodé de cobijas y demás menesteres, a mi costo, por caridad, y para dar ejemplos de los aciertos de la inoculación, aun en los yndios.*”

<sup>442</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 60r. [“. . . ninguno de ellos en su agraciado semblante, ni en otra parte visible, y apenas una corta y leve destemplanza.”]

<sup>443</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 60v. [“. . . mi muy estimado paisano . . .” “*El niño no tubo granos visible sino tres o cuatro en las manos. La niña tubo uno solo visible, y ese en la cara.*”]

<sup>444</sup> The practice of bloodletting, even for someone critical of its overuse, was impossible to avoid in New Spain. See Chapter Eight for a discussion of criticisms of the practice.

<sup>445</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 61r: “*Deseaba asegurarme, y asegurar a sus Padres; aunque pienso que está la niña ya libre de viruelas.*” [“*Salieron como cuarenta granos de viruelas; siete u ocho en la cara.*”]

<sup>446</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 61v. “*No había habido ni la preparación correspondiente a el estado de su sangre, ni aun la más común y general; las incisiones habían sido*

into the national period. How could the operation be kept out of the hands of inexperienced *aficionados*?<sup>447</sup> Repeatedly in his treatise, Morel made sharp distinctions between *inoculadores hábiles*, on the one hand, and those *malos inoculadores* who practiced without discriminating between the constitutions of patients and as a consequence made many mistakes. One risked one's life unless inoculated under the direction of an "expert and sane" practitioner (*perito y cuerdo*).<sup>448</sup> Morel did this, in part, to discredit anti-inoculists (represented at various points by José Amar, the Spanish physician and president of Madrid's Protomedicato), who, he noted with contempt, amassed unfortunate and rare cases to dissuade those disposed to participate. Nevertheless, in admitting the possibility of such cases, he tilted his hand more than he would have wanted, effectively reinforcing the very point these critics were trying to make: the risk involved in the early modern world was not negligible, and acceptance did require an enormous leap of faith.<sup>449</sup>

Unfortunately for Morel, the public began restlessly imagining nightmarish scenarios, aided and encouraged in their embellishments by the fact that operations inevitably took place behind closed doors, where observation could not give the lie to the imagination's work. It was said that the first person to be inoculated in New Spain, the *señorita* Rodríguez de Velasco, was in the throes of death as a result of the procedure to which she had unwisely submitted. (Fortunately someone else had clarified that she had in fact been left in her sitting room (*estrado*), where she was happily recovering.) Another rumor said that one or both of her legs had been amputated after being injected with the lymph. "And the rumor spread through the streets while the *señorita* strolled happily about her chambers." As a result of these "thousand voices" inspiring horror, it soon became impossible for Morel to continue with the procedure.<sup>450</sup> He fought *las calumnias* with what he viewed as the bare facts: "Fourteen inoculations performed here without a bad outcome or a burial, in the time of an epidemic that has carried away at least twenty percent (from what I can ascertain) of the infected, is more than sufficient

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*demasiadamente profundas; y la cantidad de materia introducida, había sido demasiada, mal tomada, y mal aplicada.*"

<sup>447</sup> This problem is taken up in Chapter Six. As the concept of expertise within medical practice took shape, in practice officials would be unable to police its boundaries, to keep out those who were self-ascribed experts in the practice or who willingly admitted their lack of training but could see no alternative.

<sup>448</sup> E.g. Morel, "Disertación," AHDF vol. 3678, exp. 2, 43r-44r and 51v.

<sup>449</sup> The claim that "*el arte se ha mejorado; él se mejora todos los días*," was a statement of faith in progress that would have offered little comfort insofar as it was still considered unsafe. Morel, "Disertación," AHDF vol. 3678, exp. 2, 44v. Morel remarked that he took the extra precaution of not visiting contagious smallpox patients when he was inoculating in order not to contaminate them with the natural version, and blamed anti-inoculists for not doing the same. But such a precaution would have been difficult for physicians in New Spain, who were required to inoculate as well as take care of the sick in epidemics. "*Cuántos antiinoculistas, en esta Epidemia, habrán contaminado a enfermos que por otro ninguno que por su médico, poco advertido, han podido contagiarse!*" (50r)

<sup>450</sup> Morel, "Disertación," AHDF vol. 3678, exp. 2, 58r-v. The persuasive work performed by these rumors is discussed further in Chapter Seven. [*"Y corría la voz por las calles, mientras la señorita se pascava muy gustosa en sus aposentos."*]

proof of the invaluable benefit that will redound to this important population from the establishment of inoculation.<sup>451</sup>

These then were the strategies he drew on to represent and propagate his science: an insistence on the value of evidence and a calculation of benefits couched in his own imaginative rendering of the potentially disastrous consequences of refusal, with an important role for divine agency.<sup>452</sup> If Morel's own prestige and persuasive power derived from the value attached to his international association and learning – causing him to engage in “name dropping,” a manner of buttressing and qualifying experience, experiments, and professional opinion for an audience that lacked the perspective to know better – he also knew that medicine, as he thought it should be practiced, was in its infancy in most of the provinces, and even in the cosmopolitan capital feared the harmful consequences of practicing *inexpertos*.<sup>453</sup> In fact, global references and imaginative portrayals of destruction were the foundation upon which much scientific knowledge was built and authorized in colonial Mexico; even Morel, recently arrived, was aware that numbers would not be enough to convince a Catholic population of the benefits of an innovative medical practice, yet his emphasis on numbers is significant. To allow their children to be subjected to inoculation, parents required proof, as Morel knew, because a gift sent and endorsed by God would be ignored if it did not work.

In the end, the city council reneged on its promise to publish the treatise, choosing instead Dr. José Ignacio Bartolache's *Instrucción que puede servir para que se cure a los enfermos de las viruelas epidémicas*, which focused on atmospheric putrefaction and fumigation at the expense of immunization.<sup>454</sup> With the 1785 publication of an extract of

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<sup>451</sup> Morel, “Disertación,” AHDF vol. 3678, exp. 2, 62v-63r. [“*Catorce inoculaciones echas aquí, sin un mal éxito, sin alguna sepulta en tiempo de una epidemia que se ha llevado lo menos veinte por ciento (en lo que he podido averiguar) de los contagiados son una prueba más que suficiente de el inapreciable bien que ha de resultar a esta importante población, de el establecimiento en ella de la inoculación.*”]

<sup>452</sup> Even if inoculation could not augment the riches and power of the Spanish kingdom (Morel believed it could), the value of human lives saved was sufficient justification: “*aunque no pudiese, ella y ella sola, ahorrar una infinidad de vidas, debería triunfar por lo que excusa de dolencias, y de deformidades.*” Morel, “Disertación,” AHDF vol. 3678, exp. 2, 6v-7r.

<sup>453</sup> Morel was aware of this prestige; the dissertation is laden with foreigners and foreignness. Morel presented the debates and precedents of several French, British, Italian, and Dutch philosopher-physicians, doctors, kings, and princes as evidence that the practice was neither new nor dangerous. For example, when responding to the hypothetical objection of moralists that doing harm, however small, in order to effect good was illicit, Morel cited nine doctors of the Sorbonne consulted on the matter, who decided it was in fact allowable to make use of an operation that had public utility. When arguing that inoculation never furthered the progress of an epidemic, he pointed to Paris, Lyon, Stockholm, Hanover, and Geneva in support of his claim. Morel, “Disertación,” AHDF vol. 3678, exp. 2, 54r-v, 56r.

Morel also drew on his European background to establish his credentials when applying for a position at the Hospital Real de Naturales in Mexico City, in 1783. He tediously listed his many teachers at the universities of Aix-en-Provence and Montpellier – Joseph Lieutaud, Henri Haguénot, Jean-François Imbert, François Boisser de la Croix de Sauvages, François-Bourguignon de Lamure, Louis-Nicolas Laborie, Charles Le Roy, Paul-Joseph Barthez, Gabriel-François Venel, Jacques Montet, Guillaume Davizard, and François Vigarous. Following his rejection, Morel dedicating himself to his private practice and mining. For the curriculum vitae, see Schifter Aceves, *Medicina, minería e inquisición*, Chapter Three.

<sup>454</sup> See Chapter Two for a discussion of this text, and also Donald B. Cooper, *Epidemic Disease in Mexico City, 1761-1813* (Austin: University of Texas Press, 1965), 63-69.



Francisco Gil's *Disertación Físico-Médica*, also skeptical of inoculation, it appeared the practice was doomed to linger in obscurity for a while longer. As for Morel, he soon realized that foreignness could be a double-edged sword: though he sued for and received compensation for his experiments and written work, his application for a post at the Royal Hospital was later denied, an outcome he attributed to nationalist favoritism on the part of the hospital's governing Junta. In the meantime, the Inquisition file opened in 1781 grew.<sup>455</sup> Morel was forced in 1795 to make a case before the Inquisition that he was a true Catholic, even as he repeated Buffon's distinctly pagan creation myth, which he clearly believed. He was discovered covered in blood in his prison cell, his carotid artery cut with the small pair of scissors used for beards, by which time he must have despaired of the hopelessness of his situation and the failure of his strategy of adhering to religion's "externals."<sup>456</sup> Yet Morel was prescient in one respect: he wrote that the work of persuasion would become more difficult in the following years, as the immediacy of epidemics compelled people to take notice and give immunization a chance. "An epidemic is a time of ruin . . . If one does not open his eyes in such horrific times, who will once the epidemic subsides? . . . Fear of death of a familiar, a relative, a friend, of many from a sickness that the kings themselves cannot avoid is an effective motivator."<sup>457</sup>

### **Domesticating Inoculation: Mexico City's 1797 Smallpox Epidemic**

Up to the end of the colonial period, the applied nature of medical theory in New Spain and its understanding as an endeavor of public good, shared between officials, priests, and citizens alike, meant that individuals with little or no medical training felt compelled to put pen to paper and elaborate on one medical issue or another. This was true of crown functionaries and policymakers charged with performing damage control in epidemics. Following official approval of inoculation during the smallpox epidemic in Mexico City in February 1797, Fiscal de Hacienda Lorenzo Hernández de Alva saw the newly endorsed practice already threatened by rapidly spreading rumors in the capital. He formed a lengthy recommendation to Viceroy Branciforte on September 29, 1797, which concluded by requesting a bando that would prohibit mockery of inoculation in order to ensure that the practice not fall into discredit among the public.

The immediate origin of the report was an ongoing investigation into the cause of two deaths attributed by a practicing surgeon to inoculation. Even more shocking, some *versos satíricos* mocking inoculation and the doctors who practiced it were found for sale in the capital, in front of the cathedral, and Alva thought it important that useful inventions in medicine find a haven in the political and governmental realms, which had

<sup>455</sup> Schifter Aceves, *Medicina, minería e inquisición*, 39-40.

<sup>456</sup> Schifter Aceves, *Medicina, minería e inquisición*, 62. For over an hour, three priests hovered over and around him, eliciting a final confession. Morel finally submitted, dryly answering "sí" when asked whether he was a Catholic and believed in God and the mystery of the Holy Trinity. Confession extracted, Morel died a repentant Christian in the eyes of the Church, barely a few months before a new epidemic forced colonial governments to revisit the practice he had energetically supported in his lifetime.

<sup>457</sup> Morel, "Disertación," AHDF vol. 3678, exp. 2, 45v. [*"La Epidemia es el tiempo de los destrozos . . . Si no se abren los ojos en tiempo tan espantoso, quien lo abrirá cesada que esté la Epidemia? . . . El susto de la muerte de un conocido, de un pariente, de un amigo, de muchos, causada por una enfermedad que los Reyes ellos mismos no pueden eludir, determina con eficacia."*]

the responsibility to see that “tall tales and lies” (*patrañas y mentiras*) not discredit the good effects of the procedure.<sup>458</sup> He anticipated that rumors, which appeared to be originating with the upper classes, would not end there and that the government would have to act to dictate the terms of its adoption.<sup>459</sup>

As he made a case for the widespread practice of inoculation, Alva revealed the breadth of his reading in this medical matter. He regretted that he lacked the time to compose his own *discurso apologético*, but recommended several authors and works for the benefit of the public: the *Disertación fisico-medica* by Juan Spallarrosa, for example, physician in the Royal Hospital of Cádiz. Originally in “lengua Toscana” and subsequently translated into Castilian, it demonstrated with *razón, autoridad, and experiencia* the utility and safety of the practice. Alva cited Benito Feijóo in book five of his *Teatro crítico universal*, “which deals with the great education provided by experience” and presented inoculation as one of several preventives against smallpox. The lectures of Antonio Genovesi, *catedrático* in Naples, refuted the theologians who doubted whether inoculation was licit *en conciencia*, positioned the issue of smallpox as highly relevant to politics, and saw inoculation, even if only a palliative and not a cure *per se*, as worthy of the king’s support. Finally, Alva channeled the Conde de Campomanes, who in his essay on fomenting industry had taken a position on inoculation, which could potentially preserve the health of civil society and thus increase the labor power placed in service of an expanding state (the ubiquitous Bourbon justification for strict intervention in crisis). With the Indies disproportionately affected by smallpox, Campomanes had written, and inoculation of proven value in China, Europe, Chile, Caracas, and Spain, there was no excuse to delay its adoption.<sup>460</sup> The

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<sup>458</sup> The details of these rumors and the commotion caused by the verses are explored in Chapter Seven.

<sup>459</sup> “*La ma.<sup>or</sup> parte del vulgo es muy fácil, y propensa a dejarse impresionar del sonido de las voces, y sucesos sin tratar de examinarlos.*” “*Sea en hora buena arbitro cada uno de valerse, o no del remedio de la inoculación, no obstante que cierren los ojos, y los oídos a la evidente demostración de sus felices efectos en Veracruz, en Xalapa, y acá dentro de México,*” subjects did not have the right to “*murmurar, declamar, suponer falso testimonios, y retraher con ellos al vulgo imperito, a los incautos, a los poco reflexivos, y a los que son incapaces de distinguir de opiniones, de un beneficio tan importante a la humanidad, y a la salud pública.*” AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Alva to Branciforte, 336r.

<sup>460</sup> “. . . facilitará el aumento de la población si llegamos a vencer el terror pánico contra este remedio . . . Las Indias aun sufren mayor estrago de las viruelas, y con todo eso vivimos indolente a vista de un daño tan repetido, y que con facilidad podemos atajar . . . Las viruelas es un mal de que pocos se libran, la inoculación está experimentada de todos tiempos en la China, y ha probado en Europa, en Chile, Caracas, y aun en España a cuantos la han usado. ¿Qué disculpa podemos tener para no dar a la población tan importante auxilio? Como en el gran numero consiste la robustez de una nación, es axioma cierto que la industria popular es el verdadero nervio para sostener su pujanza.” The original from the *Discurso sobre el fomento de la industria popular* (1774) continues: “*Toda Nación aplicada conserva la sobriedad y bondad de las costumbres y en ellas tiene gran interés la Religión y la moral cristiana, por ser la honesta aplicación a ganar su pan a costa del trabajo muy conforme a sus sanos principios.*” Morel had proposed a law putting inoculation into practice for very similar reasons, “*pues establecida para inocular a todos los niños arriba de dos o tres años, ahorraría tantos individuos como son los que mueren de las viruelas naturales arriba de esa edad. Calcule cada Gobierno lo que pierde anualmente, o de veinte años en veinte años, por esta sola enfermedad, y sabrá lo que pudiera darles la inoculación.*” Alva never mentions Morel’s work, although he noted that Timoteo O’Scanlon dedicated his *Práctica moderna de la inoculación* to Minister Campomanes. Morel, “Disertación,” AHDF vol. 3678, exp. 2, 55v. [“. . . que trata del gran magisterio de la experiencia . . .”]

calculation was as direct as ever: without men, “the various operations required by civil society lack arms.”<sup>461</sup>

Though employing traditional arguments to justify adoption, Alva also turned to his own experience as testimony to its value and absolute harmlessness. He stressed that in the new, simpler *método curativo* – probably referring to the instruction recently written by Mexico City’s Protomedicato – the patient was not enclosed inside a dark bedroom, “infested with the pestilential exhalations of smallpox,” but rather allowed “all the help and comforts a healthy person enjoys, with certain precautions . . .” He added that he was speaking from his own recent experience: after hearing of successes, he had his two children, Maria Guadalupe, aged sixteen, and Lorenzo, twelve, inoculated under the supervision of Doctor Manuel Moreno, *catedrático de anatomía* in the Royal Indian Hospital. Alva had personally brought them to the Hospital of San Andrés on September 7, where smallpox was taken from Basilio de Luna, a twenty-four year old *mozo* from Querétaro. On the fourth day following the operation, both children developed fevers, followed by pustules: the girl had only fifteen over her entire body, attributed to the steady transpiration that moistened her head and hair as a result of the fever and also to the virulent material purged from both hands. Lorenzo had many more all over his body, especially on his face, “where they were more burdensome, but of excellent quality . . .”<sup>462</sup>

Like Morel, Alva was eager to paint a picture in which no harm had come to the children. Two days before inoculation, the siblings had received only “a very light purgative” with a diet of fruits, vegetables, and legumes, but no meat. No other treatment had been necessary, not even a prescription filled at the pharmacy, Alva remarked. On the days following inoculation, “they went out for strolls in the morning and evening, drinking their *refrescos*, but since the first signs of fever have been kept inside the house, without taking to bed or interrupting the domestic layout, because each day they have eaten at the table with their parents and have not had even a single bad night.” In his home, it was as if nothing changed:

In the house it appears as if there were no sick patients, nor did they consider themselves sick, moving freely throughout the room, both of them passing the time in diversion, sometimes with books, occasionally with entertainments appropriate to their gender and age, waiting impatiently for the day when they would be able to go out to Mass and the street, as they now have, with only the remedy of a light purgative remaining.<sup>463</sup>

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<sup>461</sup> AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Fiscal Alva to Branciforte, 337r-339v. [“. . . *sin hombres faltan brazos a las diferentes operaciones que necesita la sociedad civil.*”]

<sup>462</sup> AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Fiscal Alva to Branciforte, 340r-341v. From the suppurations Dr. Moreno took lymph and inoculated a son and daughter of Coronel Manuel Rincón Gallardo and doña Maria Santos del Valle. [“. . . *apestada con los hálitos pestilenciales de las viruelas . . .*” “. . . *todos los auxilios y desahogos que puede disfrutar un hombre sano, bajo de ciertas precauciones . . .*” “. . . *donde cargaron más pero de excelente calidad . . .*”]

<sup>463</sup> AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Fiscal Alva to Branciforte, 341v-342r. [“. . . *salieron a paseo por mañana y tarde tomando sus refrescos; pero desde el amago de la calentura se han mantenido dentro de casa, sin hacer cama, ni interrumpir las distribuciones domesticas, porque todos los días han comido a la mesa con sus padres, y no han pasado siquiera una mala noche.*” “*En la casa parece que no había enfermos, ni ellos se consideraban tales, manejándose con libertad por toda la habitación, divirtiendo ambos el tiempo a veces con sus libros, y a ratos con otros entretenimientos propios de su sexo*”]

The promise of a home without sickness or sick children must have appealed to those members of the upper classes who believed it possible. The picture painted was of a medical technique passed from one *don* or *doña* to another, with debates over the merits of the practice being carried out primarily in the upper social strata – such outcomes, he wrote, were observed with minor differences in all the other homes of the inoculated, as attested to by the “most principal subjects” of Mexico City. But could the rest of the population possibly expect similar outcomes? Alva had no doubt: “If the excellent results are so significant for the homes of the wealthy, what about the great comfort and benefits for the poor?” Any risk could be averted if practitioners took care to choose only well-complexioned children, used good lymph from benign cases, and kept prudent practitioners on hand to respond to dangerous symptoms. He concluded recommending a decree to prevent gossip and mockery of the practice, with punishment meted out according to class, *calidad*, and degree of excess.<sup>464</sup>

Though Alva was overruled in his attempt to restrict gossip – an outcome that would have implications for the practice of vaccination in subsequent decades – his makeshift treatise was significant for the stress it placed on the domestic sphere as site of rest and recovery and true locus of inoculation. From the hospital, where the procedure actually took place, Alva’s text moved quickly back home, where the patient-child continued to play, join his parents for dinner at the table, sleep in beds, move freely in their room, and carry on as usual. By locating rehabilitation in the healthy home and equating it with ordinary domestic life, Alva rhetorically dissociated as far as possible his own personal experiment, as he called it, from the site of experimentation par excellence, the hospital, thus stripping from it any connotations of sickness or suffering.<sup>465</sup>

At the time, however, inoculation in the home remained a privilege that only the upper classes could afford, and in this Alva’s report reflects the reality of practice in Mexico City: administrators repeatedly wrote that, in general, only the wealthy were submitting to the practice or paying to be inoculated at home. Yet in this era of contagion, in which lazarettos and isolation hospitals, fumigation of letters from infected regions, and strict quarantines were in common use, the official authorization of inoculation, on February 28, 1797, had come with orders that hospitals were to be used for convalescence, in order to forestall contagion. It soon became clear, however, that few would make use of the practice if they were required to remain in hospitals, and so the government was forced to modify this position on August 31, in a letter that made clear

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*y edad, esperando con impaciencia el día de salir a Misa, y a la Calle, como lo han verificado ya restando solo el último remedio de una purguita suave . . .”]*

<sup>464</sup> AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Alva to Branciforte, 342r-344r. [“¿Si aun para las casas de las personas pudientes son tan apreciables las excelencias, que consuelo, y que beneficios tan grandes para los pobres?”]

<sup>465</sup> Although Alva’s precaution can be attributed to the recent difficulties experienced in the establishment of isolation hospital (see the previous chapter), popular suspicion of hospitals was widespread. In this chapter, we have seen that Morel imagined the children in his frontispiece out in the wide public plaza, in front of the city’s municipal building and far from any suggestion of a hospital. And his own experiments were carried out in a makeshift clinic in his home, or in the homes of the affluent, while the hospital lay empty.

that patients would not consent to being held in isolation.<sup>466</sup> The discursive shift from hospital to home in Alva's report, in other words, participated in this broader practical modification of policy, trading on the fear attached to hospitals as places of contamination, suffering, and seemingly arbitrary exercise of political authority. Like Morel, he relocated the operation to happier, better-lit, more open spaces, anticipating some of the changes that would be made with the arrival of the Royal Vaccinating Expedition in New Spain at the beginning of the following century. So long as immunization remained available on a voluntary basis, concessions would continue to be made to attract laypeople to the practice.

### **Medicine's Ceremonial Vestments: Bringing Vaccine to New Spain**

Barely five years later, an epidemic compelled Santa Fe de Bogotá's city council to seek the help of King Charles IV. The king turned to the Council of the Indies on the possibility of sending an expedition to propagate Edward Jenner's cowpox vaccine in the Americas, and members of the council in turn solicited plans from the royal physicians. After several proposals and months of preparation, the *Real Expedición Filantrópica de la Vacuna*, the most ambitious public health campaign of its time, departed from the port of La Coruña in November 1803, under the directorship of Francisco Xavier de Balmis. The expedition transported vaccine *in vivo*, kept fresh in the arms of twenty-two children of illegitimate birth (most had been extracted from the Casa de Niños Expósitos in Santiago de Compostela) and would circumscribe the entire globe, with stops on all four continents of the Spanish Empire, over the course of two years.

The Royal Expedition has received much scholarly attention from the imperial and, less frequently, local level.<sup>467</sup> The most recent revisions of this significant episode in the history of medicine suggest that vaccination campaigns succeeded in Mexico and other places in the Americas, when they did, in spite and not because of the interventions

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<sup>466</sup> See Cooper, *Epidemic Disease in Mexico City*, 100-117 passim.

<sup>467</sup> Michael Smith, *The "Real Expedición Marítima de la Vacuna" in New Spain and Guatemala* (Philadelphia: The American Philosophical Society, 1974), summarizes on pp. 13-14 the Flores report analyzed in this chapter. His study has the advantage of drawing on both the extensive documentation in Seville's Archive of the Indies and in the epidemic sections of Mexico's national archive, which together provide a fuller picture of the activities of the various subsidiary expeditions in New Spain. One of the earliest treatments, and the first to make extensive use of the copious materials in Mexico's national archive, is Sherburne F. Cook, "Francisco Xavier Balmis and the Introduction of Vaccination in Latin America," *Bulletin of the History of Medicine* 12:5 (1942), 543-560 and 12:6 (1942), 70-101. Cook's early thesis – that the colonial projects of viceroys, intendants, physicians, and governors to propagate vaccine in anticipation of the Royal Expedition represented attempts to "sabotage" the expedition from Spain – followed the frequent vituperative attacks and complaints of Balmis to the crown and has been revised, most notably by Francisco Fernández del Castillo, *Los viajes de don Francisco Xavier de Balmis*, especially 118f, 128f, which also made good use of the AGN's documents.

The most recent student of the expedition is Susana María Ramírez Martín, whose doctoral thesis at the University of Madrid forms the basis of two books, *La salud del Imperio: La Real Expedición Filantrópica de la Vacuna* (Ediciones Doce Calles: 2001), and *La mayor hazaña médica de la colonia: La Real Expedición Filantrópica de la Vacuna en la Real Audiencia de Quito* (Quito: ABYA-YALA, 1999), but both suffer from significant gaps as a result of their reliance on Spanish archives and published documents. See also Ramírez Martín et al., *La Real Expedición Filantrópica de la Vacuna: Doscientos años de lucha contra la viruela* (Madrid: Consejo Superior de Investigaciones Científicas, 2004).

of the Spanish metropolis.<sup>468</sup> My intention here is to point out other aspects of the story that have slipped through the cracks and reveal certain patterns and competing approaches to the propagation of vaccine. What role was reserved for religion, and how did protagonists negotiate a place for it?

The first and in many ways most interesting plan submitted for review came from a creole physician with extensive experience in Guatemalan epidemics, medical reform, immunization campaigns, and health care. José Felipe de Flores, born in 1751 in Ciudad Real, Chiapas (at the time part of the Captaincy General of Guatemala), was one of the king's *médicos de cámara* and happened to be resident in Madrid when the request from the king came.<sup>469</sup> He had just completed a vast inspection tour of the most prestigious hospitals in the United States and Europe, and his arrival in the metropolis was fortunate: though Charles IV's *médicos de cámara* had a great deal of medical knowledge between them, they lacked experience with the American context. The proposal he would submit – the only one contributed by an American – was ultimately discarded in favor of a streamlined version presented by Francisco Xavier de Balmis, the military surgeon, botanist, and experimentalist who ultimately served as director of the expedition.<sup>470</sup> But it

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<sup>468</sup> Especially Patricia Aceves Pastrana and Alba Morales Cosme, “Conflictos y negociaciones en las expediciones de Balmis,” in *Estudios de historia novohispana*, vol. 17 (UNAM: México, 1997), who stress confrontations, conflicts, and the colonial networks that made propagation possible. By the time Balmis arrived in New Spain, vaccinations with cowpox were being performed and publicized under Viceroy Iturrigaray; rather than recognize the validity of the viceregal projects, Balmis chose on multiple occasions to reject or demean these attempts, ignoring suggestions by colonial figures with some experience in matters of public health and imposing Juntas de Vacuna to carry out vaccination in place of local networks of assistance. For an overview of the many local initiatives undertaken prior to the expedition's arrival, see Fernández del Castillo, *Los viajes de don Francisco Xavier de Balmis*, 97-119, and Smith, *The “Real Expedición Marítima de la Vacuna,”* 23-26.

When Balmis and his expedition of twenty-two children arrived in San Juan, Puerto Rico, in February 1804, the director realized that he would not be the first to vaccinate in the Americas. Facing an epidemic in November of the previous year, Dr. Francisco Oller had acquired fluid from neighboring St. Thomas and vaccinated around 1,500 individuals on the island. Balmis reacted haughtily, confronting Oller about his initiative, condemning the effort, and then departing, having accomplished little more in four weeks than alienate the local government and medical community. In Havana and other parts of Cuba, similar successes were had prior to the arrival of the Royal Expedition, although Balmis reacted more tactfully there. For a concise summary of these episodes, see Michael Smith, “Balmis en la Nueva España,” in Ramírez Martín et al., 125-7, and Ramírez Martínez, *La salud del Imperio*, 130-1.

<sup>469</sup> Flores's arrival in Spain in the midst of discussions about smallpox epidemics and vaccination in the Americas “*fue de especial relevancia . . . para asegurar el éxito de la Expedición.*” Ramírez Martín, *La salud del Imperio*, 38-41. Ramírez Martín largely overlooks the content of the proposal itself, stressing only that Flores proposed two separate expeditions to the Indies, whereas Balmis reduced the number to one (she also appears to rely on the summary of the Junta de Cirujanos, which only summarized the Flores plan).

<sup>470</sup> Balmis was and is a controversial figure whose imprint on the venture was decisive and who has tended to receive the lion's share of attention, undoubtedly owing to his forceful personality. It is a common assumption, for example, that because Balmis was chosen to head the expedition, he was necessarily the most suitable candidate. Most recently, Enrique Soto Pérez de Celis, “The Royal Philanthropic Expedition of the Vaccine: A Landmark in the History of Public Health,” *Postgraduate Medical Journal* 84 (2008), 599: “His knowledge of the health issues that affected Spain's colonial possessions overseas was, perhaps, greater than that of any other physician of his time. Therefore . . . when the American colonies begged the motherland for help in the fight against smallpox epidemics, Charles IV and his advisors thought of Balmis to lead the rescue expedition.” If knowledge of health issues is taken to mean awareness of practicality and suitability of various health projects in the colonies, Balmis in fact had a rather limited field of expertise;

has historical significance for the way it drew on past experiences and stressed social and cultural components of healing in colonial settings, to which Balmis, for whatever reason, appears to have been oblivious. In that sense, a consideration of its unique aspects may clarify why the latter ran into so many problems when he arrived in the colonies.<sup>471</sup>

According to the Flores plan, so long as it was uncertain that Havana, Mexico, Guatemala, and Peru had acquired cowpox vaccine, two light *barcos* from Cadiz should be quickly dispatched, one to Puerto Rico, Trujillo, Yucatan, Vera Cruz, and the other to Cartagena, Santa Fe, Portobelo, and Panama, with vaccinated children and some cows with pox (though merchant ships could be used, he hoped to avoid mixing any element of commercial or personal interest). Each American capital was to be divided into *cuarteles* for vaccination, placed under the care of councils and principal residents and accompanied by one or more practitioners. A register was to be kept of all vaccinations.<sup>472</sup>

Flores's recommendations came directly from his experiences with professional medicine, health care, and epidemics in Guatemala. By his account, twenty years prior the art of healing ("*arte de curar*") had decayed considerably in Guatemala, but as Prima of Medicine at the Royal University of San Carlos he had attracted disciples, acquired books and medical instruments, and performed demonstrations that revolutionized the teaching of medicine, and his travels through Europe convinced him that his own faculty in Guatemala could compete with the most renowned.<sup>473</sup> He offered a history of smallpox

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nevertheless, as Francisco Fernández del Castillo, in his customarily generous way, put it decades ago, while Balmis could have adopted a more conciliatory stance in such an important place as Mexico, it is also true that another person lacking his nonconformist nature might never have completed an expedition of that scope. See *Los viajes de don Francisco Xavier de Balmis*, 134.

<sup>471</sup> Much is known about the life work of Flores. He graduated as *bachiller, licenciado*, and finally doctor of medicine from the University of San Carlos de Borromeo, with interests and contributions ranging widely, including hydraulics and their use in navigation; optics, physics, and electricity, the last pursued at the Academy of Sciences in Paris; botany, natural history, and Linnaean classification; and the benefits of immunization against smallpox. His interest in the last was manifest as early as 1778, when he presented for the post of Prima de Medicina at the University of Guatemala with a tract titled *Ventajas de la inoculación de las viruelas y necesidad de establecer esta operación en este Reino [de Guatemala] para precaver los estragos de esta funesta enfermedad*. Flores obtained this post in 1783, after a second attempt, where he produced and disseminated some of his most innovative ideas, including the anatomical figures from wax that he made and used for anatomical demonstrations and dissection – the only ones in America in 1789, when he and his students began using them extensively. Flores was also responsible for the creation of Guatemala's Tribunal del Protomedicato, formally constituted on June 21, 1793, with Flores serving as *primer protomédico* until his departure for a tour, in 1796, to inspect the medical facilities and techniques of Cuba, the United States, Germany, Holland, France, Italy, and finally Spain – a journey that had convinced him, as he put it, that his own faculty could compete with the most renowned in the world. Flores was probably the foremost protagonist in Guatemala's epidemics of 1780, 1785, and 1794, and an exemplary figure in an era, in Guatemalan medicine at least, of minute observation and highly practical, original inventions in science, medical training, and health care. See Martha Eugenia Rodríguez, "El doctor José Felipe Flores, primer Protomédico de Guatemala," *Boletín Mexicano de Historia y Filosofía de la Medicina* 13 (1990): 111-123; José Aznar López, *El Doctor don José de Flores: una vida al servicio de la ciencia* (Guatemala: Editorial Universitaria, 1960); and Carlos Martínez Duran, *Las ciencias médicas en Guatemala* (Guatemala: Editorial Universitaria, 1964 [3<sup>rd</sup> edition]).

<sup>472</sup> AGI Indiferente 1558a, Madrid 28 febrero 1803, Proposal submitted by Doctor Joseph Flores, 331v.

<sup>473</sup> "Dejé mi Patria: Abandoné mis comodidades: Pedí a S.M. licencia para viajar: Corrí la Europa en circunstancias peligrosas: Examiné sus escuelas más celebres: ¡Y cual fue mi sorpresa, cuando me hallo

with interpretations typical of much medical literature, stressing the special vulnerability of the Indies to disease, and remarked that though Indians were destroyed in the Spanish Conquest, subsequently “they were declared free, noble subjects, capable of all types of employment” and accorded civil, criminal, and ecclesiastical protections. A health campaign to the Indies, he implied, was necessary and would have incalculable benefits: the Spanish Crown’s American subjects had special health needs, and moreover had been granted special rights and protections for centuries.<sup>474</sup>

The majority of the proposal was a vivid description of recent epidemics, in which Flores displayed his knowledge by tracing the routes along which epidemics typically spread in New Spain (usually beginning in the ports of Veracruz or Yucatan and then progressing to Oaxaca, Guatemala, Nicaragua, Costa Rica, Panama, and Guayaquil). He described himself rushing to the capital to inoculate when smallpox arrived in Guatemala in 1780 from Oaxaca, carried by a “mulatto boy” in the mail’s relay of carriers of June of that year (the carrier, he said, delivered his load before expiring, and Flores was able to do little to halt the destruction underway).<sup>475</sup> In 1785, Flores had dutifully followed orders to practice Francisco Gil’s method of isolation and inspection of maritime vessels in the ports, but offered another explanation, in addition to the royal order to implement it, for his hesitation to inoculate at that time.

We physicians recall with pride that our predecessors achieved the great revolution in Letters, that they promoted and formed the Academies, and that they have played no small part in new and marvelous discoveries. But we forget our limited success in practice, and that among the infinite concoctions and unpleasant solutions with which the credulous sick find some consolation we have barely four drugs that might deserve the name remedy, and these we have acquired from the savages.<sup>476</sup>

Medicine in his eyes was an imperfect art of comfort and persuasion, but he thought differently of inoculation, which he saw as a far more certain remedy. In 1794, as president of Guatemala’s Protomedicato, he had put it into practice after other measures to halt the approaching contagion from Campeche, Villahermosa, and Tabasco failed, doing almost exactly what he later recommended in Spain – dividing the capital into *cuarteles*, which were placed under the care of a member of the city council along with

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*en ellas, que a mi Facultad de Guatemala nada faltaba, y que aun podía, en punto de método de enseñanza, dar Leyes!*” Ibidem, 324r-v.

<sup>474</sup> Ibidem, 325r-326r. “*Que en los imperios, y gobiernos del antiguo mundo, no hay memoria de vasallos más privilegiados, y protegidos, que los indígenas de nuestra América: Que la decantada tiranía de los Españoles, es una chimera, y que la destrucción de los indios depende de otra causa, y estas son las Viruelas.*” [“. . . fueron declarados vasallos libres, nobles, capaces de todos los empleos, y de optar a los beneficios, y dignidades . . .”]

<sup>475</sup> Ibidem, 327r.

<sup>476</sup> Ibidem, 327v-328r. [“*Los Médicos recordamos con orgullo, que nuestros predecesores obraron la gran revolución de las Letras: que promovieron, y formaron las Academies: y que no han tenido poca parte en los nuevos, y estupendos descubrimientos; pero olvidamos nuestros pocos aciertos en la práctica; y que entre la infinidad de brebajes, y composiciones desagradables, con que se consuela la credulidad de los enfermos, apenas tenemos cuatro drogas, que merezcan el nombre de remedio, y estas las hemos adquirido de los Salvajes.*”]



principal residents and a physician. In each, records were kept and clothing and habitation provided to the poor. A physician worked full time in the Royal Hospital, while Flores himself took charge of *pueblos de indios*. The proposed project, in other words, was directly informed by experience in epidemics, by implementation of the same system of relief, and also, as he put it, by his “knowledge of the *país*.”<sup>477</sup>

Now resident in Madrid and reading of repeated efforts back in his home to acquire pus by *correo* from Mexico City and directly from inspections of cows, Flores concluded that the only remedy was vaccination, gift of Providence [*“don de la providencia”*], which, he reported, the chiefs of savages had received from Thomas Jefferson to propagate to their own tribes in the north.<sup>478</sup> In addition to the rough logistic outline, Flores went on to specify precisely the manner in which vaccine was to be put into use among a virgin population. In the head towns of each province the operation would first be performed so that the most *hábiles* physicians could form instructions conforming to those from Europe, “according to their customs, and adapted to the nature and support of the Indians.” In pueblos and missions without a “Spanish or *ladino*” physician to take charge, priests and missionaries were to practice it themselves. These priests and missionaries moved to the center of the plan when Flores proposed the following:

When a child is brought to be baptized, after administering the sacrament the priest will advise and persuade the godparents of the obligation to return after four or six months, when he is well-nourished and healthy, so that he can be vaccinated. In this act, the altar boy will hold a lit candle, and the priest dressed in surplice and stole will bless the child and say the prayer. Once finished, the *facultativo* of the parish named for the operation, or the priest himself, will perform it, and once concluded the priest will pray the

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<sup>477</sup> “*Con conocimiento del País, señalé los lugares, para establecer las guardias entre los límites de Suchitepeques, y Sopususco, y en las sierras de Totonicapan, no sólo para interceptar el paso a los hombres, sino aun a los Animales. Dispuse una larga instrucción de lo que se debía practicar en la Yntendencia de Chiapa infestada: Como se había de tratar a los Enfermos de las Viruelas naturales: El caso de asilar un Pueblo para inocularlo en masa: El orden de hacer esta operación en grande: lo concerniente a las Mujeres embarazadas, a los Niños en dentición, a los Verminosos &<sup>a</sup> lo peculiar de los indios según su naturaleza, y sus alimentos: El método de preservarse los Correos, para que sin que faltase la correspondencia de España, no llevasen a Oaxaca las viruelas, ni las trajesen a Guatemala: Y en fin se detallaban todos los casos que podían ocurrir; la desinfección, y purificación, hasta la sofocación del contagio.*” Ibidem, 329r-330r. Flores referred to a list with 14,000 inoculated, of whom only forty-six died.

<sup>478</sup> On these searches for vaccine: “*Entre tanto, con las noticias que yo había anticipado del descubrimiento de la Vacuna, y de lo que habían sabido por las Gazetas de esta Corte, y las de la Havana, se procuraron los mejores escritos, e instrucciones publicadas en Londres, y en Paris: Se buscaban sin descansar las Viruelas de las Vacas: Se examinaban estos Animales en todas partes, y no encontrando el virus, el Dr. Córdova se proponía experiencias originales, inoculando ovejas, fundadas en un analogismo perfecto: Y el Dr. Esparragosa se ocupaba en promover una suscripción, para despachar un Correo extraordinario por haberse tenido noticia, de que o en México, o en Vera Cruz, se hallaba el Pus vacuno, conducido por el Argonauta.*” The *correo* returned with pus – Mexico had it – but it was *inerto*. Inspections of cows therefore continued and inoculations of sheep were repeated. “*Finalmente en fines de Agosto llegó a Guatemala el Pus Vacuno, remitido de Vera Cruz, a donde había llegado del Nuevo Orleans, pero desvirtuado: El Dr. Esparragosa inoculó inmediatamente varios Niños sin efecto alguno. Se lamentan, y concluyen diciendo: Que el primero que consiguiese el Pus haría el mayor servicio a aquel Reyno. Estas son las noticias de aquellas partes que alcanzan hasta Octubre.*” Ibidem, 330r-v

supplication and alert the godparents that without fail they should bring him notice of the child's recovery so that certification can be entered in the book. This book will be called "Of Vaccination," and it will be kept with the other parish registers. And in the event that the vaccine lymph cannot be had fresh for use from arm to arm, it should be stored carefully between two glass plates in a separate box, in the same sacristy in which the holy oils are guarded. Expenses for this book, box, and glass plates should be taken from the coffers of the confraternities.<sup>479</sup>

This proposal reveals how the Guatemalan physician intended to sacralize the medical discovery in the Americas. His attention to ritual detail – the altar boy holding a lit candle, the priest's vestments (a stole with white surplice over cassock), the blessing and supplication to be intoned, and the location of the vaccine (carefully maintained in a box in the sacristy of the church) – transferred the operation to this ritualized setting of the altar. Even practitioners of medicine, if they were present, were to vaccinate within the church and its ritual spaces.

If the practice and the vaccine could be made holy, set apart somehow, then perhaps they too would be accorded the respect and reverence reserved for the chrism, also kept in the sacristy. Flores deliberated aloud on the method and assumptions that informed his proposal:

To strike the blow, order, firmness, and tenacity are needed. It is essential to plant the remedy solidly and permanently, to accompany it with inspiring pomp and circumstance, *to dress it up in religious ceremony*. And what means are more certain to make a remedy pleasant than mixing it with sweetness, softness, and perfume? What means more appropriate than accompanying it with religion, so that the pueblo can venerate it, appreciate it, crave it? The enlightened know full well that besides it being just to give God thanks for His aid, this has been the effective resort happily employed by legislators of all the ages when they have tried to introduce and establish some custom. The profound politician, the one who is obeyed and takes possession of hearts, is the one who manages the heart's impulses, and prefers among these to manage with skill the religious impulse. The very century of philosophy, the

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<sup>479</sup> Ibidem, 332r. [“. . . según su práctica, y adaptadas a la naturaleza, y mantenimientos de los indios.” “*Que cuando se lleve a bautizar un Niño, el Párroco después de administrar este Sacramento advertirá, y persuadirá a los Padrinos la obligación de volvérselo a llevar al cavo de 4 o 6 meses, cuando se hallare bien nutrido, y sano, para que se le administre la vacunación. Que en este acto, el Monacillo teniendo la vela encendida, y el Párroco revestido de Sobrepelliz, y estola, bendecirá al Niño, y rezará la oración; lo que concluido, el Facultativo de la Parroquia, y el nombrado para esto, o el mismo Párroco hará la Operación, la que concluida rezará el Párroco la deprecación, y prevendrá a los padrinos que sin falta le lleven la noticia del restablecimiento del Niño, para sentar la partida en el libro. Este libro se llamará de Vacunación: Y se guardará con los otros libros Parroquiales; y el pus vacuno, por si acaso no le hay fresco para ingerirlo de brazo a brazo, se guarde cuidadosamente entre dos cristales, en una caja separada, en la misma Sacristía, en donde se custodian las Crismeras. Y que los gastos para este libro, caja, y cristales, se saque de los fondos de Cofradías.*”]

praised Age of Reason, offers us the most memorable example on this truth. It is according to this idea that I propose the following project.<sup>480</sup>

The most successful, thoughtful rulers made good use of religious ceremony, through which new practices were dressed up and softened before being introduced to the public. Rather than proposing strong-armed tactics for the introduction of enlightened medicine, then, he echoed dimensions of Morel's *Disertación*: by calling on religion, rulers could hope to control the reactions of a public and introduce unexpected, innovative practice in this world. And so a tract on medicine, epidemics, and the history of smallpox became, toward the end, a reflection on political philosophy and the mechanisms of the sacred.<sup>481</sup>

The decrees that followed, however, quickly reduced the proposal to its bare bones, and perhaps for this reason historians have largely ignored the fact that Flores provided some of the original inspiration for the massive campaign that was to follow. In March, the court's legal council recommended that Flores take charge of the expedition, and almost as an afterthought recommended Balmis, who had prior knowledge of the Indies by virtue of his residence there.<sup>482</sup> The royal decree on the expedition, remitted on July 31, 1803, specified only that operations were to be performed from arm to arm in both Americas and Philippines, if possible, "observing the anomalies that diversity of climate and castes can produce."<sup>483</sup> At the start of September 1803, the crown sent a printed instruction to administrators in all the affected regions, specifying that in each capital vaccination was to be performed, with the director and his team instructing

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<sup>480</sup> Ibidem, 331r-v, emphasis added. [*"Para acertar el golpe, es necesario orden, firmeza, y tesón: Es preciso plantar el remedio de un modo sólido, y permanente: Acompañarlo de una pompa, y aparato, que imponga: revestirlo de una Ceremonia religiosa; y qué medio mas seguro para hacer un remedio grato, que el mezclarle la dulzura, la suavidad, y la fragancia [sic]? Qué arbitrio mas oportuno, que acompañarlo con la Religión, para que el Pueblo lo venere, lo aprecie, y lo apetezca? Las gentes ilustradas saben muy bien, que además de ser justo dar a Dios gracias por sus beneficios, este ha sido el resorte vigoroso, y felizmente empleado por los Legisladores de todas las edades, cuando han tratado de introducir, y radicar una costumbre. El profundo político, el que se hace obedecer, y se apodera de los corazones, es el que maneja sus móviles, y el que entre estos, prefiere con destreza el de la Religión. El siglo mismo de la Filosofía: El ponderado siglo de las luces, nos esta ofreciendo sobre esta importante verdad, el ejemplo mas memorable. Según esta idea propongo el proyecto siguiente."*]

<sup>481</sup> Flores concluded the proposal by recommending that the pope be supplicated to issue a papal brief "para que santifique esta practica" and to determine the oration and supplication to be performed by the priest in his anticipated ceremony, and also offer indulgences, "pues esta buena obra se dirige a la conservación, y aumento de los Fieles, y a la prosperidad de la Monarquía Católica." Archbishops and bishops should publish the papal decree with solemnity, preaching and explaining in churches to inform the village of the benefit of the practice, examining in their reviews of dioceses the books of vaccination Flores proposed and noting whether vaccination was being practiced in each place "con su orden, y Ceremonias." Finally, the *audiencias* would ask for an extract from the books of vaccination at the end of each year to compile a *padrón* of each district, from which could be composed an ambitious *estado general* of all the inhabitants of the Indies. Ibidem, 332v-333r.

<sup>482</sup> "El otro profesor pudiera ser D<sup>n</sup> Francisco Balmis, Físico de Cámara, que ha traducido últimamente el tratado mas completo sobre la vacuna del D<sup>r</sup> Moreau (de la Sarthe) por su actividad, por su genio, que ha hecho repetidos viajes a la N.E. y por haber residido largo tiempo en México, conoce aquel país." AGI Indiferente 1558a, Madrid 17 marzo 1803, 321-3.

<sup>483</sup> AGI Indiferente 1558a, Palacio Real 31 julio 1803, Royal Decree on Expedition, 399-400. [". . . observando las anomalías, que la diversidad de clima, y de castas pueda producir."]

physicians and “other people, who may want to take advantage of this opportunity,” using orphaned children (*niños expósitos*), where available, and sending vaccine to other parts in glass plates.<sup>484</sup> Addressing itself to the charitable dimensions of *religión*, prelates were instructed to contribute to the introduction and conservation of vaccine in the pueblos of their dioceses, exhorting priests and missionaries to aid the expedition and its participants “making use of the influence that ministers of the Church regularly have over public opinion in order to dispel any contrary preoccupation.”<sup>485</sup> Here, the human and material resources of the church were to be drawn on to care for the children involved with the expedition, and also for the purpose of persuasion, but significantly nothing was said of the sacrament of baptism, or of the capacity of priests to vaccinate.

As director, Francisco Xavier de Balmis was finally left responsible for the challenges of implementation in the Americas.<sup>486</sup> He made three notable interventions that can be traced in the regulations (*reglamentos*) drawn up in each provincial capital (in

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<sup>484</sup> “*En todas las Capitales, y en los pueblos principales del tránsito residirán los Comisionados los días precisos para comunicar a los naturales y habitantes el fluido vacuno gratuitamente, enseñar la práctica de la operación a los Facultativos y demás personas, que quieran aprovecharse de esta oportunidad, repartiendo con acuerdo de los Jefes respectivos, entre los más adictos a ella, algunos vidrios, en que se transporta el fluido, y libros de los 500 ejemplares que lleva el Director, costeados por la Real Hacienda, del Tratado histórico de la Vacuna, obra la mas completa e instructiva en esta clase, escrita por Moreau de la Sarthe, y traducida por el Director, y para reponer algunos Niños, cuando este los pida, prefiriendo los Expósitos, donde los haya, y precediendo el consentimiento de los padres, si los tuvieren conocidos; en la inteligencia de que serán bien tratados, mantenidos y educados, hasta que tengan ocupación o destino con que vivir, conforme a su clase, y devueltos a los pueblos de su naturaleza, los que se hubieren sacado con esta condición.*” AGI Indiferente 1558a, San Ildefonso 3 septiembre 1803, Instructions to authorities on propagation of vaccination (printed circular), 465f.

<sup>485</sup> AGI Indiferente 1558a, San Ildefonso 3 septiembre 1803, 465f. [“. . . espera S.M. del celo de V. a su Real Servicio, que por los medios suaves que estime oportunos, y conformes a la moral cristiana, contribuya a introducir y conservar en los pueblos de su Diócesis la saludable práctica de la Vacuna, exhortando a los Curas, Doctrineros, y Misioneros a que protejan la expedición, y auxilién a sus Individuos, y a los Niños . . . valiéndose del influjo que regularmente tienen los Ministros del Santuario sobre la opinión pública para disipar cualquiera preocupación contraria.”]

<sup>486</sup> Balmis was born to a family of barber-surgeons in Alicante in 1753, aged fifty years when the Royal Expedition departed from La Coruña. He served as a surgeon in the army, with experience in a battalion stationed at Veracruz beginning in 1783, and as *cirujano mayor* of the prestigious Hospital Militar del Amor de Dios (which specialized in syphilis cases), where he served from November 1786 until April 1788. Upon retiring from the army, the archbishop of Mexico appointed him head of the syphilitic ward of the Hospital de San Andrés, where Balmis studied the anti-syphilitic properties of native plants, including Mexican agave (or maguey) and begonias, remedies in use by indigenous curanderos in and around the capital. When he returned to Spain, in 1792, Balmis brought samples in boxes for further experimentation in Madrid. He faced some resistance in Spain, characterized as a charlatan and forced to defend the use of his plants in treatment. It is unclear whether Balmis played a major role in any of New Spain’s epidemics.

At the time of his selection as director, he was a member of the prestigious Royal Academy of Medicine in Madrid and, in 1803, had recently translated Jacque-Louis Moreau de la Sarthe’s *Traité historique et pratique de la vaccine*. The *Tratado histórico* quickly became the authoritative source for the history and practice of vaccination, copies of which were disseminated over the course of the expedition’s journey. Balmis was a perfectionist, supremely confident in his professional capabilities, hyper critical, controlling, and prone to look down on those he viewed as less capable than he. See Michael Smith, *The “Real Expedición Marítima de la Vacuna,”* 16-17, Ramírez Martín, *La salud del Imperio*, 90f, 94ff, and Fernández del Castillo, *Los viajes de don Francisco Xavier de Balmis*, 32-35, 89-96, 134-5, and *passim*.

which he had much input).<sup>487</sup> The first, discussed further in the following chapter, was to place vaccine under the care of vaccinating committees (*juntas centrales*) rather than individual bureaucrats.<sup>488</sup> The second was to prefer to establish vaccination in *casas consistoriales* rather than in the hospitals later provided for in the Royal Cédula of April 21, 1805, which, he later wrote, instead of assuring parents that their children would be cared for by a medical practitioner if anything went wrong, as intended, implanted unnecessary fears by associating the procedure with sickness. “The idea of congregating in hospitals,” he noted, “is for many shameful and revolting, and for others risky.” Balmis affirmed that the most effective approach for the conservation of vaccination was:

to distance from it any notion of sickness, pain, or danger, [and nothing is more] advisable than to see the vaccinated continuing their ordinary life out in the open air, without preparation or diet, as if the operation had not been performed on them. Because the circumstance that most recommends vaccination is that it produces an effect so wonderful that it does not require any subjection . . .

We have seen these attempts to maintain all appearances of normality and to dissociate immunization from hospitals and harm, sickness and danger, by now common in New Spain. His solution was to provide for a *casa decente* for public vaccination, where people could be vaccinated “without the horror and repugnance with which hospitals, hospices, and other houses of mercy are held.”<sup>489</sup> In this he was revising the official

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<sup>487</sup> Examination of the versions sent to each region reveals minor variations, evidence that Balmis was attempting to tailor the establishment of *juntas de vacuna* and *casas de vacunación* to each place, or at least was not oblivious to local circumstances. These variations were modeled on the regulations established for Caracas, which became an archetype for other capitals. See Smith, *The “Real Expedición Marítima de la Vacuna,”* 21-2, and Ramírez Martín, *La salud del Imperio,* 196 and 186-8.

<sup>488</sup> This was in opposition to the Spanish peninsula, where Balmis stipulated that the operation was to be cared for by *corregidores*, citing challenges to following royal orders created by distance from authority as the reason. AGI Indiferente 1558a, Madrid 12 febrero 1807, Francisco Xavier de Balmis to Marques Caballero, 1414v. “*La causa de esta diferencia es, que en España los Corregidores muy inmediatos a la suprema autoridad se esmerarán mas en obedecerla, y cumplirán más exactamente las ordenes que reciban: mientras que en Yndias la distancia inmensa que separa a los pueblos de la Metrópoli hace más incierta la ejecución si se confía a un hombre solo, y precisa por lo mismo a encarar este cuidado al celo, y a la emulación de muchos. El conocimiento que tengo de aquellos países, y la experiencia de lo que me ha ocurrido en mi expedición, me han hecho preferir este medio como el más a propósito para el fin.*”

<sup>489</sup> AGI Indiferente 1558a, Madrid 12 febrero 1807, Francisco Xavier de Balmis to Marques Caballero, 1413r-v, 1414v-1415r; AGI Indiferente 1558a, Reglamento de S.M. para perpetuar en Indias la Vacuna, no place, no date (submitted to crown 12 febrero 1807), 1422-1427, article 5. Public vaccinations were to be carried out either in the *casas consistoriales* or the bishop’s palace, both centrally located and apart from menacing hospitals, and both were used interchangeably. The institutions of propagation, the Juntas de Vacuna, were conceived from their beginning for civil and ecclesiastic members, joined by the most prestigious and charitable private citizens. In practice, this is how they were executed: disputes about whether secular or religious properties were more appropriate for the practice of vaccination would be illuminating, but so far none has come to my attention. [“*La idea de concurrir a Hospitales es para muchos vergonzosa, asquerosa, y arriesgada para otros.*” “. . . *alejar de él toda idea de enfermedad, dolor, o peligro; nada más conveniente que el que se vea a los vacunados seguir haciendo su vida ordinaria al aire libre, sin preparación, sin régimen, y como si tal operación no se hubiera hecho con ellos. Por que la circunstancia que mas recomienda a la vacuna es, que produciendo un efecto tan maravilloso no obliga a*

program, a necessity informed perhaps by his own experience in hospitals and his observations of common perceptions of sickness in the Spanish kingdoms.<sup>490</sup>

The third measure insisted upon by Balmis was that only those selected by officials have access to lancet and vaccine. Such a restriction on practice of the operation would have had significant repercussions for the history of vaccination in the colonies, had it been followed. Although “the practice of vaccination may be so simple and easy that mothers will eventually execute it by themselves once it is more familiar,” nevertheless, Balmis insisted, only distinguished professors of medicine and surgery were to be selected for this important mission. Even as Balmis conjured a future moment when mothers would vaccinate their own children, he continued to circumscribe a sphere of expertise from which most of the population would de facto be excluded.<sup>491</sup> At least among versions of the regulations consulted, the restricting clause prohibiting unauthorized persons from attempting the operation remained – even in the tropical port of Acapulco.<sup>492</sup> As for prelates, parish priests, and ecclesiastical *cabildos*, these were to persuade and aid, but the sacramental details provided by Flores was absent.<sup>493</sup>

Especially in this last dimension, the regulations issued by the governors of each province made a grave miscalculation that would pose a problem for many, including the

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*requisito ni sujeción alguna . . .” “. . . sin el horror y repugnancia que generalmente se tiene a los Hospitales, Hospicios, y demás casas de misericordia.”]*

<sup>490</sup> For evidence that these modifications were made, AGI Indiferente 1558a Durango 15 noviembre 1804, Bernardo Bonavia to José Antonio Cavallero, 778-9r. The governor reported that he had composed a *reglamento* for *provincias internas* and made a change suggested by Balmis that a home, rather than hospital, be designated for vaccination. For an English translation of the regulations for Mexico City, see Sherburne Cook, “Francisco Xavier Balmis,” Appendix II, 99-101: “The Public Vaccination Clinic should be located in the center of the city and should be comfortable and clean. This is so that the public may congregate there, experiencing a minimum of tediousness, to receive the benefit granted it gratuitously. Over the door there should be a sign reading ‘Public Vaccination Clinic’. It would be inappropriate, at least at the beginning, to utilize hospitals, hospices or foundling homes to deposit so valuable a prophylactic, for aside from the dislike and abhorrence with which these institutions are commonly regarded, a factor which would contribute greatly to the reluctance of the public, the filth and emaciation of the inmates would much deter attendance on the part of the public, for the mothers do not want their children vaccinated except from the healthiest carriers, robust and of good appearance, as I have seen elsewhere.”

<sup>491</sup> AGI Indiferente 1558a, Reglamento de S.M. para perpetuar en Indias la Vacuna, article 15. [“. . . la práctica de la vacunación sea tan sencilla y fácil que las madres llegarán a ejecutarla por sí, cuando se halle mas familiarizada; sea tan benigna que no merezca el nombre de incomodidad; que no pide preparación alguna; y que puede ejecutarse en cualesquiera edad, estación y circunstancias de salud . . .”]

<sup>492</sup> AGI Indiferente 1558a, Acapulco 5 febrero 1805, Reglamento para propagar, y perpetuar la preciosa Vacuna en este Puerto de Acapulco, 982-985v, article 17: “No se permitirá vacunar a persona alguna que no esté instruida en esta nueva practica, para evitar se propaguen falsas vacunas, etc.”

<sup>493</sup> AGI Indiferente 1558a, Reglamento de S.M. para perpetuar en Indias la Vacuna, article 19: “Y aunque es de esperar que mediante este Reglamento y plan de reforma . . . se asegura su crédito y propagación; pues no presentándose a los pueblos ejemplos en contrario como hasta aquí, y correspondiendo los hecho benéficos a las promesas, no habrá Padre de familia que resista la vacunación por más preocupado que sea, viéndose rodeado de los triunfos y aclamaciones con que todos elevarán la gloria de tan precioso descubrimiento; con todo, mientras llega este día de felicidad tan deseada, es necesario coadyuven a tan saludable empresa, y empleen toda su persuasión y auxilios los M. RR. Arzobispos, Rev<sup>dos</sup> Obispos, Ven<sup>bles</sup> Párrocos, Cabildos Eclesiásticos y Seculares, y las Justicias y Autoridades públicas, y demás personas ilustradas y constituidas en dignidad, para dar a conocer la grandeza e importancia de este feliz descubrimiento, que la Providencia se dignó concedernos en nuestros días.”

bishop of Oaxaca, Antonio de Bergosa y Jordán. In a pastoral letter (*carta apostólica*) (also called an *edicto*) the bishop had given priests of his diocese permission to vaccinate in the absence of trained practitioners, announcing that he would distribute for free a number of iron instruments (*punzones*) to be used as lancets to vicars, parish priests, and others who requested one.<sup>494</sup> Yet he had seen the regulations published by the governor of Oaxaca prohibiting unauthorized persons from performing the operation and wrote the minister of Gracia y Justicia in something of a panic, wondering whether had he countermanded the king's wishes by issuing the edict.

Reading the full text of the document (see **Appendix**), it is difficult not to imagine oneself reading a contemporary medical tract on vaccination, neatly embedded in an exhortatory pastoral letter. After the conventional prelude in which the prelate addressed himself to his “beloved priests, vicars, and other ecclesiastics, and all the faithful of this our bishopric,” Bergosa ranged over the history of the vaccine, referring to the “wise physician Jenner” and his 1797 experiments with cows. He touched on the dangers of vaccination with spurious lymph, echoed medical and imperial texts on the near universality of the practice, and noted that the incision was made so lightly in the skin, that “as such fathers, mothers, or wet nurses (*chichiguas*: from the Nahuatl *chichihua*) can do it without fear, and with the same felicity and good effect, because in fact it is an operation more proper to women for their softer hands.”<sup>495</sup> Referring to “my beloved children” and “my beloved faithful,” it was, however, like Morel’s treatise, much more than a learned tract, establishing a direct relationship to an audience it sought to move as it instructed.<sup>496</sup> “Do not waste this precious treasure . . . Do not look insensitively on a remedy that costs you nothing and matters so much to you. Do not allow a sudden plague of smallpox to snatch your children and grandchildren from your arms for the tomb, covering your hearts and poor *chozas* [huts] in mourning, but instead vaccinate them in a timely fashion, which will be the same as liberating them from smallpox, and death.”<sup>497</sup>

The bishop employed the same direct language when addressing members of the clergy and compelling them to vaccinate. He linked the spiritual fitness of parishioners to their physical well being and reminded priests of their responsibility to both:

<sup>494</sup> AGI Indiferente 1558a, Villa de ETLA 7 diciembre 1804, Nos el Doctor Don Antonio Bergosa, 821r.

<sup>495</sup> AGI Indiferente 1558a, Villa de ETLA 7 diciembre 1804, Nos el Doctor Don Antonio Bergosa, 818r. [“ . . . así la pueden hacer sin temor con igual felicidad, y buen efecto los Padres, Madres, o Chichiguas, pues realmente es operación más propio de mujeres por la mayor suavidad de manos.”]

<sup>496</sup> “Esta es la verdad interesante, amados hijos míos, que deseamos haceros conocer: y esta la practica que debéis adoptar gustosos para preservar a vuestros hijos, y nietos del cruel contagio de las viruelas, que de tiempo en tiempo os acomete. Acomodándonos pues a vuestra corta capacidad, nos abstenemos de relaciones históricas, y elegantes que pudieran amenizar esta nuestra paternal exhortación, y os aseguramos sencillamente.” AGI Indiferente 1558a, Villa de ETLA 7 diciembre 1804, Nos el Doctor Don Antonio Bergosa y Jordán, 817r-v.

<sup>497</sup> AGI Indiferente 1558a, Villa de ETLA 7 diciembre 1804, Nos el Doctor Don Antonio Bergosa, 820r. [“No malogréis este precioso tesoro . . . No miréis como insensibles un remedio que nada os cuesta, y que tanto os importa. No deis lugar a que una repentina peste de viruelas naturales, cubriendo de luto vuestros corazones y pobres chozas os arrebate de entre vuestros brazos para el sepulcro vuestros hijos, y nietos, sino vacunadlos oportunamente, que será lo mismo que libertarlos de viruelas, y de la muerte.”]

do not reveal yourselves oblivious to the value of this precious discovery of vaccine, certain remedy against smallpox, for your parishioners' physical health, on which the spiritual health of souls depends. God would not permit there to exist among you one so indolent to believe himself not obligated, who would dare to say crassly that he is physician of souls and not of bodies, because he would prove his ignorance and lack of charity, knowing by his ministry that God did not create man for himself, but for the good of many . . .

The prelate continued that whosoever had the capacity to protect his neighbor's life, but chose not to, would be considered a murderer. "And yes, beloved brothers, venerable priests, he who does not try to conserve the physical health of his parishioners, so easily able, will not be a good spiritual physician of souls."<sup>498</sup> In these ways the bishop wove together the spiritual duties of priests with their responsibilities for the propagation of an invention that could preserve the physical health of parishioners. At the end, forty days indulgence were promised to those who willingly submitted to vaccination, those who performed it, and those who toiled charitably in support of it. And so, while Flores's role for the church was overlooked, its resources nevertheless were intertwined in Oaxaca with the provision of the novel procedure.

It is tempting to take the pastoral letter as evidence of a regalist bishop's slavish emulation in the face of a modern medical practice endorsed by the Spanish Crown. If taken seriously, however, the text he produced renders the conclusion that he mindlessly appropriated its project becomes not only uninteresting, but also untenable.<sup>499</sup> The bishop was driven to produce a unique solution in this instance, an improvisation of sorts situated within the limits of a genre ordinarily dedicated to the instruction of parish priests and the moral reform of parishioners. Though the text suggests a number of readings, certain features are relevant to the foregoing discussion about persuasion and audience. On one hand, the document manifested all of the conventions of a pastoral letter: the distinctive formulaic opening; the indexical references to "vosotros," you all, in relation to the paternal author (e.g. "my beloved children") and an omniscient God (to say nothing of Charles IV, present in the opening paragraph); a moralizing discourse on duty, salvation, and obedience. At the same time, these conventions were blended with those of

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<sup>498</sup> AGI Indiferente 1558a, Villa de Etila 7 diciembre 1804, Nos el Doctor Don Antonio Bergosa, 820v. Clearly serious in gaining the support of his priests, he added that anyone wishing to receive orders and the title of "idioma" would have to promise to promote and assist the practice, and that any ecclesiastic who opposed it in word or deed would be punished. [*... no os mostréis insensibles a este precioso descubrimiento de la vaccina [sic], y seguro remedio contra las viruelas, para la salud corporal de vuestros feligreses, de que pende la espiritual de las almas. No permita Dios, que se halle entre vosotros ninguno tan indolente que se crea desobligado, y se atreva a decir groseramente, que él es medico de las almas, y no de los cuerpos porque acreditaría su ignorancia y falta de caridad, debiendo saber por su ministerio, que no crió Dios al hombre para si solo, sino para el bien de muchos . . .*] "Pues sí, amados hermanos, venerables curas, no será buen médico espiritual de las almas, quien pudiendo tan fácilmente no procure conservarles la vida corporal a sus feligreses."

<sup>499</sup> The problem of independent action for the church hierarchy can be approached from other directions. For example, Bergosa y Jordán clearly proceeded as if his priests would vaccinate, an assumption that subsequently caused some awkwardness for the Spanish Crown, which had initially forbidden it. More telling perhaps was the prelate's later attitudes toward vaccination – in the insurgency years, he became rather critical of the assertion that it could cure anything other than smallpox (see the following chapter).



a medical tract, with its references to the body of an imagined patient, depictions of the act of vaccinating itself, assumptions about the validating authority of experimentation and statistics, negations of suffering, and recourse to the emotional force of descriptions of illness (perhaps not typically associated with medical treatises, but as argued above, common tactics in this period). The indexical, stylistic, and thematic elements of the *carta* suggest, then, that a unique context of medical practice, persuasion, and communication spawned an innovative genre both oriented by medical and ecclesiastical ideology and responsive to the requirements of the context and colonial audience.<sup>500</sup> It was the mirror image of other medical treatises, which, as I have suggested, were laced with references to international authorities, unbiased observation, and the authorizing force of experiments, but also steeped in personal, exhortatory language, rooted in domestic spaces, and oriented toward the ideology and value of ceremonial action and supernatural etiologies. Strict classifications of one and the other genre break down especially quickly in this era of innovative healing practice.

In the end, Bergosa y Jordán, regiphile though he may have been, clearly had something to teach the Spanish crown. His letter produced a minor crisis in the Secretaría de Estado, Charles IV's executive arm, which deliberated in a series of brief exchanges that show a state divided on the matter of popular access to vaccine. An official of the assembly (*mesa*) remarked that Bergosa y Jordán's *reglas* conformed so closely with what had been written on smallpox vaccine, that "the bishop appears to have formed an extract of the best authors, all the more considerable insofar as it is simpler and accommodated to the limited knowledge of the practitioners and *curanderos* usually found in the interior pueblos of his diocese." Nevertheless, it seemed to him prudent to limit "in the beginning" those who operated to expert doctors (*peritos*) who could teach the practice and were able to distinguish between good and spurious vaccine. It was recommended that the bishop's zeal be praised, but that he be charged with ensuring that the clergy

abstain for now from vaccinating by themselves, *limiting themselves to exhorting the public to admit this admirable preservative*, leaving its practice to the care of the secular government and the professors it names and authorizes, with the aim of avoiding spurious vaccinations, *although the reverend bishop, priests and clergy should continue their exhortations* and other assistance that depend on their faculties."<sup>501</sup>

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<sup>500</sup> William F. Hanks has used genres as units of discourse analysis in the Yucatán, in particular the emergent or novel discourse production in the official Maya documents of the early colonial period. He writes variously of "ambivalent genres," "boundary works," "blended genres," and "colonial genres" to characterize these discourse, where genres are taken as sites of historical change, as the "historically specific [discursive] elements of social practice." See "Discourse Genres in a Theory of Practice," *American Ethnologist* 14:4 (1987): 64-88, and "Language and Discourse in Colonial Yucatán [1996]," in *Intertexts* (New York: Rowman & Littlefield Publishers, 2000), 271-311.

<sup>501</sup> AGI Indiferente 1558a, no place, no date ("Nota" following summary of bishop's letter of December 11), 810v-811v, emphasis added. There was some uncertainty about whether the governor of Oaxaca had the authority to intervene to prescribe such limitations, when it was recalled that a royal decree had ordered the creation of *reglamentos* tailored to each place in consultation with Balmis. As a result, it was clarified, "En algunos [países] se advierte la prohibición de que nadie vacune por ahora, si no los Facultativos aprobados por las juntas Provinciales para evitar falsas vacunas; y esto es lo que habrá sucedido en Oaxaca." AGI Indiferente 1558a, no place, no date (written on a slip of paper folded over the file, at top: "S.E. desea saver si el Gobierno de Oaxaca tubo facultades para este bando"), 813. ["... que parece haber

The redundancy stresses the hope that restrictions on practice would not impair the persuasive function usually reserved for and exercised by members of the clergy in their parishes and among the public.

Nevertheless, the author of a subsequent note, dated May 25, 1805, felt differently. As this functionary noted, the “vaccinating operation is very simple and should be popularized [*vulgarizarle*] as much as possible; and although for now the mentioned regulations should go through in respect to this part, to avoid spurious vaccine, the zeal of this bishop should be praised,” and other bishops, the viceroy, and commanders invited “to try to make the manner of vaccinating popular and common, especially in villages where practitioners are not easily had, and even in those that have extras, once the simple Instruction on this operation is made public, so that even mothers can execute it, as is done in many parts.” Separate orders to the bishop of Oaxaca and to the viceroy of New Spain were sent out to this effect two weeks later.<sup>502</sup>

To my knowledge, nothing has been made of this chapter in the history of the Royal Expedition, in which the crown, following the lead of Oaxaca’s bishop, issued orders that flew in the face of what Balmis was attempting in New Spain.<sup>503</sup> There were

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*formado el Obispo un extracto de los mejores Autores, tanto mas apreciable, cuanto es mas sencillo y acomodado a los conocimientos escasos de los Facultativos, y Curanderos, que suelen encontrarse en Pueblos interiores de su Diócesis.” “. . . por ahora se abstengan de vacunar por sí mismos, limitándose a exhortar al Público a la admisión de este admirable preservativo, dejando su práctica al cuidado del Gobierno político y de los Profesores, que nombre y habilite, con el objeto de evitar falsas vacunas, sin perjuicio de que el Reverendo Obispo, los Curas y el Clero continúen sus exhortaciones y los demás auxilios, que dependan de sus facultades.”]*

<sup>502</sup> AGI Indiferente 1558a, no place, 25 mayo 1805, 811v-812v. [“. . . operación de vacunar es muy sencilla, y debe vulgarizarle cuanto sea posible; y aunque ahora pasen los reglamentos de que se hace mención en cuanto a esta parte, para evitar la falsa vacuna, debe aprobarse el celo de este obispo . . .” “. . . a que procuren, sea popular y común el modo de vacunar especialmente en los pueblos, donde no sea fácil que se hallen facultativos, y aun en los que haya copia de ellos después que sea pública la sencilla Instrucción de esta operación, que aun las mismas madres, pueden ejecutarla como se verifica en muchas partes.”] For the borrador of the decree sent to the bishop, AGI Indiferente 1558a, Madrid 12 julio 1805, Crown to Obispo de Antequera de Oaxaca. The first part reads: “*Han sido del agrado del Rey los varios medios adoptados por V.S. para propagar en su Diócesis el admirable descubrimiento de la vacuna . . . y aunque considera S.M. conveniente que por ahora corran los reglamentos formados por el Gobierno de esa y de otras Provincias de Nueva España, que limitan la práctica a los Facultativos y Personas instruidas, que hayan obtenido permiso, para ejecutarla, a fin de evitar falsa vacuna: ha merecido sin embargo la aprobación de S.M. el edicto, que publicó V.S. mandando a los Curas y persuadiendo a los Seglares que la adoptasen y practicasen como remedio importantísimo a la humanidad, prescribiendo a este fin reglas tan claras para la práctica de la operación y para discernir la verdadera de la falsa vacuna, que manifiestan el celo ilustrado de V.S. y los conocimientos, que ha procurado adquirir en el asunto. En su consecuencia prevengo con esta fecha al virrey que procure que sea popular y común el modo de vacunar, especialmente en los Pueblos, donde no haya Facultativos, y aun en los que haya copia de ellos, después que se generalice el método sencillo de la operación.*” For the accompanying order to the viceroy to “generalize” the operation, AGI Indiferente 1558a, Madrid 12 julio 1805, Crown to Viceroy of New Spain, 835r-v. It is unclear whether the same popularization was intended for other places, such as Peru or Guatemala; in this case, decrees went only to officials in New Spain.

<sup>503</sup> It was common in this moment for members of religious orders to be placed in charge of vaccinating in the South American territories covered by the offshoot of the expedition headed by sub-director José Salvany. This happened in the territory of Lambayeque, viceroyalty of Peru, after Salvany was called the anti-Christ and apparently persecuted by certain *indio* inhabitants in the region, as well as in Santiago de

indeed many obstacles placed in his way by colonialists, but perhaps none greater than this royal willingness to “popularize” the operation in pueblos without doctors (and even in places with them, once a simple instruction for practice was in place). Spanish colonial subjects thus had placed in their hands not only the privilege of debate and evaluation, but also the very tools of operation, indicating some interest in a degree of democratization of medicine that contradicts much of what has been written on the exclusivity of a narrowly conceived group of practitioners.<sup>504</sup> In other words, while all could agree that every Spanish subject should be made the object of enlightenment medicine, the goal, in this instance, went much further: to make the procedure so accessible that any mother without special medical training or expertise could become medicine’s *agent*, performing the operation on her own children.<sup>505</sup>

Neither the bishop’s pastoral letter, with the comments generated in its wake, nor the Flores plan has received much treatment.<sup>506</sup> The assumptions in these documents, which anticipated the participation of priests and ceremonial practice in the provision of

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Chile, where friar Manuel Chaparro, of the order of San Juan de Dios, vaccinated 286 individuals in the porticoes of the Cabildo Metropolitano. See Ramírez Martín, *La salud del Imperio*, 166f and 172. Presumably Balmis, more intent on control in New Spain, temporarily succeeded in intercepting such interferences in the territories he traversed; see the following chapters for important exceptions.

<sup>504</sup> In much of the literature on medical practice in the eighteenth century, stress has fallen on attempts by the Spanish Crown, the Inquisition, and professional bodies such as Mexico City’s Protomedicato to limit access to the practice of medicine. E.g. Luz María Hernández Sáenz, *Learning to Heal: The Medical Profession in Colonial Mexico, 1767-1831* (New York: Peter Lang, 1997).

<sup>505</sup> This attention to mothers as agents was not new: Balmis dedicated the translation of Moreau’s *Tratado histórico* to these central figures, but as is clear from his later correspondence, he did not intend for laywomen to pick up the lancet, only to bring their children to be vaccinated in a show of maternal love.

<sup>506</sup> Susana Ramírez Martín, making use of the same group of documentation, excerpts Bergosa y Jordán’s edict in her earlier major work on the Royal Expedition in a section on the attitudes of the clergy in the face of vaccination, but never acknowledges its immediate effect on royal policy, seems not to know what to do with his peculiar proposals, and omits any mention of the ecclesiastic’s intervention in a subsequent publication (a major omission, given the seriousness with which his *carta* was treated). My sense is that this episode fits poorly with the distinctly modern Western medical campaign she wishes to trace. For example, the following on the clergy’s reactions in epidemic crises, which appears in the same volume: “*Manteniéndose al margen, algunos sectores [del clero] descartaron la posibilidad de resolver los problemas con la ciencia. Para ellos, sólo Dios podía cambiar el rumbo de los acontecimientos. Al hombre del siglo XVIII, persona devota, pía y religiosa, en su lucha diaria con la enfermedad, no le queda más camino que la oración, la mortificación, y la penitencia.*” Thus in charge primarily of the ideological content of an increasingly scientific problem, at sea in the universe of belief, the religious component “*entrará en conflicto con la visión científica que se va imponiendo en el pensamiento médico*” at century’s end. *La mayor hazaña médica*, 68-72, 174-181, for assumptions of conflict and excerpts from the pastoral letter. It seems to me that association with religion, or the appearance of religious affinities within the official program (beyond the readily conceded ideological component), threatens to infect or contaminate what is championed as a modern medical achievement; vaccination in the hands of priests is backward.

Jorge Cañizares-Esguerra has commented on the seeming unwillingness of national historiographies to engage certain aspects of modernity, particularly in a matter with so much at stake as the development of nation’s modern science. See *Nature, Empire, and Nation*, 39: in an essay that generalizes about the encyclopedic nature of this scholarship, he notes a “clear teleological thrust” and notes that “for all their historicist sensibilities, most Spanish historians of science seem overly concerned with identifying the pioneers of modernity.” Certainly Spanish historians, patriotic and otherwise, are not the only ones continuing to look for and find the secularizing march of modernity.

medical care, were not isolated aberrations.<sup>507</sup> In New Spain, far from immiscible oil and water – a situation in which religious thought and ritual were held to be incommensurate with a rising empirical medicine, its epistemology, and its rituals and technologies – many influential thinkers, secular and religious alike, insisted on religion’s continued relevance to scientific theory, method, and practice. In fact religion – its cult, symbols, personnel, and moral suasion – was represented as the very solvent in which new medical science could be dissolved and introduced to a receptive public. It is one of many ways that colonial society impinged on and shaped a professional science and scientific method that have come to be seen as increasingly objective, detached, and even secular.

### **Conclusion: Science, States, and Scabs**

The history of immunization against smallpox is the best example of the appropriation and application, on a global scale, of locally fabricated medical knowledge and health practices for professional, imperial, and national ends.<sup>508</sup> Inoculation underwent numerous conversions into other media, but perhaps none was more monumental than its early eighteenth-century appearance in the pages of the *Philosophical Transactions* of the Royal Society in London: having arrived from Constantinople, knowledge about the practice was subsequently kept and circulated globally, a trajectory aided not only by the institutionalization of the practice in medical journals, but also the training of doctors at universities, which shifted the epistemological ground on which it was evaluated. After this, it would prove difficult to recall that the accidental benefits of empirical observation were not the exclusive purview of a single empire, science, religion, class, kingdom, or continent.<sup>509</sup> Still, scientific discourse continued to take operate at the interstices of theory and society, where religion’s continued relevance was assumed and other media, such as rumors and songs, a constant reality. If kept globally, in other words, knowledge continued to be validated and used locally, and in at least this sense further study of discourses built around inoculation may

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<sup>507</sup> They resemble what Adam Warren has traced for the Andes, where Friar Francisco González Laguna’s 1781 treatise on post-mortem performances of caesarean sections by priests in rural areas generated much medical-ecclesiastical discourse on surgical practice. Warren finds in the years following Tupac Amaru “a period in which officials began to debate new and unprecedented forms of intervention in medical practice, surgical practice, and reproductive health in Peru.” Countering objections that priests were not surgeons, González Laguna, in his 1781 *El zelo sacerdotal para con los niños no-nacidos* “cited numerous examples of missionaries in Brazil who performed bloodlettings on native populations, claiming that this rendered the professional boundary between priests and surgeons irrelevant.” “Piety and Danger,” 99, 109, and Chapter Three passim. There is a distinction to be made between this example of rising medical authority, where the ultimate concern is the salvation of the soul through proper baptism, and Bergosa y Jordán’s insistence that care of the soul entailed priestly care of the body’s health, as well.

<sup>508</sup> Before the practice began flowing freely between continents, inoculation had long been rooted in local trial and error, elaborated in songs, stories, and myths. In Boston, an African servant of Cotton Mather translated local knowledge for his master, who in turn zealously applied it during a 1721 epidemic (Mather had been surprised to read of the same practice in London’s *Philosophical Transactions* of 1714). “And we have an Army of *Africans* among ourselves, who have themselves been under it [inoculation], and given us all the Assurance, which a Rational Mind can desire, that it has long been used with the like Success in *Africa*.” Cotton Mather, *Sentiments on the Small Pox Inoculated*, reprinted in Increase Mather, *Several Reasons Proving . . .*, 75. See also Sidney Chalhou’s discussion, *Cidade febril*, 104f.

<sup>509</sup> Even Jenner’s subsequent “discovery” of vaccination was rooted in the “popular medicine” of herders who had contracted cowpox, and thus immunity, in the course of their work.

contribute to understandings of the elaboration and “taming” of conceptual and methodological revolutions in science through practical applications.<sup>510</sup>

It was only in the stark simplifications of state projects, to paraphrase James Scott, that the universalizing, normalized science one expects to find in a massive health campaign became a reality at the beginning of the nineteenth century. Ministers of state, policymakers, and all kinds of promoters displayed a limited field of interest, signaled by repeatedly couching arguments for more widespread use of vaccination in terms of the economic utility and productive activities of the population.<sup>511</sup> Bourbon policymakers tended to view society as more or less uniform, while in reality the empire continued to be made up of numerous clusters of *costumbres* and traditions, variations in practice that would become increasingly apparent as the expedition proceeded. This restricted view led physicians such as Balmis to esteem his own expert judgment over that of colonialists, to reduce the role of Mexican institutions in order to plant Juntas de Vacuna for the storage and propagation of vaccine, and to restrict other *curiosos* from practicing. It is symptomatic of the simplified program that no state document anticipated the role rumors would ultimately play in deciding the fate of vaccination: priests knew it, and healers knew it, but it only obliquely entered the field of vision of the official campaign, which, for whatever reasons, shunted to one side the centrality of this communicative medium.

Two strands of thought on immunization appear among physicians, magistrates, bureaucrats, ecclesiastics, and state functionaries in the service of the Spanish monarch in the period leading up to and including the 1804 campaign. The first was represented by those with vast experience in colonial epidemics and health care, some of whom offered their services as advisors to the crown. These individuals sought to apply society’s moral and cultural resources, including religion, in the propagation of the technique wherever possible, sometimes openly acknowledging, as Flores did, the limits of medical science in matters of health. The second was the tendency, and in fact necessity, of early modern states to simplify medical practice in the interest of expediency and efficiency, imagining entire regions as *tabulae rasae* onto which vaccination on a massive, unprecedented scale could be imposed. This second impulse, evident in the early official program for vaccination emitted from the metropolis, inevitably underwent modification in practice, coming to resemble the richer colonial approaches of Morel, Flores, Alva, and Bergosa.

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<sup>510</sup> E.g. the work of Juan José Saldaña on mining and industrial techniques, “Ciencia y felicidad pública en la Ilustración americana,” in *Historia social de las ciencias en América Latina*, ed. Juan José Saldaña (Mexico City: UNAM, 1996), 151-207.

<sup>511</sup> The Crown’s subjects did not imagine this interest: other statements from members of the Council of Indies confirm this limited “field of vision,” for example, the sentiments of the governor of the council, the Marqués de Bajamar, that the Royal Expedition should be carried out at the cost of the royal treasury because of the benefits that would potentially redound to it, “*así por el mayor ingreso de tributos con el mayor número de Indios, como por el fomento que estos darán a la agricultura, minas y comercia que tanto menoscabo padecían antes por la mortandad que ocasionaban las viruelas naturales.*” Cited in Ramírez Martín, *La salud del Imperio*, 26, and see also Fernández del Castillo, *Los viajes de Don Francisco Xavier de Balmis*, 80-81. Thanks to a burgeoning literature on the history of early modern natural history collecting in the Atlantic world, we know that the state’s humanitarian projects were intimately tied up in commercial interest, imperial consolidation, and political theory (see note nine above).

A case can thus be made for the limited relevance of the program conceived and launched at the metropolitan center.<sup>512</sup> The Royal Expedition resembled in at least one respect the desiccated, crushed scabs of vaccinated children that the governor of Durango thought to send into the sparsely settled northern frontiers the following year.<sup>513</sup> Until recipients added water to reactivate the dried material, it was useless. Similarly, almost as soon as the expedition arrived, residents of New Spain would have to reshape the program by contributing some of the common sense, logistical aptitude, and ritual meaning missing from the impoverished program, and were able to do so in part because of the vast space made available for discussion and commentary. Rethought from Spain, the program came to resemble in its allowances for colonial practice the visions of Bishop Bergosa and the *chiapaneco* Flores, with their experience in colonial healing.<sup>514</sup>

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<sup>512</sup> Too much of the existing literature on the Royal Expedition highlights Spain's role as a facilitator in introducing and diffusing "scientific" ideas and methods in its colonies, emphasizing the genius of a small handful of people and overstating the finalization of the project in Spain. E.g., "*La Expedición tiene como motor a dos hombres de su tiempo [Balmis and Salvany], que son el fermento para la difusión de la Vacuna . . . La Expedición no resultó algo improvisado, sino que contó con el apoyo necesario de autoridades civiles, militares y eclesiásticas, y benefactores que permitieron el éxito de los objetos previstos.*" Ramírez Martín, *La salud del Imperio*, 12f.

<sup>513</sup> The governor wrote on January 28, 1805 that in "*toda la frontera de mi mando*" vaccination was being practiced, but that in the rest of the province of Sonora and Sinaloa, "*cuya corta población se extiende en más de 400 leguas por la costa del mar del sur,*" use of lymph was nearly impossible. In the recent *correo* from Europe, however, he had seen the latest *Gazeta de Madrid*, number 65, from August 14, 1804, where it was reported that in Bajadoz they were experimenting with hydrated *costras* or *postillas pulverizadas* from vaccinated patients. The governor had the military surgeon experiment with this, and because the method appeared to be working he planned to propagate the material "*por el correo a los justicias, con un método claro que formará el mismo cirujano,*" eliminating the justified fear of degeneration of lymph in the hot, sparsely settled *país*. AGI Indiferente 1558a, 801f. Commenting on the scarcity of practitioners in these regions, Oakah Jones points out that they were normally recruited from presidios and suggests they were in fact general physicians – not surgeons – even if referred to as such. See *Los Paisanos: Spanish Settlers on the Northern Frontier of New Spain* (Norman: University of Oklahoma Press, 1979), 250.

<sup>514</sup> The extent of this American initiative falls beyond this chapter. Many residents eagerly consumed news and reports of vaccination from Europe, which excited a desire for what some saw as the latest fashion in health care. The destruction caused by epidemics was too great to allow colonial physicians to stand idly by without searching for cows with signs of pox that could be used as sources of lymph. By the time the September 1 order for propagation had been sent, the surgeon of the infantry regiment of New Spain was already in Durango requesting passage to Texas and New Orleans from the commanding general of the *provincias internas*, where he had heard of the presence of smallpox. His journey began in Toluca on March 26, 1803 and continued up and around the city to Sinacantepec, Yxtlahuaca, Querétaro, Celaya, Salamanca, Guanajuato, Silao, Leon, Aguascalientes, Zacatecas, Fresnillo, Sombrerete, and Real y Minas de Santa Maria de las Nieves. More telling, perhaps, is the remark made by the governor intendant in Durango, who said that in his effort to provide the inhabitants of the province with the "inapreciable" discovery of vaccination, "*no he omitido diligencia desde fines del año de 1801 [sic] en que me llegaron de España los primeros impresos en busca de la bacuna primitiva en las reses de las Haciendas inmediatas, y de solicitar el pus creyendo poderlo adquirir por Tejas del Gobernador de la Luisiana,*" all without effect. (Vaccine finally arrived in Chihuahua from Veracruz.) AGN IV 5297 exp. 19, Certifications on the comission of Felix Garda y Ferraris, Sombrerete 10 agosto 1803 and Durango 3 septiembre 1803; AGI Indiferente 1558a, Durango 15 noviembre 1804, Bernardo Bonavia to José Antonio Cavallero, 778-779r.

Examples could be multiplied. For Cuba: in the February 3, 1803 edition of the *Periódico de la Habana* – published well before the announcement of an expedition – 400 pesos were offered to the individual who discovered *fluido vaccino* on the island. For Guatemala: officials began searching for cowpox when news of Jenner's discovery arrived in 1800; the initiative of private citizens and Guatemala's

By then, decades of writing on the topic had confirmed that hospitals were frightful places, that a circumscribed arena for health practitioners was untenable in many places, and that perceived safety, accessibility, and ease of the procedure would be key in acceptance. Officials repeatedly asked the public to take the operation's efficacy on faith, but Mexico's inhabitants were patently empirical people who would require, as Morel knew, some hard numbers and firsthand observation before submitting their children. In the absence of experimentation, other means of persuasion were available, an issue taken up in the following chapter, but the ideal was something similar to what Flores envisioned: place the technique and its accoutrements apart, in holy spaces and surrounded by ceremony, and over time the public would bestow another kind of sacredness on it. We know much about commerce and geopolitics as factors in enlightened science and medical discovery, but the central place imagined for ritual, God, priests, pastoral letters, indulgences, and churches merits further study.

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Royal Protomedicato was so extensive and successful in acquiring vaccine and practicing vaccination that the arrival in Guatemala City of a subsidiary expedition under Francisco Pastor, in August 1804, appears comical. Smith, *The "Real Expedición Marítima de la Vacuna,"* 49-54, and Ramírez Martín, *La salud del Imperio*, 51, 138-143. See also note 73 above. In each instance, it is patently untrue that "*la expedición comienza con la Real Orden del 1 de septiembre de 1803, en que se comunica a todas las Autoridades de Ultramar los deseos del Rey . . . Es a partir de este momento y no antes, cuando algunos Virreyes y Capitanes Generales empiezan a preocuparse de obtener la vacuna lo más pronto posible y algunos se anticipan a la llegada de la Real Expedición . . .*" Ramón Navarro García, "Análisis de los documentos esenciales sobre la Real Expedición de Balmis-Salvany," in Ramírez Martín et al., 74.

## CHAPTER FIVE

### **Conspicuous Gifts: Public Pageantry in Mexico's First Vaccination Campaigns**

“The others ran terrified upon seeing the physician with the lancet in his hand. And although the mothers, having realized that to inoculate them did not mean mortally wounding them, as they had suspected, were bringing them by force, the subdelegate did not consent that they undergo the operation in this way. Bringing them to him and distributing some coins and cookies – with which he equipped himself as a precaution – he got them to allow him to wash that part of the skin of the hand that must be softened in order to inoculate with less pain, and succeeded in getting the twenty two children to undergo the operation that evening without the least violence.”

-Description of the first session in Teotitlán del Valle, Oaxaca, 1796<sup>515</sup>

Over several months in 1804 the Viceroyalty of New Spain became a lively setting for the spectacular reception of Western medical science. Elaborately coordinated celebrations marking the entrances, or *entradas*, of vaccinators and their retinue into cities and villages involved numerous acts of supplication and thanksgiving, including sung *alabanzas*, praiseful songs extolling the virtues of a benevolent God. Spectacles included music, festive illumination of the church, and in some cases fireworks, which attracted crowds to public spaces, where the eyes and ears could be engaged with decrees, sermons, and other kinds of exhortations. Far and wide, these ceremonial productions portrayed the vaccine as a gift from the king and from God; if the public was persuaded of its benefits, vaccinating sessions in the homes of officials often followed them. Presents of coins and cookies to parents and children were often exchanged as well, as gifting became part of a sustained and widespread program of immunization in the following years.

This chapter examines these interactions in order to understand how a colonial elite attracted a skeptical lay public to a new medical technique in the early years of immunization.<sup>516</sup> Through what media did medical knowledge and tools pass before they

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<sup>515</sup> AGN Epidemias 12 exp. 5, Oaxaca 25 noviembre 1796, Mora y Peysal to Viceroy Branciforte, 215v-216r. [“*Los demás corrían despavoridos al ver al Práctico con la lanceta en la mano; y aunque las Madres desengañadas de que para inocularlos no era menester hacerles una herida mortal, como lo habían sospechado, los llevaban a fuerza, no consintió el Subdelegado que de esta suerte sufriesen la operación, y tomando el medio de llevarlos consigo y distribuirles unos medios y unas bizcotelas de que a prevención se proveyó consiguió el que se dejasen lavar aquella parte de la mano cuyo cutis es preciso ablandar para hacer con menos molestia la inoculación, y también el que la sufriesen en aquella tarde sin necesidad de la mas mínima violencia veinte y dos muchachos.*”]

<sup>516</sup> A thematic approach to immunization, though offering analytical and interpretive advantages, leaves out much of the narrative on the expedition itself. For a chronological approach and in the minute political



could be taken up in colonial communities? How were cooperation and consent secured and consensus built, and which actors were most responsible for making initial overtures to lay communities? In the most violent years of insurgency, the practice of immunization declined as a result of broken communication, military occupation, and shortages of public funds. Nevertheless, it reached far and deep in colonial society by the time this happened, with pockets of continued practice and vigilance up until the close of the colonial period.<sup>517</sup> The following pages seek a better understanding of the cultural foundations of this achievement as well as a better explanation for the seemingly smooth if largely uneven adoption of modern preventive medicine in New Spain's cities, towns, and villages.

I take as a point of departure an expansive literature in the history of science appearing on the consequences of the adoption of "Western" medical science in colonial contexts. Among other things, this literature illuminates the relationship of scientific projects to cultural imperialism, arenas of contestations and cultural exchange, possibilities for medical pluralism, the construction of colonial identities based on modern science, and the involvement of state and scientific institutions in "civilizing" colonial projects.<sup>518</sup> While outcomes were not everywhere the same, such projects tended to share a set of techniques, meanings, and values over space and time. It was often hoped, for example, that scientific projects would transform in some fundamental way a society viewed as traditional, backward, or uncivilized. With the arrival of the vaccinating expedition in New Spain, the capacity of colonial subjects to adopt medical science was vocally debated by a social and intellectual elite, and many, in attempting to convert the public to a new practice, made use of some of the same methods as other "missionaries" of religion, medicine, and civilization.

Where it may seem that these interactions and their outcomes were oppressive, I argue that in fact these elite agents of an imperially sponsored medicine were compelled to respect a longstanding tradition of paternalistic benevolence, in which patrons, including viceroys, priests, hacienda owners, governors, and physicians, were obligated

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events that transpired in each region during these campaigns, see the works cited in the previous chapter, including those by Donald Cooper, Francisco Fernández del Castillo, Michael Smith, and Susana María Ramírez Martín.

<sup>517</sup> The panoramic view I attempt for this period is possible thanks to the availability in Mexico's national archive of a group of previously unclassified, unbound documents spanning roughly the period 1805-1821. In addition to suggesting other questions, it fills out some of the temporal dark holes that previously existed for the years of the Mexican insurgency.

<sup>518</sup> This literature tends to highlight French, British, and occasionally Chinese imperial expansion in the nineteenth century. See *Disease, Medicine, and Empire: Perspectives on Western Medicine and the Experience of European Expansion*, eds. Roy MacLeod and Milton Lewis (New York: Routledge, 1988); *Western Medicine as Contested Knowledge*, eds. Andrew Cunningham and Bridie Andrews (New York: Manchester University Press, 1997); David Arnold, *Colonizing the Body* (Berkeley: University of California Press, 1993); Lewis Pyenson, *Civilizing Mission: Exact Sciences and French Overseas Expansion, 1830-1940* (Baltimore: Johns Hopkins University Press, 1993); and the essays in *Missionaries of Science: The Rockefeller Foundation and Latin America*, ed. Marcos Cueto (Bloomington: Indiana University Press, 1994), which explore the "negotiated" receptions of the Rockefeller Foundation's projects in Latin America (which, coincidentally, targeted hookworm, the eradication of yellow fever and malaria, and technical instruction in the early decades of its sponsorship). On science and identity, see the essays in *Medicine and Colonial Identity*, eds. Mary Sutphen and Bridie Andrews (New York: Routledge, 2003).

to seek and secure consent from their dependents, broadly defined. The record of the many processions and celebrations that marked the entrances into cities of the director of the expedition and his subordinates suggests that contemporaries saw themselves in a similar way, offering gifts in exchange for the public's consent. In tracing the nature of these exchanges, I follow Marcel Mauss's theory of gifting practices as revelatory of the bonds and obligations of a society.<sup>519</sup> Gifting in colonial Mexico can be seen as a preferred and generalized mode of social communion, growing out of a conviction that patrons earned the right to rule through generous and conspicuous displays of largesse rather than by force. The provision of modern medicine hewed closely to this framework.

### **“To Inspire the Masses”: The Gift of Sound, Sense, and Consensus**

As envisioned by Guatemalan physician Dr. José Flores, smallpox vaccine would arrive in the Americas ensconced in the protective sheath of church and state ceremony. In roughly a dozen of the largest cities of New Spain – at the beginning of the nineteenth century places of great public drama – this is precisely what happened. The relation between the political and religious theater of colonial Mexico and the demonstrations that ultimately marked the arrival of vaccinators in 1804 reflects a broader acceptance of the central role of ceremony in the construction of social solidarity. Visual and theatrical spectacles were pleasant pastimes for the public and were occasionally employed for different purposes: to convert spectators to Catholicism, or display a sympathetic reception for a representative of the Spanish crown, and in 1804, to trumpet the benefits of modern medicine. In exchange for these carefully choreographed displays, the population was asked to submit their children to vaccination after learning through the eyes and ears the respect owed this imperial medicine. In the ideal gift economy of colonial Mexico, a gift received was reciprocated.

The congruencies between older theatrical programs in religion and statecraft and those celebrations designed to introduce new medical techniques become clear in the records kept as the Royal Vaccinating Expedition passed through the viceroyalty's major cities in the fall and winter of 1804. As the team approached, officials and public figures hurried to make the appropriate preparations, shuttled in and out to receive its personnel, spent on lights and fireworks, readied musical performances, composed sermons and pastoral letters for the edification of laypeople, and inevitably documented, sometimes in careful detail, their activities.

In Guadalajara, the city's officials nearly missed their opportunity for such displays. The assistant director of the vaccinating expedition, Antonio Gutiérrez Robredo, had sent a letter alerting officials to his immanent arrival, but it was never received and the president of Guadalajara's *audiencia*, Pedro Catani, had to rush out of the city to ask him to wait with the two boys (with smallpox vaccine in their arms) in the neighboring village of San Pedro Tlaquepaque. When preparations were finally completed two days later, the three were driven in Catani's formal carriage to the entrance of the city, where civil and religious authorities and distinguished residents joined them along with a sizeable gathering of spectators for a slow procession to the cathedral. Upon arrival, the infantry battalion's band struck up an overture, “among the best in its class,” while

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<sup>519</sup> Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies* [*Essai sur le Don*], trans. W.D. Halls (New York: W.W. Norton, 1990 [1950]).

members of the cathedral chapter and the bishop accompanied the entourage into the church to perform the *Te Deum Laudamus* (Glory Be to God), the Catholic hymn of thanksgiving and praise. Patrols of military men sought to keep the numerous crowds assembled for a glimpse of the procession from obstructing the path. It was deemed a superb display of gratitude and stimulant for the masses to be vaccinated.<sup>520</sup>

For the first time residents of New Spain witnessed a public ceremony, or *demonstración*, as these spectacles were frequently called, that had modern medicine as its object of honor.<sup>521</sup> Though descriptions later sent to Spain, composed to demonstrate compliance with royal orders, are pro forma in many respects – each full of music, clanging bells, and processions – these episodes of celebration were not merely epiphenomenal evidence of adherence to the state’s notions of royal pageantry. Too many of those responsible expressed confidence that such demonstrations were actually meaningful components of subsequent practice, perhaps useful because they helped make tangible and comprehensible a concept – immunity from disease – that initially appeared strangely foreign to many contemporaries, both literate and illiterate.

A look at a scattering of examples from other cities suggests the scope of this experience and expectation. In Puebla, where officials boasted of nearly 12,000 vaccinations within three months of arrival, the bishop took charge of the reception of Director Balmis with some assistance from Intendant Manuel de Flon, greeting the entourage outside of the city on September 20, 1804 and proceeding with ceremonies that

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<sup>520</sup> This description is from AGI Indiferente 1558a, Guadalajara 20 noviembre 1804, Pedro Catani to Bishop Juan Cruz Ruiz de Cabañas, 864ff; *ibidem*, Guadalajara 7 diciembre 1804, signed testimony of Fernando Cambre (escribano mayor), 876r-v; *ibidem*, Guadalajara 9 diciembre 1804, certification of Fernando Cambre, 878f; *ibidem*, Guadalajara 1 enero 1805, Pedro Catani to José Antonio Caballero.

Initially, the *ayuntamiento* replied to the royal order on propagation of vaccine with some confusion in regard to the public demonstrations that were to be conducted, having no idea which were most appropriate for the occasion because the issues of the *Gazeta de México* that treated the expedition made no mention of public demonstrations in Mexico City. It appears that the city, which enjoyed a great deal of independence from Mexico City owing to its independent court and archbishopric, still looked to the capital for guidance on matters of ceremony. See AGN Epidemias 4 exp. 8, Guadalajara 22 noviembre 1804, Respuesta del Sindico Procurador, 256v-259r; AGI Indiferente 1558a Guadalajara 27 noviembre 1804, Ayuntamiento to Tribunal of Audiencia, 866f.

<sup>521</sup> Viceroy, newly born members of the royal family, saints, and the mystical body of Christ were often the protagonists in such acts of gratitude and devotion. Another novel object of “adoration,” nearly contemporaneous, was the promulgation of the Constitution of Cádiz in 1812, which also witnessed elaborate public celebrations throughout New Spain. Balmis denied that these ceremonies for vaccine were self-promotional, but his vehement insistence on their performance leaves room for speculation.

The Spanish word *ceremonia* has meanings that do not always coincide perfectly with English use of “ceremony” to mean a public act of celebration (often in service of religion or the state). On the way to the port of Lisbon, Balmis and the expedition made a stop on the island of St. Helene, arriving June 12, 1806. While there, Balmis was met with hostility by the British governor, Colonel Robert Patton, when he offered to vaccinate the inhabitants of the island. He set about persuading Patton and claimed to have easily refuted his doubts and objections (that vaccine would give people new sicknesses), agreeing to solicit the consent of the population first (“*sin cuyo requisito no se podía pasar a vacunar.*”) At last, he wrote, after “all of these *ceremonias*” he was allowed to vaccinate. Though in this case there was little or no spectacle and music, use of ceremony here is consistent with the sense in which I am using it: a series of formalities in service to some other cause, in this case, the assurances and negotiations that precede consent, the overture to the practice of the act itself. Still, *demonstración* was the more common term in use. For excerpts of the letter, see Fernández del Castillo, *Los viajes de Don Francisco Xavier de Balmis*, 185.

would serve as a model for others.<sup>522</sup> The bishop reentered Puebla in his carriage with the dean of the cathedral chapter and the boy carrier, while the intendant marched with the director and the remaining members – seriously and decorously, he stressed – to the cathedral’s door, where the remaining members of the cathedral chapter awaited their arrival. Accompanied by the city council and a large gathering, the expedition’s members took the seats of honor ordinarily reserved for members of the cathedral chapter. From his own seat, the bishop addressed the congregation with a speech, eloquent and appropriate to the occasion, according to Flon, in which he urged his audience to give thanks to God and the king for the gift that had been generously sent and to submit to the practice without misgivings or fear. Afterwards, the choir led the singing of the *Te Deum* (Flon: “the hymn that the Church uses for this purpose”) with everyone intoning the customary prayers and processing outside to accompany the expedition to its lodging. The following Sunday, over 230 people arrived for vaccinations in the episcopal palace, where the bishop provided several rooms. So many arrived that operations had to be halted for lack of vaccine lymph. Writing afterward, the bishop said he had sought to do receive it “in such a way as to inspire (*entusiasmar*) the public,” which felt more acutely the effects of smallpox because of Puebla’s climate, he speculated, and thus had greater need of its practice.<sup>523</sup> Provisions for the creation of subaltern vaccination committees in all of Puebla’s district seats explicitly stated that arrival of vaccine “should be advertised to the public with as many demonstrations of rejoicing and festivity as possible, so that especially the Indians understand that they are being brought a good, and that they should present their children to receive it, freeing themselves from the cruel scourge of smallpox.”<sup>524</sup>

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<sup>522</sup> Although a calculation of total percentage of the population can be made in this case, several considerations lower the value of this statistical measurement. In the first place, only those residents immune – often determined by counting those born since the last major epidemic – could be vaccinated successfully (cowpox lymph would not mature in immune individuals). Moreover, in this period, those in charge of conservation had to measure the pace in order to conserve viable fluid: once all residents lacking immunity were vaccinated, vaccinations could not continue.

The complications within this seemingly straightforward question of percentage of a population vaccinated are illustrated well by the considerations the *ayuntamiento* of Veracruz had to make when answering Balmis’s accusations that its population willingly resisted vaccination. According to a letter of September 12, 1804, 1,350 persons had been vaccinated from the lymph that arrived in the port from Cuba three months earlier. Because most of the population had been exposed to smallpox in the epidemic of 1797 (seven years earlier), however, *only those born since then were not immune*, which, according to parish birth registers, amounted to 1,562 children. If one subtracted from that number the mortality rate and the children who were out of the city with their parents for the summer, there was no one left either to resist or to submit to the procedure for its conservation, they concluded. By this logic, in other words, 1,350 vaccinations, a seemingly small number, represented basically the entire available population for vaccination in Veracruz. See Fernández del Castillo, *Los viajes de Don Francisco Xavier de Balmis*, 129.

<sup>523</sup> AGI Indiferente 1558a, Puebla de los Angeles 28 septiembre 1804, Manuel Ignacio Obispo de Puebla to Jose Antonio Caballero, 695-6; and Puebla 27 octubre 1804, Conde de la Cadena to Josef Antonio Caballero, 712-14. [“. . . de un modo capaz de entusiasmar a este Pueblo . . .”]

<sup>524</sup> AGN Epidemias 4 exp. 3, Puebla 29 octubre 1804, Estatutos que para la real junta de vacunación, establecida en esta ciudad de la Puebla de los Ángeles bajo la protección del ilustrísimo señor doctor don Xavier de Balmis ..., f. 94-99, article 11. [“. . . habrá de avisarse al Público con cuantas demostraciones quepan de regocijo, y fiesta para que especialmente los Yndios perciban que es un bien el que se les lleva, y que deben presentar sus hijos para que lo reciban, libertándose del azote cruel de las viruelas.”] For

The programmatic concerns articulated in these intentional, coordinated displays of spectacle had a long history in colonial Mexico, where cities often became vast ceremonial centers as administrators leaned on a shared ritual complex to rally the public to various causes, including wars, reforms, the public shaming of criminals, or to enlist the aid of a saint, as we saw in Chapter One. New viceroys entered Mexico City from the shrine of Guadalupe in lavish, expensive ceremonies throughout the eighteenth century; members of religious orders entered new villages to plant the cross for God; Spanish conquerors did the same in newly “pacified” of American territories.<sup>525</sup> Upon arriving in 1804 with children in tow, members of the vaccinating expedition, joined by agents of the state and church – judicial figures, city councilmen, ecclesiastics, and prominent residents – sought to claim a territory for preventive medicine, so to speak, in an impressive show of public spectacle, and to make new converts, to extend the metaphor, of a potentially incredulous population for this novel medical gift from God. Though the projects were not identical, they were culturally unique solutions to the shared problem of persuasion. What had been relevant in one context naturally became relevant again in the other.

Anticipating hostility, in other words, the colonial elite was not in uncharted territory. The basic medical message – by injecting a patient with foreign matter, which would make her sick, they would ultimately save her from smallpox – was as difficult as any attempted by Christian missionaries.<sup>526</sup> Representations in treatises and other promotional works attempted, discursively, to soften this message, yet it was imagined that the lower classes required further persuasion. Before touching the body, the thinking at the time went, the learned classes would touch the senses with music, sermons, fireworks, procession, and poems.<sup>527</sup> And according to many administrators, it was the vast majority of Mexico’s population – Indians, castes, agriculturalists, the illiterate and destitute – who were most susceptible to disease, most in need of protection, and also most likely to object.

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running totals of vaccinations, see *ibidem*, Puebla 15 diciembre 1804, Relación de los Individuos vacunados, 104r. The bando issued by the eager Conde de la Cadena publicized the arrival and availability of vaccine, at no cost to the public, and stressed that the nobility and the plebe, the rich and the needy alike had the same right and access to it. The statutes reveal, however, that this equitable treatment did not extend to the countryside, where Indian villagers were perceived to require different sorts of persuasion. AGN Epidemias 4 exp. 3, Puebla 2 septiembre 1804, Bando issued by Manuel de Flon, Conde de la Cadena, 86-88.

Article 12 of the regulations, missing from Mexico City’s version, refers to the frequent appearance of putrid fevers among the “*casta de Indios*” and recommends that the Juntas make careful observations of the appearance of such fevers, “*pero sin que los Yndios lleguen a entenderlas por ahora*,” because if the results were not satisfactory, the operation could be discredited or viewed with distrust or distaste, even as a preventive measure against smallpox. Here, the special needs of the Indian population included not only imputed cultural capacities, but also biologically grounded susceptibility to disease, and the belief that what was not known could not harm.

<sup>525</sup> Steven Flinchbaugh, “Economic Aspects of the Viceregal Entrance in Mexico City,” *The Americas* 52:3 (January 1996), 345-365.

<sup>526</sup> As discussed in Chapter Four, it was a message that encountered objection and underwent debate even at the highest levels in Spain and Spanish America.

<sup>527</sup> These ceremonies contrast with the urban processions analyzed in Chapter One: while the public demonstrations in 1804 also displayed theological concerns – in the innumerable performances of the Te Deum, for example – they had as their primary aim widespread adoption of vaccine.

For these reasons displays tended to center on the most official and symbolically powerful sites: the parish church, municipal buildings, and points of entrance and egress, which were often the prominent landmarks within urban spaces. Financial records submitted for performances in Guanajuato and Sombrerete highlight the importance of pyrotechnics, music, singers, and also the illumination of the church building itself during celebrations in those places.<sup>528</sup> In Zacatecas, like Guadalajara, ceremonial music (“*aparato de música*”) accompanied the issuing of a *bando* or summons announcing the arrival of the expedition. After traveling a league outside to greet members, officials reentered “amidst hurrahs, cheers, and pealing bells” until received in the atrium of the church by the clergy and prelates. Once inside, the bishop pronounced a sermon to the effect that the happiness and health of subjects depended on the prompt presentation of their children for vaccination.<sup>529</sup>

Though residents were not physically compelled to vaccinate, the kinds of persuasions used to attract the public inevitably drew on some less than innocent insinuations of force. It was not uncommon, for example, for militia company musicians to perform the music accompanying the issuing of official bandos, as in Celaya, where the stated purpose of the performance was to “banish those preoccupations and ideas that always accompany the lowly pueblo . . .”<sup>530</sup> In this city, the military corps had joined the usual gathering of prelates, clergy, and distinguished residents in receiving Balmis and his team of assistants and children, who had been accompanied by a group of city councilmen in ceremonial regalia from the municipal building to the parish church – by

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<sup>528</sup> These amounts could be small in comparison with other expenditures. In Guanajuato, twenty pesos were spent “*por la música y cantores que cantaron el Te Deum*” in the parish church; this amount barely registers (2.3 percent) against the total of 878 pesos spent on the expedition’s maintenance. In Sombrerete, where assistant director Gutiérrez brought vaccine, 10.5 pesos were spent for the pyrotechnics used during the singing of the Te Deum and the reception of the expedition in the parish church (including pinwheels, gunpowder, and workers to execute the firework display), and another thirty-six for the illumination of the tower and main body of the church. Together, these expenses comprised 5.6 percent of the total of 829 pesos, less than the 135 pesos spent on clothing for children taken on the expedition. Nevertheless, the modest amount spent on illumination and fireworks in Sombrerete would have covered the cost of a trained medical practitioner vaccinating in the town for a period of two or even three months, depending on his class and training. Given that funds for medical practitioners in Mexico became increasingly scarce in the following years, it was a considerable sacrifice, but perhaps one regarded as worthy. AGN Epidemias 4 exp. 15, Guanajuato 1 diciembre 1804, Cuenta de los gastos hechos, en el recibimiento, hospedaje, y manutención de los Yndividuos de la Expedición de la Vacuna . . ., José Joaquín Peláez, 474r-v, and *ibidem*, Sombrerete 17 diciembre 1804, Gastos causados en obsequio de la Real Dirección de la Bacuna . . ., signed Lucas de Vriondo, 460r.

<sup>529</sup> AGI Indiferente 1558a, Summaries of documents from Zacatecas (the documents are missing or out of place), 838-841. The Te Deum was sung afterwards, and in all of December, 2,448 children were vaccinated. [“. . .entre vivas, aclamaciones y repiques de campanas . . .”]

<sup>530</sup> *Ibidem*. [“. . .desterrar aquellas preocupaciones e ideas que son siempre inseparables del bajo pueblo . . .” “. . . gritando con continuos clamores viva el Rey, viva la Reina, viva la Augusta Familia; cuyos ecos se confundían con el repique general de las Campanas, y las descargas que en varias secciones hizo la compañía de Granaderos de este Regimiento Provincial, formada en el Atrio de la Parroquia, donde permaneció mientras se cantó con la mayor solemnidad la Misa de Gracias, terminándose la función con un Te Deum, en que se repitieron los vivas expresados con el sonido de las Campanas y estruendo de las Salvas.”]

foot rather than carriage “so that it should be more visible.” The council members later reported on the general euphoria of the population,

shouting with continuous clamors, long live the King, long live the Queen, long live the royal family, the echoes of which mixed with the general ringing of the bells and the volleys of the company of grenadiers of the Provincial Regiment, which was stationed in the atrium of the church, where it remained while the Thanksgiving Mass was sung with the greatest solemnity. The function ended with a Te Deum, in which the *vivas* were repeated with the sound of the bells and the thunder of the military salute.

At last, on the eve of the expedition’s departure a solemn, “bloodless” offering (*incruento*) was made for the health of the royal family and the expedition’s success.<sup>531</sup>

If the persuasion of gunfire and the presence of armed men is indisputable, it is significant that the volleys took place within a ceremonial setting, which included, as the councilmen stressed, fine clothing and a procession by foot so that the public might have more time to take in the spectacle. The built spaces in which these performances took place were important: the exterior and interior of churches, above all, become ceremonial spaces *par excellence* during receptions of vaccine, confirming the observation for colonial Mexico that the parish church formed the core of village life. Churches were nodes of activity, festivity, thanksgiving, propitiation, and exhortatory speeches; it was in these spaces that those present could benefit from the sights, sounds, and words of assembled authorities and in which some transfer of knowledge could take place, as in the sermons and pastoral letters deemed indispensable by secular officials. Participation in these rites symbolized to the public a united effort on the part of church and state. This helped initiate a transfer of medicine from the royal and divine realm by presenting vaccine as a gift from both the Catholic King and God, which had the effect of legitimizing and requiring action in this matter of public health, life, and death.<sup>532</sup>

As an example of this transfer of knowledge and agency, the pastoral letter issued by Guadalajara’s bishop Juan Cruz Ruiz de Cabañas (1795 appt. – 1825 d.) was intended, he later reflected, to instruct the pueblo, helping residents see the unique benefit they stood to receive from God. His hope was that parishioners might give thanks for the precious gift and cooperate fully in its propagation. To that end he addressed parish priests and other members of the clergy, stimulating the “learning and zeal of all . . . in order to inspire in the heads of family, by means of the softest reflections, the necessary knowledge and light for the happiest success and enjoyment of such a lofty benefit.”<sup>533</sup>

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<sup>531</sup> AGI Indiferente 1558a, Sala Capitular de Celaya 29 noviembre 1804, Ayuntamiento to José Antonio Caballero, 748-751. [“. . . *para hacerlo más visible.*”]

<sup>532</sup> Esteban Morel, the French physician and promoter of inoculation, did the same in his medical treatise of a quarter century earlier, although he would have rejected the accessibility of the sender.

<sup>533</sup> AGI Indiferente 1558a, Guadalupe 17 enero 1805, Juan Cruz Obispo de Guadalajara to José Antonio Cavallero, 799-800. [“. . . *ilustración y celo de todos . . . a fin de que por medio de las reflexiones más suaves inspirasen a los Padres de familia los conocimientos y luces necesarias para el más feliz éxito y goce de tan alto beneficio.*”] The bishop noted that God periodically overwhelmed with His omnipotence but also occasionally dispensed providential treasures, leading them to knowledge and discovery of the truths that for centuries were hidden from them; the adoption of vaccination, he wrote, had placed the most efficacious and opportune remedies for the worst calamities in their hands. Part of the sermon has been published, in Fernández del Castillo, *Los viajes de Don Xavier Francisco de Balmis*, 169.

While the social background of the groups addressed from pulpits on the benefits of immunization is vague, and only a small sample of the sermons and letters has survived, their message undoubtedly reached beyond cities: pastoral letters that contained admonitions or instructions relevant to parishioners were often read aloud not only in the cathedral, but also to the congregations of each parish in the diocese, meaning that such performances would have been heard throughout the viceroyalty.<sup>534</sup>

The experiences of smaller towns in the provinces were not, in fact, so different. These too often combined celebration with active preaching from pulpits, as in Oaxaca, where Alejandro García Arboleya traveled on commission to vaccinate in its capital. Although he did not originally plan a stopover at Tehuacán de las Granadas (roughly halfway to his destination), he had to delay his journey after receiving news that its residents, who suddenly found the expedition at their doorstep, were anxious to participate. Arboleya vaccinated in all eighty *párvulos* in the village, children mostly of principal families, in the presence of the subdelegate, parish priest, scribe, and the two practitioners (a physician and surgeon, who were instructed and left ready to continue vaccinations). At his next stop in Teotitlán del Camino (this one planned), he vaccinated another 187 from the district seat and surrounding towns.

To what did he owe this unexpected enthusiasm? Arboleya credited the way the technique's benefits had been made manifest to the public, with festivals in the church, masses, and performances of the Te Deum for the health of the king and in thanks to the Almighty. These acts, he claimed, as well as the ways parish priests prepared their parishioners with orations in favor of the "invention," encouraged the considerable number of residents to participate.<sup>535</sup> Tehuacán's subdelegate confirmed that on the day of the physician's arrival there were enthusiastic public announcements to move residents to receive the gift, as well as a thanksgiving mass accompanied by bell ringing and fireworks. The priest exhorted his parishioners with "great energy" from the pulpit to give thanks to the king, "for his paternal diligence and care in the protection of his happy vassals . . ."<sup>536</sup>

Did these celebrations actually reassure very many spectators? The nature of the documentation makes it difficult to address the question. What can be said is that the conviction among authorities that assurances directed toward New Spain's Indian residents should ideally come in the form of public drama, including fireworks, music, and the example of officials and the clergy, had a long intellectual genealogy in colonial Mexico.<sup>537</sup> A tradition of learning and unlearning through the eyes and ears had

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<sup>534</sup> This would have been true of the pastoral letter composed by Oaxaca's bishop, Bergosa y Jordán, examined in the last chapter.

<sup>535</sup> AGN Epidemias 4 exp. 6, Teotitlán del Camino Real 10 octubre de 1804, Alejandro García Arboleya to Viceroy.

<sup>536</sup> AGN Epidemias 4 exp. 6, Tehuacán de las Granadas 11 octubre 1804, Juan Pedro de Necochea to Viceroy, 180-181 [" . . . por sus paternas solicitudes y esmero en la protección de sus felices Vasallos . . ."]

<sup>537</sup> Similar occurrences were witnessed in Oaxaca's capital, where García Arboleya arrived on Monday, October 15. Carteles were affixed in public places advising residents of vaccinations on Wednesday and Thursday, when parents and children were to go to the house in which the doctor was accommodated, along with all physicians and surgeons of the capital, to witness the operation. "Conociendo yo que en la mayor parte de estos habitantes reina mucha preocupación contra toda novedad," the acting intendant wrote, he had his young son vaccinated first as an example to others. On the first three days of vaccination, 187



antecedents, for example, in the earliest missionary settings, which suggest that medical programs shared similarities with some far older colonial projects of conquest and conversion. In 1573 Phillip II issued a royal ordinance on “peaceful conquests” that ordered preachers to dress in stole and surplice and enjoined any Spanish Christians in attendance to listen with extreme respect and veneration, “because the infidels are inclined to be taught in imitation of them.” In order to gather together those natives who were otherwise disposed to wage war and to induce admiring and attentive disposition, the king also recommended singing and minstrels. By dress, comportment, example, and song, Spaniards were to move (*que conmuevan*) unwilling Indians to join together so that they could subdue (*amansar*), pacify, and persuade them.<sup>538</sup>

The spirit of this order, which was assembled in the Laws of the Indies (*Recopilación de leyes de los reinos de las Indias*) in 1681, informed the missionary work of Franciscans, Dominicans, Jesuits and others into the eighteenth century. From the famous Franciscan Pedro de Gante onward, missionaries commented on the remarkable persuasive powers of music; made a habit of singing hymns of praise in new towns for their safe arrival, sometimes with new converts, crosses, soldiers, and even choirs of singers in tow; and some, such as the Jesuit Juan María de Salvatierra, were said to claim that devotion entered the heart through the senses.<sup>539</sup> Spain’s missionary efforts in the

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others of principal families in the city were vaccinated. “*Es de esperar que en lo sucesivo se aumente el número, así por haberse desengañado estas Gentes de la sencillez de la operación y de las ningunas resultas que recelaban,*” and because of the thanksgiving Mass that was to be celebrated in the cathedral the following Sunday. The senior city councilman (*regidor decano*) Diego de Villasante offered for continuing vaccinations the second floor of his home, which was in the center of the city at the intersection of the four sectors into which it had been divided for aid (*cuarteles mayores*). A year later, almost no one came to his house any longer to be vaccinated, either because residents considered the danger from smallpox to be remote, Villasante speculated, “*o ya porque ha cesado el atractivo de la novedad.*” The shelf life of the medical novelty was short, enduring only as long as it continued to be seen as novel and relevant, or money was available to pay vaccinators and coax patients into submission, as argued below. AGN Epidemias 4 exp. 6, Oaxaca 19 octubre 1804, Izquierdo to Viceroy, 187r-v, and Oaxaca 8 noviembre 1805, Diego de Villasante to Intendente Corregidor, 228-9.

A similar reception of the expedition was reported in San Luís Potosí, where Assistant Director Gutierrez Robredo arrived on January 5, 1805: the Te Deum was sung, a bando published containing the date of vaccination, and official letters sent to the city’s parish priests, “*encargándoles persuadiesen en el Púlpito el interés y utilidad de dicha operación . . .*” On the single day of Gutierrez Robredo’s stay, 391 were vaccinated. See AGN Epidemias 4, exp. 9, San Luís Potosí 9 enero 1805, José Ygnacio Velez to Viceroy, 300r-v.

<sup>538</sup> *Recopilación de leyes de los reinos de las Indias*, vol. 1 (Madrid: Centro de Estudios Políticos y Constitucionales, 1998), Book I, title I, law IV. “. . . para que la oigan con más veneración y admiración, estén revestidos [los predicadores] a lo menos con albas o sobrepellices y estolas, y con la santa cruz en las manos, y los cristianos la oigan con grandísimo acatamiento y veneración, porque a su imitación los infieles se aficionen a ser enseñados. Y si para causarles más admiración y atención pareciese cosa conveniente, podrán usar de música de cantores y ministriles, con que conmuevan a los indios a se juntar, y de otros medios para amansar, pacificar y persuadir a los que estuviere de guerra . . .”

<sup>539</sup> Kristin Dutcher Mann, “Opus Dei, ‘The Work of God’: Franciscan and Jesuit Music,” in *Religion in New Spain*, eds. Susan Schroeder and Stafford Poole (Albuquerque: University of New Mexico Press, 2007), 266-278. Salvatierra worked in the northwestern frontier missions of New Spain at the beginning of the eighteenth century.

This brief overview is of necessity simplistic, and there were countervailing forces among the religious orders that sought to stem the tide of what they considered the *excessive* enthusiasms of their

Americas formed complex contexts in which representatives of the Catholic Church attempted the conversion of indigenous Americans to Christianity and in the process to turn them away from practices and ideas construed as heathen. The entire transformation entailed a coordinated translation of Christianity's message – one deity miraculously born in human form to a virgin mother in order to redeem humans from a state of sin – into what were seen as more suitable forms for the eyes and ears of attentive, but restive, and sometimes bellicose, members of indigenous communities.

A growing number of recent studies of missions, evangelization, and conversion in Mexico in the last several decades have argued that it was far from a mono-directional, imperialist, hegemonic enterprise imposed from above.<sup>540</sup> A similar engagement of peasants with modern medical science took place with the arrival of new medicine in cities and villages, one that paralleled, in fact, the new conversions and pacifications taking place on the northern frontiers among unsettled communities of “*indios bravos*.” In these “enlightened” conquests and conversions to preventive medicine, not coincidentally, considerations continued to be made of the cultural capacities of the “convert,” the potential and, if things went well, actual patient, who was assessed as rustic and in need of special consideration.

In this, teams of vaccinators benefited from interaction with the instructional and devotional activities prescribed in parishes, where at the time of the arrival of vaccine priests were being encouraged to turn their flocks from their old ways of healing and respectfully fete the representatives of enlightened medicine. A good example is Mexico's archbishop, Francisco Xavier de Lizana y Beaumont (1750-1811), who was an active supporter of the Spanish Crown's new medical programs. In January 1806 he upbraided a subordinate in Tultitlán who revealed in a letter of compliance that in the midst of a smallpox epidemic there, he had been largely restricting his efforts to the pulpit, preaching on divine wrath as the source of the outbreak. Lizana reminded him of prior orders that priests should correct the false ideas of parishioners about healing, specifically seeking to halt use of “ignorant *curanderas*” and “medicines that are useless, when they are not actually harmful.” The archbishop was surprised, he claimed, to learn that the priest instead had limited his efforts to preaching on etiology, expecting that a newly appointed pastor would be more eager to do all he could for the public's benefit. It was simply not enough, he concluded, for a priest to preach:

it is necessary to labor and place oneself in front of the pueblo by example:  
it is necessary that the public see that you receive, accompany, fete, honor,  
and distinguish with the greatest esteem the practitioners and any other  
persons sent by the supreme government to that pueblo as a result of the  
sickness that afflicts it. It is necessary to urge publicly and privately, by  
word and deed, to “give the physician his place” [*da locum medico*] and

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indigenous converts, particularly in matters of music, dance, and image worship. For a more extensive discussion, see Robert Ricard, *The Spiritual Conquest of Mexico*, trans. Lesley Byrd Simpson (Berkeley: University of California Press, 1966), 176-193, and Taylor, *Magistrates of the Sacred*, 252-58.

<sup>540</sup> For example, the works of Louise Burkhart, Nancy Farriss, and William Hanks, among others. It is more common now to make interpretive allowances for local initiatives in the propagation of Christianity, for the social and generational stratification of indigenous communities, for the roles of native mediators, and for the powerful linguistic and conceptual categories shaping the ideology and the project of the missionaries.

“honor the physician” [*honora medicum*];<sup>541</sup> that one remain vigilant in persuading those people until convinced, as Saint Cirilo said, “Obeying physicians as if they were ministers of God” [*Medicis tanquam Ministris Dei obediendum*]; in making them know that the crude Indian medications inherited from the ignorance of their ancestors are of no effect, and perhaps wrapped up in some residue of superstition; in relieving them of their notions, puerile even when their beards turn white; and in instilling in them obedience to all legitimate authority, subordination, peace, and tranquility.<sup>542</sup>

Though that the regalist prelate was eager to show his complicity in enlightened medicine, the tone and content of his instructions were no different than the advice proffered long before in colonial manuals for novice pastors, which addressed among other things the proper reverence owed to sacred images – a reverence learned and unlearned through the example of the priest.<sup>543</sup> Here, the general principles and tactics pastors had been using for a century and more – modeling proper devotion and reverence through word and deed – were being adapted in order to transfer allegiance to modern medicine and its representatives, engaging a laity who, in a not uncommon metaphor, were likened to children with beards.<sup>544</sup>

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<sup>541</sup> From verse 38 of Ecclesiasticus, which reads in part: “*Honor the physician* out of necessity / for God created him. For all healing comes from the Most High / and from the king he will receive his reward. [...] Give a sweet sacrifice and an offering of fine flour, anoint it / and *give the physician his place*. For the Lord created him; let him not abandon you, for you need his works.” Eccl. 38: 1-2, 11-12 (my translation of the Latin Vulgate, the version cited by the archbishop, with quoted portions italicized).

<sup>542</sup> AGN IV 3885 exp. 4 Mexico 10 enero 1806, Francisco Arzobispo to Mariano Dionisio Alarcon, 6-8. [“... *es menester obrar, y ponerse a la frente del Pueblo con el ejemplo: es menester que vea el Público que vmd. recibe, acompaña, agasaja, honra, y distingue con el mayor aprecio a los facultativos, y a cualesquiera personas, que envía el Superior gobierno a ese Pueblo con motivo de la enfermedad que lo aflige: es menester, que exhorte en lo público y en lo privado, de palabra y por obra al da locum medico y al honora medicum: que se desvele en persuadir a esas gentes hasta convencerlas, que como dijo S. Cirilo: Medicis tanquam Ministris Dei obediendum en darles a conocer, que son de ningún efecto las medicinas groseras de los yndios, heredadas de la ignorancia de sus antepasados, y envueltas tal vez con algunos residuos de superstición: en desengañarles de sus ideas siempre pueriles aun cuando sus barbas llegan a emblanquecer: en inculcarles la obediencia a toda legítima Potestad, la subordinación, la paz, la quietud.”]*

<sup>543</sup> Cf. Andrés Pérez de Velasco’s manual for curates, published in Puebla in 1766 and discussed in Taylor, *Magistrates of the Sacred*, 265: “What will this [devout] Indian think – after so many genuflections, such expressive demonstrations of his devotion, approaching the image with such fear, and barely daring to draw his hand close because it seems overly bold to touch the image of Jesus Christ – if he sees the priest elevate and lower the consecrated Host quickly, without special feeling or reverence? What will he think if he sees the priest bless it and sign the chalice with it in a disorderly way, with extravagant flutterings as if he were dancing with it? . . . [W]ill he learn from this Mass the respect and reverence that is owed to Christ Our Lord in the Eucharist?” See also Ignacio José Hugo de Omerick’s unpublished 1769 guide on ministerial work, which enjoined the priest to teach silently through works and attributed faults in Indians to the indifference, arrogance, and poor preparation of ministers, discussed in William B. Taylor, “‘...de corazón pequeño y ánimo apocado’: Conceptos de los curas párrocos sobre los indios en la Nueva España del siglo XVIII,” *Relaciones* 39 (Summer 1989), 15f.

<sup>544</sup> This is consistent with Cabañas in 1797 on “sacred things,” as cited in William B. Taylor, “Image and Immanence in Colonial Mexico,” forthcoming: “. . . *las cosas santas han de ser tratadas santamente.*”

The intellectual assumptions of centuries of colonial practice, in other words, bleed through in these campaigns to end epidemic disease at the turn of the nineteenth century. Like priests in their parishes, administrators responsible for vaccination were sensitive to perceived cultural difference within New Spain's population and tended from the beginning to see the relationship of Mexico's public to medicine in terms of emulation, or mimesis. Like the archbishop, they drew a direct line from a proper reception of the vaccine and its personnel, with attendant tribute to God and the king, to subsequent acceptance of the procedure.<sup>545</sup> Within this sensitive setting, each action and word of the viceroy, director, vaccinator, priest, and subdelegate with respect to medicine and its practitioners became an exemplar that would persuade or dissuade according to its tone, and it is in this light that we can begin to understand the numerous celebrations planned and executed over the course of 1804.

Variations on the theme of proper disposition on the part of authorities can be found in much of the official correspondence passed between officials. Writing to Viceroy Iturrigaray, for example, Balmis remarked that his recent experience on the journey through the Canary Islands, Havana, Caracas, Mérida, and Cartagena, among other places, convinced him that commoners (*"el vulgo"*) did not ordinarily give vaccine the attention it deserved; if it did not have a financial interest, they paid attention to the utility of a new discovery only after "a century of experience." "Rustic people," he continued, required "material examples and considerable demonstrations to be able to grasp the idea of an important thing; all of them are driven by pure imitation, and the shining acceptance with which the pueblos have received this Philanthropic Expedition has made a greater impression on the commoners than that which Jenner's immortal discovery produced in all of Europe." For Balmis, the willingness of parents to present their children for vaccination depended almost entirely on the intensity and immensity of public demonstrations to the medical gift and the decorum of the public authorities and clerics receiving it: only then would the public flock to churches to give sacrifices on the altar in thanks to God. Conversely, where these were absent, vaccination made no progress, and the masses (*pueblo bajo*), who suffered most in epidemics, were left deprived of its benefits. There could be no hope of vaccine's acceptance in Mexico "if one does not attempt to inspire [*entusiasmar*] the masses beforehand . . ."<sup>546</sup>

*Entusiasmar* translates into English awkwardly, but the basic idea was to delight and excite, instill a state of enthusiasm, or produce admiration in the audience, Mexico's lower classes. Such inspirational activity was necessary, Balmis maintained (in a patronizing assessment of culture and capacity) because rustic folk were most impressed by sensual, concrete things (unless they first perceived the financial benefits to them).

<sup>545</sup> AGN IV 5297 exp. 19, San Lorenzo 15 octubre 1806, Josef Caballero to Viceroy of New Spain, 53-4, where the archbishop was asked to explain why these shows of respect in the capital were not forthcoming.

<sup>546</sup> AGN Epidemias 10 exp. 7, Mexico 5 septiembre 1804, Balmis to Iturrigaray, 320r-v; the letter can be found in Fernández del Castillo, *Los viajes de Don Francisco Xavier de Balmis*, 229-241. ["*La indiferencia con que el vulgo mira siempre todo lo que no le produce un interés pecuniario: la ignorancia que no se convence jamás de la utilidad de un nuevo hallazgo, sino es después de un siglo de experiencia . . .*" "*. . . ejemplos materiales, y demostraciones sensibles para poder formar la idea de una cosa grande; todas ellas se conducen por pura imitación, y la brillante aceptación con que han recibido los pueblos a esta filantrópica Expedición, ha hecho más impresión en las gentes vulgares, que la que produjo en la Europa entera el inmortal descubrimiento de Jenner . . . si no se procura entusiasmar antes al pueblo bajo . . .*"]

Although the letter reveals as much about his own biases and explanations for the resistance and apathy he had encountered thus far, the pursuit of this ideal, *entusiasmar*, helps explain the numerous ceremonial *entradas* that appeared throughout Mexico. Elite carriers of vaccine worked in a universe that allowed them to view their enterprise in humanitarian terms, stressing the benefits of civilization to populations more often than not represented as ignorant and child-like, whose eyes could only be opened to the benefits through sound and sense.<sup>547</sup> Public demonstrations were attempts to lay the tracks for a smooth acceptance of preventive medicine in a society where exchanges were evidence of goodwill and calculated to catch the attention of the recipient. Medical “missions,” not surprisingly, appropriated many of the same methods, with the corresponding cultural assumptions, representations, evaluations, and projections.

It must be added that these performances were not simply manipulative or cynical. Many colonial administrators appear truly grateful for the arrival of vaccine and willing to pour their energies into songs of thanksgiving and stage public pageantry. The vaccinating expedition’s arrival provided a unique opportunity for New Spain’s administrators to showcase and advertise their work for the crown, as well, and the parish priest often joined them. The local administrator of Tenancingo, Antonio de Elías Sáenz, responded to orders to assist in establishing vaccination by requesting a doctor from the expedition and permission to send children to carry the vaccine *in vivo* to his district. The viceroy instructed him to bring the children with a phlebotomist, barber, or physician, and ordered this “sentiment of loyalty and patriotism” announced to the public in the city’s *Gazeta*.<sup>548</sup> These advertisements of loyalty and sacrifice in journals spurred Toluca’s subdelegate into action, as well. He wrote the viceroy on December 19, 1804 to say that he had read the October 27 issue of the gazette, in which the feats of Elías Sáenz were reported, and that he wished to provide the same service in his district. He asked the

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<sup>547</sup> Cf. the evaluations of Indian nature, temperament, capacity, and character made by parish priests in the second half of the eighteenth century, who drew on a rich vocabulary that was naturally inflected by the circumstances of the speaker (parishioners could be fierce litigants when embroiled in a dispute with a priest). See Taylor, “...de corazón pequeño y ánimo apocado,” 19-52, and Chapter Two for further evaluations made with respect to healing and sanitation by physicians and intellectuals.

<sup>548</sup> In his letter to the viceroy, Elías Sáenz highlighted his work in service of *industria*: breeding silkworms, building roadways to handle carriage traffic, laying pipes to divert water, and establishing funds for schools, and viewed this most recent effort as one more example in a history of service to Spain. He also took care to acknowledge the role of the parish priests of the district seat and of Tecualoya and Zumpaguacan, who “*por las demostraciones de alegría con que recibieron en sus respectivas Doctrinas la Vacuna, y por que se han esmerado en hacer comprender a estas Gentes el beneficio tan sin igual que les ha proporcionado el Paternal amor de nuestro Augusto Soberano.*” As a result of this promotion, and the fact that no one became ill, “Spaniards and Indians” alike thronged with their families (“se agolpan”) to be vaccinated, and the subdelegate had to regulate access. By February 23, another 481 had been vaccinated, and by the end of the year, 2,448 in the district. (Initially, the eager subdelegate had solicited vaccine directly from Balmis, but when he, two children, and the physician had arrived in the city, Balmis informed the subdelegate that there was insufficient lymph to proceed owing to the cold weather. The physician was instructed and given a copy of Moreau’s *Tratado histórico*, and the subdelegate told to return three days later.) AGN Epidemias 4 exp. 1, Mexico 27 octubre 1804, Iturrigaray to Elías Saenz, 7r-v.; *ibidem*, Mexico 3 noviembre 1804, Xavier de Balmis to Viceroy, 9r-v.; *ibidem*, Tenancingo 10 octubre 1804, Antonio de Elías Saenz to Iturrigaray, 4-5; *ibidem*, Tenancingo 22 diciembre 1804, Antonio de Elías Sáenz to Viceroy Irurrigaray, 14-15; *ibidem*, Tenancingo 23 febrero 1805, Antonio de Elías Sáenz to Viceroy, 20r-v, and Francisco Sáenz de Sizilia to Viceroy, 28r-v.

viceroys to advise the corregidor of the city to assist, along with the juez eclesiástico and parish priest, “with public demonstrations in imitation of the subdelegate, so that by this means these inhabitants should submit with pleasure . . .”<sup>549</sup> Three carriers were brought from Tenancingo for vaccinations in Toluca, which were performed solemnly, and the administrator had no doubt that with the overtures (*exordios*) of the juez eclesiástico and parish priest “my purpose will be obtained, banishing the fear and preoccupations of many . . .”<sup>550</sup>

These events indicate the powerful and pervasive affinity in New Spain between the programmatic concerns, messages, and experiences of preventive medicine and those of Christianity’s conversion campaigns, both firmly rooted within a state ceremonial complex and founded on a belief in the power of gifts of sight and sound and the need for their continual transaction. Nevertheless, expenses for showy displays could not be sustained indefinitely: even before the dust of the expedition settled, people at the highest levels of colonial society, including viceroys, *audiencia* judges, certified physicians, and even parish priests in Mexico City, began supplementing these public displays with another familiar colonial practice. A second kind of gift – of coins to attract residents to the procedure – came into use as the approach and vaccinating program were calibrated with experience and time.

### **Gifts in Pursuit of Public Consent**

The most extensive, sustained example of payment in exchange for consent to vaccinate at the time came from the parish of San Miguel in Mexico City. This parish would become widely known as the site in the viceregal capital of the most successful vaccinating effort, which lasted between 1804 and 1810, when its priest, Juan José Guereña, departed for a new post in Puebla’s cathedral.<sup>551</sup> The director of the vaccinating expedition referred to Guereña as “the only protector” of vaccine in the capital, which suggests that the priest’s strategy and method stood out at an early date.<sup>552</sup> The numbers

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<sup>549</sup> AGN Epidemias 4 exp. 1, Toluca 19 diciembre 1804, Nicolas Gutierrez to Viceroy, 11-12. [“. . . a imitación del Subdelegado con demostraciones públicas para que de este modo entren con gusto estos habitantes . . .”]

<sup>550</sup> AGN Epidemias 4 exp. 1, Toluca 6 marzo 1805, Nicolas Gutierrez to Viceroy, 22r-v, and *ibidem*, Toluca 12 marzo 1805, 23r-v. [“. . . se conseguirá mi fin, desterrando el miedo, y preocupación de muchos . . .”]

<sup>551</sup> AGN IV 4957 exp. 23, Mexico 6 abril 1810, Juan José Guereña to Francisco Xavier de Lizana y Beaumont, 1r-v: “*Me retiro ya a servir la Canogia Doctoral de la Santa Yglesia de Puebla, a que me ha presentado la augusta piedad del Soberano. De consiguiente no puedo ya seguir con el cuidado de que se perpetúe en dicha Parroquia la implantación de la Vacuna, que he mantenido a mis expensas, por el tiempo de 5 años y 6 meses.*” There is some evidence that Guereña was vaccinating: when Arboleya was commissioned in Oaxaca he left Guereña in charge of the procedure in Mexico City “*y para cuyo fin instruyó [Arboleya] sobre el modo de hacer las vacunaciones por el orden sucesivo con objeto a la permanencia y a que el Público siguiera surtiéndose en la misma manera que hasta entonces*” (Antonio Serrano was in this instance designated as practitioner). AGN IV 4896 exp. 9, Mexico 10 marzo 1807, Relación del servicio hecho por don Alexandro García Arboleya en la propagación, y asistencia de la Bacuna en esta Capital . . . (signed), 2r-v.

<sup>552</sup> Balmis acknowledged the efforts of the pastor, although most of the credit went to Antonio Serrano. He wrote that vaccine would have died out on multiple occasions in the capital if not for the priest, whom he acknowledged again when complaining about the lack of steps taken to establish vaccination in Mexico City, where 30,000, he claimed, remained to be vaccinated, and where not one bit of vaccine would exist if

confirm his success: from March 1804, when Guereña began keeping records, to the end of 1809 (the latest date for a register has been found) he listed, by ethnic category, a total of 9,696 vaccinations in his parish alone.<sup>553</sup>

The surgeon Antonio Serrano, director of the anatomical theater in the Royal Indian Hospital, wrote in glowing terms of Guereña's method of attracting parishioners. At the end of 1804 Serrano, who had briefly vaccinated in the parish of San Miguel alongside the priest, wrote the viceroy to praise Guereña, who had been providing him with a steady supply of children for vaccination and who "with his exhortations has made the individuals of that parish submit to cowpox inoculation; truth be told, if it had not been for his care and efficiency, presenting me with poor children, it could have already run out . . . " Most in the capital had by then vaccinated their children: " those who remain, and who out of ignorance put off providing them with this benefit are commoners [*las gentes del pueblo bajo*], trust only by the lively expressions of their parish priests, and even then with some suspicion; consequently none other can convince them, because they imagine they are being deceived."<sup>554</sup>

Guereña justified his method when corresponding with the viceroy about several proposed amendments to the regulations composed by Balmis for the capital (the pastor made recommendations on the continued search for cowpox vaccine, on its preservation, on the need for attending physicians to keep detailed observations of their work, and on the distastefulness of the isolation of vaccinated patients). In his letter, Guereña included the following advice on drawing children from each of the minor sectors (*cuarteles menores*) of the capital, a precaution that had to be performed periodically and punctually to prevent the accidental loss of vaccine, he thought.

Because those who have to be vaccinated rarely attend voluntarily, and the majority are led by their interest in the reward [*obsequio*] or the constant requests of the priest or the *alcalde* of the sector, it is appropriate that each

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not for the "*ilustrado, y celoso*" parish priest of San Miguel, "*que es el único protector de ella en aquella ciudad, que la mantienen entre los Niños de su escuela gratuita, a pesar de la oposición de los Padres.*" AGN Epidemias 4 exp. 13, Mexico 30 octubre 1804, Xavier de Balmis to Viceroy, 355-359; AGI Indiferente 1558a, Acapulco 5 febrero 1805, Balmis to Josef Antonio Caballero, 1034v-1035r.

<sup>553</sup> AGN IV 244 exp. 1, "Estado General de las Personas, y Familias, que hay en la Feligresía de Señor San Miguel de México, según resultan del Padrón formado en el Año de 1809, octavo del gobierno del Doctor y Licenciado Don Juan José Guereña, Cura por S.M. de dicha Parroquial." By ethnic category: Spaniards 6,772 (67.8 percent); *indios* 1,300 (13.4 percent); *mestizos* 818 (8.4 percent); *mulatos* 293 (3.0 percent); *castizos* 286 (2.9 percent); *negros* 76 (.78 percent); *lobos* 56 (.58 percent); *moriscos* 42 (.43 percent); and 53 "eclesiásticos" (.55 percent) vaccinated and included in the total.

Prior to 1960, Francisco Fernández del Castillo consulted a different register in San Miguel's parish archive, one that contained the names of 6,106 individuals vaccinated between March 27, 1805, and December 23, 1807. The new data from the national archive essentially cover an additional year's work and confirm these numbers. See *Los viajes de don Francisco Xavier de Balmis*, 141f and 195.

<sup>554</sup> AGN Epidemias 10 exp. 12, Mexico 26 noviembre 1804, Antonio Serrano to Iturrigaray, 454-455. [. . . *ha hecho que con sus exhortaciones se sometan a la inoculación de la vacuna los individuos de aquella Feligresía; a la verdad a no haber sido por su esmero y eficacia, presentándome niños pobres, pudiera ya haberse acabado . . . el casi todo lo principal de esta Capital tiene ya vacunado a sus hijos, y . . . los que restan, y se retraen por ignorancia de proporcionarles este bien, son las gentes del pueblo bajo, estos solo por las vivas expresiones de sus Párrocos lo creen, y aun con todo con algún recelo; de consiguiendo ningún otro puede convencerlos, pues se discurren los engaños.*]

child be gratified with half a real and some cookie and that said justices be strictly ordered to bring a child from his respective department each day of vaccination.<sup>555</sup>

By then, faith in the power of the gift reflected nearly two years of accumulated experience. At a later date, when Antonio Serrano joined Arboleya (who also vaccinated in the parish) and García Jove, president of the Protomedicato, as part of a commission to advise on continuing propagation of the vaccine, they singled out Guereña's "incessant work and care" in gathering children from various poor barrios as an example to be emulated in the rest of the viceroyalty. They wrote that the children only submitted because he attracted them, following the example of the viceroy, with money in exchange for their cooperation.<sup>556</sup>

Mention of the viceroy suggests that Guereña's preternatural skill in attracting parents had other sources of inspiration, that his method was not unique or novel. In fact, monetary exchange had become a central component of campaigns to pacify unsettled societies on the frontiers of the Spanish Empire at the time. These incentives were put in practice, for example, when officials, scientists, or missionaries attempted their "peaceful conquests" in Malaspina's slightly earlier artifact gathering expedition through the Americas (1789-1791), when indigenous communities had been regularly engaged as informants, translators, and allies and had been paid in exchange for their cooperation.<sup>557</sup>

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<sup>555</sup> AGN Epidemias 10 exp. 7, Mexico 26 agosto 1806, José Guereña to Viceroy Iturrigaray, 338-341. [*Como los que se han de vacunar, pocas veces asisten voluntariamente, y a los más los conduce el interesillo del obsequio, o las constantes solicitudes ya del Cura y ya del Alcalde de Cuartel: será muy oportuno que a cada Niño se le gratifique con medio real y algún biscocho, y que a dichos Jueces se les prevenga estrechamente que en cada día de vacunación, lleven un Niño de su respectivo departamento.*]

<sup>556</sup> They wrote that Guereña "*no perdona diligencia, gasto, ni alguna otra cosa, para solicitar por todos los barrios niños en quienes se practique la inoculación.*" Their recommendations stressed the limited means of professors of medicine, suggesting that vaccine fluid would not last if placed solely under the care of these men, even if assisted by alcaldes. "*A la verdad no es segura su subsistencia, por que el carácter de los facultativos no es suficiente para mover al pueblo de los arrabales particularmente y si en la actualidad se someten a vacunarse, no solo es por el influjo del padre cura, sino es porque los atrae gratificándolos, y de esta suerte, adaptan lo que les importa: siguiendo el dicho cura el ejemplo del mismo Exmo. Señor Virrey, que con mano liberal ha dado y da dinero a los muchachos para que se dejen vacunar.*" AGN Epidemias 12 exp. 6, Mexico 1 abril 1805, Plan que manifiestan ... los comisionados de la vacuna, para la segura conservación del fluido vacuno en esta Capital, 330v.

By August 1810, only months after Guereña had left the parish, physician Miguel Muñoz, in charge of weekly vaccination sessions on a rotating basis in the city's four departments, wrote to Serrano to say that vaccine had run out in the parish: Guereña's successor, Doctor Don Agustín Medrano, was unwilling to continue the work of his predecessor. This priest, "*impuesto del piadoso establecimiento de bacuna declaró inmediatamente no ser este ramo de trabajo de su celo y mucho menos de su gasto: que si el Señor Guereña se lo había tomado a su cuenta, había sido por secretas miras; y que careciendo él de todas ellas y de proporciones para su desempeño la suspendía . . . Que a su vez gratificaría solo al Facultativo, y no a los Maestros de Escuela, ni a los Niños con un bizcocho como hasta aquí se tiene de costumbre [sic] y se ha tenido como valiente atractivo.*" AGN IV 6177 exp. 15, Mexico agosto 1810, José Miguel Muñoz to Antonio Serrano, no folio numbers.

<sup>557</sup> On a 1777 royal cédula to the viceroy of La Plata that mentions gifts as "the real means to bring about conversions," see David Weber, *Bárbaros: Spaniards and Their Savages in the Age of Enlightenment* (New Haven: Yale University Press, 2005), 119 and 315n187, and for the method employed in Malaspina's



It was an approach modeled on the generosity expected from the king's representatives in the Americas, such as the viceroy. It was a kind of charity or symbolic almsgiving that became especially common in Mexico's vaccinating campaigns once officials came to acknowledge the hardships the procedure posed for parents and the apparent inability of physicians to assuage the anxieties of their Indian patients.

Evidence of recognition of hardship and of attempts to compensate comes from a printed notice to Mexico City's inhabitants, affixed in public places to advertise "gratuitous vaccination" in August and September of 1804. It said that the viceroy, aware of the fact that many among the "poor people" cannot bring their children because it would disrupt their daily work, would provide one real for each "poor boy or girl" brought to be vaccinated, in compensation for any wages lost as a result.<sup>558</sup> Arboleya later confirmed that the viceroys who had accompanied him when vaccinating in Mexico City, its barrios, and its surrounding villages had provided each vaccinated person with two *reales* from their personal accounts.<sup>559</sup>

As Marcel Mauss wrote in his essay on gifts, alms to children and the poor carry especially powerful moral valences, the result of ideas about sacrifice and the obligatory generosity of the ruler that underlay the right to rule.<sup>560</sup> Acts of largesse were materially and symbolically meaningful displays of generosity extended by the more powerful, fortunate patron (in this case, the viceroy) to his dependants, suggesting one among a range of paternalistic gestures in common use in Mexico at the time. Not everyone imagined such efforts to be effective: Serrano, for one, though impressed by these shows, remained skeptical of their results.<sup>561</sup> Yet this system of gifting, with all its moral implications for a society's subject population, apparently became nearly ubiquitous in

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expedition, 31: "Our peaceful contact with the natives had put down solid roots at that time, even at the cost of various gifts . . . [and] a steady contribution of biscuits [galletas]."

<sup>558</sup> AGN IV 5297 exp. 19, "Aviso al Publico" (printed), 97r: "*persuadido el Exmo. Señor Virrey a que entre la gente pobre habrá muchos hombres y mujeres que dejarán de llevar a sus hijos por impedirselo las ocupaciones con que ganan el diario sustento, ha resuelto S.E. estimulado del amor con que mira este recomendable Público que está a su cuidado, que para resarcirles el corto perjuicio que pueda seguirseles faltando a sus quehaceres el rato de la vacunación, se dé un real por cada Niño o Niña pobres de los que se presentaren y vacunaren, que ministrará una Persona deputada por S.E., con lo que espera lograr que ninguno por su pobreza o infelicidad, deje de aprovechar la ocasión tan apreciable que se le presenta de libertar a su familia por un medio tan sencillo e inocente, de la cruel enfermedad de las viruelas naturales, que tantas vidas sacrifica.*"

<sup>559</sup> AGN IV 4896 exp. 9, Mexico 10 marzo 1807, Relación del servicio hecho por Don Alexandro García Arboleya en la propagación, y asistencia de la Bacuna en esta Capital ... (signed), 4v. "*Ha asistido con los Señores Exmos. Virreyes a todas las vacunaciones públicas que han presenciado y promovido en los barrios, y Pueblos comarcanos a esta Capital vacunando el por si, y con ayuda de otros dos facultativos al número de muchos miles que acudían a las persuasiones de sus Exas. a la par del interés de un real o dos con que de cuenta de dichos Señores Exmos. se socorría a cada vacunado.*"

<sup>560</sup> "Alms are the fruits of a moral notion of the gift and of fortune on the one hand, and of a notion of sacrifice, on the other. Generosity is an obligation . . . This is the ancient morality of the gift, which has become a principle of justice." Marcel Mauss, *The Gift*, 18.

<sup>561</sup> He sent a notice to the editor of the *Gazeta de México* several years later saying that despite this incentive of cookies ("biscochos") for the children, their parents still refused to bring them, and suggested that alcaldes or primary teachers be used for this purpose. AGN IV 5297 exp. 16, Mexico 20 enero 1820, summary of Serrano's report, 8r-v.

New Spain as a way to introduce a new medical practice and elicit the public's cooperation.

A few brief examples of this ubiquity will suffice. In the mining centers to the north, the new vaccinating committee in Zacatecas wrote to the intendant in August 1805 to report that its twelve members had contributed 525 pesos and solicited another 368 from "zealots and patriots" in the city, with which they had been able to establish almost weekly vaccinations (they documented an average of 151 a month since December). In addition to supporting a carrier and *maestro sangrador* (probably a licensed phlebotomist), who were paid ten and thirty pesos a month, respectively, the money went as rewards to the children: each one received a half real (one-sixteenth of a peso) after the incision, "all with the purpose of attracting them to the benefit that they received and to make progress in destroying the preoccupations and fears that the very poor [*ínfimo*] pueblo forms with new and peculiar establishments."<sup>562</sup> This was not an insignificant expense (if done consistently it reached seventy-five pesos, four reales), which indicates that these civilians and officials considered it necessary to secure cooperation for this unfamiliar and also inconvenient technique.

Much of this activity continued to be made possibly by the good will of administrators and medical practitioners, who donated when necessary to ensure that they could report a successful campaign to their superiors. In Querétaro, where the surgeon was patriotically operating without payment, the corregidor, attorney Miguel Domínguez, dutifully cooperated by "giving from my pocket one or another small reward to some of the parents of children who are vaccinated" in order that they would look after the children and make sure to return when their pustules were ready to be used for new vaccinations.<sup>563</sup> Domínguez, who a few years later would advocate fervently for the cause of Mexican independence, characterized all of this activity – parents arriving with their children to be vaccinated, a surgeon operating without pay, and an official donating from his own pocket – as "service" to the king, suggesting some of the ways residents of Mexico sought to reciprocate the imperial gift they had so ostentatiously been given by the king.<sup>564</sup> Chalco's local administrators also believed the small incentive to be indispensable: following a renewed 1808 push for vaccination, he inquired into whether he should pay the vaccinated, noting that in 1806 he had spent more than 800 *pesetas* (two-real coins) on this expense. He suggested that without payment for the crucial return trip to the vaccinating station, the goal of propagation would be unattainable: "as soon as this contribution to the vaccinated ceased, the parents did not return to present their children, the lymph was lost, and vaccination ceased."<sup>565</sup>

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<sup>562</sup> AGN Epidemias 4 exp. 15, Zacatecas 6 agosto 1805, Junta Central to Teniente Letrado Jose de Peon Valdés, 455-457. ["... *todo con el fin de atraerlos a el bien que reciben, e ir destruyendo las preocupaciones y temores que forma el Pueblo ínfimo con establecimientos nuevos y peregrinos.*"]

<sup>563</sup> This second visit was key for continued success of the operation, but often the part with which patients dispensed.

<sup>564</sup> AGN Epidemias 4 exp. 15 Querétaro 16 marzo 1805, Licenciado Miguel Dominguez to Viceroy, 497-498. ["... *dando de mi bolsillo una u otra corta gratificación a alguno de los Padres de los Niños que se inoculan . . .*"]

<sup>565</sup> AGN IV 1717 exp. 18, Chalco 8 julio 1808, Manuel Fernandez de los Rios to Intendent Arce, 4r-v. ["... *en cuanto cesó esta contribución a los vacunados, no volvieron los Padres a presentar a sus hijos, se perdió el pus, y cesó la vacunación.*"]

If these are especially insistent and perhaps exceptional endorsements of the necessity of monetary incentive, this gifting practice – providing monetary remuneration as a means to attract the poorer classes – was also codified in several regulations on the propagation of vaccine. In Durango, the poor who were vaccinated were to be assisted (*se socorrerá*) with one real daily, which was referred to as alms (*limosnas*), and Guadalajara’s regulations mention gratuities or rewards specifically for “the miserable” and “solemn poor.”<sup>566</sup> Small gifts of money, at once conventional, habitual, public, and statutory, were if nothing else a practical solution intended for ordinary folk, “especially people from the poorer barrios” in cities such as Mexico City, which suggests a shared awareness of the realities of dearth and deprivation in colonial Mexico, from viceroy to parish priest, physician to local administrator.

Still, not everyone took a favorable view of this arrangement. Most prominently, the director of the expedition, Balmis, who had personally witnessed this necessity all around him, remained disdainful and dismissive of the power of such gestures. After King Charles IV had graciously offered to educate and care for the children collected for the expedition to the Philippines once they returned to Mexico, he complained from Celaya, he repeatedly found that parents preferred a single payment up front in exchange for their children. “Experience has demonstrated in Querétaro just as in that city that the distrustful and stupid character of these natives makes them prefer and esteem more a single pecuniary reward for voluntary use of their children . . . than the great reward that the King offers them of maintaining and educating them afterward . . .” The generous gift of a royal education was apparently being discounted in favor of payment up front, perhaps used to alleviate immediate material necessities. Complain as he did, this was a reality that Balmis had accepted from the beginning – he admitted to having paid *indios* from his pocket in exchange for their cooperation.<sup>567</sup>

Incidentally, monetary gifts were only one of several kinds of incentive. As mentioned in the last chapter, the bishop of Antequera offered forty days indulgence instead of coins. This was a transaction that traded on the Catholic Church’s economy of sin and salvation and would have been an appropriate solution in a society in which such spiritual incentives had real value, but evidence that indulgences were being widely issued and received has not come to light. Were such incentives out of touch with the realities of the poorer classes? This might in fact have been true of ceremonies in cities:

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<sup>566</sup> AGI Indiferente 1558a Durango 2 septiembre 1804, Reglamento formado para la conservacion del fluido bacuno conforme a la Real Orden de 20 de Mayo del presente año, signed Bernardo de Bonavia: “Aunque no dejará de estimular el ejemplo de las personas principales concurriendo con sus hijos cuando les toque a la Sala de Bacunación, habiendo hecho ver la experiencia cuando la inoculación general del vecindario, que a pesar del ejemplo, auxilios, y del terror de las Viruelas naturales, fue necesario atraer a muchos con las Limosnas, será mas indispensable en el día valerse de este medio careciendo de aquel riesgo, en cuya atención se socorrerá con un real diario a cada uno de los pobres que se inoculen.” For Guadalajara, see *ibidem*, Del establecimiento de una Casa de Vacunación Pública (sent by Balmis from Querétaro, 14 noviembre 1804), 890v-896v, article 6.

<sup>567</sup> [“La experiencia me ha acreditado así en Querétaro, como en esta Ciudad, que el carácter desconfiado y estúpido de estos naturales, les haga preferir y estimar en más una gratificación pecuniaria por una vez para prestar voluntariamente sus hijos . . . que no la gran recompensa que el Rey les ofrece de mantenerlos y educarlos después . . .”] Balmis cited in Ramírez Martínez, *La salud del Imperio*, 22n.18. “No tiene número las pesetas que he repartido entre los indios para que se dejasen vacunar, y las empleadas en juguetes para que se entretuvieran a bordo los niños embarcados . . .”

the transience of celebrations – I have not found evidence beyond 1805 – may suggest that “consent” was ultimately a matter of financial incentive for those who could not afford the luxury of much state pageantry. Still, too great a stress on money as a material good ignores the symbolism conveyed by such gestures of *noblesse oblige*, which was one among many important ties binding a colonial pact.

## Conclusion

By associating vaccine with the sacred realm – its buildings, its ceremonial accoutrements, its celebrations of thanksgiving – initial entrances into cities and villages legitimized the agents and tools of medicine, if not quite in exactly the way the *chiapaneco* José Flores had imagined in his proposal to the crown for the expedition. Almost from the beginning, ceremonial considerations were supplemented by gifts of money, which were a more efficient, and possibly more effective, means of obtaining consent. This solution responded to concrete material realities and also implied the obligation to reciprocate through cooperation. Built into these gifts were ties of paternalistic benevolence that infused colonial society as well as assumptions about the cultural competencies and motives of *indios* and the poor.

Episodes like the one in Guadalajara that began the above analysis can therefore be seen as exemplary in at least two senses. First, they were intended to instruct or illustrate, to give the public a visual example of the significance of the medical technique. They were also exemplary in the sense that they were exceptional, not infinitely repeatable. Not all entrances were so grand, not all demonstrations of the procedure accompanied by such pomp, not all audiences so rapturously attentive. From the calculated attempts to impinge on the senses and the prevalence of general considerations of public spectacle, to payments made to parents and sometimes children, these strategies ran the gamut of possible solutions and reveal authorities tacking between a perception of a cultural sensitivity and susceptibility to impression – the “childlike-ness” of poor, indigenous classes – and the socioeconomic hardships that formed a part of the daily existence of these groups. Both were fertile arenas for exchanges in service to modern medicine and a broader public health.

When Marcel Mauss wrote in his essay on the gift (1950) that it could not go unrequited, he meant that by entailing obligations to receive and, equally important, to reciprocate, gifting worked to bind people together in a society. In this view, any act presented as straightforward charity must be reconsidered: the administrator in New Spain who boasted of his selfless efforts in service to the king expected his name to appear in the public papers, his family to acquire some fame, or his position in the colonial hierarchy to improve. Far from a terminus, an initial gift given to stimulate interest in a medical innovation always incited an interminable chain of considerations and reciprocities. Colonial society, it appears, was saturated with gifts; sacrifices on the altar to God and hymns of praise were the most appropriate accompaniment to self-conscious presentations of vaccination as a celestial and royal benefit.

Mauss’s theory brought a crucial insight to the study of ritual exchange. He sought to appreciate the force of things, looking for the rules and conventions underlying transactions and seeing these as more than just commerce, but as the glue holding members of a society together. It is this insight, having influenced theorists of language and culture from John Austin to Pierre Bourdieu, which allows one to see the persuasive

(and obligation-inducing) effect of public pageantry.<sup>568</sup> Attention to these cultural considerations may yield results in the future as historians of science look more closely at the kinds of resources on which contemporaries drew to rally their communities to imported “Western” medicines.<sup>569</sup>

Put otherwise, the sugary biscuits, showy theatrics, and shiny coins that appear with some frequency in the documents lead us to observe how states seeking to propagate medical expertise in the early modern period of necessity relied on personal relations of dependency and the ties of mutual obligation implied in such relationships, which naturally contained a great deal of persuasive force. If *patrón* and dependant, whether speaking of a priest and his flock, an *hacendado* and his workers, or the king and his subjects, became experts in the art of persuasion, honing this art whenever possible, it was no less true when it came to an unfamiliar medical procedure. Those participating in the 1797 scene in Teotitlán, Oaxaca related in the epigraph, when most of twenty-six small children prepared for the operation in the hospital subsequently refused after seeing the physician use his lancet to vaccinate a teenage boy, were familiar with the grammar of this relationship. They recognized the emphatic stress on soft words and negotiation as a more fitting means of securing consent and dispelling fear.<sup>570</sup>

In sum, there was no shortage of tokens to give in pursuit of consent. Where viceroys, municipal councils, the vaccinating juntas, and parish priests consistently faltered was in finding a steady stream of revenue to support the practitioners who would perform the procedure. As shortcomings grew more acute in the years of insurgency, administrators struck on some novel solutions and compromises. The following chapter considers the logistics of vaccination, including the paths it took into the countryside. Following this analysis, its concluding remarks return us to the issues raised in this chapter about consent, culture, and the successes and limitations of an imperial medicine in years of dearth, deprivation, and social upheaval.

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<sup>568</sup> John Austin, *How to Do Things with Words* (Cambridge, MA: Harvard University Press, 1962), and of his many studies see especially the essays in Pierre Bourdieu, *Language and Symbolic Power*, trans. Raymond and Adamson (Cambridge, MA: Harvard University Press, 1991), which specifically tackled “the economy of linguistic exchanges” and engaged Austin’s work on illocution.

<sup>569</sup> A previous application of Marcel Mauss’s theory of gifting to the Spanish expeditions places these within the context of imperial rivalries, as gifts bestowing prestige on the donor nation, with Spain always seeking to outdo her neighbors. While there is no doubt that competition for glory was part of this story, with scientific achievement wielded as a weapon of sorts on an international stage, in the documents relating to the 1804 expedition, Spanish subjects – and not European powers – were clearly the recipients of the gift, and I have followed the sources in this respect. See Fermín del Pino Díaz, “Por una antropología de la ciencia: Las expediciones ilustradas españolas como ‘potlatch’ reales,” in *Ciencia y contexto histórico nacional en las expediciones ilustradas a América*, ed. Fermín del Pino Díaz (Madrid: Consejo Superior de Investigaciones Científicas, 1988), 173-186, and Fernando Monge Martínez, “La honra nacional en las expediciones de Cook y Malaspina: Una visión antropológica,” in *ibidem*, 187-198.

<sup>570</sup> The lessons of Teotitlán’s riot months earlier had apparently been learned; see Chapter Three.

## CHAPTER SIX

### **Republics of Vaccinators: The Diffusion of a Medical Technique, 1804 to 1820**

With all this it consoles me that if the devouring contagion has not produced its usual mockery, it is due to the many vaccinated: vaccination is the true cordon, the chain, and the impenetrable wall against this epidemic. Let us open our eyes at once and make the most of it.

-Doctor Ciprian Blanco, vaccinating in Campeche, 1814<sup>571</sup>

It is one of the ironies of Mexico's history that the Bourbon government opted to make vaccine available to rural populations in a period when violence and great economic depressions were engulfing much of New Spain's countryside. Among other obstacles, the Spanish Crown's quixotic attempts to vaccinate subject populations against smallpox were accompanied by recurring subsistence crises, a fall in real wages, the occupation of towns by troops and bandits, sacked archives and vandalized buildings, drained municipal, village, and confraternal coffers, periodic stoppages of transport, and total breakdowns in communication.<sup>572</sup> The cumulative effect was to provide a precarious context for the government's sustained attempts to bring Edward Jenner's vaccine to the most remote communities of the viceroyalty, with material constraints conditioning at every step the way this feat would ultimately be accomplished.

If the insurgency backdrop to this experiment in preventive medicine was marked by repeated episodes of rural violence, particularly in the years between 1810 and 1817 or so, the vaccinating campaigns, by contrast, were not. Unlike the best-known case in Latin America, in which a riot broke out during a forced vaccinating campaign in the highlands of Guatemala in April of 1815, Mexico's experience can be characterized as nonviolent.<sup>573</sup> The peaceful setting in the realm of medicine contrasts as well with the

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<sup>571</sup> AGN IV 5297 exp. 18, Campeche 31 diciembre 1814, Estado que manifiesta el número de vacunados en esta ciudad y sus barrios, en los meses de Julio, Agosto, etc..., 12-13. [*“Con todo, me consuela que si no ha hecho aquella riza acostumbrada este contagio devorador, se debe a los muchos vacunados: la vacunación es el verdadero cordón, es la cadena, y es la muralla impenetrable para este peste: desengañémonos de una vez, y aprovechémonos.”*]

<sup>572</sup> Richard Garner, “Price Trends in Eighteenth-Century Mexico,” *Hispanic American Historical Review* 65 (1985): 279-325, John Coatsworth, “Obstacles to Economic Growth in Nineteenth-Century Mexico,” *American Historical Review* 83 (1978): 80-100, and Eric Van Young, *The Other Rebellion: Popular Violence, Ideology, and the Mexican Struggle for Independence, 1810-1821* (Stanford: Stanford University Press, 2001), 69-86.

<sup>573</sup> Studying the highlands of Quetzaltenango, historian Greg Grandin argues that a riot in 1815 was partially the result of an increasingly common “meddling of a state in nearly every aspect of community life” in the pre-Independence years. “These unaccustomed interventions into the daily life of the population

invasions of the private sphere that would take place less than a century later in places like Mexico City, when the state drew on “experts” such as social workers, physicians, psychiatrists, and the police to regulate and reform the nation’s population, breaching homes in the name of modern medicine, social science, public health, and national progress.<sup>574</sup> In some Latin American contexts, vaccinating attempts in the national period, such as the one in Rio de Janeiro, would lead to the largest social movements of the twentieth century.<sup>575</sup> Multiplied, examples of coercive violence formed part of what anthropologist James Scott calls “high modernism,” in which state functionaries viewed the government as infinitely capable of imposing rationalism and order on populations.<sup>576</sup>

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generated hostility and, during a particularly tense moment, sparked resistance. In the days following the April [1815] riot, groups of Indians attacked [Doctor Ciriano] Flores’s quarantine house and . . . freed the hospitalized smallpox victims . . .” Meanwhile the priest of Tejutla, fearing a riot “we wouldn’t be able to resist,” demanded an end to invasive house inspections and vaccinations, while the audiencia provided for sixty armed men to be stationed around the plaza during Easter week. Grandin, *The Blood of Guatemala: A History of Race and Nation* (Durham: Duke University Press, 2000), 74ff.

Adam Warren’s dissertation on healing in Peru suggests that coercion practiced in Lima and beyond was minimal. He documents orders for priests to persuade their flocks and occasional posting of a soldier outside a vaccination site. The kinds of resistance he reports were unexceptional, similar to those in Mexico, spurred by uncertainties and inconsistencies within the administrative program, straightforward lack of funds, and the reasonable fears and apathy of parents. Adam Warren, “Piety and Danger: Popular Ritual, Epidemics, and Medical Reforms in Lima, 1750-1860” (Ph.D diss., University of California, San Diego, 2004), 145-160, 174, and for the failure of vaccination in San Miguel de Piura, where Warren argues that villagers “actively took part in the destruction of the vaccine project,” 165f.

<sup>574</sup> For the *higienista* “foot soldiers” of the Mexican Revolution and their regulation of sexuality, see Katherine Bliss, “The Science of Redemption: Syphilis, Sexual Promiscuity, and Reformism in Revolutionary Mexico City,” *HAHR* 79:1 (February 1999): 1-40. See also Pablo Piccato, *City of Suspects: Crime in Mexico City, 1900-1931* (Durham: Duke University Press, 2001), and for the “scientific” groundwork for many urban renewal and public health campaigns, Nancy Stepan, “*The Hour of Eugenics*”: *Race, Gender, and Nation in Latin America* (Ithaca: Cornell University Press, 1996).

<sup>575</sup> The *revolta contra vacina* in Rio de Janeiro brought poor and working-class residents from crowded tenements and *favelas* of the capital’s most marginal districts into the streets for several days in November of 1904, where grievances and resentment over the invasive hygienic policies of a federal government found violent expression, ultimately forcing the government to rescind a compulsory vaccination article in the health code. For debate on the centrality of the vaccination issue to the revolt, see Sidney Chalhoub, *Cidade febril: cortiços e epidemias na Corte imperial* (São Paulo: Companhia das Letras, 1996), 101f and 121-162 passim, which provides a discussion of vaccination’s prior history. Those tending to downplay the importance of vaccination include Jeffrey Needell, “The *Revolta Contra Vacina* of 1904: The Revolt Against ‘Modernization’ in *Belle-Époque* Rio de Janeiro,” *HAHR* 67:2 (May 1987): 233-269, Robert Nachman, “Positivism and Revolution in Brazil’s First Republic: The 1904 Revolt,” *The Americas* 24:1 (1977): 20-39, and Teresa Meade, “*Civilizing*” *Rio: Reform and Resistance in a Brazilian City, 1889-1930* (University Park: Penn State University Press, 1997), 90, and 75-120 passim.

<sup>576</sup> James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 51f: “Where the premodern state was content with a level of intelligence sufficient to allow it to keep order, extract taxes, and raise armies, the modern state increasingly aspired to ‘take in charge’ the physical and human resources of the nation and make them more productive. . . . The state’s increasing concern with productivity, health, sanitation, education, transportation, mineral resources, grain production, and investment was less an abandonment of the older objectives of statecraft than a broadening and deepening of what those objective entailed in the modern world.”

It is in light of the observation that the record of immunizations in colonial Mexico between 1808 and 1820 is hardly full of violence and *tumultos* that we take up the interpretive problem posed in Part II once again.<sup>577</sup> How was it that so many indigenous peasants came to participate in this new and medically “modern” project? This chapter is conceived as another step toward an understanding of the cultural considerations that allowed vaccination – an occasionally invasive, still uncertain medical technique – to make such extraordinary early headway in Mexico in the absence of coercion. From the ceremonial considerations that welcomed the Balmis expedition, this chapter turns to the mechanisms of distribution and the practical problems faced by administrators, city councils, priests, and local governments in the following years as these institutions and individuals attempted to bring vaccine to the countryside. A perennial shortage of funds and the almost nonexistent relationship between city doctors and rural populations ultimately led administrators to turn to a corps of local medical providers, including bleeders, priests, parents, *curanderos* or shamans, and amateur practitioners of the healing arts, who were called on for reasons of availability, affordability, mobility, and cultural familiarity with patients. It was this network of laypeople, rather than certified physicians, through which the technique often arrived in much of Mexico’s countryside.<sup>578</sup> We see that at the very moment professionalization of medicine was supposedly suppressing alternate healing knowledge, Bourbon health administrators actually leaned heavily on non-certified healers for the distribution of smallpox vaccine.

### **A Calculus of Medicine’s Burdens**

Beginning with the regulations for vaccine enacted in the capitals of all of New Spain’s major intendancies in 1804, the caretakers of vaccine worked under the assumption that vaccinators would carry it directly to the countryside rather than ask indigenous populations to travel to the district seats and provincial capitals for the procedure. Puebla’s regulations, for example, provided for the establishment of a number of subaltern vaccinating committees in each of the district seats in that province, made up of a physician, surgeon “or inquisitive healer [*curandero*], of which there is no shortage in the pueblos,” to serve as vaccinator. These subaltern bodies would see that an expert practitioner (*perito*) “or others who will learn to execute the operation in the district seat” – presumably one of those ubiquitous *curanderos* in the countryside – subsequently made trips to subject towns, accompanied by members of the vaccination board. This practitioner could thus operate without having to inconvenience the burdened villagers

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<sup>577</sup> The record does, however, include many examples of popular rumor and acts of flight; see Chapter Seven. In many regions, these were the more common and likely traditions of protest available to actors in this period. Of those patterns of violence, street fighting, streetcar barricades, and neighborhood protests that characterized Rio de Janeiro a century later, Teresa Meade suggests that the 1904 riot “combined genuine premodern suspicion of public health codes with modern resistance to an urban renewal plan that discriminated against the lower class.” In this Hobsbawmean interpretation, the “modern” forms of protest available to later generations would have been absent in the early-nineteenth century; the point of inflection would be a sharper definition of a proletariat class in the nineteenth century. “*Civilizing*” Rio, 111.

<sup>578</sup> Figures such as Viceroy José de Iturrigaray (1803-1808), doctors Alejandro García Arboleya, José Ignacio García Jove, José Montaña, and Antonio Serrano, as well as the priest of Mexico City’s parish of San Miguel, Juan José Guereña – all of whom make appearances in this chapter – were central players in this new initiative in New Spain, but they represent only the iceberg’s tip.



(*aquellos infelices*), the regulations noted; to require Indians to travel from the neighboring municipalities (*de la comarca*) to these head towns would inevitably slow progress, “because they will resist the journey on the pretext of their need to always be employed in their occupations.”<sup>579</sup>

Various physicians and administrators in charge of the prophylactic subsequently reiterated the assumption that it was too great an inconvenience to ask agriculturalists to journey to administrative centers for the procedure, even if this approach would lower the cost of vaccination. Three years later, the vaccinating physician in Texcoco, to the northeast of Mexico City, wrote to the capital to complain that while he had worked diligently and with few comforts (he reported 2,621 vaccination over several villages), the practice had not spread as quickly as he had hoped because the Indians were not receiving it well in all the pueblos. Significantly, he thought the situation would be even worse if they were asked to leave their villages and homes to travel the distance to Texcoco to undergo the procedure.<sup>580</sup> These were acknowledgments of the limitations imposed on the practice of modern medicine by the realities of rural village life.

If administrators could agree that the use of some practitioner for transport of vaccine to outlying villages was necessary and justified, they were at odds over two significant points. First, what kind of person should be commissioned to practice? And second, should funds come from village coffers (*bienes de comunidad*) or some another source? The matter required clarification at the viceregal level, but for many years such clarification was beyond the grasp of a government embroiled in containing a movement for independence from Spain. In this situation, a number of local governments were forced to rely on ad hoc arrangements as a solution to this paralysis at the top. Perhaps the best way to understand the provenance of these arrangements is to consider the contours of debates over practice, as these were carried out over more than a decade in one of the viceroyalty’s provinces.

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<sup>579</sup> AGN Epidemias 4 exp. 3, Puebla 29 octubre 1804, Estatutos que para la real junta de vacunación, establecida en esta ciudad de la Puebla de los Angeles bajo la protección del ilustrísimo señor doctor don Xavier de Balmis ..., 97r-v and articles 17 and 19. Further differentiating the kinds of treatment to be received, the regulations stipulated that in those provinces in which the governors of Indians were “ladinos” (literate or fluent in Spanish) and “expertos” – which could have referred to their awareness of vaccination or medicine generally, or their experience ruling Indians – these authority figures would be given places on the subaltern juntas and allowed to vote. The document referred explicitly to Cholula, Huejotzingo, Tehuacán, and other unnamed places, but added that the same could be done in pueblos “menos civilizados” according to circumstances. [“. . . o curioso curandero que nunca falta en los Pueblos, y será el que deba hacer la vacunación.” “. . . por que resistirán el viaje a pretexto de la necesidad que tienen de emplearse siempre en sus ocupaciones.” “. . . u otros que aprendiesen a ejecutar la operación en la cabecera . . .”]

<sup>580</sup> AGN IV 5297 exp. 19, Texcoco 30 septiembre 1807, Miguel Antonio Arteaga to Oidor Don Ciriaco González Carvajal, 40-41: “¿Y si tomándome el trabajo de ir de vacunando de Pueblo en Pueblo, sin encontrar en ellos ni que comer, ni lecho en que dormir, perdonando estas incomodidades solo por conseguir el fin de aprovechar el tiempo; (en algunos de ellos ha habido días en que solo me han presentado cinco o seis) ¿qué sería si se hubiese citado para esta cabecera de Tescuco incomodándolos a que saliesen de sus Pueblos que dejasen sus casas? En fin voy consiguiendo por las persuasiones ya del Sor. Cura, o Padre de la administración; y las razones que a su modo de entender les doy yo, se me presenten en ocasiones en un gran numero.” At the recommendation of Doctor Garcia Jove, president of the Protomedicato, he received 250 pesos for eight months of work, or thirty-one pesos a month.

In the important colonial capital of Antequera, Oaxaca, the officials and civilians who made up the newly formed vaccinating committee, the Junta de Vacuna, met regularly to carry out vaccinations in the city and plan propagation to the rest of the intendancy. As early as January 1805, however, they began reporting difficulties in funding expeditions and to debate where, ultimately, the benefits of vaccination lay, and who should therefore have to pay for it. The crown's legal assessor, Antonio María Izquierdo, acting in the dual role as intendant of Oaxaca and president of the vaccinating committee, wrote the viceroy to say that surgeon Santiago Coda had been commissioned to propagate lymph to Oaxaca's Mixteca Baja, the arid lowlands lying to the northwest of the capital, where difficult terrain, few provisions, and poor transport meant that they would have to offer him an honorarium of at least three pesos daily. Lacking any source of revenue, alternatives were discussed, including whether to solicit donations from wealthier citizens or pay the expense from village income. Likely broaching the issue for the first time, the committee had decided on the latter solution, reasoning that *cajas de comunidad*, the communal coffers designated for the subsistence of indigenous villages, were originally established for the general welfare of Indians, and Izquierdo deemed immunization an excellent application of these funds. As for those wealthier merchants who might otherwise finance such an undertaking, they "should not be thought to have an interest in the fate of distant pueblos . . ." <sup>581</sup> A year later the surgeon reported a staggering 16,983 vaccination and requested payment for his efforts from November 29, 1804 to January 1806. Understandably, members of the committee were especially eager to know whether the viceroy had approved the use of village funds for this and other expenses. <sup>582</sup>

In January 1807, the viceregal government provided an answer, resolving that communities benefiting directly from the propagation and conservation of vaccine were to pay for it from communal properties and coffers. <sup>583</sup> But in a major omission, it left open the salary to be paid and the type of practitioner to be commissioned, depending on which the decision could be highly burdensome to communities, especially in a context of constant shortfalls. As a result, Antequera's public figures continued to study the value of certified medical professionals for the introduction of vaccine in the countryside. <sup>584</sup> In September 1808, the city's physicians and surgeons were invited to take part in this conversation. They were called to a meeting in the public vaccinating building (Casa Pública de Vacunación) where the intendant asked them to weigh in on distribution and instruction. The best option, they thought, was for one of them to be sent with child carriers to each of the district seats, where he would stay to vaccinate and instruct for a

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<sup>581</sup> AGN Epidemias 4 exp. 6, Oaxaca 11 enero 1805, Izquierdo to Viceroy, 222-3. [*no debe considerar a los comerciantes interesados en la suerte de los Pueblos distantes . . .*]

<sup>582</sup> AGN Epidemias 4 exp. 6, Oaxaca 14 enero 1806, Diego de Villasante to Intendente Corregidor, 231r-v.

<sup>583</sup> See AGN Epidemias 10 exp. 7, Mexico 31 enero 1807, Fiscal de lo Civil to Iturrigaray, 356v-357r.

<sup>584</sup> AGN IV 5297 exp. 19, Oaxaca 18 agosto 1807, Diego de Villasante to Ciriaco González Carvajal, 74r-v: "*esta Junta carece enteramente de fondos y que sin ellos es imposible adelantar mucho en asunto tan importante; pues aunque la generosidad de algunos vocales ha suplido ciertos gastos y yo he franqueado mi casa para las operaciones y celebración de las Juntas, no se puede coleccionar lo necesario para trasladar el fluido vacuno a lugares distantes como se ha representado por esta Junta al Exmo. Sor. Virrey de este Reyno.*"

period of a month, “so that the barbers or whatever other practitioners are judged apt to communicate it to the other pueblos remain instructed . . .” For this service, they recommended for themselves a generous salary of 200 pesos monthly, an estimation of their professional worth that also took into consideration the extraordinary expenditures required for a journey through rough terrain (*fragoso*), which required an assistant, pack and riding animals, and provisions of food, among other things.<sup>585</sup>

Similar considerations effectively paralysed municipal bodies everywhere. The documents produced from these discussions in Oaxaca were subsequently compiled for study by officials of the Junta Central in Mexico City, who in September 1810, at the insistence of Director Balmis (who had returned to New Spain to supervise vaccinations), were still searching for a site for its public vaccinating committee. If this is good evidence that political “center” was attempting to learn from the “periphery,” it also suggests that circumstances in New Spain’s other major cities and intendancies were not so different. Discussions about public utility were inevitable after the initial period of vaccinating sessions in cities, when shortage of funds and the prospect of journeying into rural areas became pressing. Mexico City’s Junta de Caridad reported in the middle of 1806 that despite continued vaccinations in their city, the cost of expeditions to the pueblos of the province required money, and its president concluded that there remained no other option than for the viceroy to designate from the royal treasury 6,000 pesos of communal funds.<sup>586</sup> Months earlier, the vaccinating committee of Zacatecas reported that it had run out of funds. Apparently 2,448 vaccinations at the hands of a bleeder earning twenty pesos monthly, and another ten pesos for a porter, had exhausted municipal coffers.<sup>587</sup>

In these years vaccination fell into disuse, even in capital cities with dedicated officials and the resources of private individuals.<sup>588</sup> In Oaxaca, insurgents occupied the capital in November 1812. In power for the next fifteen months, they forced the flight of Oaxaca’s regalist prelate, Bergosa y Jordán, destroyed the documents in the archive of the intendancy (including those dealing with vaccination), and redirected public funds, which had been supporting Antequera’s only vaccinating physician. This individual

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<sup>585</sup> “*Como quiera que no es posible que los facultativos recorran todos los pueblos con suceso sin gastos extraordinarios, no queriendo salir ninguno de ellos de esta capital por menos de doscientos pesos mensuales, por que efectivamente los caminos son fragosos, los bagajes y alimentos caros, creo que el arbitrio más racional que pueda adoptarse en estos casos es, el que me propuso dicha Junta, sobre que sin embargo aguardo la superior orden de V.E.*” Izquierdo recommended the viceroy adopt this plan. AGN IV 4848 exp. 46, Oaxaca 9 septiembre 1808, Antonio María Izquierdo to Viceroy, 18-19; *ibidem*, Oaxaca 5 septiembre 1808, Facultativos de Medicina y Cirugía D. Juan Bautista Figueroa, D. José Valerio Fernández, D. Félix Chazari, D. Sebastián Espinoza, D. Gaspar Carranza, D. Rafael Briones y D. Juan de Figueroa el hijo, 20r-v. [“. . . para que quedasen instruidos los barberos o cualesquiera otros prácticos que se juzgasen aptos para comunicarlo a los otros pueblos . . .”]

<sup>586</sup> AGN IV 5297 exp. 19, Mexico 14 agosto 1807, Ciriaco Gonzalez Carvajal to Viceroy Iturrigaray, 78-80.

<sup>587</sup> AGN IV 5297 exp. 19, (on a slip of paper) La Junta central de Zacatecas en Oficio de 28 de Enero de 1806 dice . . ., 139. Either the “maestro sangrador” had received a reduction in payment from the thirty pesos originally reported, or had been replaced by a more economical bleeder.

<sup>588</sup> In Guatemala City, the final session of the capital’s vaccination board, which had propagated vaccine in the capital and outlying provinces for twelve years, occurred in July of 1817. Smith, *The “Real Expedición Marítima de la Vacuna,”* 56.

ceased working eight months into the occupation once it became clear that payment for services rendered would not be forthcoming. A lull in fighting and the prospect of another epidemic in 1815 encouraged authorities to revive the conversation begun several years earlier. The cathedral chapter, the bishop, and the city council all refused to support the expense this time; Bishop Bergosa y Jordán requested a new plan that would not require touching episcopal revenues, priest salaries, or the income from pious works. When the governor of the bishopric was presented with Viceroy Venegas's cédula, which resolved that the bishops and cathedral chapters were to pay the costs of physicians employed in this practice, he could only reply that, if the bishop had not seen fit to expend a portion of rents or income prior to the arrival of the insurgents, it was less likely in current circumstances owing to the considerable financial hardships in the province.<sup>589</sup>

So, in 1815, when a viceregal decree ordered new vaccinating campaigns following outbreaks of smallpox, the royalist commander and acting intendant of Oaxaca Melchor Álvarez found himself in an uncomfortable situation. In a communication to Viceroy Calleja requesting a new supply of vaccine – he explained that it had been sorely needed in the prior year's smallpox epidemic, which persisted in some regions – Álvarez related the difficulties encountered securing payment.<sup>590</sup> The crown attorney suggested that revenue from confraternities be utilized for the expense, as these associations were erected, he noted, precisely for the purpose of caring for the sick. Bergosa y Jordán, still in exile, protested vehemently, adumbrating a number of reasons why such use was impossible in a letter to Viceroy Calleja, which reveals his views on the practice and the kinds of considerations and distinctions made in the choice of a vaccinator for rural areas.

Although Bishop Bergosa said he lacked the necessary documentation on Oaxaca's confraternities, he confidently excused these associations from the responsibility of investing in what he called public health (*salubridad pública*). He argued that their concerns were more specific, the resources of even the wealthiest of these associations stretched to the limit, and the patience of members worn thin by continual forced loans in defense of the province and capital of Oaxaca against insurgents.<sup>591</sup> As an alternative he suggested financing the "important" medical invention

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<sup>589</sup> AGN Historia 530 exp. 4, Oaxaca 10 mayo 1815, Melchor Alvarez to Viceroy, 1-3. Ever willing to negotiate, and still hopeful that he would receive compensation, the physician proposed he be given some vacant position as administrator of monastery rents or pious works, in which capacity he could receive a salary, support himself, and thus continue his care of the vaccine lymph, but the response from the governor of the cathedral chapter had cooled his zeal, according to Álvarez, and the vaccine was lost. Bergosa y Jordán would later explain that he had tried this method (providing a position as mayordomo) with the physician of the General Hospital, which was under the bishop's direction, and that within a year the physician had renounced: as Bergosa saw it, handling rents and collections and other *negocios* of a mayordomía was incompatible with the work of a physician, who should be preoccupied with visiting the sick and his studies in order not to err in treatment. AGN Historia 530 exp. 4, San Angel 4 noviembre 1815, Antonio Obispo de Antequera to Felix María Calleja, 17r.

<sup>590</sup> The intendant received lymph *in vitro* from Puebla on the first of August and began vaccinations with six "niños robustos" on the seventh, AGN IV 4848 exp. 16, Oaxaca 8 agosto 1815, Melchor Alvarez to Viceroy Calleja. Around the same time, Mexico City also lost vaccine lymph and had to request it from Puebla, AGN IV 4848 exp. 17, Sala Capitular del Ayuntamiento de Mexico, 9 mayo 1815, Ayuntamiento to Viceroy Calleja.

<sup>591</sup> Bergosa's letter shed light on the general contours of religious association and activity in this insurgency period. He assured the viceroy that only the two wealthiest cofradías in Antequera, the cathedral's Santísimo Sacramento and one dedicated to Nuestra Señora de la Soledad in the convent of the Religiosas

from municipal funds, as practiced in New Spain's capital, which he thought should serve as the norm. He also mentioned Spain, where, he said, there was hardly a village (*villa*) that did not use municipal funds to employ a physician or surgeon for matters of public health. The problem as he saw it was that this request for the support of a physician had been made without expressing how much the practitioner would be paid, or from what class he should come, "there being an enormous difference between providing a medical bleeder and barber with a stipend of eight pesos monthly, as the bishop-elect of Valladolid proposed, and a learned physician, as the *señor* vaccinating director [Balmis] proposed: for the first considerable sums of money would not be necessary, as they would for the second."

What became clear from the communication was that, in spite of an absence of official policy, some custom with respect to the provision of vaccination had already been established in Oaxaca's countryside, where parish priests offered their homes to those practitioners designated to pass through and the communities themselves made available what was necessary for transport. Oaxaca was different, the bishop wrote, in that unlike Mexico City it did not abound in certified physicians, with its faculty reduced to three, plus another two surgeons primarily dedicated to vaccinating in the city and its immediate surroundings. As a result, in the past two of the best bleeders (*barberos sangradores*) had been commissioned to work opposite directions for distant places (*parajes distantes*) (he was likely referring to the 1811 epidemic, when two were designated for the districts of Villa Alta and Tehuantepec), and another practitioner designated for the Mixteca region. Roaming from pueblo to pueblo, they were supported at the expense of parish priests, who provided their homes and their tables, as well as the Indian *repúblicas* (the legally-constituted corporate bodies of the villages), which provided mules for transport, all in addition to gratuities paid by the city of Antequera.<sup>592</sup>

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Recoletas, had any remaining funds and that these were stretched to the limit because, he admitted sheepishly, he had demanded of them and from Oaxaca's well-to-do citizens "repetido donativos, y préstamos" for the Royalist cause, which totaled some 211,000 pesos between 1808 and 1812 (without including his or the cabildo's donations to the cause). In the other *cofradías* in the capital the rich simply did not enlist: most were made up of poor people looking for a decent burial, he wrote, from which purpose funds could not be very easily diverted. And those *cofradías* in Indian villages were even less capable of contributing since their wealth consisted "por lo común" of one or another head of cattle "*con que costean la función de su titular, y los entierros de los cofrades.*" Gesturing triumphantly to a royal *cédula* of December 27, 1802, Bergosa noted that it listed only two confraternal responsibilities: first, to pay the expenses of the deceased and to aid its sick members, "*que es comúnmente el principal objeto, y el que mueve a los cofrades para alistarse en ellas,*" and to conserve and contribute to the "*culto divino en la celebración de algunas misas y funciones,*" which were commonly made to the Blessed Sacrament, "*con la devoción, y decoro debido a tan alta majestad.*" Even prior to the current "unhappy epoch" of "both Spains," confraternities met these responsibilities with difficulty, and now after forced donations and sixteen months of insurgent occupation "*es preciso, que . . . se haya resfriado la piedad Cristiana, hayan disminuido los alistamientos de cofrades, y sus limosnas, y que se hallen en mayor imposibilidad de sufrir nuevas cargas, como la que se trata de imponerles.*" Envisioning the bleakest scenario, Bergosa thought that the faithful, seeing their *cofradías* "*gravadas con otro objeto extraño,*" would stop enlisting or providing alms to these associations. AGN Historia 530 exp. 4, San Angel 4 noviembre 1815, Antonio Obispo de Antequera to Felix María Calleja, 18v-20r.

<sup>592</sup> AGN Historia 530 exp. 4, San Angel 4 noviembre 1815, Antonio Obispo de Antequera to Felix María Calleja, 17-18v. [*... siendo enorme la diferencia de dotar a un facultativo sangrador y barbero con ocho pesos mensuales, como dijo el Señor Obispo electo de Valladolid a dotar un Médico sabio, como propuso el Señor director de la Vacuna, pues para lo primero no serían necesarias cuantiosas sumas, y para lo*

Two characteristics of these arrangements stand out. The first is that practice in Oaxaca existed extra-officially and in combination with the efforts of parishes, Indian communities, and the municipal government. The second is that a crucial distinction was consistently made between trained experts from the city and those bleeders who could make do with less. To this may be added the observation that authorities of each institution – religious, municipal, provincial – were shrewdly maneuvering to protect the funds at their disposal. Antequera’s impecunious city council similarly attempted to excuse itself from responsibility, proposing the use of *bienes de comunidad* from the villages in the province to support a physician and reasoning that everyone stood to benefit from ongoing vaccinations in the capital when vaccine was subsequently propagated to each district. Furthermore, if everyone supported this practitioner, he would have an incentive to oversee its management in each district.<sup>593</sup>

The central government, which in the past had looked favorably on contributions from village coffers, felt differently and rejected the plan from Mexico City. The official of the accounts office (*contaduría general*) reviewing the case reasoned that a single practitioner could not extend care and personal assistance in a timely manner to everyone. The intendency of Oaxaca was simply too large (“*una de las que contiene mayor número de Pueblos*”) to ask communities to pay for a benefit they might never see, and anything remaining in communal coffers was destined “for application to the urgencies that could follow seed shortages, for the repair of prisons, viceregal buildings, communal edifices, churches, bridges, and other public works, as well as in the healing of epidemics . . .” While expenditures on vaccine could in theory be included in the last category, the economical method employed in Oaxaca’s epidemic of 1811, “designating two barber-bleeders paid by communal funds,” could be followed in the future without needlessly burdening communities with the maintenance of city physicians (“. . . there is no reason to make them contribute to maintaining in the capital a good that they will not enjoy”).<sup>594</sup> In other words, custom as established and outlined by Oaxaca’s bishop would prevail for now, even if the debate continued in Oaxaca in the next several years.<sup>595</sup>

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*segundo sí.*”] For vaccinations in the capital, he suggested a single practitioner could be paid twenty-five pesos a month for weekly sessions in the municipal building, in contrast to Mexico City, where two were being paid the same for a larger population.

<sup>593</sup> AGN Historia 530 exp. 4, Oaxaca 28 abril 1816, Ayuntamiento to Viceroy, 24-25. In its scheme, each pueblo contributing a modest portion could together fund a sufficient endowment for a vaccinator.

<sup>594</sup> AGN Historia 530 exp. 4, Mexico 26 noviembre 1816, signed Uribe, 27r-v. [“. . . para ocurrir a las urgencias que puedan sobrevenir de carestía de semillas, reparos de cárceles, casas Reales y de comunidad, iglesias, puentes, y otras obras públicas, como también la curación de epidemias . . .” “. . . destinando dos Barberos sangradores pagados por los bienes de comunidades . . .” “. . . no hay razón para hacerles contribuir a mantener en la capital un bien que no han de disfrutar.”]

<sup>595</sup> E.g., AGN IV 4848 exp. 18, Oaxaca 24 febrero 1817, Francisco Rendon to Viceroy. In his report on the state of vaccination, he said he had yet to receive anything from his superiors on the resolution of this case – the province was in a holding pattern, basically, conserving lymph by vaccinating several children regularly, but he could do little else, “*mayormente cuando los Propios de esta Ciudad no alcanzan para ocurrir a sus atenciones preferentes, y que no bien entran los comunes de los Pueblos en su respectiva Arca cuando se invierten en el pago de las tropas.*” He blamed the entrance of “cabecilla Morelos” for the decline of vaccination’s establishment, as well, noting specifically that when the rebels took charge of the archive, the province had lost the “*reglamentos impresos que vinieron formados por el Señor Director [Balmis], y los ejemplares de la obra publicada por Gener [sic] inocutor de la Bacuna en un tomo de a*

This extended discussion of the debate shows that in 1815, after more than a decade of experience with smallpox vaccine, officials continued to work from customary practice rather than from official decree. The issue of designation of public funds for the support of vaccination went to the heart of the shortcomings of medical care in colonial Mexico: residents were not prepared when an epidemic arrived because preparations would have incurred new hardships for farmers, artisans, day laborers, and Indian communities. From one perspective, contemporaries held that communities should be made to spend resources on a predetermined good in order to prevent a possible disaster in the future. At the beginning of 1817, José Hipólito Odoardo, reviewing Oaxaca's case as the crown's legal adviser for Indian affairs (*fiscal protector de naturales*), noted the king's wishes for timely propagation of vaccine and recommended appending the main records on its administration to the dossier, which indicated his opinion that propagation should continue even when not forced by an epidemic.<sup>596</sup> A second view saw fit to tackle the problem as economically as possible by employing less expensive personnel for the task when the time came. While it was conceded that vaccination could be classed as a solution to health emergencies, and so a legitimate use of communal funds, those responsible for the financial interests of the Spanish Crown insisted on less expensive alternatives. By default, in tumultuous years during which villages were already being asked to support royalist troops, this view prevailed.<sup>597</sup>

Bundles of responses to the first major general vaccinating campaign following the departure of the 1804 vaccinating expedition demonstrate that in matters of medicine colonial Mexico was a place of great regional diversity, and that from an early date local administrators were referencing the extremely high costs involved in bringing licensed doctors to their villages. In 1808, the viceroy ordered Mexico City's intendant to direct his subordinates to pay costs for a practitioner from communal coffers in Indian villages, and for non-Indians (*de razón*) and other castes to pay themselves (*de su bolsillo*).<sup>598</sup> The

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*cuarto*," leaving only the instruction published in the capital by Viceroy Calleja in 1814. The physicians in the province, meanwhile, were generally useless, "*sujetos de pocas facultades y mientras no se les asigne sueldo, será imposible que pueda hacer progresos la vacunación*." He suggested that, because epidemics tended to arrive from Guatemala, a junta of vaccination "con menos formalidades" be established in Tehuantepec as well and assumed that in other district seats "some barber" could be instructed by an individual commissioned to vaccinate *in vivo* (with children), "*a efecto de que de dicha Cabecera pudiera propagarse a los Pueblos sujetos*." Regular vaccinations in significant quantities were again being practiced in Oaxaca's capital the following year.

<sup>596</sup> AGN Historia 530, exp. 4, Mexico 21 enero de 1817, signed Odoardo, 28-29.

<sup>597</sup> The distinction between healing and medicine, on one hand, and vaccination as an emergency measure, on the other (something that was to be performed by doctors for free in the interest of the public good), was made by Francisco Farfán de los Godos, a surgeon certified by Mexico City's Protomedicato. After a commission to vaccinate in a pueblo of *indios*, he later referred to article thirty-four of the Royal Instruction for Intendants when requesting payment, which designated one quarter of *bienes de comunidad* for the salary of a physician or surgeon, where one existed, and other expenses: "*en cuyo concepto suplico rendidamente a Vuestra Excelencia Ilustrísima se sirva de asignar a mi parte el salario que sea de su justificado arbitrio, no tanto por vacunar (por que esto debe hacerse sin el menor interés) cuanto por la asistencia de los indios en sus otras enfermedades*." AGN IV 5297 exp. 20, Mexico 20 febrero 1810, Marcelo Alvarez, por Don Francisco Farfán de los Godos, cirujano examinado y aprobado por el Real Tribunal del Protomedicato de esta corte, residente en el pueblo de Teloloapam, jurisdicción de el Real de minas de Zaqualpam . . .

<sup>598</sup> AGN IV 1717 exp. 18, Mexico 21 mayo 1808, Yturriagaray to Intendente Arce, 2-3.

more populated centers, including Tacuba, Coyoacán, Chalco, Cuernavaca, and Querétaro (but not only larger populations – Chilapa, Guerrero as well) made no mention of problems, saying only they would comply, apparently able to engage and pay a practitioner without much difficulty (Taxco had two, a physician and a surgeon). At most, these responses inquired into the source of lymph to be used, or as in Texcoco's case, the precise salary to be paid the practitioner.<sup>599</sup> The most common response was that no medical practitioner was available to operate, in which case some of the subdelegates proposed sharing one between population centers, or bringing a physician from a more populous town, such as Toluca or Mexico City.<sup>600</sup> In Oaxaca administrators responding to similar initiatives supported this picture, blaming delays in implementation not only on recalcitrance of the patients, but frequently on the limited availability of vaccinators and on the extreme poverty of many rural communities.<sup>601</sup>

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<sup>599</sup> This inquiry came in spite of the fact that the prior year in Texcoco, a physician had completed 1,295 vaccinations there and in its barrios, mostly of children, as well as in Tesoyuca, Ocopulco, Nexquipayac, and Ixtapa, over the course of forty days of vaccinating. AGN IV 6172 exp. 16, Texcoco 30 mayo 1807, "Lista del numero de individuos que tengo vacunados en esta Ciudad de Texcoco, etc.," 30-39. AGN IV 1717 exp. 18, Chalco 8 julio 1808, Manuel Fernandez de los Rios to Intendant, wanted to know among other things what salary should be designated for facultativos.

<sup>600</sup> E.g. AGN IV 1717 exp. 18, Santiago Tianquistenco 9 julio 1808, Francisco Menendez Valdez to Intendant, where a commissioned doctor arrived from Toluca, who vaccinated a portion of Spaniards as an example for Indians (most resisted anyway); Otumba 23 julio 1808, Jose Lopez Lascande to Intendant, wanted to know whether bienes de comunidad were to be used to cover only cost of facultativo, or also food and care of vaccinated patients (the subdelegate had secured a house for vaccinations and wanted to know whether to equip it with mats and fresadas, or blankets, for thirty to forty beds, "*tanto porque regularmente no tienen con que cubrirse esta clase de gentes por su demasiada miseria; como por que estando juntos en una o dos piezas, estará al cuidado el Perito, o una persona que con nombre de enfermero se ponga de los pacientes . . . pues de lo contrario se frustrará y nada se avanzará con respecto a que si se queda en sus respectivas casillas, comerán sus continuos alimentos de tortilla, chile, pulque y otros de esta naturaleza . . .*"); Tlalchapa 20 julio 1808, Tomás Arnaldo Escobar to Intendant, reported no facultativos in "estos países" or anyplace nearby and the great rusticity of Indians and other casts; San Christobal Ecatepec 9 julio 1808, Antonio Enriques de Otero to Intendant, not easy to put vaccination into practice because no facultativo in his partido of Zumpango de la Laguna, or any instruction for it found in archive; Yahualica 19 julio 1808, Francisco de la Vega to Intendant, limited communal funds and no facultativo there or "en toda la Huasteca," and one would not come down from the capital "*sin un sueldo fijo muy crecido,*" and no drugstore or medications, "*solo usan algunas viejas de las yerbas de la tierra, a que se agrega, que el común alimento de estos Naturales, es solamente frijol, chile, y tortilla.*" This administrator suggested that one physician could be shared between Yahualica and surrounding jurisdiction to cut costs. Huejutla's subdelegate similarly told that one would have to travel from the capital because no one had ever arrived in the Huasteca to vaccinate before, Huejutla 19 julio 1808, Manuel Guemes y Sierra to Intendant (he added that communal funds amounted to only slightly more than 300 pesos, with few "de razon," although these would be asked to pay what they could).

<sup>601</sup> These responses can be found in AGN IV 5297 exp. 15, San Lorenzo Zimatlán 30 junio 1807, Juan Benito Muedra to Intendant Izquierdo: Indians have no means to pay salary of a vaccinator; Quiechapa 26 junio 1807, Jose Ygnacio Gonzales Bonita to Intendant: no perito nearby to perform vaccinations; San Bartholomé Chontales 7 julio 1807, Pedro Fessar to Intendant: complete recent poverty of Indians and partido "*estéril por naturaleza, fragoso en Haciendas de granado vacuno, escasísimo de Gentes de Razón, y falta de consecuencia de toda clase de auxilios . . .*"; Miahuatlan 27 junio 1807, José Cardenas de Gordon: no pus or "sujeto de inteligencia" to put method into practice, "*siendo todos estos Pueblos de Yndios mazorrales, e indolentes, que por su ignorancia se desentienden de emprender esta operación tan benéfica, validos de la indigencia, y falta de arbitrios en que por lo general se hallan envueltos . . .*"; Villa de Oaxaca, 9 junio 1807, Emeterio de Cosio to Intendant: no physician, and one cannot be maintained in



The problem of poverty and the unique considerations this posed in rural Mexico imply a broader and unavoidable differentiation in health care, in immunization as in other realms, despite the order for universal vaccination for “people of all classes and ages.” The district seat of Tecpam (Guerrero), roughly fifty kilometers northwest up the coast from the port of Acapulco, lacked physicians for many leagues around, according to its subdelegate, not to mention medications. He wrote that the exorbitant cost incurred by bringing a doctor could not be defrayed by what were always variable and inconsistent sources of communal income. In the district seat as well as in nearby Atoyac, income in communal coffers was dependent on the productivity of cotton harvests, and these harvests “so completely contingent, that no decisions can be dictated for the reestablishment of vaccination until one addresses whether the harvests can manage it or not, and this will be verified in the month of February of the coming year . . .”<sup>602</sup>

Significantly, no administrator objected that vaccination was not worthy of communal funds; these simply were too meager to manage commissions of pricy urban practitioners to bring lymph, or could only support them for a short period of time. From Jamiltepec, in the cotton-producing region along the coast of Oaxaca, the local official reported that he had secured the services of José Bermúdez, a physician from distant Antequera, for vaccinations in his jurisdiction and in the surrounding populations of Tetepec, Mechoacán, Comaltepec, Huazolotitlán, and Chicometepepec. Remarkably, Bermúdez agreed to vaccinate the children in three of the fifty-seven pueblos of the jurisdiction for free as long as he received payment for the remainder, presumably because the others required more travel. This spurred Oaxaca’s intendant to boast to the viceroy in January 1806 that he had been able to extend the practice to many of the villages adjacent to the capital, some in Villa Alta, and a considerable part of the district of Jamiltepec “without incurring a single expense.” But after 2,003 vaccinations Bermúdez stopped vaccinating, in June of 1806, having received neither acknowledgment nor payment from Antequera’s vaccinating committee. The silence of the source indicates that it never occurred to the subdelegate to pay the large expense from village funds.<sup>603</sup>

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the pueblos because of “*cortas facultades*” of Indians, however “*no obstante ser opuestos a los remedios, y usos de los Españoles, se les puede obligar a observarlos por resultar en su beneficio.*” In some jurisdictions, only some of the populations had been vaccinated owing to the distance of others and high transportation costs, as in Teococuilco, “*porque estando sus Pueblos en un rincón extraviado de los caminos generales, hubiera sido forzoso destinar a él solo un Facultativo por este objeto,*” Teozacualco 20 julio 1807, Juan José Ceruta to Intendant. In Teposcolula, where Santiago Coda had passed through to perform vaccinations two years prior, the subdelegate said lymph had been lost in the entire jurisdiction in the interim “*por la suma desidia de los naturales de ella, quienes no cuidaron de su conservación, y juzgo la verán con la misma indiferencia, aunque se vuelva a comisionar sujeto para esta interesante operación.*” Teposcolula 11 julio 1807, Juan Angel de Yturrios to Intendant.

<sup>602</sup> [“. . . estos como dependen el que haya producción en que se logren las cosechas de Algodón, y estas son tan sumamente contingentes, no se puede dictar providencias algunas para el establecimiento de la Vacunación, hasta desengañarse de si se logran o no las cosechas, que esto se verifica hasta el mes de febrero del venidero año con respecto a que lo producido en el presente . . .”] AGN IV 1717 exp. 8, Tecpam 16 julio 1808, Juan Sanchez de Movellan to Intendant, 30-31.

<sup>603</sup> AGN Epidemias 4 exp. 6, Xamiltepec 19 marzo 1805, Antolín Orbajena to Viceroy, 232r; AGN Epidemias 4 exp. 6, Oaxaca 17 enero 1806, Mora y Peysal to Viceroy, 232-3; AGN Epidemias 4 exp. 6, Xamiltepec 19 marzo 1805, Antolin Orbajena to Viceroy, 232r.

When the more expensive certified physicians were hired, in other words, their commission was usually brief, with administrators eager to pass along the technique to local, less costly vaccinators.<sup>604</sup> When Teotitlán del Valle's official suggested a practitioner could be sent to propagate vaccine, he specified that this individual could leave without causing further expenses, "because in this district seat there is a designated barber who will shortly be informed of the procedure, of its effects, and of the method that should be followed, and this individual can be paid at a far lower rate" than what would be designated for the outsider.<sup>605</sup> Several other thrifty authorities in Oaxaca turned to bleeders, when available, as the more economical alternative to city doctors, which cut costs and made immunization feasible for their communities. This would have serious consequences for the spread of a technique that was originally expected to be the restricted purview of certified medical experts.<sup>606</sup>

In these and other instances, material conditions limited what was possible and had the effect of bifurcating medical practice, as evidenced by dual arrangements for payment – from individuals in the case of Spaniards and other castes, from communal funds in the case of Indian patients. A similar phenomenon took place in cities. An 1804 announcement published in Mexico City reiterated the fact that the poor did not have recourse to a physician for personal (and expensive) house calls. As such, they were asked to return to the vaccinating building (in this case, the Casa de Expósitos in Mexico City) at a set time to see whether vaccine had "taken" in the arm.<sup>607</sup> Typical as they were, such arrangements carried implications for treatment, not least the fact that patients

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<sup>604</sup> There was some variation in the fee for physicians depending on level of training and the size of the market, although some standardization can be seen across time and territory, whether paid by patient or month: in New Mexico, surgeon Cristóbal Larrañaga vaccinated 3,610 in 1805 at the standard one *real* for each operation (451 pesos, two reales), paid from donations and the sale of gunpowder (it appears vaccinations continued annually for the next decade under his direction, although it is not clear what he was paid later). Oakah Jones, *Los Paisanos*, 140-1. See also Chantal Cramaussel, "La lucha contra la viruela en Chihuahua durante el siglo XIX," *Relaciones* 114 (Spring 2008): 112-118. In the Villa of Chihuahua (Nueva Vizcaya) salaries of 130 pesos yearly (about eleven pesos per month) were paid to the first two individuals charged with propagating vaccination (until 1814) followed by 25 pesos monthly to the third (beginning in 1817).

<sup>605</sup> AGN IV 5297 exp. 15, Teutitlan del Valle 20 julio 1807, Esteban Melgar to Intendant. ["... y aun podrá retirarse sin causar mayores impensas, pues en esta Cabecera hay un Barbero aplicado que breve se impondrá de la inoculación, de sus efectos, y del método que deba seguirse, y este individuo, puede ser pagado con mucho menos interés . . ."] When Tehuantepec's subdelegate recommended that a facultativo be sent at the expense of the Royal Hacienda, he was shrewdly pointing to the fact that most inhabitants of his jurisdiction paid tribute to the crown as "indios tributarios" – although the population the village was too small and poor to finance the trip with communal funds, he saw another, and perhaps in his mind more appropriate, way. AGN IV 5297 exp. 15, Tehuantepec 28 julio 1807, Manuel Ruiz y Parrasar to Intendant.

<sup>606</sup> See Chapter Four. These barbers, or phlebotomists, were not always more economical: Villa Alta's subdelegate requested a practitioner from Oaxaca to return with child carriers sent from the town, referring specifically to a "*maestro barbero u otro facultativo*," suggesting that often trained or licensed phlebotomists were coming from the city (in which case they would not have been any less costly). AGN IV 5297 exp. 15, Villa Alta 20 junio 1807, Juan Antonio de Laguno to Intendant. Sometimes officials specifically lamented the lack of "*cirujano, barbero, ni otra persona útil*" in their jurisdictions to take charge of the necessary operations, which suggests that for these, the priest or other kinds of local healer did not count, or were simply not available, e.g. AGN IV 4957 exp. 47, Tlacolula 10 octubre 1807.

<sup>607</sup> AGN IV 5297 exp. 19, "Aviso al Público" (printed), 99r (probably September 1804).

interacted in different ways with certified practitioners. This could cut in two directions. On one hand, because authorities believed it out of the question to ask Indians to come to *cabeceras* to be vaccinated, they would be spared the necessity of traveling for vaccination and of paying from their own pockets for the services of a vaccinator. On the other, residents of Indian villages poured tribute into these coffers and were paying indirectly; they had every interest in seeing the fruits of their labor put to good use. The solutions settled on by officials ultimately addressed both facets of the problem, making available indigenous healers, amateur aficionados, and priests, all of whom brought a different kind of cultural expertise to their work while simultaneously saving village funds a severe hit in a time of need. Use of alternate healers as cheap and accessible sources of labor not only circumvented costs, but also had the additional benefit of shielding the communities against potentially disruptive external intervention.

### **Bleeders, Shamans, Priests, and Amateurs**

In Valladolid, the colonial capital of the central-western intendancy of Michoacán, the ongoing struggle to preserve cowpox vaccine in the years of the insurgency show its administrator working for years with meager resources. According to the intendant, Manuel Merino, vaccine lymph had run out in the middle of 1811 owing to the insurrection, and because of curtailed communication between Valladolid and the viceregal capital, it was not reacquired until August 1814. The smallpox epidemic had compelled Merino to resort first to inoculation, and then vaccine (obtained from one of the pueblos in the Bajío). Owing to the archive's state of disarray from occupation by insurgents, he had found only the 1810 regulations written for the city by Balmis. In March 1817, spurred by Viceroy Apodaca's revival of monthly vaccinations, Merino wrote Mexico City to request a fresh supply, which arrived *in vitro*.<sup>608</sup> The procedure was attempted in Merino's home, but even with the experience of the surgeon Francisco Córdoba, who with the assistance of a phlebotomist vaccinated in 1814 during the smallpox epidemic, they had no success. With the six vials of lymph used up, another supply arrived, with the same result.<sup>609</sup> When Merino wrote to request lymph again, he remarked that he would now have "distinct subjects" perform the operation in case its failure was the fault of the two who were vaccinating. "Although those whom I am thinking of using are not physicians, but rather barbers, they administered inoculation and vaccine with good effect in periods past, and here there are no more of the first class besides the two who vaccinated here recently."<sup>610</sup> On November 15, two boys came from the village of Zinapequaro, thirty miles to the east, to be vaccinated and propagate vaccine in that direction, and the intendant promised to do his best to bring it to those regions in which insurgents were not in control.<sup>611</sup>

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<sup>608</sup> AGN Epidemias 14 exp. 3, Valladolid 10 marzo 1817, Manuel Merino to Viceroy Apodaca, 62-63.

<sup>609</sup> AGN Epidemias 14 exp. 6, Valladolid 2 mayo 1817, Manuel Merino to Viceroy Apodaca, 126r-v.

<sup>610</sup> AGN Epidemias 14 exp. 10, Valladolid 17 junio 1817, Manuel Merino to Viceroy Apodaca, 231r-v. [*"Aunque no son Facultativos los de que pienso echar mano sino barberos, ministraron con buen efecto la inoculación y la vacuna en las épocas pasadas, no habiendo aquí otros de los primeros que los dos que han vacunado últimamente."*]

<sup>611</sup> AGN Epidemias 14 exp. 8, Valladolid 22 noviembre 1817, Manuel Merino to Viceroy Apodaca, 178r-v.

Although the two trained practitioners mentioned by the intendant ultimately had success in their efforts, Valladolid's experiences reflect several characteristics of vaccination in the insurgency years. First, the practice was intermittent and spotty, with some regions in a single intendency receiving a good deal of attention and others passed over entirely. Officials were aware, furthermore, that the best means of transporting vaccine was *in vivo* – too often results were disappointing otherwise – but also sensitive to the costs involved when using child carriers over long distances and hopeful to avoid them. Third, barbers and other local healers (those not of the “first class”) were not dismissed simply because they had not been conferred credentials by Mexico City's regulating board. These figures provided valuable services and, in some cases, were as esteemed as their certified colleagues. If the ideal moment in which every mother picked up a lancet to vaccinate her own child never arrived, nevertheless numerous less expert, if not necessarily less desirable practitioners – priests, barbers, *curanderos*, and bureaucrats – became integral to success in these attempts at distribution.

Colonial barbers, called *barberos*, or *sangradores* if they limited their work to bleeding, were ubiquitous figures popular among patients of all social classes and backgrounds. Although their functions were poorly defined, barbers basically worked with blood and veins, while also dabbling in tooth extraction, the application of caustics, and hair cutting. Phlebotomists were less educated and wealthy than their certified brethren and subject to only limited oversight by the Protomedicato in Mexico City, and because they charged so much less than licensed counterparts, they provided indispensable health services to less wealthy residents, for whom bleeding continued to be a common therapeutic well into the national period.<sup>612</sup> Most lacked university training and were disinclined to travel to Mexico City to pay fifty pesos or more for a license that would grant them the ability to practice what many were doing anyway.

The role of these figures in immunization, as in other arenas, can only be arrived at obliquely. When in the summer of 1807 putrid fevers (“*fiebres pútridas*”) were reported in the pueblo of Tecamachalco – two rough, insurmountable leagues from Tacuba, according to its subdelegate, in the valley northwest of Mexico City – Ciriaco González Carvajal, *oidor* of the capital's *audiencia* and president of the vaccinating Junta, ordered use of vaccine, which had just been implemented successfully in nearby Cuatitlán. Carvajal observed that there was no shortage of barbers available in “those pueblos” to take one or two child carriers to the surrounding villages to vaccinate.<sup>613</sup> In effect, a barber left from Tacuba to Mexico City's parish of San Miguel (on this parish see Chapter Five) on July 13, 1807, to see when the children were to be brought to begin vaccinations. The following week four barbers from four parts of the district received commissions to vaccinate in their respective regions, and they were paid by Tacuba's

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<sup>612</sup> For a discussion of the licensing process of these functionaries and the obstacles to fulfillment in Mexico City, see John Tate Lanning, *The Royal Protomedicato*, 282-286 and 290-297.

<sup>613</sup> AGN IV 3885 exp. 10, Tacuba 17 junio 1807, Jose María de Zenea to Yturriagaray, 2v-3r: “*El Pueblo está situado dos leguas de esta cabecera, en una altura privada de toda vecindad e infelícísimo: es corto, y de puros Yndios, y no hay habitación alguna donde pueda formarse Hospital, y si hubiese de venir el Facultativo al reconocimiento no admite Coche de aquí al transito de su situación: la fiebre experimentada en los Naturales según las instrucciones del vicario que les ha asistido es la misma pútrida que se ha experimentado en el año anterior, en las circunferencias de Tultitlan, y Quautitlan, durando de tres, a cuatro días el Paciente . . .*”

official from his pocket for every hundred procedures (*por cada ciento de vacunados*). Precisely how much he did not say, but one can assume that their fee was far below what was demanded by certified city physicians.<sup>614</sup>

Another perspective on these healers comes from the numerous accusations of incompetence leveled at so-called *aficionados* or amateurs working in these years (the term was often used, but connoted a certain dilettantism inappropriate to medical practice). In Miahuatlán, Oaxaca, halfway between the provincial capital and the coast, the subdelegate reported 6,753 vaccinations in the summer of 1810 with the help of certified phlebotomist José Nestor Cortés (over 1,100 in the district seat, the rest by Cortés in surrounding villages). Things had gone according to plan, for which the official credited the great care he had personally taken in the matter, seeing that the operation was performed by “a practical and intelligent man as is the expressed Cortés, and not by one of these *aficionados* who, cutting the incision very deep, spurt blood and cause the lymph to come out, while others leave the pus on their finger when they press the incision, and in sum because they are not practiced in it make many involuntary mistakes.”<sup>615</sup>

Attempts to restrict practice to licensed officials, evident in professional squabbles, invariably settled on the lack of practice, studies, and experience, but they were rarely successful, for several reasons.<sup>616</sup> First, roles for these bleeders, and even *curanderos*, were written into the earliest regulations for vaccination, particularly in the less populated peripheries of New Spain.<sup>617</sup> As a result administrators throughout the

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<sup>614</sup> Meanwhile a physician from the capital, Bachiller José de Dios Salazar, was placed in charge of the makeshift hospital established in Tecamachalco, which illustrates nicely how a division of labor was made during these crises. AGN IV 3885 exp. 10, Tacuba 13 julio 1807, María de Zenea to Gonzalez Carvajal; Tacuba 15 julio 1807, Zenea to Gonzalez Carvajal; 19 julio 1807, Zenea to Gonzalez Carvajal, 20v: “*a los cuatro Barberos que el Lunes van de diversas Poblaciones, les he ofrecido gratificarles por cada ciento de vacunados, a pesar de mi situación escasa, y es la mejor prueba de mi empeño.*”

<sup>615</sup> AGN IV 5297 exp. 17, Miahuatlan 14 julio 1810, Manuel de Ortega to Intendente Izquierdo; Miahuatlan 15 septiembre 1810, Relación to Intendente, signed Manuel María de Ortega, 8-9. [“*. . . un hombre práctico e inteligente como lo es el expresado Cortés, y no por uno de estos aficionados, que ya ahondan mucho la cisura brota sangre y se sale el pus, otros que se llevan éste en el dedo cuando aprietan la incisión, y en fin como no son prácticos en ello cometen muchos errores involuntarios.*”]

<sup>616</sup> In Ixmiquilpan, Hidalgo at the end of 1804, resident surgeon José María Victorino Cervantes wrote to the viceroy to report on the grave necessity of vaccination in light of the many infants (*parvulitos*) recently born in the district. The surgeon asked that he be awarded sole responsibility for vaccination, because in three years he had witnessed the excesses committed by various practitioners – he never said which or what kind – “*unos por carecer de práctica y estudios, y otros por el ningún conocimiento del temperie,*” and he feared further spread of contagion if anyone besides him operated. AGN Epidemias 4 exp. 1, José María Victorino Cervantes to Viceroy, no date (passed to Real Tribunal del Protomedicato on December 25, 1804), 16r-v. The response was that the surgeon should obtain lymph from the capital and begin operations.

<sup>617</sup> Durango: the reglamento for the establishment of vaccine ordered *barberos* named by physicians to attend vaccinating sessions in order to be instructed so that they could transmit lymph to other pueblos, “*instruyendo en ellos a otros de su Profesión,*” because the only physicians in the province were located in Durango or in the military hospital of Chihuahua, AGI Indiferente 1558a, Durango 2 septiembre de 1804, Reglamento formado para la conservacion del fluido bacuno conforme a la Real Orden de 20 de Mayo del presente año, signed Bernardo de Bonavia, 782f; Nueva Vizcaya: Nemecio Salcedo, Comandante General of Provincias Internas, commented upon the “absolute lack of physicians and surgeons” as the only obstacle to propagation of vaccine in other towns, villages, haciendas, and ranches, ordering the military surgeon in Chihuahua’s hospital to train (“adiestrar”) not only its practitioners, but also “los Sangradores, y

vicerealty leaned heavily on the services of resident bleeders for transport and execution, as in Huajuapán, a commercial hub in Oaxaca's Mixteca Baja region. By the summer of 1807 vaccine had still not arrived, which spurred the subdelegate, together with the priest, to pay the expense of sending a bleeder and four children to Chila, in the neighboring jurisdiction of Acatlán, Guerrero, to bring vaccine back and operate in the district's four *doctrinas*. Without any superior order to maintain fluid, however, the subdelegate claimed it was impossible for him and the priest, with so many duties (he added, "we have been vaccinating with our own hands" [*hemos sido los vacunadores por nuestras propias manos*]), to maintain vaccine in the town. They decided to renew the practice yearly rather than establish it permanently, and presumably would rely on bleeders again in the future.<sup>618</sup> Although several communities in the region surrounding Celaya had enough resources to fund a physician or surgeon's trip to acquire and propagate vaccination after 1804, the official of Acámbaro wrote Guanajuato's intendant to say that he paid for a barber named Pedro Camargo to make the trip to Celaya, roughly twenty miles away. The majority of parents were unwilling to compel their reluctant children and the pueblo lacked funds to continue the operation – an indication, perhaps, of why he opted for a barber in the first place.<sup>619</sup>

Fundamental in the proliferation of these vaccinators and transporters was a widespread assumption that the techniques required for practice could be sufficiently simplified or translated in order to allow not only bleeders, but also parents, to take up a lancet if necessary.<sup>620</sup> In other words, if regulatory allowance for their participation made it *legally* possible, simplified instructions made it *technically* available, appearing as they did in a number of publications, any of which a host of bleeders, *curiosos*, *aficionados* and other unlicensed healers might have consulted.<sup>621</sup> A method for vaccination, based loosely on an earlier edition composed by Mexico City's Protomedicato in 1797, appeared in the *Gazeta de México* in 1804, with an illustration of the various stages of pustules in a successful vaccination (**Figure 6-1**).

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Barberos que hay aquí" and in the presidios of Nueva Vizcaya, AGI Indiferente 1558a, Hacienda de Encenillas 9 octubre 1804, Nemecio Salcedo to Joseph Antonio Cavallero, 758-760.

<sup>618</sup> AGN IV 5197 exp. 15, Huahuapán 1 julio 1807, Domingo Lasquelty to Intendant.

<sup>619</sup> AGN Epidemias 4 exp. 15, Acámbaro 22 marzo de 1805, Jose Joaquin Duarte to Intendente Corregidor Antonio de Riaño, 486r-v.

<sup>620</sup> Cf. Peter Razzell, *The Conquest of Smallpox: The Impact of Inoculation on Smallpox Mortality in Eighteenth-Century Britain* (Sussex: Caliban Books, 1977), 49f and 56-82 for evidence of reliance on amateur inoculators following simplifications in technique and preparatory periods (discussed in the previous chapter).

<sup>621</sup> A list of publications would include the *Instrucción formada para ministrar la vacuna, como único preservativo del contagio de las viruelas, y en efecto de su fluido inocular con el pus de esta . . .*, by order of Viceroy Calleja in consultation with the Junta Superior de Sanidad (Mexico: Don Mariano Ontiveros, 1814), the only document on vaccine reported to have survived the destruction of insurgents in Antequera.

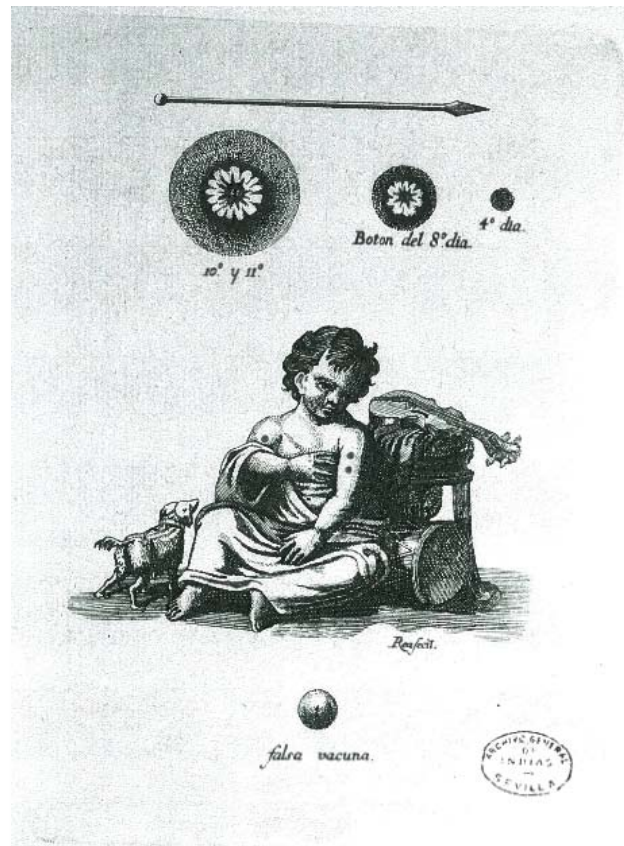


Figure 6-1. An illustration of vaccinating lancet, pustules on the fourth, eighth, and tenth-eleventh days, and an example of false vaccine, as it appeared in a supplement to the *Gazeta de México*, May 1804. Courtesy of the Archivo General de Indias, Seville, Spain.

Hundreds of copies of the *Tratado histórico*, translated by Balmis himself and published at great expense in Spain and subsequently reprinted in New Spain, contained more detailed instructions, but the force of the method was again reduced to a visual scheme of the various stages of the procedure (**Figure 6-2**).<sup>622</sup>

<sup>622</sup> Each of the thirteen intendants received twenty-five copies of the *Tratado histórico*, with Mexico receiving sixty-four. Mexico's intendant, at Balmis's urging, passed these books to subdelegates via circular letter in July, 1810 with these instructions: "En caso de que no haya ahí profesores de Medicina, o Cirugía, deberá V.M. colocarlos en el Archivo sin dejar de franquearlo a los Señores Curas Párrocos y vecinos de alguna instrucción para que imponiéndose de las conocidas ventajas de la vacunación puedan enterar de ellas al Pueblo . . ." Balmis reported that the initial 500 copies brought from Spain in 1804 had not been enough for both Americas, Asia, the Canary Islands, and other places. He had another 389 copies of the "tomo en octavo" printed, at a total cost of 680 pesos, six reales (the cost was absorbed by each intendency – Oaxaca, for example, paid forty-five pesos, six reales for its copies). AGN IV 6177 exp. 17,

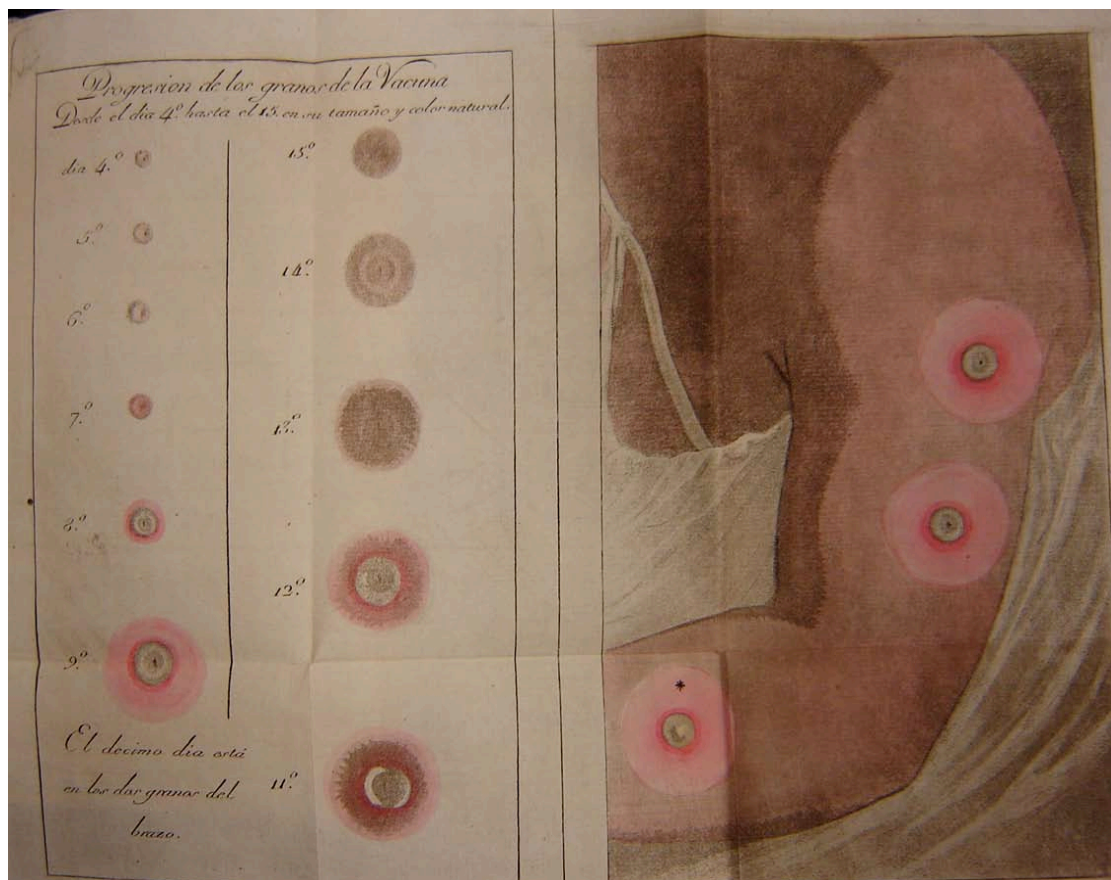


Figure 6-2. A color diagram of the progression of pustules, from Moreau de la Sarthe, *Tratado histórico y práctico de la vacuna*, Spanish trans. 1803. Courtesy of the John Crerar Library of Medicine, the University of Chicago.

Instructions for immunization first circulated in the *Método claro, sencillo y fácil*, printed in Mexico City in 1797, and an examination of its pages provides an idea of what local practitioners were being asked to do in the early years of its practice.<sup>623</sup> With

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Mexico 4 julio 1810, Balmis to Señores Intendentes, 5r-v; ibidem, 4062 exp. 27, Mexico 7 julio 1810 (Intendant of Mexico's circular to subdelegates), 9-10; ibidem, 6177 exp. 19, Mexico 10 enero 1811, Balmis to Viceroy Venegas, 7-8; and ibidem, 6177 exp. 19, Oaxaca 22 marzo 1811, Joseph María Lassos to Viceroy, 22r-v.

<sup>623</sup> Though it may seem odd to consult an instruction on inoculation, it is likely that the practice continued even after the arrival of vaccine. Because contemporaries used “inoculación” and “vacunación” interchangeably, or sometimes spoke of “inoculación de la vacuna,” it is difficult to know whether amateur practitioners were inoculating with vaccine or human smallpox, the latter a real possibility in regions where vaccine lymph was scarce and always on the brink of extinction. In republican Nuevo Leon, practitioners were so scarce that the following instructions on *inoculation* with human smallpox appeared in the state's *Gazeta Constitucional* on February 11, 1830. According to it, a smallpox victim with mature lymph (“podre”) was to be pricked “con lanceta o con navaja que tenga punta delgada y de ahí pasa al que se le ha de pegar, picándole entre el dedo gordo y el otro en ambas manos, esto es, las dos manos en términos que solo les toque a la sangre.” The article instructed that the same foods could be administered as prescribed for vaccination, explaining that this detailed description of a practice that had been superceded



smallpox already in Mexico City and inoculation at last officially in use in the viceroyalty, the viceroy asked members of the Protomedicato to compose the instruction, which appeared in the pages of the *Gazeta de México* and also circulated far beyond the capital. In October, Archbishop Alonso Núñez de Haro y Peralta sent copies to those regions not yet affected by the epidemic, namely, the fifty-two parishes in the populous area north of the capital, terminating roughly 200 miles away at the parish of Pánuco. After directing the priests to solicit God's pity during the epidemic with the three orations of the *pro vitanda mortalitate vel tempore pestilentiae* in all masses where Catholic rite permitted, Núñez de Haro drew their attention to the printed instruction, which they could use to instruct themselves and "exhort and persuade" their parishioners to put it into practice.<sup>624</sup>

The pamphlet was, as its authors stressed, a grossly simplified version of medical practice.<sup>625</sup> At just under seven printed pages, the first half covered the kinds of children to be inoculated, how they were to be prepared (addressing food, drink, and exercise), and how the lymph was to be injected in the hollow between the fingers on each hand. The second half covered the subsequent care of the patient, recommending several remedies (along with the occasional laxative) to alleviate symptoms and provide as much comfort as possible to the patient, but above all directing the caregiver simply to make sure that the light sickness ran its course, letting nature do its work when possible, "because although the burning, sharp pains and extraordinary fever inconvenience the patients . . . nature relieves and alleviates them once the operation has finished forming the pus, without requiring more assistance besides tolerance, principally in restraining from scratching or rubbing the ailing parts."<sup>626</sup> The child would eat as before, drink refreshing beverages, try to breathe fresh air, and avoid knocks, frights, and anger ("golpes, miedos, cóleras") and anything else that could overheat or excite her. To that end, she was to be cared for in a spacious room without the company of people, animals, or fire, all things that raised the space's heat and risked harming her, and be made to leave the bed, even if weak and groggy from fever.<sup>627</sup>

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decades earlier had been written with the "greatest clarity" so that the Indians ("*los infelices indios*") could make use of it "*en esos pueblos abandonados, donde parece que no son nuestros progenitores ni hermanos, cosa que si faltan médicos, jueces instruidos y curas que lo hagan, pueden ellos hacerlo.*" The implication was that in pueblos without trained physicians and priests, Indians would not have access to a source of vaccine lymph. For excerpts of the issue, Raúl García Flores, "Morbilidad y vulnerabilidad en una epidemia de viruela: Nuevo Reino de León, 1787," *Relaciones* 114 (Spring 2008), 51.

<sup>624</sup> AGN Bienes Nacionales 873 exp. 195, Tacubaya 6 octubre 1797, "Señores Curas propios, Interinos, Coadjutores, Vicarios de pie fixo, y R.R. P.P. Ministros de..." signed Alonso Arzobispo de Mexico. ["... a fin de que instruidos Vmds. de cuanto contiene exhorten, y persuadan con la mayor eficacia a sus respectivos Feligreses a que la pongan en práctica . . ."]

<sup>625</sup> *Método claro, sencillo y fácil que para practicar la Inoculación de viruelas presenta al Público el Real Tribunal del Protomedicato de esta N.E. por Superior orden del Exmo. Señor Marqués de Branciforte Virrey de este Reyno* (México, 1797), in AGN Bienes Nacionales 873 exp. 195.

<sup>626</sup> ["... pues aunque los ardores, punzadas y calor extraordinario suelen incomodar á los enfermos á efecto del trabajo que la naturaleza tiene en este tiempo, ella misma los remite y alivia, concluida la operación de hacerse la podre, sin que se necesite mas auxilio que la tolerancia, principalmente en sujetarse á no rascar ni estregar las partes doloridas."]

<sup>627</sup> The instruction recommended inoculation for all children who had not already been exposed to smallpox so long as their parents or caretakers consented. The children were to be robust, without visible illnesses;

Although difficult to know what the priests who received the instruction did with it, and indeed possible that it arrived too late to have any relevance in parishes, still the *Método claro, sencillo y fácil* . . . for immunization reflects not only current medical practice, but also what some authorities in the capital thought possible or likely in the villages and less administratively central places to which vaccine would be remitted.<sup>628</sup> As the authors made clear, it was *not* intended for use by “legitimate” professors of medicine, whose superior knowledge would have allowed them to recognize the limitations of its information. Nor was it for those who, though outsiders to medicine (*extranjerías en la Medicina*) had acquired sufficient “lights” to direct the procedure with success by reading the “many common works [*opúsculos vulgares*] circulating in everyone’s hands in a common language and easily comprehended . . .”<sup>629</sup> Rather, the instructions were to be used for the sake of common good in those places in which inhabitants were in dire need and lacked any other aid. Thus the instruction omitted the practice of bleeding (“*sangría*”) and other treatments that could cause more harm than good if not done in the appropriate time and circumstances.

It was, in short, medical practice translated for the layperson on the basis of a simple premise: there were communities in New Spain that lacked even the basic skills offered by an unlicensed bleeder, or the acquired knowledge of the *aficionados* or *curiosos* who studied the “little works” in a “common language” to which everyone had access. Those places, when necessary, could get by with far less if they followed it. This

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not teething; and girls not menstruating or pregnant, or suspected of pregnancy, in which case a physician should be consulted or, if not possible, the girl subjected only to the preparatory stage, which could at least dispose her humors favorably to subsequent infection by smallpox. Preparation was to last between eight and fifteen days, during which time the patient would avoid fatty, salty meat, spicy substances, any stimulating (“ardiente”) beverages, and strenuous activity, instead consuming herbs, fruits, *semillas*, and refreshing beverages, including *sueros* (saline solutions?) and *cocimientos* of barley, oats, vinegar water, or lemonade. The patient would take fresh air in the mornings, and on the day before the operation be given a purgative of Epsom salts in water, or in its absence, the dissolved pulp of the Golden Shower Tree (*cañafistula*), a laxative. The child would eat a meal of chicken or mutton stew, “animándole cuanto sea posible á fin de mantenerle el espíritu tranquilo, y confiado en el buen éxito de la operación.” The practitioner was to inject lymph with a lancet or needle into the hollow between the first and second fingers of each hand, superficially so little or no blood came out, making sure to leave lymph inside the incision.

The remedies recommend during recovery included the application of bread crumbs and milk, or *aceite de huevo*, to lesions on the skin or pain in the throat; for fevers, soreness, and nausea, bathing the feet and legs with hot water and wrapping them, which would provoke a light sweat and alleviate these symptoms. An additional purgative in the same manner as during preparation was prescribed for the sixth day, with an optional enema of malvas (hollyhock plant), honey, and oil, if necessary. Using a needle to puncture and drain pustules was permitted, if these became unbearable. To eat, the patient was to be given weak soups, or atoles made of corn, barley, or rice, as well as cooked apples or pears and bittersweet oranges. To avoid any *desorden*, finally, the instruction recommended ingestion of diluted milk from donkeys or cows for eight to fifteen days following the operation, “*por cuyo medio se restablecen las fuerzas, se mejoran los humores, y se restituye el enfermo á su antiguo estado de salud.*”

<sup>628</sup> Donald Cooper, focusing on the unfolding of the 1797 smallpox epidemic in Mexico City, noted the belated arrival of these instructions in the provincial parishes (by the time the final parish had seen a copy, nearly half a year later, the epidemic in the capital had ended) and dismissed its relevance. As an indication of the domestication of medicine and of perceptions of rural healing, however, this genre of writing may yet contain much of interest to historians. Cooper, *Epidemic Disease in Mexico City*, 117-8.

<sup>629</sup> [“. . . por la aplicación a la lectura de muchos opúsculos vulgares que corren en manos de todos en idioma común y de fácil inteligencia . . .”]

genre of medical writing is a reminder of the perceived effectiveness in an emergency of even the most simplified treatment, but also that assessments of competence in medicine were variable, with the criteria shifting according to the people making the assessment and the definition of healing at any moment. A licensed physician who met the standards of the Protomedicato in Mexico City might not have met those of villagers, particularly when it came to immunization, the low technical requirements of which numerous local healers and laypeople were deemed capable of fulfilling.

A second and possibly more common method of transmission of the technique was through simple observation, a brief apprenticeship with a trained vaccinator. Physicians in general vaccinating campaigns made frequent use of assistants, often local healers, and of necessity had to instruct onlookers responsible for public health in the practice before departing. In August 1804, in order to ensure that provincial justices helped propagate the newly arrived vaccine, Durango's intendant sent each three printed copies of an instruction: one to be read in a meeting of residents and archived, the other two given to the priest and principal residents. He sent these, as he wrote, "even though seeing it is enough to learn it" (*aunque basta verlo para aprenderlo*). Referring to the many women healers in the province who charitably applied their homemade remedies (*remedios caseros*) to the sick poor, he remarked that he hoped they would continue to do this with vaccination.<sup>630</sup> Whether it was these women healers he wanted to "see and learn" is unclear; possibly he expected them to function as nurses, caring for children with their remedies once a man had vaccinated them. Whatever the case, there were at least some who believed that people without any formal medical training, including women, would play a role in propagating the new technique, and though temporary, these improvised arrangements of medical education suggest that a good deal of education happened far from the anatomical theaters and lecture halls of Mexico City.

Priests also became involved in these campaigns, although it is worth distinguishing the particular role government expected them to play. Administrators and vaccinators rarely worked without the assistance of a priest, who through communal influence and established trust helped close the perceived gap between literate bureaucrats and the medicine they sought to introduce and their untutored charges. The bureaucratic assumption that priests and local magistrates would have the most success allaying fears and convincing parishioners to take up cooperative dispositions has appeared in previous chapters, but physicians leaned on clerics, as well. While preparing to transport vaccine beyond Toluca into other villages in the district, the practicing surgeon made sure first to write the viceroy to ask for a superior decree that all justices and priests in territories he traversed "provide me the necessary assistance to obligate heads of family and other caretakers to submit willingly to the procedure, apprised of the great benefit that will result to them; because otherwise it will not be possible to uproot the false impressions that commoners have had . . ."<sup>631</sup> Once these "false impressions" spread, the consequences for the campaign could be disastrous.

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<sup>630</sup> AGI Indiferente 1558a Durango 14 agosto 1804, Bernardo Bonavia to Justicias de la Provincia, 780r-v: "*Muchas son las mujeres en toda la Provincia que caritativamente y sin el menor interés aplican los remedios caseros que saben a los Pobres enfermos: espero harán lo mismo en la aplicación de este preservativo, así como es justo y debido que las personas pudientes las gratifiquen . . .*"

<sup>631</sup> AGN Epidemias 4 exp. 1, Toluca, no date, José Ygnacio Garcés to Viceroy, 24-5. For attributions of success to the parish priest see, for Tepozotlan, AGN IV 5297 exp. 19, no place 23 junio 1807, Francisco

The perception that the gap between literate and illiterate, professional and lay, could never be closed may have been rare, but in some instances colonial bureaucrats sunk into a morass of despair at the number of obstacles that had to be overcome. In Zoyaltepec, Oaxaca, the subdelegate lamented that vaccine had not reached a single one of his pueblos by the summer of 1807, suggesting several possible explanations for the oversight: the pueblos were distant (*lejanos*), he noted, situated in hot, mountainous country and, it went without saying, uncouth (“*incultas*”), “strictly of Indians speaking difficult and diverse languages, uninhabited, inclement in its weather, and coarse.” To overcome these obstacles and prevent them from adversely affecting the locals, he requested an informed vaccinator, with “the parish priests and *vicarios* assisting so that they manage to induce and persuade them [the patients] in their respective language.”<sup>632</sup> The geographic, social, and cultural distance and isolation were powerfully felt, but not overwhelming: in the administrator’s view the communities in his jurisdiction simply required a capable practitioner and a priest who spoke the language.

In addition to serving as persuaders of reluctant parishioners, priests worked as vaccinators. Tehuacán’s pastor (signing only as “a subject”) lamented at the end of 1804 that of 20,000 souls in the district of forty pueblos, not even 200 vaccinations had taken place during Arboleya’s jaunt through the region. Although many remained to be vaccinated, the lymph had been carelessly lost. Nevertheless, a supply existed nearby, and he requested that the viceroy commission physician José Mariano Castro or another resident, suggesting the prior of the Convento del Carmen, apparently confident that a man of religion could manage the operation without difficulty.<sup>633</sup> Nearby, the priest of Teotitlán del Camino, Juan Nepomucena, took charge of vaccinations himself after observing Arboleya on his commission. The priest examined the 187 vaccinated individuals (he identified and re-vaccinated seven unsuccessful cases) and subsequently vaccinated another twenty-five, according to Teotitlán’s subdelegate. The chain of vaccinating priests expanded, as Huejuetlan’s and Huautla’s priests went to the district seat to bring vaccine, by means of two vaccinated boys, to their own parishioners.<sup>634</sup> The

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Fugairon to Josef de Cuevas, 109r-v. [“. . . *me impartan el auxilio necesario para obligar a los Padres de familia, y demás a cuyo cuidado estén los jóvenes, se presten gustosos a la vacunación, entendidos del gran beneficio que de ella les resulta; pues de no ser así no será fácil cortar de raíz las falsas impresiones que ha recibido el vulgo . . .*”]

<sup>632</sup> AGN IV 5297 exp. 15, Zoyaltepec de Teutila 28 junio 1807, Juan de Pimentel y Sotomayor to Intendant Izquierdo, 29r-v. [“. . . *de puros indios de idiomas difíciles y diversos, y despobladas casi en proporción de su intemperie y rudeza.*” “. . . *y coadyuvando los Párrocos y Vicarios lograsen inclinarlos y persuadirlos en su respectivo idioma.*”]

<sup>633</sup> AGN Epidemias 4 exp. 3, Tehuacan 27 diciembre 1804, 106r. Further evidence of the crippling matter of costs comes in correspondence written the following month, when the Junta Central requested permission to use communal funds for this expense, Puebla 27 enero 1805, Junta Central to Crown, 109-125.

<sup>634</sup> AGN Epidemias 4 exp. 6, Oaxaca 26 octubre 1804, Arboleya to Viceroy, 192-4. Three years later, the newly installed subdelegate of Teotitlán (“poco mas de un año”) had to consult the resident cura to see what had been done with regard to immunization, not knowing anything himself. Nepomucena informed him of the history of Arboleya’s stopover, after which the priest had continued vaccinating in the entire parish, in addition to those of Huejuetlan and Huautla; the official reported that because it was not extended to other jurisdictions, and because the priest performed his work with such enthusiasm, “*se acabó*

expertise of priests was thus not restricted to the symbolic, discursive, and doctrinal realms; at least some were responsible for more of the actual practice of vaccination. Although Bergosa y Jordán had not yet issued his circular letter encouraging priests to obtain vaccinating instruments from him, the need for some independent initiative was clear: without sufficient municipal funds or even a set procedure, labor came from many other arenas, including private citizens, priests, and a network of unlicensed, less expensive healers willing to perform the newly acquired technique.<sup>635</sup>

What were the motives of those who took up a lancet in these years? They varied, although some underlying conviction of public utility seems to have been shared by many of the protagonists. In a crisis or with an epidemic on the horizon, a sense of urgency compelled authorities to renew efforts to vaccinate and private residents to coordinate organizational and charitable efforts. In a common scene, a parish priest first notified authorities in the provincial capital that he had confessed or healed a parishioner suffering from smallpox, or performed an exceptional number of burials. Officials in Mexico City or the provincial capital sent a trained practitioner to evaluate and vaccinate, and the latter might take it upon himself to exercise his vow to treat the poor for free and refuse payment.<sup>636</sup> In this way, a looming epidemic often led to vaccinations in a district

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*el Germen, cuando se acabaron todos los niños capaces de recibirle . . .*” Nepomucena assured him that he intended to request lymph from Oaxaca’s Junta Central in order to continue vaccinations. AGN IV 5297 exp. 15, Teotitlan del Camino Real 20 junio 1807, Joaquin Freiria y Sotomayor to Intendant Izquierdo.

Bernabé Simón Gonzáles Villar of Huautla, along with Nepomucena, ultimately each took one of the two orphan boys who had been transported from Mexico City’s Royal Hospice to Oaxaca. This “adoption” was a symbolic gesture of thanks to the crown, liberating the institution in Mexico City from the cost of having to care for them. The hospice’s administrator added that the children would benefit from a good education under the tutelage of the two priests. Germán Muñoz was a five-year old Spaniard with deceased parents; José Macario Terrasas was a four-year old Spaniard, whose mother, María de la Luz Monfort, was a widow who had entered the hospice one year prior with him and her three other children. The administrator had solicited her consent and, according to him, she had agreed, saying that she could not care for her son as well as the priest (Simón González) and requesting that she be given news of his health and status, and notice if the priest could no longer care for him. See AGN Epidemias 4 exp. 6, Mexico 21 noviembre 1804, Ignacio José de la Peza y Casas to Cosme de Mier, and Mexico 21 noviembre 1804, “Noticia de los dos Niños,” signed Ignacio José de la Peza y Casas, 199-202.

<sup>635</sup> In regions lacking priests and other healers, a different pattern held. Chantal Cramaussel argues that in Nueva Vizcaya in the years following arrival of vaccine, carriers sent beyond the Villa of Chihuahua to propagate tended to heap attention on the populations of military presidios, while the largely indigenous sierra to the west was ignored (between 1807 and 1809 thousands were vaccinated, many from the regions surrounding the *ayuntamientos* of Parral and Chihuahua). Cramaussel insists that all the *encargados* for the operation before the Porfiriato belonged to the personnel of the military hospital: “*Al parecer, el encargado de la vacuna era el único que la aplicaba. No cumplieron con ese papel las parteras ni otro tipo de personas, como en España.*” If correct (cf. note 47 above), this would suggest that reliance on multiple classes of healers to disseminate the procedure found for the heartland of New Spain was not universal on the northern frontier, with corresponding results. See Chantal Cramaussel, “La lucha contra la viruela en Chihuahua,” 112-118. As elsewhere, an ongoing battle to keep a viable sample of pus was waged in the following years, with Nueva Vizcaya experiencing many of the same challenges: *alcaldes de barrio* and *regidores* charged with neglect in obliging parents to bring their children during the insurgency years, flagging interest and military upheaval, lost fluid in 1817, and again in 1829-30 and 1836.

<sup>636</sup> AGI Indiferente 1558a, Tala 18 enero 1805, Francisco Enriquez del Castillo to Pedro Catani, 950r-v; AGI Indiferente 1558a, Guadalajara 21 enero 1805, Doctor José María Jaramillo to Pedro Catani, 952-953. In January 1805, Tala’s priest wrote officials in Guadalajara to inform them of an outbreak of smallpox in the parish. One of the city’s physicians, José María Jaramillo, set out with two boy carriers on a Wednesday

for the first time.<sup>637</sup> And of course, efforts in the interest of public health did not often go unnoticed. Mexico City's journals often made such efforts publicly known, and some hoped – and in a few cases demanded – that their names and good works appear in their pages.<sup>638</sup> Finally, many knew that the consequences of inaction or lethargy could be devastating. An epidemic unchecked resulted in decimated populations and an accompanying loss of income for the royal coffers and a parish priest. And a vaccination campaign performed hastily and without sufficient investment could leave parishioners fleeing for the hills, with priests and local administrators left to clean up the messy situation (for the latter, see the following chapter).

### **A Final Colonial Campaign**

The vagaries of banditry and warfare during the insurgency years wreaked havoc not only on vaccination campaigns but also on the records of vaccination in this period. The lacuna would be far greater if not for the correspondence generated from a final vaccinating push in 1820. These documents were lumped together with other materials from those years and filed away in Mexico's national archive under "viceregal miscellany." recently catalogued and made available to the public, they include detailed descriptions of the state of the practice in various places at the time. Although gaps in the

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afternoon, arriving the following day at noon after an arduous journey, as described by the physician. The town's magistrate, Francisco Enriquez del Castillo, was immediately informed of the order to vaccinate, and a bando published announcing the purpose of their arrival and convoking a vaccination session at three in the afternoon that day at the curate's home, where Jaramillo and the two children were staying. Of the children who arrived, the physician stopped half an hour and forty vaccinations later, citing the good measures already taken by the curate to halt the spread of smallpox by isolating the sick and the fact that forty was sufficient a sufficient number propagate vaccine lymph. The following day, the magistrate convened the entire population at ten in the morning at the priest's home. He expressed thanks to the intendant for his care and generosity in the interest of their health, conveyed the wishes of the priest that all those who had not had smallpox should avoid it by means of vaccination, and thanked the physician for going to Tala to vaccinate without any salary or gratuity. Jaramillo then took the floor to elaborate on the beneficence of the king in providing an expedition to bring vaccine to his subjects, the care of the intendant of Guadalajara when he heard of the village's need, and the advantages and simplicity of the procedure. The following day, Saturday, Jaramillo departed, arriving that night in Guadalajara "*con el consuelo de haber llenado en cuanto he podido los deberes que me imponen el vasallaje, la humanidad, y la patria.*"

<sup>637</sup> In Pénjamo, fearing a smallpox epidemic, the official established a provisional hospital with thirty beds in the summer of 1819 and requested permission to vaccinate "*respecto a que los vecinos de este distrito nunca han logrado de este beneficio por la actual rebelión . . .*" He ultimately attributed avoidance of an epidemic to prompt immunization, although the care provided in the hospital, with separate departments of medicine, surgery, and syphilis (gálico), may have been just as significant. One can see how this population, roughly equidistant from major centers of distribution such as Valladolid (at least until 1817), Celaya (beginning in 1804), and Guanajuato might have managed to go without vaccine, but it may also be possible that the official lacked knowledge of past experience. AGN IV 4583 exp. 6, Penjamo 31 mayo 1819, José Ygnacio Quiros to Viceroy, 15r; Penjamo 6 agosto 1819, José Ygnacio Quiros to Viceroy, 1-2.

<sup>638</sup> From Veracruz, José Angel de Zumarán wrote the viceroy in July 1804 to remind him of his role in transporting vaccine to the port of Veracruz, expressing disappointment that his name had not appeared in the recent supplement to the *Gazeta* (number twelve), which treated introduction and propagation in Mexico City without mentioning the conductor. Zumarán noted that without the conductor, smallpox vaccine could never have arrived. He asked the viceroy to order a revision of the supplement, a request that bore some fruit as indicated by a note in the file, "Para la gaceta." AGN Epidemias 12 exp. 6, Veracruz 7 julio 1804, José Angel de Zumarán to Viceroy, 299-300.

intervening years remain, this source provides a valuable synoptic view of vaccination in the heartland of the viceroyalty at the threshold of Mexican Independence.

On April 6, 1820, the archbishop of Mexico wrote to Intendant Gutiérrez del Mazo to say that on his recent pastoral visit to the Sierra and Huasteca regions he had witnessed the recent effects of smallpox on the young, perhaps referring to the lesions that remained on the faces of children. It was all the more regrettable, he thought, owing to the fact that Spain's monarchs had made vaccine, a "certain" preservative against smallpox, available throughout New Spain. The archbishop had already taken steps to introduce vaccination in "those nations" he had visited, having commissioned and paid the expenses of a medical practitioner since February and vowing to continue to pay this expense for six months. He requested the administrator's assistance in obtaining the cooperation of other subdelegates and deputies, "without the formalities of juntas and sessions," he stressed, "which in my opinion only lead to displays I wish to avoid, restricting myself solely to the benefit of those worthy pueblos."<sup>639</sup>

Even as he pinpointed the bureaucratic blockages that had plagued places like Oaxaca, the archbishop set in motion a good deal of activity only with the help of the intendant, whose letter to subordinates, though missing, can be gleaned from the many archived responses. The following day, Gutiérrez del Mazo sent an official communication to warn of the need to reestablish vaccination, including with it copies of the archbishop's letter. It produced the typical replies of obeisance, in which several subdelegates provided detailed descriptions of past experiences, failures, and successes. Where the archbishop had visited and met personally with officials, as in Yahualica and Meztitlán (district of Hidalgo), the effects had been immediate.<sup>640</sup> In some cases, this renewed push was irrelevant, unnecessary, or of limited reach: Antonio Elías Sáenz, the tenacious official who appeared in the *Gazeta de México* for his efforts in Tenancingo (see Chapter Five), had brought this enthusiasm to Texcoco. He reported that since taking office he had propagated vaccine in his district "so that many parents have diligently brought their children to that capital, when vaccine lymph has lacked here."<sup>641</sup> Licenciado Manuel Neyra wrote from Cadereyta, over 200 kilometers to the north of the

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<sup>639</sup> AGN IV 5424 exp. 26, Mexico 6 abril 1820, Pedro Arzobispo de Mexico to Ramon Gutierrez del Mazo. ["... *sin las formalidades de juntas y sesiones, que solo conducirían en mi juicio a una ostentación que deseo evitar, contrayéndome solo al provecho de aquellos recomendables Pueblos.*"] The archbishop mentioned specifically only the subdelegates of Yahualica, Mextitlan, and Huejutla, so it is possible that the intendant was responsible for deciding to extend the initiative to other populations.

<sup>640</sup> From Meztitlán, Francisco Menéndez Valdez responded that since the archbishop visited "y tubo a bien manifestarme el empeño que tenía" in propagating vaccine, in particular for exposed young children, he had made certain that the operation was observed in his jurisdiction by designating one day a week for vaccinating in the district seat, "en mi presencia." He reported only that "many" had been vaccinated. AGN IV 5572 exp. 5, Mextitlan 16 abril 1820, Francisco Menéndez Valdez to Gutierrez, 24-5.

Even without a personal visit, the archbishop's role in this campaign was evident from the inclusion of copies of his letter, a formality that possibly augmented the moral authority of the endeavor. From Actopan, Martin Martinez, said that he had been informed of the archbishop's preparations for a general vaccination by the copy of the letter included and reported vaccinating eleven children the day he received lymph. AGN IV 5572 exp. 5, Actopan 25 abril 1820, Martin Martinez to Gutierrez, 13r-v.

<sup>641</sup> AGN IV 5353 exp. 39, Texcoco 28 abril 1820, Antonio Elías Saenz to Gutierrez, 3r-v. ["... *de modo, que oficiosamente muchos Padres han llevado sus hijos a esa Capital, cuando se ha carecido aquí del Pus Vacuno.*"]

capital, that residents had informed him that “*dicha vaguna* [sic]” had been established there since 1814 – the year of its last smallpox epidemic – and referred simply to successes in “all those children” who had been vaccinated.<sup>642</sup> In both cases, the official found the new provisions unnecessary, as they followed rather than propelled practice.

In several cases, the effect of this initiative from above was to set in motion patterns first established over the course of the previous decade. In Toluca, the official did not actually know the history of vaccination in his jurisdiction, but the primary *físico* of the Military Hospital informed him that since 1813 and up until the middle of 1818 he, Casimiro Liceaga, and Ignacio Garcés, along with “various other practitioners” had administered vaccine in five distinct periods. As a result, only those born in the time since the last campaign were left to vaccinate. The official then requested a fresh supply of vaccine from the capital, suggesting it would be practiced on them as before.<sup>643</sup>

Given the existence of several doctors in Toluca, its military hospital, and the proximity to a supply of vaccine in Mexico City, there were fewer obstacles to success there than in many other places; a new push merely provided the impulse to renew a program set in motion in the past. In communities with less, prior experience served them equally well, as in Lerma, in the greater valley of Toluca, where the operation had been practiced successfully on different occasions, “because there are two barbers for the operation who in other occasions have executed it with the greatest perfection, and the results have been very favorable . . .”<sup>644</sup> These barbers lacked only the vaccine, which would be obtained from Mexico City or Toluca.

Elsewhere, vaccination was a struggle, though one that administrators seemed willing to assume. In Otumba, the official had been performing vaccinations since receiving the intendant’s order, but with some difficulty (“*aunque con algún trabajo*”), he admitted, counting thirty-two vaccinations with more to follow but not specifying the cause of his difficulties.<sup>645</sup> Officials from Tenancingo and Acapulco requested vaccine lymph, while several offered to send a *muchacho* or other carrier to the capital to be vaccinated, revealing the efforts required to maintain a viable supply of lymph.<sup>646</sup> Huichapan counted two surgeons, with whom Manuel de la Hoz was conferring after receiving the order for vaccination, revived by the archbishop, he noted. Yet he required vaccine from the capital because it could not be found in those parts “until the rains come and the necessary inspection can be made of the few cattle that exist on the *haciendas*.” He added that the surgeons were prepared to perform their duty in all the pueblos of his jurisdiction, including *haciendas* and ranches, but they were poor and responsible for their own families, and he requested permission to pay them from communal coffers a

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<sup>642</sup> AGN IV 5572 exp. 5, Cadereyta 26 abril 1820, Licenciado Manuel Neyra to Gutierrez, 27r-v.

<sup>643</sup> AGN IV 5572 exp. 5, Toluca 22 abril 1820, José Joaquín Abalía to Gutierrez, 20-21.

<sup>644</sup> AGN IV 5572 exp. 5, Lerma 21 abril 1820, Nicolás de Arias to Gutierrez, 2r-v. [“. . . *pues para la operación hay dos Barberos que en otras ocasiones lo han ejecutado con la mayor perfección, y los resultados han sido muy favorables . . .*”]

<sup>645</sup> AGN IV 5572 exp. 5, Otumba 22 abril 1820, Manuel de Valdivieho to Gutierrez, 5r.

<sup>646</sup> AGN IV 5572 exp. 5, Cuernavaca 29 abril 1820, Miguel Avalesi to Gutierrez, 36-7. Cuernavaca’s official proposed sending two *jóvenes* “*en una litera*,” which would serve as a precaution to ensure that on their return the pus would be preserved in a good state. From there, he said, it would be remitted to the districts of Tetecala, Tlaquiltenango, Yantepec, and Xocanate.



half real for each vaccinated *indio* or *india* (non-Indians would pay twice this amount from their own pockets [*con doble peculio*] while the solemn poor would be excused).<sup>647</sup> Clearly, the critical question of funding had not been resolved, but this administrator nevertheless had a good idea whom could be asked to pay themselves, whom from communal funds, and whom vaccinated for free.<sup>648</sup>

In several places, vaccination was still unknown or rare, and it appears unlikely that officials were able to follow through on their overtures. José Antonio Horabuena wrote from Zumpango, fifty kilometers north of Mexico City, that he would not spare effort and diligence in the recommended operation, but added that his jurisdiction was in a miserable state from the dearth of maize, “of primary necessity,” with two consecutive years of shortfalls. It seemed unlikely to him that vaccination would be carried out in such a place, by which he may have meant the rusticity of its population, or simply the great difficulties encountered each year merely growing sufficient quantities of food. For Zumpango, vaccine was a medical luxury the community could not afford.<sup>649</sup> On the coast of Veracruz, Zempoala’s official similarly offered mixed hope: he would do what he could to establish vaccine, but within nine leagues there were no professors from either of the two faculties, medicine or surgery.<sup>650</sup> From the Chalco region, Rafael Zevallos wrote to say that his jurisdiction lacked any physicians who might administer the measure, or a source of lymph. He assured the intendant that if both were provided “certainly much benefit would redound to these miserable folk,” and then struck upon inspiration, adding that the operation seemed simple (*me parece sencilla*) and that if Intendant Gutiérrez were to send “a brief instruction and the lymph, without doubt a subject will appear to perform the operation, and in his total absence I myself, as a gift to humanity and out of a wish to please, will do whatever my dimness allows me . . .”<sup>651</sup> That the simplicity of the procedure should strike a middle-tier administrator at this moment and awaken in him the confidence to carry it out is not surprising: these figures were the levers of a colonial system that worked in fairly isolated units, particularly during crises, when spotty communication made outside intervention infrequent when forthcoming at all.

What these responses show is that implementation was highly uneven, varying according to geography, climate, soil, size of population, distance from cities, and zeal of

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<sup>647</sup> AGN IV 5572 exp. 5, Huichapan 27 abril 1820, Manuel de la Hoz to Gutierrez, 14-5. [“. . . *hasta que entren las aguas y se haga la pesquisa necesaria entre el poco ganado bacuno que hay en las Haciendas.*”]

<sup>648</sup> Cuautitlán’s subdelegate, who two years previously wrote to the viceroy to report success in applying vaccine to ulcers and other sicknesses, expressed uncertainty on this point as well. He referred to unanswered letters he had sent the intendant, informing him that the physician who had been commissioned in the head town had pressed him for payment to go out to “*pueblos distantes de esta cabecera,*” but the subdelegate did not know from what source he should cover this expense. AGN IV 5572 exp. 5, Quautitlan 22 abril 1820, José María Marin to Gutierrez, 18-19r.

<sup>649</sup> AGN IV 5572 exp. 5, Zumpango 8 mayo 1820, José Horabuena to Gutierrez, 31r-v. [“. . . *que es de primera necesidad, y se ha experimentado en dos años consecutivos.*”]

<sup>650</sup> AGN IV 5572 exp. 5, Zempoala 5 mayo 1820, Manuel de la Torres to Gutierrez, 28-9.

<sup>651</sup> AGN IV 5424 exp. 26, Coatepec-Chalco 19 junio 1820, Rafael Zevallos to Gutz, 3-4. [“. . . *ciertamente redundaría mucho beneficio a esta miserable gente . . .*” “. . . *una ligera instrucción y la tal semilla, no hay duda proporcionar sujeto que haga la operación, y si del todo faltare yo mismo en obsequio a la humanidad y en los deseos que tengo de complacerlo haré cuanto mis cortos alcances me permitan . . .*”]

the local official. No doubt even veteran administrators such as Ramón Gutiérrez del Mazo would have wondered at the range of experiences described in the responses he received. It relied, moreover, on a constellation of healers whose presence must be explained not only by a lack of resources, but also by the desire to close a perceived social and cultural distance, which went beyond mere linguistic difference to include ways of working, living, and healing. Remarkably, as part of an ongoing feud with Valladolid's bishop-elect Manuel Abad y Queipo during his second trip to Mexico as director, Balmis complained that Abad was interfering in business about which he knew nothing: the prelate had reportedly maintained that a barber was capable of administering vaccine, which Balmis pronounced impossible.<sup>652</sup> Clearly New Spain had come far from the ideal but simplistic program of vaccine administration with which it had started.

Still, in some cases vaccine was distributed through the more expensive method, with a certified practitioner at the helm. It appears to have been most common in the Yucatán, a region distant enough from the band of fighting in the insurgency years to have been spared the greater economic and political disruptions experienced elsewhere. Its remarkable success during the insurgency years must also be explained by the willingness of its intendant to draw on communal revenue to support the costs of the physician – to override, in effect, a cumbersome colonial apparatus in order to designate funds.<sup>653</sup> Though he credited his own periodic encouragement of subordinates for this success, he stressed that this alone was insufficient:

neither the authority of the justices nor the persuasion of the parish priests in the pulpit is enough . . . because the coarse, weak, and by nature worried Indians resist the beneficial effects of the operation, their renunciation further magnified by their unwillingness to contribute a half real for each child to the vaccinator, and as a result there is no one who wants to practice vaccinations . . .

Practitioners were supported with public funds in Mérida and Campeche, and the official insisted that the same would have to be adopted for Indian villages in order to reduce opposition – presumably among both patients and the practitioners asked to work there. He quoted a fee of a half real for every two vaccinated Indians taken from communal coffers, while non-Indians would contribute the same amount themselves, as customary.<sup>654</sup> The records show that his recommendation was followed: when José

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<sup>652</sup> AGN IV 5297 exp. 19, marzo 1811, Francisco Xavier de Balmis to Viceroy, 33-34.

<sup>653</sup> Records remitted from Mérida (the official waited to send them “*por no exponerlas al extravío que sufren las pérdidas de correos,*” which by then had somewhat subsided) are remarkable for their detail, consistency, and high numbers vaccinated: in Campeche and its barrios, for example, physician Ciprian Blanco reported 1,681 vaccinations for 1815 and another 945 in 1816, totaling some 26,000 vaccinated individuals in the district since 1804, while numbers were reported in Mérida and its barrios, along with dozens of Indian pueblos, in the following years. AGN Epidemias 14 exp. 9, Campeche 31 diciembre 1816, Estado que manifiesta el número de Vacunados y revacunados en esta ciudad y sus barrios . . . , 247r; AGN IV 4848 exp. 25, Campeche 1 julio 1815, Estado que manifiesta el número de Vacunados en esta Ciudad y sus Barrios, 3r; and *ibidem*, 5297 exp. 18, Campeche 30 diciembre 1815, 3r.

<sup>654</sup> AGN IV 4848 exp. 25, Merida 17 marzo 1817, Miguel de Castro Araez to Viceroy, 1-2. [“ . . . *no bastando ni la autoridad de los Jueces, ni la persuasión de los Párrocos en el púlpito, cuya providencia circulé desde que advertí los inconvenientes que presta la propagación del fluido, por que los Yndios rudos, débiles y preocupados por naturaleza, se resisten a los benéficos efectos de la operación,*

Sebastián María González received his commission to vaccinate in the Costa Alta and Baja of Yucatán (from December 23, 1817 to May 8, 1818) he was paid one half real for each (rather than every two) of the 8,800 *indios* vaccinated, or 550 pesos in all.<sup>655</sup>

So in the waning months of the colonial period vaccine, far from an unknown novelty, had been introduced with varying degrees of success from the flat limestone shelves of the Yucatán, to the port of Acapulco, to the mining centers in northern New Spain. In most cases administrators simply made do, resisting tenaciously the use of expensive city doctors and turning instead to local healers to replace them. A more accurate portrayal of the practice of preventive medicine in these years accounts for the fact that tools and simplified techniques were frequently placed not only in the hands of many non-experts, including priests, *hacendados*, and local authorities – all individuals who were expected to persuade “dependents” in the absence of hard force – but also many more *curanderos*, bleeders, and amateurs with experience in rural healing, surgical instrumentation, venesection, indigenous communities, and the topography and climate of a rugged Mexican terrain. How else to explain that in April 1817, when the government ordered vaccine sent to the districts beyond Mérida, it was *mozos inteligentes* who came down to the city for instruction by the operating physician, vaccinating in his presence and receiving a bit of advice so that they could return and perform it in their pueblos.<sup>656</sup>

Who were these young men and what must they have thought of their commission? Many trained physicians saw themselves as missionaries of medicine, but they, much like even the most precocious polyglots of the religious orders, lacked sufficient time, resources, and patience to gain familiarity with local dialects beyond superficial forays, relying instead on people better versed in “difficult and diverse languages” to mediate both the technique and the message. Whether the reason was economic, geographic, or cultural, the outcome was a situation where disruptions by outsiders were usually kept at a minimum.

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*aumentándose por otra parte su renuencia, por la odiosidad que tienen en contribuir al vacunador con medio real por cada niño, con motivo de que no hay quien quiera ejercitar al mérito ni por caridad la inoculación.”]*

<sup>655</sup> These lists, reporting what amounted to marathon vaccinating campaigns, are persuasive evidence of practice given that names and ages of children are indicated in every case and that the file is full of certifications by priests and caciques (writing in Maya) asked to witness the practitioner’s work. By location, Tekanto: 1,102; Citicum: 190; Kimbilá: 260; Bokolá: 435; Tepakam: 350; Teya: 600; Kamcabchen: 59 (from AGN IV 1997, exp. 2, Partido de la Costa 23 diciembre 1817 – 4 enero 1818); and Tekal: 1,273; Izamal: 1,052; Pixila: 384; Sudul, 1,284; Xanaba: 240; Kantunil: 683; Sitalpech: 884 (from AGN IV 1997 exp. 3, on cover: Mayo 22 de 1818). The following is a typical certification from a parish priest included in these folders: “Yo Fray Tomas Leal residente de este Pueblo de Kantunil; Certifico en toda forma como habiendo ingresado a este Pueblo dicho de mi cargo Don José Sebastián María González, comisionado por el superior Gobierno para la propagación de la Vacuna, me dio vista a la pastoral del Ylustrisimo Señor que es a mi Cargo en que le franqueé todos auxilios, aun exhortando a todo genero humano, en esta Santa Yglesia Católica apostólica Romana, y fueron congregados, y inoculados los que manifiesta esta matricula, y para su constancia lo firmo en este de Kantunil a los dies y nueve días del mes de Abril de mil ochocientos dies y ocho años.” He signs, 44r-v.

<sup>656</sup> AGN Epidemias 14 exp. 10, Mérida 10 abril 1817, Estado que manifiesta el número de Bacunados y rebacunados en esta Capital y sus barrios, signed Alejo Dancourt, 248-9. “Han bajado a esta capital mozos inteligentes para instruirse prácticamente los cuales han vacunado en mi presencia haciéndoles las advertencias necesarias para que pudiesen vacunar en sus pueblos con éxito feliz.”

## **Conclusion: Privileging Paternalistic Programs**

As argued in this chapter and the previous two, the state program for preventive medicine in New Spain underwent several adaptations with time that sought to tailor it to the social, cultural, moral, and communicative competencies of the unlettered residents of Mexico's cities and countryside, which involved verbal but also non-linguistic elements of ritual performance. Among these adaptations were the ways functionaries sought to distance the procedure from hospitals, places strongly associated with sickness; medical treatises studded with references to gifts from God and pastoral letters that cited international medical experts, both tugging at the boundaries of genres; the printed bulletins accompanied by dulcet chords of music and hymns of praise, as common as the coins and cookies appearing to entice the public; the urban ceremonies featuring processions and dazzling light displays; the lancet itself, originally intended to remain in the hands of trained physicians, as it was carried, in simplified instructions, to those with no medical training; and laypeople being encouraged to experiment in order to uncover new, previously unknown applications. All of these adaptations were germane to the mechanics and claims to legitimacy of the colonial state, with medicine of necessity introduced through a paternalism always highly inflected by ideas about race and cultural capacity, one of the legacies of centuries of colonial rule.

The absence of urban and rural violence and protests against vaccination, in contrast to the highlands of Guatemala, no longer seems surprising. In the first place, immunization's epistemology was modern in peculiar ways, with twists and turns in promotion that borrowed from multiple discursive, ideological, and symbolic realms at once. A ceremonial tradition that sought the use of various civic and religious rituals when introducing new practices produced a softening of the impact of the practice: more often than not, smallpox vaccine arrived accompanied by trumpets rather than truncheons. Though a scarcity of blatantly coercive techniques in the early moments hardly means violence was nonexistent, officials and civilians had recourse to numerous other tactics to compel laypeople to give their consent.

Because vaccination arrived as often as not accompanied by priests, the norm seems to have been some combination of reasoned argument (in missives from the pulpit or elsewhere), reverential displays, and deference to the needs and wishes of communities. Priests, central figures in the enactment of state policy at the end of the colonial period, had not only the knowledge, but also the time to translate a new technique by situating it within familiar frameworks of theological or royal benevolence. Priests, prelates, and a few experienced physicians found themselves in an essential mediatory role, essential pragmatists in the adoption and adaptation of a utopian medicine. In various ways, then, the church and its agents succeeded in acquiring, or simply maintaining, a practical relevance through engagement with a burgeoning medical practice.<sup>657</sup> Ultimately, where relative tranquility in Mexico may be explained by arguing

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<sup>657</sup> It is simplistic to assume that the prelates who threw their weight behind enlightened medical science were simply chasubled parrots echoing the latest regalistic fashion of the day. The impetus and initiative of higher church authorities was based on the purchase of late-colonial enlightened ideas, but also took shape in the perception of suffering – through first-hand experience with the deformity and pain of children and their families – combined with an understanding that the professional bureaucrat's position demanded some participation in any remedy that promised to save lives and prevent the loss of revenue.

for the alignment of colonial interests with the state project and the successful imposition of it on a subdued or complacent society, the reality appears to have been different: regular acceptance of the new practice facilitated by a class of (self-) interested colonial representatives and power holders, including priests and administrators, who drew on time-worn strategies to tailor an overly ambitious project.

It is in light of these observations that a body of literature arguing that New Spain's elite lacked the resources, but not motives, to restrict the sphere of action for midwives, *curanderos*, bleeders, and unorthodox indigenous healers without training and credentials may require some revision.<sup>658</sup> The preceding pages raise a complicated category quandary in respect to the ideal type referred to frequently in the documentation, "*curandero*": were the persons signified local, mostly indigenous healers, as I assume, or some other *aficionado* – a creole tailor or merchant, for example – without formal medical training, perhaps in a class between the local healer and the university-trained, licensed physician? The same may be asked for the "poor" physicians or surgeons sometimes invoked: were these licensed practitioners, and if so, how then did they afford their training? Historians of Mexico are accustomed to seeing the *curandero* prosecuted for superstition or heterodoxy, wielding peyote, crosses, Catholic prayers, and liturgical paraphernalia and referred to, in English, as "shamans." If at this moment, some of these individuals were being commissioned to perform vaccinations throughout the countryside, then the literature that stresses enthusiastic prosecution and marginalization can be only part of the picture. In other words, assuming barbers, *curanderos*, and other unlicensed practitioners suffered from oppression and exclusion, they also remained relevant well into the nineteenth century not because regulatory institutions lacked the resources to police these threats, but because they were not always seen as such. Instead, some of the distance between trained professionals and these allegedly subversive healers was being closed in these moments, an erosion of functions that produced some confusion of categories, which helps explain how vaccine infiltrated so far and also why discernment of these ostensibly distinct categories in the documentation becomes so difficult in retrospect.<sup>659</sup>

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To date there remain few studies of vaccination for Mexico's early republican period. For Peru, Adam Warren notes that its republican government granted the Catholic Church a major role in its propagation. "This is particularly ironic," Warren muses, "considering that in the first years after Independence the government actually tended to seize control from the Church over most charitable institutions, hospitals, orphanages, and hospices." According to Warren, the burden on parish priests increased over the course of the decade; by 1840 "the administering of the smallpox vaccine had become a fundamental part of the training of new priests." Warren, "Piety and Danger," 176-9.

<sup>658</sup> Most recently, Pamela Voekel, *Alone before God*, Chapter Seven ("The Rise of Medical Empiricism"), especially 172-176. Voekel argues that during the same time period covered in this chapter, enlightened bureaucrats and scientists prosecuted unlicensed *curanderos* and midwives (*parteras*), declaring a "veritable war" on them, which widened the gap between authorized (male) and local (Indian and female), bolstered the licensed male practitioners, and thus helped professionals "rise on the officially rebuked backs of the undocumented."

<sup>659</sup> Along similar if not identical lines, Paula de Vos has argued that beyond Mexico City, a blurring of professional boundaries between various practitioners of medicine "was accepted as a way of life." See de Vos, "The Art of Pharmacy in Seventeenth- and Eighteenth-Century Mexico" (Ph.D. diss., University of California, Berkeley, 2001), 63 and *passim*.

On the threshold of republicanism, Bourbon reforms in administration and social practice had initiated the purposeful undoing of Mexico's juridical division of two republics, one of Indian villages, the other of everyone else, with distinct judicial systems, taxation, tithes, resources, punishments. Nevertheless, the foundations of a colonial project, in which *indios*, castes and the poor were seen as childlike, fragile, and impressionable, to be instructed and protected at all costs for God and their king, were still solidly in place, and perhaps nowhere as visibly as in the provision of medicine. The following chapter considers the fulfillment of this colonial pact in popular rumors and institutional reactions.

## CHAPTER SEVEN

### **Of Magicians, Kings, and Kidnappers: Rumors and Other Realities of Colonial Medicine**

The previous chapters traced the variety of efforts employed to translate new techniques in preventive medicine for laypeople prior to the introduction of inoculation and vaccination. With the arrival in New Spain of the Royal Vaccinating Expedition in 1804, colonial authorities refined their persuasive efforts, using ceremonies in cities and villages to welcome the team of vaccinators and even, at times, paying parents with pesos to secure consent. In the following years of hardship and upheaval, the distribution of vaccine in colonial Mexico took place through a wide network of priests and indigenous shamans and bleeders, which not only kept costs down, but also created an expanded sphere of activity for local healers, parents, and priests. This chapter extends this account to an analysis of rumors, which are taken as a rough proxy for reception of the new medical technique among laypeople in urban and rural Mexico. Rumors in politically charged vaccination campaigns were more than spun webs of significance for those who spread them, in Clifford Geertz's formulation; these webs entangled the local administrators and vaccinators in charge of distribution and at times threatened to wreck the late-colonial vaccinating machinery.

The formation of public opinion in cities and villages remains poorly understood for colonial Mexico. As in agrarian movements, urban riots, and conflicts between priests and parishioners, a public sphere in which opinion took shape conditioned the interactions between medical providers and patients, yet this opinion of medicine and the cultural components underlying its formation have not been studied. How did people in early modern societies communicate with one another about medicine? Through what process was good, effective, or desirable medicine distinguished from bad or potentially harmful kinds? The successful adoption of new treatments, drugs, and other medical discoveries was predicated on some consensus among the members of a community, and the circulation of news and other sources of information an integral component of such opinion. Yet we know little about the mechanisms of speech in late colonial society, owing in part to the nature of the available evidence, which of necessity converts rich oral knowledge into written documents.

Reports of rumors represent a unique opportunity to explore how communities anticipated vaccine and interacted with vaccinators. A close look at their contexts suggests the ways communicative practices conveyed medical knowledge in Mexico and illuminates the epistemological value placed on speech at the end of the colonial period. In 1797 the viceregal government declared that parents would be allowed to choose whether to inoculate their children and acknowledged that some debate would be necessary given the scarcity of information on what was still an untested, uncertain technique. Yet word of mouth, public opinion and notoriety, or what was commonly called *pública voz y fama* nevertheless did not begin in 1797: from the beginning of

Spain's rule in the Americas, hearsay was admissible as reliable evidence in royal and ecclesiastical courts, in the Holy Office of the Inquisition, and in legal and territorial disputes. Confirmations of the miraculous repute of a saint image, for example, could involve lengthy oral testimonies that related what had been said and heard, if not necessarily seen by one's own eyes. Similarly, proceedings to confirm the purity of blood of a candidate for an official position asked familiars to attest to his public repute and lineage, things most often gleaned by word of mouth.<sup>660</sup> Words counted, in other words, as reliable sources of information in a variety of colonial settings.

Yet at the same time many, especially among the colonial elite, held rumors and gossip in contempt, viewing society's idle words as empirically unsound, delusional, and dangerous. The study of speech acts such as rumors allows us to see how this ambivalence about language was managed within charged clinical settings. Within these settings, I argue, rumors came to resemble certified public knowledge, *pública voz*, in the ontological status they were accorded. Both the testimony admitted in colonial courts and the gossip circulating beyond were verbal expressions of opinion held in common, really two species of a single genus. Whether or not a rumor was "true," it could disarm a vaccinator and halt a campaign and in that sense became real for multiple audiences. Through a kind of dialectical process, administrators were compelled to treat the supposed illusions and fantastical objections of peasants as confirmed public knowledge, which challenges us to rethink notions of empiricism and truth as these functioned and came to predominate in enlightened health care.

The study of rumors poses certain methodological problems.<sup>661</sup> In the period covered by this dissertation, the vast majority of Mexico's population was agriculturalist and pastoralist. Lacking the tools of literacy, their words were often recorded and reported by *gente de razón*: priests, physicians, and local non-Indian administrators (frequently lifelong bureaucrats, attorneys, or businessmen). In this situation, one often glimpses peasant commentaries on medicine mediated by the pens of dominant classes, precisely the predicament identified by members of the "subaltern studies" group, who asked how texts produced by and for society's elite can be read to recover the voices of

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<sup>660</sup> On the value of oral testimony in blood purity proceedings, see María Elena Martínez, *Genealogical Fictions: Limpieza de Sangre, Religion, and Gender in Colonial Mexico* (Stanford: Stanford University Press, 2009), especially Chapter Three.

<sup>661</sup> There is a considerable literature on rumors and medicine for other times and places. The sources consulted for the current chapter (many of which have something to say about the challenges of rumors as historical evidence) include David Arnold, *Colonizing the Body*, 218-226; Mary Preston Sutphen, "Rumoured Power: Hong Kong, 1894 and Cape Town, 1901," in Cunningham and Andrews, *Western Medicine as Contested Knowledge*, 241-161; Nadja Durbach, *Bodily Matters: The Anti-Vaccination Movement in England, 1853-1907* (Durham: Duke University Press, 2005), Chapter Five; and Luise White, *Speaking with Vampires: Rumor and History in Colonial Africa* (Berkeley: University of California Press, 2000), especially Chapter Two, which should be consulted for further readings on rumors and gossip. Other sources not dealing explicitly with medicine include Arlette Farge and Jacques Revel, *The Vanishing Children of Paris: Rumor and Politics before the French Revolution*, trans. Claudia Miéville (Cambridge: Harvard University Press, 1991), and the seminal articles by Max Gluckman, "Gossip and Scandal," *Current Anthropology* 4:3 (1963): 307-316 and Roger D. Abrahams, "A Performance-Centered Approach to Gossip," *Man* 5:2 (1970): 290-301. These last two, which consider the ways intimacy or solidarity is created between those who share rumors, tend to imagine the boundary between insider and outsider in a straightforward way, which the episodes in this chapter seem to challenge.



the poor and illiterate.<sup>662</sup> Even assuming the documents relate roughly what people said and did at the time, there remains the problem of the analogies used and of how they were intended to signify – literally or figuratively, most basically – but also of determining which groups of peasants (parents, officials of republic, men, women, healers) originally made the remarks, the biases of the reporter, and the form of the speech act prior to its filtering through the written document (with the accompanying loss of gestures, intonation, and so forth). These limitations are compounded by the fact that only a small set exists; we find ourselves agreeing with Claude Levi-Strauss when he noted in his study of South American myths that behind each recorded instance are many that remain unknown, “and we are only too pleased with the samples and scraps at our disposal.”<sup>663</sup>

The nature of these sources recommends against looking for a pristine, homogenous voice, a native view of Western medicine, or a typical “subaltern” speaker. Rumors hold out the promise of fresh insights owing to the ways they reflect, always imperfectly, the contours of non-literate ways of knowing medicine. More often than not, however, they highlight moments of mutual awareness and suspicions between classes, castes, professions, and regions. They suggest the kind of cultural work spoken words performed in diverse clinical settings and the consequences for those responsible for vaccination. In a sense, rumors were the fulfillment of the paternalistic colonial medical program traced in previous chapters. Though disruptive for some, as acknowledged forms of critique rumors were also the consummation of a tacit colonial pact, in which the ruled in New Spain placed limits on the latitude afforded the ruler. If one can hardly speak of widespread aversion to modern medicine in Mexico, the success stories were nevertheless offset by some fascinating moments of rejection, tension, and contention.

### **Public Debate in an Urban Setting**

The appearance of rumors in Mexico City is a good reminder that the colonial city was a place of the spoken word, where even elite members of society made good use of a genre that has too often been circumscribed as “popular” or not for literate people.<sup>664</sup>

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<sup>662</sup> See Ranajit Guha, “On Some Aspects of the Historiography of Colonial India” and “The Prose of Counter-Insurgency,” in *Selected Subaltern Studies*, eds. Guha and Chakravorty Spivak (New York: Oxford University Press, 1988), 37-88; Gayatri Chakravorty Spivak, “Can the Subaltern Speak?” in *Marxism and the Interpretation of Culture*, eds. Cary Nelson and Lawrence Grossberg (London: Macmillan, 1988); and Frederick Cooper’s call to a greater awareness when undermining categories like subaltern and domination, “Conflict and Connection: Rethinking Colonial African History,” *American Historical Review* 99:5 (December 1994): 1516-1545. Cooper poses his own question – “[c]an the theorist listen?” – which is apropos of both the oral sources upon which some of his fellow Africanists relied in writing their histories and the original oral form of the rumors reported in written colonial sources in New Spain. That peasants were often speaking is a reminder that for contemporaries paper was of limited use as a vehicle for local knowledge and “subaltern” agencies, which were often articulated in verbal form, with the accompanying paralinguistic dimensions, and also shared or articulated in common, with the accompanying accretions and elaborations through time.

<sup>663</sup> Claude Lévi-Strauss, *The Raw and the Cooked*, trans. John and Doreen Weightman (Chicago: The University of Chicago Press, 1969), 3.

<sup>664</sup> Cf. Angel Rama, *The Lettered City*, trans. John Charles Chasteen (Durham: Duke University Press, 1996), 29-49. Rama’s work on Latin America’s “lettered cities” argues that men of learning exalted and obsessed about writing in the process of creating the legal apparatus – edicts, codes, laws, and finally newspapers – that formed the basis of modern nations.

Urban incidents were treated quite seriously: casual conversations in homes, taverns, and public spaces that meandered into speculation on the latest medical discoveries generated mass and momentum like a snowball, which authorities feared could crush the fragile lower classes, who lacked, it was said, sufficient judgment and discernment to resist the impact. Although the weight of this chapter's evidence comes from the countryside, some examples of urban debates provide a sense of the stakes involved, the conceptions of the urban administration, and also the origins of a debate about the ability and even necessity of parents to assess the relative merits of the procedure.

As early as 1780, esteemed French physician and promoter of inoculation Esteban Morel reported numerous rumors about the recently conducted experiments with inoculation in Mexico City. These included one that claimed that the first non-Indian ever to be vaccinated in New Spain, the *señora* Bárbara Rodríguez de Velasco, was left an amputee, having lost one or even both of her legs; that the *señora* Condesa de Santiago was dying from a vaccination administered by Morel, though he wrote that he had done nothing more than visit her home over several days at her request to prepare her for the procedure (one could see how casual observers might have been persuaded of his role in her death); that a *señorita* "in whom," Morel proclaimed, "God has seen fit to give me the greatest of my successes" was left a leper; and several other reports of death from the procedure, in many cases of individuals who had never undergone it. The slanders, or *calumnias*, as Morel called them, were transforming even the successful cases into total failure (*total desacierto*). "Few ladies, and few children from visible homes have died of smallpox in Mexico in some time," Morel lamented, "who, according to the calumny, did not owe their death to inoculation."<sup>665</sup>

In the early years, when primarily Mexico City's upper classes were being immunized, gossip appeared frequently among the social elite. Just months after inoculation became official policy in 1797, authorities discovered that a surgeon in the city had allegedly reported two deaths from inoculation, which led to a formal investigation conducted by one of the capital's most renowned medical doctors, Luis Montaña, overseen by the senior judge of Mexico City's *audiencia* (the medical expertise of a doctor was required due to the technical matters of the case). The investigation centered on whether the surgeon had in fact made such a report and, equally important at this early date, whether the rumor was true. After the surgeon denied the charges, the two upper-class women at the heart of the rumor were deposed: the first, doña Inés Delgadillo, wife of José de la Barcena, said that in a casual conversation in her home, doña Teresa Bastida had told her that someone named Rodríguez (the surgeon) reported news of the death of two boys from inoculation. But when asked, doña Teresa could remember only that she "had been told" that two children had died (a son of don Fausto Elhuyar, Director General de la Minería, and another of don Isidro Icaza), not recalling who told her. With two children of her own to inoculate, doña Teresa said she personally had looked into the matter and already determined the news to be false – one boy had

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<sup>665</sup> Morel, "Disertación," AHDF vol. 3678, exp. 2, 58-59r. ["... en quien se ha servido Dios de darme el mejor de mis aciertos . . ." "Pocas señoras, y pocos niños de casas visibles, han muerto de viruelas en México, por algún tiempo, que, según la calumnia, no hayan debido su muerte a la inoculación."]

died of epileptic fits (*alferecía*); the other was, in fact, still alive.<sup>666</sup> The self-interested mother, in other words, had already done the work assigned to the physician and justice.

The same year, with the city buzzing anxiously and officials desperate to quench the flames of the smallpox epidemic, a page of printed song verses, or *boleros*, was found for sale in front of Mexico City's cathedral. Scandalous in content and even more threatening in their mocking tone, the verses charged administrators with exaggerating the risk of smallpox, lampooned the operation and the impecunious doctors who practiced it, and warned the reader, or audience, that anyone foolish enough to undergo the procedure at the hands of one of these ignoramuses risked losing his life. One line even warned that the pus (*podre*) from cancerous patients was being injected into the "poor inoculated." The song ended with a grim prognostication that the inoculated would die from the procedure. In these ways, the verses stripped the pretensions of Spanish medical imperialism: modern preventive medicine, in the song's mocking stanzas, became just a handful of incompetents searching for easy money, with filthy tools, spurious lymph, and base ulterior motives.<sup>667</sup>

Following an investigation into the provenance of the verses, all that could be discovered of their source was that the copy had been purchased in the *zócalo* for one real by an eighteen-year-old *ministro de coro* in charge of the cathedral's books, and that the vendor was an "*hombre de fresada*" – a man wearing a cape or poncho of cloth, a style common among the lower classes in colonial Mexico – who was never seen again.<sup>668</sup> Was the man an Indian who had acquired the verses from another distributor or merchant,

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<sup>666</sup> AGN Historia 44 exp. 14, Mexico 7 septiembre 1797, Testimony of José Rodríguez, signed, 330r-v; Mexico 9 septiembre 1797, Testimony of Inés Delgadillo, she signs, 331v-332r; Mexico 9 septiembre 1797, Testimony of Teresa Bastida, with rubric, 332r-v. [". . . le dijeron, sin poder acordarse de la persona por mas reflejas que hace . . ."]

In his assessment, Fiscal Alva clarified the complicated relationships between residents, noting that don Fausto had only one daughter, who had been inoculated successfully, while don Isidro inoculated all four of his children, not one of whom suffered the least threatening symptom or at any point died of *alferecía*. In fact, it was the daughter of don Gabriel de Iturbe who died of the latter; wife was the sister of Isidro Icaza's wife, and this, according to Alva, was the source of the confusion expressed in these false *noticias*. AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Alva to Branciforte, 334-335r.

<sup>667</sup> "*Las Ynoculaciones han inventado los médicos más pobres necesitados. / Pero se advierte los que se Ynoculizan van con la Muerte. / Los que se Ynoculizan no tienen juicio pensando quedar buenos y es artificio. / Y esto es tan cierto que quedan cacarizos y algunos muertos. / Te he de dar un consejo muy acertado que no te inocules que bas errado. / Se está mirando que los Ynoculados van apestando. / México adolorido ya se ha quejado que los médicos pobres lo han apestando. / Con experiencia por que se está mirando con evidencia. / Los médicos muy pobres y de hambre malos que vienen las Viruelas han inventado. / . . . Con esta me despido médicos pobres que mal van ya quedando las Curaciones. / Ya y lo verán que los ynoculados se morirán.*" AGN Historia 44 exp. 14, "Boleras," 313v-316r. The full Spanish text can be consulted in Fernandez del Castillo, *Los viajes de don Francisco Xavier de Balmis*, 66-70.

<sup>668</sup> AGN Historia 44 exp. 14, Mexico 22 septiembre 1797, Declaración de Don Antonio Boso, 362r-v (he signs; the scribano Mariano Cadena notes that he spent time at the portal looking for someone with said signs selling the verses, but never found anyone); *ibidem*, Mexico 28 septiembre 1797, Cosme de Mier to Branciforte, 319r. "*De las declaraciones recibidas sobre la averiguación del Autor que compuso los Versos satíricos contra el método de la Inoculación resulta por la deposición de don Antonio Boso Ministro de Coro de la Santa Yglesia Catedral que éste los compró en 21 del corriente en el Portal de las Flores a un Hombre de fresada que aseguró ser la única vez que lo ha visto; y aunque se ha solicitado en el Portal diversas ocasiones no se ha podido saber quién sea este Yndividuo, que aún se continua buscando.*"

or had he composed them himself? Was he a peasant from the rural south, bringing the verses with him in his escape ahead of the spreading smallpox epidemic as it spread north from Guatemala? Or was he drawn to Mexico City in anticipation of a market for the verses when he heard that the epidemic had at last arrived in the populous commercial center? Because he does not reappear in the record, it is impossible to say, but the incident shows how notions of healing and medicine and occasional idle remarks passed between classes in a bustling capital that frequently saw the mixing of its residents, in work and sickness as in play.<sup>669</sup>

The urgent discussions that took place in the city following the appearance of these perceived threats to the government's inoculating program reveal physicians and state functionaries apprehensive about blasphemous gossip, the possibilities of public health administration, and the enforcement of viceregal medical policies, but also willing to acquiesce to liberal debate, at least in these last few years of the eighteenth century. The matter of the verses led to a report by the Protomedicato, for example, on how to ensure that inoculation not fall into discredit in the future, or that the doctors who practiced not become the victims of satire, fearing that this would influence the uninformed masses disproportionately.<sup>670</sup> Crown attorney Alva, whose own promotional efforts were discussed in some detail in Chapter Four, recommended publishing a decree in the city "so that no one should dare to criticize, mock, or dissuade the people from using inoculation, by word or in writing," primarily so that these "tall stories and lies" that began with the upper classes did not trickle down to the *vulgo*, the commoner, who according to Alva was "very easily prone to let himself be affected by the sounds of voices and incidents without attempting to examine them."<sup>671</sup> If the upper classes were to be allowed to consider and debate rationally the practice, their conclusions would be severely restricted, in other words, in order to protect medical professionals and the potential beneficiaries of vaccination. Meanwhile the lower classes, in classic

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<sup>669</sup> Cosme de Mier concluded that secular priests and members of the religious orders, and not "the pueblo," were responsible for producing the rumors and suggested they possessed some moral aversion and therefore spread "contrary opinions and doctrines" to dissuade the less informed from being inoculated. While 3,000 had been inoculated in Mexico City, he wrote, the procedure would not be adopted among the populace (*gente del pueblo*) as long they were influenced by the suggestive comments of these ecclesiastics, who were often held as wise among the pueblo by virtue of their position. AGN Historia 44 exp. 14, Mexico 2 octubre 1797, Cosme de Mier to Branciforte, 353-354r.

<sup>670</sup> AGN Historia 44 exp. 14, Real Protomedicato 19 septiembre de 1797, Real Tribunal to Cosme de Mier, 323v-324r. "*Este Tribunal sabe, con sentimiento suyo, que por medio de papeles satíricos, y chocarre nos burlan la importante manobra de la Inoculación, y zahieren a los Profesores que la patrocinan, y aunque esto jamás desanimará a los que por dictámenes científicas, y sentimientos patrióticos la recomiendan, y ejercitan, pero sí podrá mucho sobre Personas o preocupadas, o ignorantes para que menosprecien, y abandonen esta única tabla, en que muchos podrán salvarse.*"

<sup>671</sup> AGN Historia 44 exp. 14, Mexico 29 septiembre 1797, Fiscal Alva to Branciforte, 336r, 342-344r. ["... para que ninguno se atreva a zaherir, burlarse, ni retraer a las gentes del uso de la inoculación de palabra ni por escrito . . ." ". . . muy fácil, y propensa a dejarse impresionar del sonido de las voces, y sucesos sin tratar de examinarlos."] In Alva's opinion, though everyone could choose to be inoculated, each individual did not have the liberty to mutter, declaim, and thus dissuade the inexperienced (*imperito*) commoner, the gullible, and those unable to distinguish opinions. Inoculation was a benefit to humanity and to public health (*salud pública*), and those who did not desist, he continued, would be responsible to God, the King, and the public for the loss of so many lives to the ongoing epidemic.

paternalistic fashion, were being protected from harmful rumors, assumed to lack the will to resist these on their own.

Not everyone agreed with Fiscal Alva's view on the matter: as was often the case, crown functionaries, secular administrators, and priests at times produced contradictory statements about cultural capacity and competence that suggest more complex concepts and evaluations of colonial subjects. Crown attorney Pedro Jacinto Valenzuela, communicating with Viceroy Branciforte, wrote critically of Doctor Montaña and his attempts to determine whether the surgeon José Rodríguez had, in fact, said that two patients had died of inoculation. Even if it had turned out that the surgeon did in fact report these deaths, Valenzuela reasoned, "the superior government has not even come close to prohibiting discussion about the sick who die of inoculated smallpox, but rather to the contrary, it matters to it greatly to know how many have been inoculated, and of those how many have died of the operation or its results, in order to form a sure calculation and make a comparative judgment between it and the number of those infected by natural smallpox, and to deduce the advantages in favor of the first . . ." Clearly not settled in his mind, the efficacy of the practice would continue to be discussed and evaluated by policymakers and parents, who had to decide whether to submit their children to the operation. Valenzuela concluded that while Fiscal Alva had argued convincingly in his "very well written" brief in favor of the practice (see Chapter Four), nevertheless Valenzuela had to consider "that in this purely permissive matter, each head of family has been granted the freedom to put inoculation into practice or not; it is natural that each man should reason [*raciocine*] about the grounds for its efficacy, or inefficacy, and it has not been prohibited by the superior government that one speak in favor or against inoculation." The viceroy ultimately agreed with Valenzuela that the decree requested by Alva should not be published.<sup>672</sup>

The decision marked an important intervention by the state as it assessed the merit of verbal testimony as evidence of the efficacy of modern medicine. Perhaps not surprisingly for a society that privileged public opinion as valid, practical evidence in legal proceedings, viceregal functionaries ended up reaffirming the mode of communication by which residents of the capital most often participated in debates on enlightened medicine, even if some doubted that all residents would participate on equal footing. Everyone's word counted, even if, as in nearly all legal testimony in colonial courts, some words would count extra.

By recognizing both the necessity and the capacity of heads of family to reason about what was best for their children, the government acknowledged that administrators consumed these reports, malicious or otherwise. Inoculation was still new, and many

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<sup>672</sup> AGN Historia 44 exp. 14, Orizaba 11 octubre 1797, Valenzuela to Marqués de Branciforte, 354v-356r, and ibidem, Orizaba 12 octubre 1797, Branciforte to Cosme de Mier, 357r-v. [". . . tan lejos ha estado el superior gobierno de prohibir el que se hable de los enfermos que mueren de viruelas inoculadas, que por el contrario, le importa mucho saber a cuanto asciende el numero fijo de los inoculados, y de los que han muerto de esta operación o sus resultas para formar el cálculo fijo de unos, y otros, y hacer un juicio comparativo entre ellos, y los contagiados de viruelas naturales, para deducir las ventajas, que resultan a favor de los primeros cuando menos en lo pronto o actualidad del contagio." ". . . también ha tenido en consideración que en este asunto puramente permisivo, queda acción libre a todo Padre de familias para poner en practica la inoculación o dejar de hacerla, y como es natural que todo hombre raciocine sobre los fundamentos que tiene para obrar, o dejar de obrar, y no se haya prohibido por el superior gobierno que se hable en favor, o en contra de la inoculación . . ."]

continued to suspect that the procedure could have dangerous consequences, which would be proved or disproved, according to the state, by the intended objects of medicine, specifically parents. Without reading too much into the debate, the lack of any qualifications on this rational capacity of parents seems significant, supporting at least the conclusion that contemporaries were not fully in agreement about the natural fitness of New Spain's residents for making informed assessments about preventive medicine such as inoculation. In the end rumors, as a vehicle for public voice and opinion, were recognized and authorized by the colonial government and would, in part as a result of the deliberations carried out in this moment, continue in the following decades to provide useful information to administrators, at least some of whom were open to hearing in the gossip some kernel of truth that could lead to better governance.

What of the verses discovered in Mexico City's plaza? A suggestive clue comes from Taxco, a mining center in Guerrero roughly seventy miles from the capital. Its subdelegate was a strong convert to the benefits of inoculation and reported in October of 1797 a number of successes: in his own home, he had submitted to the procedure the daughter and son of two maids, aged thirteen and seven, respectively, along with a fifteen-year-old female servant and seven others with the assistance of Taxco's surgeon, using lymph sent by Ayacapistla's priest. Four days later he inoculated by himself a seven-year-old boy with lymph taken from the first patients (using a sharp penknife, he said, apparently to demonstrate the nonchalance with which one could execute the operation and still achieve success). The results were excellent, and the procedures would have continued, he claimed, if not for a certain letter (*carta*) that arrived from a subject from Mexico, which had inspired some fear in parents and caused them to suspend the inoculation of their children. Only after an edict was published that encouraged the population to make use of the procedure once again was the administrator able to attract residents back – he counted a grand total of 120 inoculations, including those originally inoculated and ten children of poor residents in the hospital.<sup>673</sup>

It is a suggestive reference to a literary production in the viceregal capital and its direct influence on the adoption of immunization in the province. This "letter" may or may not have been the *boleros* discovered for sale in the plaza of the capital, but the fact that any writing on inoculation reached the mining center of Taxco serves as a reminder that migratory circuits between regions, cities, and towns were common in the eighteenth century, and that these require correspondingly mobile perspectives to trace the many ways information flowed into and out of cities. Turning to rumors in the countryside, then, it is useful to keep in mind that regions were bound together in reciprocal relationships by people and commerce and that some oral reports were been inspired by the debates and writing produced elsewhere.

### **Dissecting Rumors in the Countryside**

Evaluations of the benefits and dangers of rumor and debate at the upper administrative levels of colonial Mexico suggest that at issue was not so much their falsity, but the possibility of their adoption by gullible, uninformed people, with serious

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<sup>673</sup> AGN Epidemias 3 exp. 10, Taxco 21 octubre 1797, Fernando de Mendoza to Viceroy, 137-138. Perhaps reacting to the suggestion that the administrator had forced his employees to inoculate their children in his home, Valenzuela wanted to make certain that "*entreguen a la operación espontánea, y libremente, sin que se entienda obligárseles de modo alguno . . .*" Ibidem, Orizaba 15 noviembre 1797, 139.

consequences for the practice of immunization among the lower classes. The strenuous preparatory efforts of numerous colonial actors ultimately could not completely ensure against the rejection of the procedure. Careful efforts to present vaccine as a gift of God, for example, examined in detail in the last chapter, would fail if a community determined that God had not, in fact, sent it; a gift denied canceled the obligation to receive. This is precisely what happened in Acayucan, roughly 150 miles south of the port of Veracruz on the Isthmus, where the subdelegate, Manuel Lopez de Sobreviñas, complained in 1817 that many in his district, mainly *pardos*, or people of mixed African, European, and Indian descent, “are stubbornly against this incomparable benefit to humankind, resorting to fleeing to the mountains with their children so that a *mal* [illness, or evil, bad thing] that God does not send them is not put into them. This,” he noted with incredulity, “is the language they use.”<sup>674</sup>

Claims that vaccination could not possibly have been sent by God in effect rejected the eager preparatory efforts of religious and secular authorities, who had sought to represent vaccine as a divine gift. Instead residents placed the medical technique into another, maleficent category and thus flatly denied any obligation to embrace it. The worst about this, in the mind of the subdelegate, was that these *pardos* were sowing discord among the Indians, who were scratching and washing their children in order to impede the progress of the vaccine. And to complicate the picture further, Sobreviñas had simultaneously enjoyed some remarkable successes: the same volume of documents in the archive is full of *estados* or registers he submitted with the results of dozens of vaccination sessions. These took place in several outlying villages in addition to the district seat of Acayucan, including Xoteapa, Mecayapa, Soconusco, and Sayula, with claims that everyone in Moloacan and Ixhuapan (both “small pueblos”) had been vaccinated, as well.

The concerns appearing in the district seat of Acayucan – of physical flight, verbal rejection, and the possibility that the dissatisfaction of some could lead to rejection by all – were not unique and are best explored through other examples, which are documented for villages following the arrival of the vaccinating expedition in New Spain (in the summer of 1804) and the subsequent escalation in distribution efforts. The perspectives accompanying periodic progress reports reveal what kinds of things were being said, what laypeople might have thought about the practice, and the various obstacles faced by administrators and communities in Mexico as vaccine campaigns were periodically revived up until the end of the colonial period.

Responding to a renewed push in 1808 to implement vaccination in central Mexico, the local authority from the district of Mexicaltzingo, in the fertile agricultural region of the Valley of Toluca, wrote to say that as many as were able had been vaccinated (in the district seat as well as in San Mateo Churubusco), but that he had encountered difficulties in several other villages, where Indians were resisting, apparently horrified by the operation. Some fathers and mothers had fled with their children to hide them in the surrounding mountains, having persuaded themselves, mistakenly, the official said, that the lancet or needle used to inject the vaccine was a brand with which the king

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<sup>674</sup> AGN Epidemias 14 exp. 8, Veracruz 12 noviembre 1817, Francisco Hevia to Viceroy, 194r-v. [“. . . están obstinados contra este imponderable beneficio de la humanidad, en términos de huirse a los Montes con las criaturas para que no les introduzcan un mal que Dios no les envía. Este es el lenguaje de que usan . . .”]

would mark them (“*que aquella operación era como una marca del Rey con que se señalaban*”).<sup>675</sup>

The role of the king in this interpretation of immunization contrasts starkly with the understanding in the colonial period of a beloved and seemingly beneficent figurehead who remained exempt from human imperfections as well as the charges of injustice or corruption often raised against bureaucrats and other local administrators. This was not, moreover, the king who appeared in certain messianic rumors reported for Mexico’s insurgency period, when, after perhaps 1810, some expectation became attached to the figure of the dethroned king, Ferdinand VII, who some thought would return triumphantly to reclaim his rightful place (a belief sometimes referred to as “naïve monarchism”).<sup>676</sup> In Mexicalcingo, the king was the would-be owner of human chattel, or cattle, a significance possibly gleaned, among other sources, from peasant familiarity with the branding of animals as an act of ownership and possession. Employed to describe the vaccinating procedure and the intentions of the king, the rumor reveals much about the experience of vaccination and about a colonial situation in which the sovereign could be accused of treating his subjects as if they were slaves. By equating vaccination with human branding – illegitimate, from any point of view – peasants challenged the legitimacy of the procedure and in the process disarmed those who might seek to implement it (an effect that resembled the likely consequences of the *boleros* discovered in Mexico City).

The acts of flight that accompanied rumors were rather common ways of expressing dissatisfaction in the colonial period, not by any means unique to Mexicalcingo. A cluster of reports of fearful Indians fleeing into the mountains came from towns in the valleys around Celaya, a city in the fertile Bajío region that produced many of the comestibles for the mining towns to the north. Once the Balmis expedition deposited vaccine there, Celaya became a distribution center, with populations in the surrounding countryside asked to send physicians with children to tap into the source and transport it *in vivo* back home. An examination of the reports submitted to Guanajuato’s intendant shows that in many cases these efforts went off without a hitch.<sup>677</sup> In a few, however, authorities had no luck persuading uncooperative populations, but rather found their would-be patients making themselves rather scarce. In Salvatierra, twenty miles

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<sup>675</sup> AGN IV 1717 exp. 18, Mexicalcingo 8 julio 1808, Manuel de Ahedo to Intendant Arce, 51r: [*“Aunque en esta cabecera y el Pueblo de San Mateo Churubusco se vacunaron cuantos eran capaces de ello, resistiéndolo los Yndios en los demás, por el horror que le tomaron, hasta ausentarse los Padres y Madres con sus hijos a esconderse en los Cerros, persuadiéndose con equivoco que aquella operación era como una marca del Rey con que se señalaban, procuraré cumplir en lo posible con lo mandado . . .”*]

<sup>676</sup> Eric Van Young, *The Other Rebellion*, Chapter 18. By the time the complaint was recorded, events unfolding in Spain had led to the abdication of Charles IV and his replacement by Ferdinand VII, but news would not have reached the region by then; as far as members of the community knew, it was business as usual in the Spanish Empire, and any critique leveled was a reflection of a pre-existing colonial dynamic.

<sup>677</sup> AGN Epidemias 4 exp. 15, San Juan Bautista de Apaseo (located between Celaya and Querétaro) 23 marzo de 1805, José Rodrigo Valdés to Riaño, 490r-v; and San Luis de la Paz 28 marzo de 1805, José Manuel de Septién y Primo to Riaño, 492r, where the official, the parish priest, and the respectable residents of the town (“*vecindario decente*”) together covered the expense of transporting vaccine from Celaya, about fifty miles to the south. The official estimated that fifty pesos yearly would be needed to support the individual who served as physician in the town for its conservation, an amount, it was proposed, that could be taken from its communal funds and those of San Juan Bautista Xichú de Indios.



from Celaya due south, the royal order on propagation of vaccination had barely arrived, the local administrator reported,

when the parents of families, with the news that residents were being collected in other parts, hid their children by taking them up to the mountains, in their extreme ignorance, without being fully convinced that this was for the purpose of the specified important operations, and efforts to persuade them were in vain because they always presumed they were being sought out for other, diverse fates, while some who came to understand the purpose [of their collection] saw the operations as dangerous and did not adopt them.<sup>678</sup>

In this report, most residents simply did not understand why they were being collected, while those who did questioned the advertised benefits of the procedure.<sup>679</sup> A similar scene appeared in nearby Chamácuaro, where the official reported thirty-three successful operations on children after vaccine arrived from Celaya, about twenty-five miles away. He had paid some of the children from his own pocket (“*de mi faldriquera*”), an approach he said he would have continued with pleasure (“*graciosamente*”) in order to attract the entire village, “but not even then, because the majority absented themselves to the mountains, some saying that their children were child martyrs, and others that it was the intention of the magistrate and surgeon to take illegitimate possession of them: this is what the ignorant said.”<sup>680</sup> Also in Yuriria (or Yuririapúndaro), twenty miles west of Salvatierra, the vaccine brought from Celaya by three children and an expert (*perito*) sent with them to learn the procedure was lost when other children “immediately left with their mothers for the hills and other places” and consequently could not be vaccinated.<sup>681</sup>

In these ways, the appearance of a new medicine backed by the crown made temporary fugitives of at least some Spanish subjects, who preferred to leave for the hills

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<sup>678</sup> AGN Epidemias 4 exp. 15, Salvatierra 23 marzo 1805, Domingo González de Ossio to Intendant Riaño, 489r-v. [“. . . cuando los vecinos Padres de Familia por su nimia ignorancia escondieron sus hijos retirándolos hasta los Cerros, con la noticia de los que se recogían en otras partes, sin acabar de persuadirse que esto fuere para las indicadas importantes operaciones, y en vano fueron los empeños de persuadirlos por que siempre presumieron se les buscaba para otros destinos muy diversos, y algunos que llegaron a entender el fin tuvieron por peligrosas, y no adoptaron dichas operaciones.”] The physician from the town accompanied several children to Celaya to bring back lymph anyway, paid for by a “pious” resident (officials were attempting to ensure that no cost be incurred by the royal treasury or communal funds for this “humanitarian” undertaking), a step that probably reflected wishful thinking or the desire to comply with the order rather than any sincere expectation of success upon their return.

<sup>679</sup> Perhaps residents in this case had some prior experience with inoculation (the older, more dangerous method, which produced greater scarring), although it is extremely difficult to determine for certain whether the practice had been experienced in any of these places, owing to the lack of documentation on earlier efforts and the tendency to use “vaccination” and “inoculation” interchangeably.

<sup>680</sup> AGN Epidemias 4 exp. 15, Chamácuaro 21 marzo 1805, José Ramon de Huerta to Juan Antonio de Riaño, 485r-v. [“. . . pero ni aun así, pues los mas se ausentaron al cerro, diciendo unos que sus hijos eran Mártires antes de tiempo, y otros, que era advitrio [sic] del Juez y Cirujano, para tener de ellos: esto produjeron los ignorantes.”]

<sup>681</sup> AGN Epidemias 4 exp. 15, Yuririapúndaro 29 marzo 1805, Manuel de Urodea y Duque to Riaño, 493r. [“. . . se ausentaron inmediatamente con las Madres a los cerros, y otros lugares . . .”] Children would again be sent for vaccination in Celaya, with expenses (ten pesos) once more to be paid by the official and the population’s merchants and businessmen (“*los vecinos de este comercio*.”)

or to join other populations than to submit their children to the procedure. It was not uncommon, in fact, for those in charge to report two types of reactions among populations, one proper to *gente de razón*, the near-ubiquitous phrase applied to non-Indians in the late colonial period, and the other attributed to those presumably less reasonable in their judgment and reactions. Chamácuaro's official, for example, when he referred to the reaction of *los ignorantes*, also said that most of those *de razón* in the village and in the rest of the jurisdiction were traveling with their children directly to the source in Celaya for the procedure. It is evidence of a commitment to a dominant social dichotomy, but also a reminder of the differential access to the procedure for classes and castes and of the acknowledgment, discussed in the prior chapter, that indigenous agriculturalists could not be made to abandon their fields to travel distances for vaccination in district seats.<sup>682</sup>

These acts of peasant flight happened to be extremely frustrating for administrators, who already had a difficult time making ends meet. Given the volcanic mountain ranges dotting a region such as Celaya, flights away from inhabited settlements were certainly feasible, reminiscent of flight to "zones of refuge" identified for the Yucatán: places of dispersed settlement and rough terrain where villagers could take shelter from forced labor drafts, tributary exactions, ill treatment, and the stresses of Spanish sovereignty, usually more consolidated in the towns than in the hinterlands.<sup>683</sup> Flight in medicine was akin to flight in the face of taxation or burdensome labor drafts: an infrequent occurrence that provided the route to some response from administrators, or to a legal advocate in the city, or simply allowed peasants to wait out a political storm with friends and family in neighboring villages.<sup>684</sup> If not a reaction to tribute or taxation, one is left with the question: *from what* were peasants fleeing in these reports? Is it the case that misunderstanding, ignorance, and an irrational fear were the overriding motives for such escapes, and if not, what was the logic underlying these departures?

Other reports of rumors, when read alongside the objections of men of letters and in consideration of the way vaccine was being presented to New Spain's population, go part of the way toward an explanation. One from Nochixtlán, Oaxaca (about fifty miles to the northwest of the provincial capital of Antequera) arrived during the renewed attempt to vaccinate in the province in 1807, when an inexperienced subdelegate had to seek out the parish priest to learn exactly why vaccine had been lost so that he could report back to his superiors. The priest informed him of Santiago Coda's commission and journey through the region in July 1804, when vaccine had been left in the hands of a surgeon, Pedro Xijón, and a *curandero* named Juan Abendaño. The surgeon was consulted (for whatever reason, the *curandero* was not) and provided the recently arrived subdelegate with the following account of its abandonment:

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<sup>682</sup> For a discussion of these deliberations, see the previous chapter.

<sup>683</sup> Gonzalo Aguirre Beltrán, the Mexican anthropologist, a surgeon by training, developed the notion of "regions of refuge" as ecological backlands providing shelter against oppressive political and economic processes, in *Regiones de refugio: el desarrollo de la comunidad y el proceso dominical en mestizo América* (Mexico: Instituto Indigenista Interamericano, 1967). See also Nancy Farris, *Maya Society under Colonial Rule: The Collective Enterprise of Survival* (Princeton: Princeton University Press, 1984), 72-79.

<sup>684</sup> For migrations as acts of protest and a reminder that flight was not always to sparsely settled areas, see Taylor, *Magistrates of the Sacred*, 374ff.

on various occasions not only in this district seat but in various pueblos of the jurisdiction he had begged some heads of family when going to perform some cures for injuries to bring their children to vaccinate, and these parents, far from doing it, had fled with their little ones to other pueblos, saying that they would not allow witchcraft [*una brujería*] to be done with them, and as a result lymph had run out and the operation ceased.<sup>685</sup>

As reported, residents in Nochixtlán leveled a term frequently used to condemn the activities of their own healers, *brujería* – witchcraft or a kind of black magic – against the surgeon and his vaccine, and it had the desired effect: rendered superstitious, the campaign was left illegitimate by fleeing peasants, who might have recognized the emptiness of claims promising wellness and knew from experience how effective the term could be at refuting the legitimacy of healing practices in colonial settings.

With news in the air of the arrival of a miraculous cure in New Spain – championed by authorities, promoters, and other enthusiasts as the thing that would cure whatever ailed you – it was perhaps inevitable that some would construe vaccine as a kind of modern, state-sponsored witchcraft, as in Nochixtlán. Successes with vaccination were not usually deemed “miracles,” but many involved in the expedition were advertising something along these lines, encouraging the expectation that vaccine protected patients against more than just smallpox. For example, experimentation with smallpox vaccine was prescribed in the regulations issued under Director Balmis for all of the major cities, clearly in the hope that other uses would be uncovered with time.<sup>686</sup> In Valladolid, following the establishment of smallpox vaccine, the surgeon of the Royal Hospital reported that three girls from the Colegio de Niñas Educandas had been vaccinated for intermittent strong fevers, called *fríos* (or *tercianas*, tertiary fever), after they had been bled without success. Another resident, don Josef María Luna, experienced relief after being vaccinated for an eye ailment (“*por enfermedad en los ojos*”), and others showed good results after undergoing vaccination for various unspecified ailments

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<sup>685</sup> AGN IV 5297 exp. 15, Nochistlan 20 junio 1807, Yldefonso Rafael de Rocas to Intendant Izquierdo, 18r-v. [“. . . que en barias ocasiones no solamente en esta cabecera sino en barios Pueblos de la Jurisdicción al tiempo de ir hacer algunas curas de heridos había rogado algunos Padres de Familia le llevasen sus hijos para envacunarlos y estos lejos de hacerlo así habían huido a otros Pueblos con sus criaturas diciendo no consentían hiciesen con ellos una brujería por lo que se había acabado el Pus, y cesado dicha operación.”]

<sup>686</sup> In an era of experimentation with new, profitable and potentially prestigious medicines, it made sense that physicians and agents of the enlightened state were carried away with the possible curative properties of vaccination. For Mexico City’s regulations, where it was reported that vaccine cured numerous maladies, including elephantiasis, gangrene, and yellow fever, see Cook’s published translation into English, “Francisco Xavier Balmis,” Appendix II, 95-99. Other indications of wider applicability appeared also in Acapulco’s *reglamentos*, in which article 14 announced that it was “*innegable, que la preciosa Vacuna no sólo goce de la virtud preservativa contra las Viruelas, sino que posee la facultad de Curar otras muchas enfermedades particularmente las cutáneas . . .*” AGI Indiferente 1558a, Acapulco 5 febrero 1805, “Reglamento para propagar, y perpetuar la presiosa Vacuna en este Puerto de Acapulco,” 982-985v. In Guatemala, physicians were instructed not only to attempt the procedure in other sicknesses “*en que la vacuna está ya indicada como remedio,*” but also to experiment on dogs to see whether it could reduce cases of rabies, AGI Indiferente 1558a, Guatemala 25 enero 1805, “Reglamento para la propagacion y estabilidad de la vacuna en el Reyno de Guatemala,” signed Antonio Gonzalez Saravia, 1258-1275.

(“*por distintas enfermedades*”).<sup>687</sup> Director Balmis himself proclaimed that the vaccination’s protective virtue against smallpox was “the least of its values in view of the miraculous and sudden healings we witness.”<sup>688</sup>

Such excitement about the varied healing properties and powers of vaccine helps put the reaction of Nochixtlán’s communities into context. On the one hand, it would be a mistake to take at face value the surgeon’s straightforward explanation of the reasons for the decline in use of vaccine in Nochixtlán. Physicians and administrators, in Oaxaca as in other provinces, struggled continuously with shortages of funds and personnel, and it may be the case that if the vaccine had been attempted and presented as a primary interest rather than as an afterthought, the outcome would have been different. It is doubtful, in other words, that community members alone can be credited for the loss of vaccine (although this interpretation certainly took the burden off medical practitioners’ shoulders).

On the other hand, the common tendency to gesture toward some widespread, debilitating distrust or ignorance among rural peasants to explain these rumors not only fails to account for the shortcomings in its execution, but also overlooks the fact that many in colonial society, from the most enlightened literate consumers of medicine to the less informed, debated the uses, dangers, and efficacy of the practice. As a critique of preventive medicine, Nochixtlán’s complaint resembled the one Antequera’s regalist bishop, Antonio de Bergosa y Jordán, would voice years later when he wrote the viceroy to say that, after contracting an illness in Oaxaca and Tehuantepec’s brutal heat, he had not found any relief from vaccination on three separate occasions despite the recommendations of Director Balmis. Though he continued to endorse vaccine for use against smallpox, he noted that this personal experience flatly contradicted the claims being made by medical professionals: “if only what the director had set down in writing and perhaps has been published in Spain were true, I would give him thanks for the invention, but this is one more of many medical falsities with which the overly credulous are deceived.”<sup>689</sup> Although the bishop’s critical stance unfolded in a very different

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<sup>687</sup> AGI Indiferente 1558a, Valladolid 16 enero 1805, Felipe Diaz de Ortega to Balmis.

<sup>688</sup> AGI Indiferente 1558a, Acapulco 5 febrero 1805, Balmis to Caballero, 1031-36. [“. . . *son tantos los maravillosos efectos que admiramos continuamente en la Vacuna, que no temo afirmar que la prodigiosa virtud preservativa de las viruelas naturales, es lo menor que goza, en vista de las milagrosas y repentinas curaciones que presenciamos.*”]

<sup>689</sup> Here are the excerpts of Bergosa y Jordán’s full criticism of the claims made by Balmis. “*El establecimiento de la Vacuna es de la mayor atención por ser de los mas grandes y útiles descubrimientos en su clase,*” he began, but continued, “*aunque no sea remedio universal de curarlo todo, como indica el Señor Director general de la Vacuna [Balmis] en su escrito de 7 de Marzo de 1811 en cuyas observaciones Médicas, aunque muy lisonjeras para mi, no puedo desentenderme de su gravísima equivocación en la respectiva a mi persona.*” He went on to describe the sickness he had acquired in the blazing heat of Oaxaca and Tehuantepec, remarking that it had never left him, as Balmis wrote, “*tan imposibilitado por una cruel erupción hermética de pies a cabeza que me tuviese postrado, y privado de mi ministerio; pues nunca omití las principales funciones sagradas de él [ministerio]; nunca estuve postrado; nunca me subió el mal a la cabeza, sino que lo he tenido a los pies; nunca omití la consagración de Oleos, y demás funciones de semana santa en mi Iglesia Catedral de Oaxaca: y aunque es cierto que me vacuné, no una sola vez sino tres en Puebla, México, y Oaxaca por facultativos sabios, como los que se quieren dotar, ningún efecto me causó la Vacuna, como es público y notorio; y ojala fuese cierto lo que asentó el Señor director, y acaso habrá publicado en España, que yo le daría las gracias de la invención; pero con dolor mío puede añadirse esta falsedad a las muchas de la medicina, con que se engaña a los crédulos.*” If

context and medium, the basic message of both utterances was essentially the same: the promises being made about this particular medicine could not realistically be fulfilled.

In their affinity for skepticism and observation, the universes of the literate and illiterate may not have been so apart, and even converged in their wariness of duplicity. Like the experimental trials of Oaxaca's enlightened prelate, peasant rumors just as often began as substantive empirical observations, with the mode of their circulation occasioning accumulations and accretions that ultimately transformed them into a pastiche: a reasonable, if not simply true or false, elaboration playing on the initial observation. A good example of this transformation comes from the port town of Acapulco, where in January 1805 the Balmis expedition arrived for a brief stop before continuing on its journey to the Philippines. The team encountered great difficulty vaccinating because, it was reported, parents were hiding their children, which was apparently the result of the rumor ("*con motivo de haberse divulgado la voz*") that those who appeared for the procedure would be forcibly taken to the Philippines along with the expedition. In this case, the rumor of kidnapping (incidentally, another kind of enslavement) appears inspired by knowledge that the team arrived in the port only after painstakingly collecting twenty-four children from various cities in New Spain to take as human vaccine carriers. Though their caretakers had been paid significant sums of money, in some cases up to 150 pesos (and their children not forcibly taken, as the rumor had it), parents in Acapulco clearly feared the worst.<sup>690</sup> Rather than simply true or false, these reports of compulsory enlistment were more compelling stories about colonial force, duplicity, and vulnerability.

Transformed into creatively embellished reportage, rumors became irreducibly political, like any medium in which interested residents commented on modern medicine at the time. To talk about something as important as public health in this period was to enter an arena in which the stakes were high and the success or failure of a campaign rested on the effect of a few words, gestures, or pieces of news. What consequences would a statement to the effect that a village's children were being martyred, or taken by the magistrate and surgeon without justification, presumably for some illegitimate purpose, have had in such a charged colonial setting? Representations of ignorance in politicized contexts turned on a certain repugnance toward those who held conflicting viewpoints; charges of rumor mongering were even made of educated medical practitioners – undoubtedly *gente de razón*, neither poor nor Indian – whose positions on inoculation were decried as “ignorant” because they happened to go against the prevailing medical current among the medical elite.<sup>691</sup>

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powerless against other sicknesses, the bishop nevertheless continued to have faith in its usefulness against smallpox. (This is good evidence that although the bishop displayed enthusiastic, perhaps mindless adoption in 1804, his support did not necessarily signal the inexorable closing of critical reception of medicine by regalist figures in the church hierarchy.) AGN Historia 530 exp. 4, San Angel 4 noviembre 1815, Antonio Obispo de Antequera to Felix María Calleja.

<sup>690</sup> The episode is reconstructed from AGI Indiferente 1558a, Acapulco 16 febrero 1805, José Barreyro y Quijano to José Antonio Caballero, 978f, and *ibidem*, Acapulco 5 febrero 1805, Balmis to José Antonio Cabalero, 1033v-1034r.

<sup>691</sup> Even among the highest ranks of trained physicians and surgeons, frequent fissures in opinions and positions could cause one to turn on the other for having spoken out against immunization. In Campeche, surgeon Miguel José Monzón arrived in May of 1804 after Veracruz's *ayuntamiento* commissioned him to transport and administer vaccine (just prior to the arrival of Balmis and the Royal Expedition). Monzón

Moreover, representations of peasant utterances and fearful *indios* as ignorant were never disinterested, as I have already suggested. To cite an example, the physician commissioned to vaccinate in Texcoco (Valley of Mexico) following news of an epidemic in the region reported several months later a total of 1,295 vaccinations, mostly children, in the head town, its barrios, and several other pueblos, “notwithstanding the great repugnance with which the parents as well as the children look on the vaccinating operation: they believe that it will cause them great harm, and the continuous experience that nothing happens to the vaccinated does not suffice to dispel this judgment . . .” This document was written and submitted to the president of the sanitation committee in Mexico City for the purpose of requesting a daily stipend for the practitioner’s work (García Jove, the president of the Protomedicato, scribbled his recommendation into the margin: “four pesos daily”). In other words, this perspective on fear and panic arrived through a glass darkly, it being always in the doctor’s interest to draw attention to the great difficulty, resistance, and backwardness he had encountered in the rustic, impassable regions where he had toiled. Here, the physician concluded by saying that, if too few had been vaccinated, “it has not depended on me, but rather on the terrified panic with which the Indians conceive the operation.”<sup>692</sup>

Still, it is significant that it was most often the poor, indigenous inhabitants of Mexico who received the full force of elite commentary in this period. This class was most often described as ignorant and childlike, fleeing to the hills in the face of arriving

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experienced waning interest in the city and its barrios, which he attributed to one Carlos Escofiet, a surgeon who assisted in the search for cowpox vaccine as a member of Mérida’s advisory board. Escofiet was disseminating the opinion (“*la voz que ha esparcido*”) that Monzón’s smallpox vaccine was spurious, perhaps having seen a letter from a jealous Balmis to the effect that the Veracruz lymph was worthless, and even harmful. After learning of this, Mérida’s captain general wrote Escofiet a strongly worded reprimand in which he reminded the surgeon that officials in Veracruz had already examined the lymph and that Escofiet’s assessment would not be necessary, “*y mucho menos el esparcir voces en el Pueblo que retraiga a las gentes de vacunarse, y hagan odiosa una operación tan útil a la humanidad . . .*” Monzón referred to Escofiet as the “*cirujano romancista*,” pointedly using the term for a lower class of surgeon, and approved the rebuke Escofiet had received for his “*seductivas conversaciones anti-vacunales*,” noting that Escofiet had arrived in the province before Edward Jenner’s discovery and could therefore not possibly possess real knowledge (“*conocimiento práctico*”), never having seen vaccine lymph. Meanwhile, in Campeche, he claimed, “*ya los demás Facultativos de esta Plaza, sin excluir los Barberos, tienen sobrados [conocimientos] para administrarlo y propagarlo sin necesidad de otras instrucciones.*” Even a barber, in other words, had more experience in the matter than Escofiet, who by breaking ranks threatened the success of the mission and was quickly put back in his place. AGN Epidemias 4 exp. 10, Merida 29 mayo de 1804, Benito Pérez to Miguel José Monzón, 308r-v; AGN Epidemias 4 exp. 10, Campeche 10 julio de 1804, Miguel José Monzón to Benito Pérez, 311-12.

<sup>692</sup> AGN IV 6172 exp. 16, Texcoco 19 abril 1807, Miguel Antonio de Arteaga to Gonzalez Carvajal, 18-19, and *ibidem*, Texcoco 30 mayo 1807, Lista del numero de individuos que tengo vacunados en esta Ciudad de Tescuco; así mismo en tres de sus Barrios, y cuatro de sus Pueblos, que son los que se me han presentado en cuarenta días que he dedicado para dicha operación, 30-39. During the same epidemic outbreak, 150 individuals were reported vaccinated in nearby Tacuba, against which the 311 in Texcoco compare favorably. (Although Tacuba’s officials said he would send numbers for the rest of the jurisdiction, I have not found them.) AGN IV 3885 exp. 10, Tacuba 5 agosto 1807, Zenea to Gonzalez Carvajal, 35r-v. [“*. . . no obstante la suma repugnancia, con que tanto los padres, como los hijos miran la operación de la vacuna: pues se creen que con ella se les ha de originar un gran mal, sin que baste a desvanecerlos de este juicio la constante experiencia de que a los vacunados nada les sucede . . .*” “*. . . no ha pendido de mí, sino del terror pánico que los indios han concebido la operación.*”]

physicians in such numbers and dramatic fashion that one could conclude that no one in the countryside participated in vaccination if not for the substantial quantitative reports indicating otherwise. Members of San Luis Potosí's city council threw up their hands in a letter to the viceroy after successful preliminary attempts to propagate vaccine: while they had sufficient lymph to transport to the entire province, there were in the city, its barrios, and surrounding villages, they reported, individuals of good sense and learning ("*de juicio, e instrucción*"), and some who timidly submitted to those who ministered to them, but also many lacking intelligence ("*muchísimas de muy escasas luces*"), miserable, suspicious of everything, and scared or intimidated ("*se amilanan*") when presented with any novelty, even of proven benefits.<sup>693</sup> As another representative of the city put it, Indians and the poor were "slow-witted folk" (*gentes torpes*) incapable of grasping vaccination on their own.<sup>694</sup> There was, in general, a conviction that these people needed the practice carefully explained to them and that even such condescension might not ensure success of the endeavor.

If the dominant classes construed the intended objects of imperial medicine as timid, irrational, distrustful, and dim, the other side of the coin was that they also saw in them a need for special protection and a capacity for correction and instruction, which consequently became the responsibility of administrators, priests, and others who could ease the worries of the pueblo. In a way, depictions of mass exodus to the hills contained elements of a self-fulfilling prophecy, confirming as they did the suspicions and stereotypical elite commentaries regarding peasant nature. Yet Indians behaving in stereotypically Indian ways, paradoxically, meant administrators had not taken the appropriate precautions to militate against what was universally perceived as an unfavorable outcome. Flight pointed to some failure or breakdown in an ideal colonial system, and peasants, whether or not they had an intuitive grasp of ideas about their innate capacity (for measured evaluation, enlightened things, or modern medicine) ended up leveraging notions of fragility and irrationality in rather interesting ways in these moments. Rumors, flight, *and their very possibility*, to push this interpretation further, would have shaped the provision of medicine over time, so long as administrators remained attentive to the possibility and eager to avoid it.

Evidence of this attentiveness is found in the expected remedy or remediation, which often drew on the persuasion of an official, the payment of patients, and the intervention of a parish priest, but rarely the use of force. Returning to the peasants of Mexicaltzingo, Valley of Toluca, now twelve years after the local administrator first reported the rumor about branding, with the region in the midst of a renewed push for vaccination after Mexico's archbishop had taken an inspection of the Huasteca and seen firsthand the suffering and disfigurement that continued to plague smallpox victims. Mexicaltzingo's administrator wrote to Mexico's intendant to pledge compliance, but made clear that on other occasions in which the same had been decided in his jurisdiction there had been much resistance, "and principally among the Indians, who utter the falsity that what is administered to their children to liberate them from smallpox is uncertain,

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<sup>693</sup> AGN Epidemias 4 exp. 9 Sala Capitular de San Luis Potosí 21 julio 1804, to Viceroy, 292-3.

<sup>694</sup> For the local official's assessment that the efforts of the intendant were insufficient to attract parents, in the majority "*los pobres, los indios y sujetos de cortas facultades . . . por lo general gentes torpes, incapaces de hacer por sí las inoculaciones . . .*," see AGN Epidemias 4 exp. 9, San Luis Potosí, 285-6.

pronouncing instead that it is an iron, or a brand that marks them so that they are left signaled as slaves.” Years later, another administrator anticipated similar excuses among the Indian population: the salvation of their children by means of the operation was not certain and the needle was an iron that left them branded and enslaved. He added optimistically, however, that he thought it would help if the archbishop learned of this resistance, so that he might communicate it officially to his parish priests, and these, “joining forces with me in their respective parishes, might exhort and require their parishioners to present their children to receive this appealing preservative, removing from their minds the error that they are marked as slaves.”<sup>695</sup> The proposed solution – an intervention by the parish priest, who might persuade his parishioners to cooperate – echoed decades of wisdom on immunization, which sought to put pastors at the front of the battle lines against illusions and tall tales in order to temper a suspicion, fear, and fragility everywhere perceived and remarked.

Though possible that illiterate peasants uttered and heard rumors in a literal sense, a reading along these lines inevitably raises questions of truth, falsity, coherence, and sobriety of belief, things that were perhaps less relevant in colonial rumors about medicine. Such a reading echoes the elite sources that reported them, possibly part of a broader unwillingness to accord peasants the capacity for distanced reflection, analytical thought, and analogical comparison. As a comparative reflection on two apparently different practices with similar implications for power – in other words, as analogy – the act of branding (or martyring, or bewitching) offered a sophisticated way to think through and articulate an experience of losing autonomy, of relinquishing control over one’s body, or one’s children, and of powerlessness vis-à-vis present and absent figures of authority, such as a king. This particular perspective was premised on the similarities between two acts, vaccination and branding, and focused on a feature in common: that the operation left scars on the arms of children in the area where lymph was injected. And the scar, a physical effect perhaps taken for granted today, was a powerful, nontrivial reality for many communities, with significance that drew attention to it and apparently transcended in importance any question of immunization’s effectiveness (against smallpox, to say nothing of many other illnesses for which it was being used). Rumor mongering, perhaps a fairly minor gesture in the provision of medicine, could in this way perform a kind of dissection of the technique in critical situations, laying bare its inner mechanisms for others to see and rendering the practice exposed and at times risible by means of a striking economy of words and images.<sup>696</sup>

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<sup>695</sup> AGN IV 5353 exp. 39, Mexicalcingo 4 mayo 1820, Ramon Maseras y Mazo to Ramón Gutiérrez del Mazo, 1r-v. [“. . . y principalmente en los Yndios profiriendo estos el abuso de que no es seguro el que se les aplica a sus hijos para libertarlos de esta Peste, sino que pronuncian, que es un hierro, o una Marca que les pintan para quedar señalados por esclavos.” “. . . asociados conmigo en sus respectivos curatos exhortan y requieran a sus feligreses que presenten a sus hijos, a que reciban este preservative tan interesante, quitándoles del frente el error en que están de que se marcan para esclavos.”]

<sup>696</sup> The reference to laughter is apropos: as Michel de Certeau, following Freud, noted when writing of what he called tactical ruses, surprises, or tricks, a well-placed rumor “juxtaposes diverse elements in order suddenly to produce a flash shedding a different light on the language of a place and to strike the hearer. Cross-cuts, fragments, cracks and lucky hits in the framework of a system, consumers’ ways of operating are the practical equivalents of wit.” de Certeau was familiar with the sociolinguists whose “ethnographies of speaking” had pushed speech situations into the forefront of their analyses, and by the end of his career



Acknowledgment of this capacity for analogy, the foundation of creativity and theory, makes of peasants co-theorists, their readings of preventive medicine no less valid than that of historians, their comments freed from normative benchmarks of reality or rationality imported from another place. Attentive to the political consequences of rumors in clinical settings, and allowing that peasants may not have been communicating beliefs held literally, one could say as well that rumors may have had a purpose and effect comparable to what Paul Ricoeur attributed to narration: a quest for expression, particularly among the ignored, who through storytelling communicate an experience, engage an audience, and indicate pain and suffering to a listener who would take up the appropriate response.<sup>697</sup> While complications were rare, when they happened they could be painful and frightful.<sup>698</sup> Rumors and flight to the mountains achieved the equivalent of holding up an arm as if to say, this hurts, or is uncertain, or unjust, with the expectation that the perceived lack of care would be remedied.

If correct, then rumors not only performed a great deal of interpretive work in colonial Mexico, but also shaped the outcomes of medical campaigns and epidemics. Elite documents constantly chatter on about the credulity, ignorance, and rusticity of the public, but they also consider various precautions that they hope will ease these anticipated obstacles. In the port town of Acapulco, after parents clamored that their children would be kidnapped and whisked away with the expedition to the Philippines, the governor went carefully from house to house to persuade families that the belief was unfounded. According to Director Balmis, the strategy worked: he was able to report a number of successes, including 337 “*criaturas*” who were brought “cheerfully” (“*con suma alegría y regocijo*”) by their parents to be vaccinated in the governor’s home.<sup>699</sup> By

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admired the economy with which linguistic “tactics” produced their effect in such situations. See *The Practice of Everyday Life*, trans. Steven Rendall (Berkeley: University of California Press, 1984), 37-8.

<sup>697</sup> Paul Ricoeur, *Time and Narrative*, vol. 1, trans. Kathleen McLaughlin and David Pellauer (Chicago: The University of Chicago Press, 1984), 75.

<sup>698</sup> In Miahuatlán, the subdelegate reported only a single complication among 6,753 vaccinations. It happened in Santa María Osolotepec, where a boy of sixteen, Juan Pérez, had become impatient on the fifth day of the procedure and left home for his ranch, getting rained on and soaked on the way and falling ill three days later. The boy’s father sought the phlebotomist in a panic, “saying *maestro*, now my son is dying because many pustules have erupted along with those that you gave him” [“*diciendo Maestro ya mi hijo se muere por que le han salido muchas viruelas con las que le hechastes*”]. The boy was brought immediately to Tapexco for observation by the phlebotomist, who noted that the eruptions on the skin had formed blisters that looked as if he had been burned. He recovered several days later, but not before he had been bled three times in his arm, and once on the instep of his foot. The confidence displayed by the authorities is telling: though the father denied that Juan had ever been drenched, the subdelegate and phlebotomist continued to insist that the “*mojada*” was the cause of such a horrendous eruption. See AGN IV 5297 exp. 17, Miahuatlan 15 septiembre 1810, Relación to Intendant, signed Manuel María de Ortega, 8v-9r.

<sup>699</sup> It was a triumph even more significant, Balmis thought, considering that besides the governor and hospital physician Acapulco lacked *ayuntamiento* members, a parish priest, or other subjects who ordinarily helped calm [“*despreocupar*”] the pueblo. See note 30 above.

The *reglamento* for the propagation of vaccine that Balmis composed for Acapulco following this episode contains the following comments, which appear to reflect his personal perceptions of the town and his awareness of its exceptional social and institutional characteristics relative to the rest of New Spain: “*como en esta Ciudad, no se puede contar, con los auxilios que se proporcionan en los demás del Reyno, por que no hay Ayuntamientos, Cabildos, ni otras autoridades públicas, ni tampoco fondos públicos de ninguna clase, ni vecinos ilustrados, por que toda la Población de esta Ciudad, y su distrito se compone de*

throwing new light on a situation, rumors caught the attention of the provider, attuning him to the fear and rejection the procedure could elicit. To the extent that they resulted in careful persuasive efforts such as this, it seems they were among many colonial practices that had the effect of producing a more palatable modern medicine.

### **Conclusion: What the Pueblo Knows**

Through ups and downs, repeated losses of vaccine lymph, battles for independence, and three major vaccinating campaigns (which usually coincided with impending epidemics, as in 1813-14), reports on the practice in the waning years of the colonial period show that vaccination was alive and well in several cities and regions, although even the major provincial capitals were struggling to keep it going.<sup>700</sup> Requests

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*gentes de color, y un corto número de Españoles sumergidos en la pobreza, se hace preciso, se varíe el sistema propuesto en los demás Países, por que no podemos contar, con más auxilios, que los que proporciona, la franqueza de este digno Gobernador de la Plaza el Señor Don José Barreyro, que generosamente ofrece costear los gastos, que puedan ocasionarse, y con la actividad, y celo de este R. Cura, y del Ylustrado Profesor Don Juan Molina, por ser el único, que se halla en todo el distrito de este Gobierno.”* Molina, physician of the port’s Royal Hospital, had Acapulco’s *sangrador* attend all vaccinations so that he could duplicate the method in the pueblos surrounding Acapulco, which suggests the continuity with procedures followed in other regions of New Spain. AGI Indiferente 1558a, Acapulco 5 febrero 1805, “Reglamento para propagar, y perpetuar la preciosa Vacuna en este Puerto de Acapulco,” article 6, Francisco Xavier de Balmis to Governor Jose Barreyro, 982-985v; and *ibidem*, Acapulco 18 marzo 1805, Juan Molina to Governor Barreyro, 991r-v.

<sup>700</sup> In Valladolid, vaccine was lost in November 1817; three years later, the intendant had requested and received lymph from Mexico City and was vaccinating successfully again in December 1820, ordering that two child carriers be sent from all of the surrounding jurisdictions for propagation. AGN IV 4583, exp. 10, Valladolid 4 febrero 1818, Manuel Merino to Viceroy Apodaca, 1-2; 4984 exp. 40, Valladolid 19 diciembre 1820, Manuel Merino to Viceroy Conde del Venadito, 1r-v; 4848 exp. 21, Valladolid 15 noviembre 1820, Manuel Merino to Viceroy, 108r.

In Guanajuato, intendant Fernando Pérez de Marañón reported weekly vaccinations from June 1815 (following the smallpox epidemic) until November 1816, when the vaccine failed to take in some of the patients and it was lost. He was writing to Viceroy Apodaca to request a fresh supply from the *ayuntamiento* of Mexico City in February 1817, and in June of 1820 reported that vaccinations were taking place in the capital, Yrapuato, and Silao. AGN Epidemias 14 exp. 4, Guanajuato 8 febrero 1817, Fernando Pérez Marañón to Ruiz de Apodaca, 103r-v; AGN IV 4848 exp. 21, Guanajuato 4 junio 1820, Fernando Pérez de Marañón to Viceroy Venadito, 54r-v.

In Oaxaca’s capital, 666 vaccinations were reported in 1818, 417 in 1819, and 813 in 1820 (including 68 children in the barrios of Jalatlalco and 45 in Xochimilco). When, in June of 1819, the group of children previously vaccinated appeared with their pustules scabbed over, “*pues unos se habían rasgado la postilla, al tiempo de romper, y otros por su indigencia, se roscaron los brazos con las esteras en que duermen,*” vaccinations stopped for three months until fresh lymph could be acquired from Puebla. AGN IV 4583 exp. 13, Oaxaca 2 enero 1819, Estado signed by Juan Figueroa, 5-17v; *ibidem*, 4848 exp. 21, Oaxaca 27 febrero 1820, Lista de los vacunados en el año de 1819, signed Juan Figueroa (passed to viceroy by Oaxaca’s intendant), 42-49; *ibidem*, 5297 exp. 12, Oaxaca 18 septiembre 1820, signed Juan Figueroa, 18-23; *ibidem*, Oaxaca 9 febrero 1821, 79-84.

Puebla had such great success maintaining smallpox vaccine – 795 children vaccinated in 1816, 864 in 1818, 1,028 in 1819 and another 1,799 in 1820 – that it became a reservoir for surrounding regions, sending lymph not only to Mexico City and to Oaxaca in 1820, but also Amozoc, Tepeaca, Tehuacán, Córdoba, Orizaba, Jalapa, Atlixco, and Cholula. An *estado* from Puebla for October 1810 – April 1811 lists the professions of the parents of the children and thus provides some sense of their social background: bakers, tailors, construction workers (*albañiles*), a few servants, and many weavers, not surprisingly, were

for “*unos vidrios de pus*” (some vials of lymph) came from everywhere in this period, often fulfilled by officials in Puebla, Mexico City (where the intendant remitted lymph from the periodic vaccinations in the municipal building),<sup>701</sup> Zacatecas (where lymph was sent to San Luis Potosí, Fresnillo, and Aguascalientes), and Toluca, among other places.<sup>702</sup> Administrators were clearly serious about its continued use, and some regions so reliable in their care of vaccine lymph that offers of replenishment were unnecessary. Mérida was one such place: its intendant reported at the end of 1820 a continuous supply of viable lymph for the province and rejected the offer to send a new dosage.<sup>703</sup>

Yet successes such as these, and the sheer numbers of operations reported in the registers, obscure a great deal of uncertainty, inconsistency, and creativity in the ways people received the prophylactic across New Spain. Far too little, for example, is known

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listed. AGN Epidemias 14 exp. 9, Puebla 31 diciembre 1816, Estado en que se muestra el número de niños, y niñas, que se han vacunado . . . , signed José María de Torres and Mariano Anzures; AGN IV 6164 exp. 28, Cuaderno compuesto de 21 fojas útiles y que comprehende 18 listas de los Niños vacunados . . . ; ibidem, 5297 exp. 10, Puebla 31 diciembre 1818, Estado que demuestra el numero de niños, y niñas, que se han vacunado en esta ciudad este año de 1818, por el D.D. Mariano Anzures . . . , signed Anzures and Torres; ibidem, 5297 exp. 12, Puebla 31 diciembre 1819, Estado que manifiesta los niños y niñas que se han bacunado en todo este año de 1819, signed Anzures; ibidem, 5297 exp. 13, Puebla 12 enero 1821, Estado manifiestativo del numero de niños de ambos sexos que han recibido el fluido vacuno . . .

<sup>701</sup> Officials had to proceed cautiously and at a measured pace if the capital was to serve as a reservoir of vaccine for the rest of the viceroyalty. At times, contemporaries themselves expressed some confusion about this deliberate method of operation: when Viceroy Apodaca observed of the reports submitted by the city’s corregidor, “[s]on pocos estos niños para una población tan grande,” the crown attorney explained that everyone could not be vaccinated if children were to remain for future vaccinations; informed of the reason, Viceroy Apodaca then wrote the *corregidor* to clarify that his remark was not meant to suggest he should do otherwise. AGN Epidemias 14 exp. 3, Mexico 16 enero 1817, Fiscal to Viceroy, and ibidem, Mexico 29 enero 1817, Viceroy to Corregidor.

Documentation of Mexico City’s periodic vaccinations, which took place every eight or nine days, is scattered throughout the following boxes in the Indiferente Virreinal *ramo* of Mexico’s national archive: for **1818**: 4848 exp. 19, 5297 exp. 11, 4848 exp. 21, 4984 exp. 42; for **1819**: 4583 exp. 5, 4984 exp. 39, 4848 exp. 20, 4848 exp. 21, 4394 exp. 6; for **1820**: 4848 exp. 21, 4376 exp. 62, 5297 exp. 12, 4376 exp. 62, 4973 exp. 24; for **1821**: 4973 exp. 24, 5297 exp. 13 (records end with 37 vaccinations on August 8, 1821). For earlier periods, see for **1811**: 5297 exp. 18, 6408 exp. 6; for **1812**: 6408 exp. 6; for **1813**: 4833 exp. 9; for **1814**: 4833 exp. 8, 4848 exp. 14. The registers submitted from October **1816** to December **1817** are bound in AGN Epidemias vol. 14.

<sup>702</sup> AGN IV 4984 exp. 41, Mexico 18 octubre 1820, Manuel de la Concha to Viceroy Conde del Venadito (to propagate *fluido vacuno* in region under his care); ibidem, 4376 exp. 61, Acapulco 16 febrero 1821, Junta Municipal de Sanidad to Viceroy Venadito, 2-3. After several failed attempts to bring vaccine to Acapulco *in vitro*, the appearance of a child with smallpox in the port on February 12, 1821 spurred an impecunious municipal sanitation committee to action, writing the viceroy to propose chain vaccinations from the capital to the port and that the *ayuntamientos* of each town along the way pay the costs of transport. “*Casi todos los Pueblos del tránsito, hasta esta Capital carecen de dicho especial preservativo contra la enfermedad más destructora, y no dudando que esta representación, tan importante como necesaria, merezca toda la consideración de esa Junta superior, suplicamos a V.E. tenga la bondad de mandar, que sin pérdida de tiempo el pueblo más inmediato a esa Capital remita dos o tres niños a recibir la vacuna en sus casas consistoriales, ordenando que sucesivamente de unos jóvenes a otros de cada uno de los principales lugares del camino se ha de transmitir hasta esta Ciudad, de aquí a sus costas laterales, y de este modo quedará sencillamente establecida con la debida exactitud a muy poco costo.*”

<sup>703</sup> AGN IV 4848 exp. 21, Mérida 10 octubre 1820, Pedro Boho to Superintendente de la Hacienda Publica, 116r.

about other kinds of uses and illnesses to which vaccine was applied, uses that often transcended the original intentions of scientists and physicians. When several small children appeared with smallpox in Cuautitlán in 1818, the subdelegate implemented a general vaccination in his jurisdiction, performing nearly 200 operations with a physician's help. Afterward he expressed amazement at the vaccine's good effects, "having experienced that this antidote is not only a preservative against smallpox infection, but also that it extends to the extermination of chronic ulcers and sores, given that many children who suffered from this ailment have recuperated completely . . ."704 The phlebotomist in charge of vaccinations in Zacatecas made several annotations of quasi-miraculous healings, observing that on December 11, 1819 a three-year-old boy named Euntaquio Martínez appeared for vaccination. Never having spoken before, his parents thought he was mute. When he uttered a complex sentence, they attributed his recover to vaccine (with good reason, the phlebotomist thought). Months later, a father brought his nineteen-month-old toddler, Luisa Velasco, to the same practitioner for vaccination. According to the register, she appeared with a skin ailment suffered since birth. With the procedure, her condition improved, and the father similarly credited the vaccine with her recovery.<sup>705</sup> Even a cursory consideration of the variety of uses of the procedure demonstrates a good deal of faith in its powers for ailments beyond smallpox.

How does one categorize this faith in vaccine's curative properties? Was it primarily the purview of the literate elite or the illiterate masses? The foregoing analysis of rumors suggests that both men of learning and illiterate parents engaged in a process of critical reception and creative adaptation of preventive medicine: like accounts of faith in miraculous healings, skeptical rumors often circulated between classes, media, and continents in the early modern period, encouraged by a climate of experimentation and uncertainty that transcended any single class or group. Vicente Ferrer, the Spanish philosopher and member of the Royal Cabinet of Natural History, provides a good example of this phenomenon at the elite level. As a vocal opponent of inoculation in the 1780s, he supported his views by referring to the significant threat of contagion posed by inoculation and repeated a report he had seen in the pages of the *Gaceta de Madrid* as evidence. According to the report, black slave deserters fleeing plantations in the wars of American Independence had been caught and inoculated by the English and sent into the

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<sup>704</sup> AGN IV 5297 exp. 10, Quautitlan 18 abril 1818, José María Marin to Intendente Corregidor Ramón Gutiérrez del Mazo, 78-9r; Mexico 18 abril 1818, Ramon Gutierrez del Mazo to Juan Ruiz de Apodaca; Mexico 7 julio 1818, Ramón Gutiérrez del Mazo to Juan Ruiz de Apodaca (quoting subdelegate's letter to him), 97r-v. It is possible that the public was eagerly consuming this news in a variety of places: at least twice, Cuautitlán's subdelegate sought the announcement of this news in "periódicos" or "gazetas," so that, as he put it, the news could serve "*de emulación a otras jurisdicciones . . .*" Whatever the case, it continued to occur to officials to experiment with this "antidote." (All the items in this dossier were in fact sent to the *Gazeta de México*.) ["*. . . habiéndose experimentado que este antídoto no sólo es preservativo del contagio de las viruelas, sino que se extiende al exterminio de úlceras y llagas crónicas, respecto a que muchas criaturas que adolecían de este mal, se han recuperado en el todo . . .*"]

<sup>705</sup> AGN IV 4376 exp. 63, Zacatecas 1 enero 1820, "Estado mensual de los individuos que se han vacunado en esta Capital de Zacatecas," signed Pedro Martinez (flebotomiano) and Manuel de Abréu, 11r (under "Observations"); and Zacatecas 1 agosto 1820, "Estado . . ." signed Martinez and Abréu, 35r. ["*. . . y pensaban sus padres, Rito, y Paula, que era mudo.*" "*. . . confesando, y con fundamento que debían este incomparable beneficio a la vacuna.*"]

American army to infect it: “but the vigilance of the French commander,” Ferrer wrote, referring to Lafayette, “rendered these barbarous ruses useless.”<sup>706</sup>

Stories reporting immunization’s underhanded appropriation as a weapon of biological warfare are not unfamiliar today. They are a good reminder of the global and historical scope of the debate at the time, which took place in a multitude of media, and at once in the most rarefied intellectual circles of Europe and in the agricultural countryside of New Spain. Rumors of warfare, enslavement, and miraculous cures were not simply stories one told oneself, but stories people told one another that went some way toward coping with and making sense of suffering, power, faith, and skepticism. The characteristics of communication in colonial Mexico must be investigated further in order to understand why rumors had such powerful effects within certain clinical settings. It has been argued that self-identified enlightened actors at the upper echelons of society – natural scientists, military men, royal authorities, and regalist prelates – were acutely aware of negative assessments of Spanish imperialism in this period and determined to correct them whenever possible.<sup>707</sup> This helps explain not the progressive approach to pacification and conversion in the new “conquests” carried out along the Spanish frontier in the eighteenth century and the special considerations taken in the introduction of immunization, including the official decision, at the end of the eighteenth century, to allow the crown’s subjects to debate and decide whether or not to adopt the practice for their children.<sup>708</sup> But a focus on decision-making and agency at the upper levels leaves out the contexts of provision, where patients’ words were powerful precisely because they could render the efforts of the vaccinator useless. Within these settings, medical providers had little choice but to acknowledge commentary, which held significant force for civil and religious authorities doing their best to cope with the prospect of an epidemic outbreak. Put otherwise, soft imperialism might have been a consequence of the

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<sup>706</sup> This rumor appeared in an ongoing, politically charged, transcontinental polemic that drew on many secondhand nuggets in support of one position or another. Pilar León Sanz and Dolores Baretino Coloma write that, in Spain as in England and France, few who sought to weigh the benefits against the risks were able to remain objective, frequently drawing on public knowledge, as periodically manifest in a rumor, without much interest in whether factual basis could be verified. As they write, “*tanto los defensores, como los detractores de la inoculación se dejaban convencer fácilmente por los rumores que corrían entre el pueblo, sin preocuparse de confirmar los hechos, empleándolos para contradecir y refutar a sus contrarios.*” Sanz and Coloma, *Vicente Ferrer Gorraiz Beaumont y Montesa (1718-1792), un polemista navarro de la Ilustración* (Pamplona: Fondo de Publicaciones del Gobierno de Navarra, 2007), 245, and 244 for Ferrer citation. [“. . . mas la vigilancia del comandante francés hizo inútiles estos bárbaros ardidés.”] For a discussion of reports in the American colonies that the British were in fact waging biological warfare, see Elizabeth A. Fenn, *Pox Americana: The Great Smalpox Epidemic of 175-82* (New York: Hill and Wang, 2001), 88-92.

<sup>707</sup> David Weber, *Bárbaros: Spaniards and Their Savages in the Age of Enlightenment* (New Haven: Yale University Press, 2005), 47-50. “For Spaniards of the late eighteenth century, humane treatment of their savages would also demonstrate to foreigners that Spain had moved beyond the cruelties of the sixteenth century that had blackened its reputation . . . Acutely aware of Spain’s reputation, [Alejandro] Malaspina and his principal officers took pains to avoid offending Indians and to portray themselves in a different light than their sixteenth-century predecessors.” Weber is quick to note the limited sphere of this mentality, following Stanley Payne’s estimate that around five percent of the population were affected by such enlightened ideas, perhaps “a few hundred thousand people.”

<sup>708</sup> See Weber, *Bárbaros*, 99-102, for this trend in the “Age of Reason.”

crown's more humane and enlightened worldview, but it was also a policy born of necessity.

If not rife with violent backlash and riots against vaccinators, Mexico in the final years of the colonial period nevertheless experienced a good deal of viable political action in the form of flight, or in the signaling of discomfort or dissatisfaction through the familiar idiom of rumor, which reflected and shaped public opinion. As the epistemological ground shifted beneath the feet of intellectuals and enlightened policymakers, many nevertheless continued to valorize and look to what the pueblo knew about medicine, which confirmed or threw into doubt the efficacy of a recently introduced procedure. This valorization of lay knowledge was apparent in the “rediscoveries” of indigenous *materia medica* in this period and in gathering local remedies against contagion for publication in periodicals of Mexico City.<sup>709</sup> To the extent this appreciation extended to the realm of speech as well, it seems more accurate to speak of a plural epistemology as a correction to depictions of a triumphalist scientific empiricism in Mexico. Such a perspective would have the benefit of putting modern medicine in its place and reveal it for what it was: a flexible ideology, uncoordinated in practice and mediated on numerous levels, a knowledge in the face of which even indigenous peasants and the poor could rebuff expectations and capitalize on their subordinate status to shape a health program more in line with their needs.

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<sup>709</sup> On the debates about the efficacy and uses of lizard meat, see Miruna Achim, *Lagartijas medicinales*, especially 73-119, and the discussions of scientific practice in Chapter Two.

## CHAPTER EIGHT

### **Medicine's Malcontents: From Enlightenment Expertise to the Pueblo's Pharmacy**

“Those who would abhor a medication prescribed by a learned physician consume the most absurd and unwise concoctions by order and hand of their godmothers, no matter the cost.”<sup>710</sup>

-José Ignacio Bartolache, *Mercurio volante*, 1772

“. . . we are entirely convinced that among the infinite numbers of remedies that have been invented in the Art of Healing . . . none is more efficacious, certain, simple or better administered than the one we propose; and we have the pleasure of assuring you that it has been exceedingly rare for one suffering from this seasonal illness to be treated by this method and not obtain his complete recovery.”<sup>711</sup>

-Committee of physicians and surgeons called to consult on black vomit in the port of Veracruz, proposing a mild laxative of tamarind, manna ash, and cream of tartar, 1795

By the end of the eighteenth century, New Spain's medical profession was acquiring a confidence in its practice that was out of proportion to the efficacy of its remedies. From his position in Mexico City, where he wrote about medicine more often than he practiced it, the physician José Ignacio Bartolache took a fairly low view of the medical practices of his patients and the prescribing habits of some of his peers, finding the enthusiasm for “absurd concoctions” to be a remnant of a bygone era. Like other ideals of the enlightened era, the non-interventionist stance of elite members of the profession would break down as many found themselves dispatched to the countryside to heal in epidemics, where they encountered enthusiasm for popular therapies that included bloodletting, sweat bathing, and the ingestion of some form of intoxicating beverage. In truth, these professionals were a diverse group that varied in ideas about the most efficient and appropriate course of action. Many were willing to adjust to the expectations

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<sup>710</sup> *Mercurio volante* no. 6 (November 25, 1772), in Moreno, 64. [“*Las personas que repugnarían un medicamento prescrito por un médico docto toman los brebajes más absurdos y desatinados como sea de orden y mano de sus comadres.*”]

<sup>711</sup> AGN IV 4300 exp. 5, Veracruz 2 octubre 1795, “En consecuencia de las juntas celebradas de orden de V.S. y a su presencia, entre los Médicos Cirujanos de la Armada, existentes en este Puerto, y los Profesores de Medicina, y Cirugía de esta Ciudad . . .,” 12r. [“. . . *estamos enteramente convencidos de que entre el infinito número de remedios que se han inventado en el Arte de Curar . . . ningunos son más eficaces, más seguros, más sencillos, ni más bien administrados, que los propuestos; y tenemos la satisfacción de asegurar a V.S. que ha sido sumamente raro el enfermo de esta Estación, curado por este método, que no haya logrado su entero restablecimiento.*”]

of their patients, whose remedies and concoctions were consistent and still compelling in their underlying bodily principles. In such moments of compromise, the mechanisms of lay healing were not so different from those that informed trained medicine.

The picture of a professional war on popular healing continues to prove attractive to historians of colonial Mexico, but it has recently been challenged. As anthropologist Laura Lewis argues in a study of seventeenth-century prosecutions of witchcraft, the efficacy of subversive, “magical” healing arts in colonial Mexico often emerged from the interweaving of socially diverse actors in the sanctioned and unsanctioned realms. Indians, Africans, mulattos, *mestizos*, creoles, peninsular Spaniards, men, and women worked closely in a variety of ritual settings in which the power these of rites came through a connection to and awareness of official institutions and “certified” Spanish authority – inquisitorial, religious, medical, and professional.<sup>712</sup> As argued in previous chapters, physicians who arrived in villages had to exercise extreme caution, availing themselves of an administrator familiar with the community if he could and often leaving vaccine in the hands of popular healers or parents. In epidemics as well, the physician who arrived in a rural village late in the colonial period was hardly in a position to command would-be patients unilaterally, instead finding himself subject to a universe of expectations and values to which he would have to hold himself or risk non-cooperation. Local mediators in these situations were crucial in facilitating relations.

By examining the nature of the relationship between community members and outsiders in disease emergencies, this chapter provides a closer look at how enlightened ideals were implemented and adapted to the realities of practice, where patient and practitioner often participated together. Outbreaks in the countryside increased the frequency of these interactions, and if it was the case that physicians encountered straightforward conservative reaction, we would want to know why. How were the medications and methods they brought at odds with the healing practices through which villagers defined and managed disease, if that was the case? Was it possible for sick villagers both to turn to their kin, and also to consider what it was the physician had to offer? The assumption of incommensurability written into the history of medicine requires further consideration from the perspective of the clinical settings themselves.

Specifically, two epidemic outbreaks in rural Mexico, of typhus in 1773 in the village of Santa Marta (jurisdiction Mexicaltzingo) and of ambiguous “putrid fevers” in several communities on the northern outskirts of Mexico City in 1806, are examined in detail as snapshots of these interventions in different moments of relief. Documents produced during disease emergencies provide another vantage onto ideas and habits in healing, as relief was carried out at the nexus of the community, secular and religious administrators, and the medical practitioners called to intervene. Healing during epidemics happened in the open, in makeshift and established hospitals, in *chozas* or crude huts, in sweat baths called *temascales*, and at shrines. By tracing doctors, surgeons, bleeders, nurses, curanderos, clergymen and others into barrios, villages, and homes, we approach, if only obliquely, the therapies of lay people and their ideas and ideals of healing – how people treated others and how they thought people *ought* to treat one another, imperatives often imbedded in rituals we would categorize as religious or

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<sup>712</sup> Laura Lewis, *Hall of Mirrors: Power, Witchcraft, and Caste in Colonial Mexico* (Durham: Duke University Press, 2003).



medical but were often both. Consideration of these moments, which engaged the efforts of entire communities, opens an interpretive window onto colonial power relations, urban and rural interactions, political action at the parish and village levels, and relations between literate and illiterate, in ways that Inquisition trials, often clandestine affairs carried out among a few people, can obscure.<sup>713</sup>

If not necessarily abusing their power, one suspects that in colonial Mexico, physicians were at once trading on their technical expertise in healing and acting and speaking as members of a social class in the interest of broader reform. As discussed in Chapter Two, it was expected that learned men would volunteer to take social matters such as health into consideration. Scientists were savants and dilettantes, eager to communicate whatever they felt would redound to the benefit of society, and this made them experts, like some parish priests, in almost anything. Michel de Certeau argues that the expert's privileged *social position*, and not training per se, allows the translation of authority, in this case, from the medical expertise and training that justified the physician's dispatch to rural villages to the communities themselves. Confusion between the power bequeathed by social position and the learning, skills, and training acquired in the laboratory, hospital, or university is typical of the expert: "when he continues to believe, or make others believe, that he is acting as a scientist, he confuses social *place* with technical *discourse*."<sup>714</sup> Rather than fault scientists and administrators for their broad applications of expertise in the medical, social, or doctrinal realms, a different question can be asked, namely, how others used their own expertise in healing – informal, implicit, but consistent – to submit trained physicians and professional

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<sup>713</sup> I mean to follow the lead of scholars who have sought out the perspective and participation of the patient in their histories and ethnographies of medicine. As Roy Porter noted when promoting a shift in view, "Whatever may be true within the 'professional dominance' of today's medical empire, it is not clear that, two or three centuries ago, in that age of weak professionalization before 'the clinic', patients automatically marched to the drum of the medicine man. It goes without saying that the "people's histories" of healing that should follow these calls are less easily achieved, particularly in colonial Mexico, where Inquisition documents, rather than diaries and journals, have of necessity been the evidentiary base of choice. See Roy Porter, "Introduction" to *Patients and Practitioners: Lay Perceptions of Medicine in Pre-Industrial Society*, ed. Roy Porter (Cambridge: Cambridge University Press, 1985), 1-22 (quotation on 3); for Inquisition sources as windows onto popular healing, e.g. Noemí Quezada, *Enfermedad y maleficio: El curandero en el México colonial* (Mexico: UNAM, 1989), and for an example of the kinds of "narrations of illness" literate sources have provided for pre-industrial England, see Roy Porter and Dorothy Porter, *In Sickness and in Health: The British Experience, 1650-1850* (London: Fourth Estate, 1988).

<sup>714</sup> Michel de Certeau, *The Practice of Everyday Life*, 8: "Because he has successfully submitted himself to this initiatory practice, [the expert] can, on questions foreign to his technical competence but not to the power he has acquired through it, pronounce with authority a discourse which is no longer a function of knowledge, but rather a function of the socio-economic order. He speaks as an ordinary man, who can receive authority in exchange for knowledge just as one receives a paycheck in exchange for work. . . . A few individuals, after having long considered themselves experts speaking a scientific language, have finally awoken from their slumbers and suddenly realized that for the last few moments they have been walking on air, like Felix the Cat in the old cartoons, far from the scientific ground." One could extend de Certeau's application of Wittgenstein's studies of language to argue that in fact no initial independent field of technical competence, in which specialized knowledge could be cultivated, and from which it could be objectively (or abusively) applied, ever actually exists. From the beginning, early modern medicine, with its new language of numbers and quantification and tools of observation – microscopes, thermometers, barometers, and dissections – was highly dependent on its place of practice, and as a result pronounced with ease on matters of social reform, morality, propriety, and civilization. See Chapter Two.

bureaucrats to a gamut of criteria before granting them the authority they sought in rural Mexico.

Two caveats are in order regarding the sources used in this chapter. First, in all cases they deal with communities in the vicinity of Mexico City, lying in the farthest case thirty miles distant, a half-day ride by carriage. While these interactions were not exclusive to the hinterland of Mexico City – further digging in archives will determine to what extent they occurred in the regions around Puebla, Veracruz, Antequera, or Valladolid – most rural villages in New Spain would not have been subject to university-trained and Protomedicato-certified members of the medical faculty. Nevertheless, the sources offer two valuable insights. First, the documents were only recently catalogued in Mexico's national archive, and in that sense the perspectives they offer on the communities are novel. More important, they suggest how residents of cities took account of the countryside and, in many cases, adjusted or moderated idealistic claims and aims in view of what was possible in rural villages. If not typical or representative of the experience of rural Mexico in epidemics, the villages surrounding Mexico City are exceptional if not unique instances of urban and rural, as well as literate and illiterate and professional and lay, converging on shared problems and coming to mutually beneficial solutions in the interest of public health.

### **Cold Foods and Feverish States: Mexicalzingo, 1773**

While traveling to collect tribute early in October, 1773, the corregidor of Mexicalzingo, to the southwest of Mexico City in the agricultural regions surrounding Toluca, fortuitously stumbled upon an outbreak of matlazahuatl in the village of Santa Marta. The official, José Manuel Vayeto, estimated six deaths daily and immediately requested a minister who could dispense “spiritual medications,” explaining that the disaster had not been discovered sooner because the village lacked a pastor. The interim priest of Ixtapalapa (the doctrina to which they belonged) could not attend to them because Santa Marta was too distant, and he did not in any case speak Nahuatl (*el idioma Mexicano*), the native tongue of most residents.<sup>715</sup> Five days later, the second physician of Mexico City's Royal Indian Hospital, Manuel Gómez, arrived in the village with one of the institution's barber-surgeons in tow, and for the next two weeks worked alongside Miguel Dávila Galindo, *vicario* “de idioma” (fluent in Nahuatl) with twenty years experience.<sup>716</sup>

Upon arriving, the physician found Dávila Galindo already confessing the sick. Noting the coagulated blood in patients, Gómez requested emetics, an opiate, and febrifuges from the Royal Indian Hospital, medications typical of the time.<sup>717</sup> The priest meanwhile surveyed the population to determine the origin and duration of the epidemic,

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<sup>715</sup> AGN IV 5531 exp. 70, Mexicalzingo 7 octubre 1773, Josef Manuel Vayeto to Viceroy, 1r-v.

<sup>716</sup> AGN IV 5531 exp. 70, 10 octubre 1773, Luis Fernando de Hoyos to Viceroy, 6r-v; *ibidem*, 15 octubre 1773, Antonio de Arroyo to Peramas, 49-50r. The Protomedicato was asked to send a physician to inspect the epidemic, but appears to have hesitated, inquiring instead about the cost of care, the availability of pharmaceuticals and a bleeder, and the necessity of deep burials, and opining that a medical expert would have no use without the necessary circumstances to support him. The fiscal expressed amazement that with so many physicians in the capital one could not have been sent immediately to Santa Marta. See *ibidem*, Mexico City 11 octubre 1773, Fiscal to Viceroy, 11-13r.

<sup>717</sup> AGN IV 5531 exp. 70, 12 octubre 1773, Manuel Gómez to Secretario de Cámara Josef del Valle, 24r-v.

but residents could not agree: some said signs of illness had appeared in February, in April, or as late as August, when they began to die in greater numbers. Its impact had been great: from tributary registers, Dávila Galindo determined some 218 tributaries out of 685 had died in the village and its barrios in the past year, with similar mortality rates (about thirty-five percent) in the neighboring village of Reyes, where the epidemic had abated.<sup>718</sup> The physician blamed the proximity of Lake Texcoco, which was in a state of desiccation and releasing harmful miasmas into the air from decaying materials on the lakebed, as well as scarcity of food and good water and poor clothing and shelter.<sup>719</sup> That the fever turned malignant or spotted among inhabitants was the result of their eating habits, primarily the unripe fruit of prickly pear (*tuna*) and copious amounts of chile. He requested quinine for the gangrene, but admitted that the patients would not take the medications he prescribed unless he was present at all times, and with the huts full of patients, there was no one else to administer medication. He was especially anxious to find a woman for the female patients, because it was indecent, he wrote, for a man “to assist them, apply unguents, etc.”<sup>720</sup> The priest, who approved of the physician’s healing method and dietary regimen, was adamant that many were dying as a result of their “*desarreglos, y excesos,*” and that few observed the prescribed regimen.<sup>721</sup> Remaining in their homes, they ate what they pleased, which could only be prevented by assigning a guard to each domicile. Clearly, this was an impossible precaution, and he wrote that only in the event that nearby populations became infected and a temporary infirmary was erected could the regimen be enforced. In his short time there, he reported, he had already caught the sick eating poorly cooked squash, the fleshy fruit of prickly pear, and bitter *frijoles*, all of which he considered detrimental to their health.<sup>722</sup>

<sup>718</sup> In Reyes, 210 died out of 541. AGN IV 5531 exp. 70, 19 octubre 1773, Miguel Dávila Galindo to Viceroy, 65-6.

<sup>719</sup> AGN IV 5531 exp. 70, 13 octubre 1773, José Manuel Vayeto to Melchor de Peramas

<sup>720</sup> AGN IV 5531 exp. 70, 14 octubre 1773, at top, “Este es traslado de una carta que recibí oi, del Médico de Santa Marta,” 34r-v. “. . . los más se mantienen con tunas no maduras, y mucho chile . . . de este abuso creo, les ha venido a muchas gangrenismo en algunas partes: así necesito se me remita quina, y otras medicinas propias para la gangrena.” “En los más de los jacaes no hay más que enfermos, y ninguno que pueda ejecutar lo que yo ordenare; y entre estos los que más me apuran son las Yndias, pues no hay una mujer de quien valerse para medicarlas, por que no es decente, que un hombre les eche ayudas, las unte, etc.”

<sup>721</sup> The physician’s ministrations appear to have been minimal: with the help of the corregidor, he provided daily rations of bread, stewed mutton (for the convalescing), and broth or *caldos* (for the sick), barrels of clean water for cooking and boiling herbs, transported in barrels from a spring two leagues distant, as well as sufficient blankets and straw mats, acquired along with the botanicals from the Royal Indian Hospital. AGN IV 5531 exp. 70, 14 octubre 1773, Manuel Gómez to Corregidor, 38r; *ibidem*, 15 octubre 1773, Manuel Gómez to Corregidor, 44r-v; *ibidem*, 17 octubre 1773, Josef Manuel Vayeto to Melchor de Peramas, 59r-v.

<sup>722</sup> AGN IV 5531 exp. 70, 19 octubre 1773, Miguel Dávila Galindo to Viceroy, 66v. A team of inspectors, including Mexico City’s corregidor and two licensed physicians, were sent by the viceroy to the village to meet with the administrator and priest, and though they determined that the sickness was not *matlazahuatl* but *fiebre ardiente*, and much more benign than previously thought, they agreed that it had turned fatal for the same reasons: “*por la decidía, e inopia de los miserables indios. La causa . . . juzgamos ser el uso de alimentos de mala digestión, y abundantes de partes alcalinas capaces a inducir un movimiento desordenado y espasmódico en los sólidos por la diátesis alcalescente de los líquidos.*” They too judged an infirmary to be the solution, because otherwise each patient remained in his or her *choza*, where foods and

These refusals to take medication and follow proscriptions soon escalated, as villagers grew impatient with Gómez's method. According to the priest, villagers were refusing to follow the doctor's orders, only reluctantly allowing him even to take their pulse, and intentionally neglecting to call him when they took ill, as the priest had discovered in rounds of confessing patients. On October 25, when the pastor was brought to confess a patient, he learned from the others in the home that they had not called the physician. When Dávila Galindo scolded them and asked why, they replied, "because he did not heal them to their satisfaction." The picture was bleak: a rumor was circulating that patients were dying from the medications, and as a result, when the bell rang announcing the distribution of medication, few arrived. "They also charge that he does not rub oil on them," Dávila Galindo specified, "or apply plasters, and especially, that he does not bleed them." This last offense seemed to be causing the most anxiety: when the priest tried to reason with them the day prior to his report, "they explained that they are accustomed to it, as they say, and even begged in tears to be bled."<sup>723</sup> Now villagers were refusing to be purged, and even residents of the neighboring village of Santa María, who had been traveling to Santa Marta for purgation with horses to transport the sick, had caught the spreading distrust of the physician and not come in three days.<sup>724</sup> Dr. Gómez did not last very long: after a failed final attempt to secure horses, presumably to visit those who no longer came to him, he left for Mexico City in a feverish state, debilitated by the illness he had labored for days to cure and effectively driven out of the village by dissatisfied residents a mere fifteen days after he arrived.<sup>725</sup>

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medications were administered without effect: "*se ha hallado unas veces que no quieren usar del abrigo que se les franquea (como vimos en un indio viejo, que aun estando ya sin fiebre, puede haber muerto por el desabrigo voluntario en que estaba) ya que dejando de alimentos de caldos, y demás convenientes de que se les provee comen los que son del todo dañoso . . .*" See *ibidem*, 21 octubre, Ignacio Seguar and Juan Bermudes to Viceroy, 79r-v. On the cause of illness, see also the Protomedicato's opinion, following the third and final physician who healed in the village, who reported, "*que las fiebres, que a el presente observa, son las que vulgarmente llaman Tabardillos, originadas de los alimentos piperinos que usan, y de la continua embriaguez . . .*" The Tribunal also repeated a less frequently advanced thesis, apparently from the physician, that residents were faking illness: "*el número de Enfermos no es el que parece, pues muchos, o por no trabajar, o por su connatural pereza, o por lograr el alimento, afectan la Enfermedad.*" See *ibidem*, 9 diciembre 1773, Protomedicato to Viceroy, 216r-v.

<sup>723</sup> AGN IV 5531 exp. 70, 26 octubre 1773, Dávila Galindo to Viceory, 99r-v. [" . . . *que porque no los curaba a su satisfacción.*" "*Dan también por causales, que no los soban con Aceite, ni ponen emplastos, y particularmente, el que no los sangran, sobre esto último sucedió el día de ayer el que apretados por el que informa en los mas racionales términos que pudo, le significaron, y aun rogándole con lagrimas, que las sangren por estar como dicen, acostumbrados a ello.*"]

<sup>724</sup> Days earlier, the priest and physician together decided on a course of purges, which required careful monitoring of the patients' diets and was carried out in the priest's quarters. See AGN IV 5531 exp. 70, 22 octubre 1773, Miguel Davila Galindo to Viceory, 86r-v, and *ibidem*, 26 octubre 1773, Dávila Galindo to Viceory, 99v.

<sup>725</sup> AGN IV 5531 exp. 70, 30 octubre 1773, Protomedicato to Bucareli, 106r-v. "*Y porque don Manuel Gómez que fue el primer médico que los asistió, le evitaba estos abusos le aborrecieron de suerte que lo hicieron salir, y venir a esta Ciudad ya contagiado, pues está en cuarto día de Fiebre maligna, y con grave peligro de su vida.*" See also the request for an *honorario* from Gómez's father, under whose care the physician remained in Mexico City, *ibidem*, 2 noviembre 1773, Francisco Gómez de Villas, padre legítimo de Manuel Gómez, ante V.E., 131-2r.

This episode is of interest both for the lessons it taught administrators dealing with future epidemics and for what it reveals about the healing preferences of those Indian patients clearly dissatisfied with the physician. In the first category is the fact that the epidemic eventually saw the construction of the prototype of Oaxaca's isolation hospital (see Chapter Three) – at the recommendation of the priest, corregidor, and physicians alike, two huts, one for men and the other for women, were eventually built of wood and hay for infirmaries, with nurses and porters stationed at each to prevent the entrance of prohibited food and drink.<sup>726</sup> Though barely used in Santa Marta's epidemic, the significance of these wards lies in the way they reflect the shared elite opinion, voiced several times in the documents, that excesses could not be stamped out and patients not made to follow imposed regimens if left to themselves in their homes. The number of physicians ultimately caring for the village was somewhat exceptional, as well: over the course of the epidemic, three physicians performed duties in the village, which officials noted led to an instability and inconsistency in healing that did not serve the communities well. No longer would a medical doctor commissioned to assist in an epidemic be allowed to come and go as he pleased, although turnover continued to be frequent.<sup>727</sup> Finally, the arrival of foods, medications, instruments, and personnel from the Royal Indian Hospital in Mexico City was unusual: its mayordomo wrote the viceroy after the epidemic abated to say that this was the first time in his experience that the institution had ministered to Indian out-patients, even in times of disease emergency, and he asked that it not be used as an example for future epidemics.<sup>728</sup>

Though exceptional in several respects, the episode reveals a number of healing perspectives of patients that were more typical, although less easily accessible. In this case, reports arriving in Mexico City were written strictly by outsiders, including the

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<sup>726</sup> AGN IV 5531 exp. 70, 31 octubre 1773, Fiscal to Viceroy, 107r-v. By the new year, the buildings were complete and patients were transferred (following an early proposal that the few remaining sick be moved to the Royal Indian Hospital in Mexico, a plan that was abandoned owing to the difficulty of transport; on this, *ibidem*, 22 diciembre 1773, Antonio de Arroyo to Viceroy, 237-239).

<sup>727</sup> Don Francisco Pérez, who replaced Manuel Gómez, left after nine days, citing the fact that the Royal Hospital, where he was also employed, would not assign him any more than his two real daily salary, which in Mexico City he could supplement in private practice. Pérez was followed by don Mariano Fernández. The corregidor complained about this turnover: “*si cada nonada, se han de ir unos, y venir otros no cesará la enfermedad, por que cuando uno ya adquirió conocimiento, y acierta, en el contrario de la epidemia, el que viene nuevo empieza ha hacer sus experiencias, y no puede ser eso bueno . . .*” AGN IV 5531 exp. 70, 6 noviembre 1773, Vayeto to Crown, 137r-v. For the resolution of the fiscal in this matter, *ibidem*, 18 noviembre 1773, Fiscal to Viceroy, 147-8: “*que al Tribunal del Protomedicato se encargue cuide de que no se varíe de médicos fácilmente por el perjuicio que representa el Corregidor apercibiendo al que está destinado a la asistencia de los Yndios de que si se separa sin avisar antes la causa, y que se apruebe por V. Exa. se le suspenderá del uso de su facultad.*”

<sup>728</sup> AGN IV 5531 exp. 70, 12 febrero 1774, Antonio de Arroyo to Viceroy, 270-272. Perhaps most remarkable is the surprise and alarm displayed by officials in Mexico City, who appear to have been incapable of much policing of villages in the vicinity despite the presence of an epidemic already discovered in the barrios on the northern fringes of the capital (see Chapter Two). Though a pastor would ordinarily have notified officials of elevated incidences of sickness and death, in this case the village was too isolated, by virtue of its distance and the language spoken by villagers, for regular visits by a priest. Once a case was uncovered, authorities moved quickly, fearful that this outbreak would spread to the capital if not quickly contained. See AGN IV 5531 exp. 70, Mexico 9 octubre 1773, Fiscal Areche to Bucareli, 1v-2v, for the response.

visiting vicario, the corregidor, and several attending physicians, and because all were in agreement that healing in homes was unacceptable, the reports of activities there are highly biased. What is clear is that patients were generally unsatisfied with the way things were being handled. Allowing for some hyperbole, they would have preferred an element of bloodletting, but what else? Dávila Galindo elaborated on domestic cures in his correspondence, complaining that though the physician paid daily calls, the patients took only some of the medications prescribed, substituting of their own accord others that in the priest's estimation would without doubt kill them. These included "eating bitter prickly pear fruits and using them as unctions, sucking on limes, and bathing in temascales, all because of the fleeting relief they instinctively feel [when doing these things]; as well as placing themselves in the sun when they feel chills from the fever, changing places without covering themselves against the air, not preventing against the convulsions that could result." If even in the homes of the better off, entire families preoccupied themselves with fulfilling the insalubrious whims of a single patient, applying homemade remedies without ever consulting a physician, what could be expected of these poor villagers, with less ability to discern good from bad? Left in their homes, the sick would be finished off and the epidemic spread everywhere, and Hippocrates himself could do nothing to prevent it.<sup>729</sup>

In these descriptions lies a universe of healing strategies and preferences, of hot and cold sensations and pain relief, more or less confirmed in other reports from the village. The habit of lying in cool doorways to escape heat, for example, was reported in the local administrator's communication to the government to request infirmaries. He described healing inside huts in this way: "the sick Indians lie down in front of and beside their doors so that the wind blows on them, or they are beside their wood burner, which they call *tecuile*, and which makes the blood boil . . ." Entire families were huddled into these drafty, tiny spaces to sleep with the patient (he feared their inevitable contamination), and these relatives – wives, sons, fathers – "give them whatever rubbish the patient asks to eat and drink, providing the drink pulque as well as aguardiente even when they are breathing their last breath . . ."<sup>730</sup> The intimacy, draftiness, and heat of these spaces, some with wood-burning stoves in the middle, was repulsive to most elite observers, as were the "crass errors" in medication commented on by the Protomedicato, apparently repeating what its members learned from two physicians who had been sent to Santa Marta to inspect. The medical board noted that residents were "bleeding themselves six times, spreading tomato and chile all over their body, and not abandoning use of pulque, aguardiente, prickly pears, etc."<sup>731</sup>

<sup>729</sup> AGN IV 5531 exp. 70, 5 diciembre 1773, Miguel Dávila Galindo to Viceroy, 212-213. [" . . . como es comer tunas agrias, y untárselas, chupar limones, y bañarse en los temascales, provenido todo esto de aquel rato, que en su inteligencia, sienten alivio en lo animal; como es también ponerse al sol cuando sienten el escalofrío, que trae consigo la fiebre, mudarse de su lugar a otro sin cubrirse, o resguardarse del aire no previniendo la convulsión, que les puede venir."]

<sup>730</sup> AGN IV 5531 exp. 70, 28 octubre 1773, Vayeto to Peramas, 104-5. ["los indios enfermos, se acuestan frente, y junto de sus puertas, a que les sople el viento, o están junto a su fogón de leña, que ellas llaman *Tlequile* [sic], y se les enciende la sangre fieramente . . ." ". . . les dan cuantas porquerías ellos tienen, a los enfermos quieren comer, y beber, la bebida del pulque no la largan, y sí se proporciona también aguardiente más que estén boqueando . . ."]

<sup>731</sup> AGN IV 5531 exp. 70, 30 octubre 1773, Protomedicato to Bucareli, 106r-v. [. . . dándose seis sangrías, untándose tomates, y chile en todo el cuerpo, y no dejando el uso del Pulque, Aguardiente, Tunas, etc."]

It is worth pausing to ask what these methods had to do with each other and how, in turn, they were related to those prescribed by physicians and others “de razón.” Pulque was a hot topic for debate at the time, but whether it was used medicinally in special ways during epidemics or consumed socially and ritually as in other times is less clear. Earlier that year, José Ignacio Bartolache had published in his medical journal a number of experiments he performed with white pulque acquired from the city’s taverns, noting the kinds of chemical reaction (“efervescencia”) that resulted when combined with tartaric acid, alkali soils, and vinegar. By measuring changes in temperature and pressure, but also registering qualitatively alterations in taste and in color, he concluded that common pulque was not acidic, and thus tried to redeem the product from the disparaging opinion in common circulation, recently repeated in a viceregal bando prohibiting sale, that all pulque sold in the city was watered-down vinegar. The principal matter at hand was why pulque worked *as medicine* against diarrheas, including scurvy and tuberculosis (*tisis*), about which he was apparently convinced. Bartolache speculated that pulque’s medicinal value lay in the glutinous foam precipitate he observed after a sample was left out to evaporate – the taste and smell of it suggested that it was the detritus of the hide pouches in which it was transported. If so, Bartolache thought, other pulque not transported in the same manner would lack this special healing power.<sup>732</sup>

In the results of these scientific experiments, which sought to locate the curative virtue of a remedy already in common use, Bartolache basically agreed with those in Santa Marta who, according to descriptions of the epidemic, continued to provide the beverage to loved ones despite the repugnance of those sent to the village. This remedy and others suggest ways that, despite discourse to the contrary, elite and popular continued to converge in this period. With respect to the North American context, Charles Rosenberg noted that the early modern therapeutic tradition, though an embarrassment by the medical standards of the twenty-first century, was consistent nonetheless. Sickness and health in the period before the “therapeutic revolution” of the nineteenth century “resulted from a cumulative interaction between constitutional endowment and environmental circumstance. . . . The body was always in a state of becoming – and thus always in jeopardy.”<sup>733</sup> The environment, changes in temperature and climate, diet, and a host of other factors could disrupt a precarious equilibrium.

In the face of this constant danger, a common solution was to consume foods with clear physiological effects or to extract blood, sweat, and other bodily fluids, all in an attempt to regain bodily composure. In Mexico, where variations on the humoral tradition have been remarkably resilient over time, scholars agree on its ubiquity in the colonial period but disagree on its origins. The anthropologist George Foster and the Mexican historian Alfredo López Austin engaged in an ongoing polemic in the 1970s over this

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<sup>732</sup> He conjectured also that lye (*lejía de cal*) used in the chemical processing of pulque contributed to the salubrious effects of consumption and insisted on the need for more experimentation to decide the answer, although he was willing to take as given medical opinion on the effectiveness of the lime compound itself: “*Nadie duda de su virtud absorbente, antiséptica y propia para invertir determinadas especies de acrimonia en los humores de nuestro cuerpo.*” *Mercurio volante* no. 10 (December 31, 1772), in Moreno, 97-108.

<sup>733</sup> Charles Rosenberg, “The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth-Century America,” in *Explaining Epidemics and Other Studies in the History of Medicine* (Cambridge: Cambridge University Press, 1992), 9-31, quotation on 12.

issue, arguing, respectively, for its diffusion from the Hippocratic (European) tradition and for its existence among pre-Hispanic Nahua communities.<sup>734</sup> What they more or less agreed on was the significance attached to hot and cold properties of body parts, plants, foods, places, seasons, and states, with illness implying a physiological or moral disequilibrium that had increased the patient's vulnerability. This etiology of disease was not always the result of a physiological imbalance or offence: divine retribution for human sinfulness and malicious spells, for example, invoked moral and personal offenses and imbalances. But to the extent that bodily symptoms were usually salient, contemporaries tended to look to physiology and its role in healing rituals for a partial explanation and for some solution.<sup>735</sup>

Much of colonial medicine, as refracted in ethnographic compilations and Inquisition trials, was aimed to extract foreign objects that penetrated the body (Nahua medical systems even included categories of healers dedicated to palpations and massages (a *tlamatqui*) and to extraction by sucking (a *tetlacuicuiliani*), and specialists in these acts appeared frequently in colonial Inquisition trials). For example, the process of restoring health might have involved blowing air or spitting chewed herbs and aguardiente over the body, applying *friegas*, massages with oils or herbs, and once the offending object was located, sucking it out, sweeping it away, or otherwise removing it, and along with it, the illness.<sup>736</sup> Analogous acts of extraction, such as bloodletting – a key component in Santa Marta's epidemic – appeared in many of the medical manuals published in the sixteenth, seventeenth, and early-eighteenth centuries, including Juan de Esteyneffer's popular *Florilegio medicinal* (1711), which contained detailed instructions for simple phlebotomy techniques.<sup>737</sup>

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<sup>734</sup> Alfredo López Austin, *The Human Body and Ideology*, trans. Thelma Ortiz de Montellano et al., vol. 1 (Salt Lake City: University of Utah Press, 1988), 267-282, and George M. Foster, "Hippocrates' Latin American Legacy: 'Hot' and 'Cold' in Contemporary Folk Medicine," in *Colloquia in Anthropology*, ed. R.K. Wetherington, vol. 2 (Taos, NM: Fort Burgwin Research Center, 1978), 3-19.

<sup>735</sup> Hot and cold referred not necessarily to thermal states but to the dualistic properties and forces of the universe. Foods, botanicals, and animals were not objectively or statically hot or cold, moreover, but acquired these properties in particular places and times and for particular groups. They are best understood as cultural categories, reflecting views of difference and similarity that were particular to communities. Put otherwise, we should expect that the systems Foster and López Austin analyze and describe in their studies lose some of their integrity when put into practice.

<sup>736</sup> Aguirre Beltrán, *Medicina y magia*, especially 51-54 and 238-241. In his words (p. 238), "*la primera acción del médico primitivo al oír las quejas de dolores internos sin hallar en el doliente región alguna lesionada, fue proceder por impulso primario, no por móviles racionales, a sobar o estrujar al paciente tratando de expulsar aquello que en circunstancias normales no se encontraría en el organismo. La experiencia le habría enseñado que en las afecciones quirúrgicas las causas accesorias de enfermedad procedían del mundo exterior en forma de objetos que penetraban desde fuera, como las espinas y las flechas; por analogía extendería a las enfermedades internas esta su interpretación de los orígenes de las dolencias, dando así nacimiento a una teoría de los cuerpos extraños que considérase la más antigua por ser la que corresponde a un modo de pensar más sencillo.*" Despite his apparent stress on the mechanism of extraction here, Aguirre Beltrán often insisted that the emotional significance of its application (as well pharmaceuticals, the properties of which are often separated out and analyzed in lists of herbal remedies) formed an integral component of the ritual. See also Quezada, *Enfermedad y maleficio*, 82-93, for summaries of the Inquisition trials in which these extractions occurred.

<sup>737</sup> These booklets, along with a sample of letters from elite residents in early New Spain and remarks on indigenous bathing practices from the sixteenth-century *relaciones geográficas*, have led Sherry Fields to



These principles of balance and extraction continued in the eighteenth century, and in fact informed many of the therapeutics that have appeared in previous chapters. Recall that the cleric Cayetano Cabrera y Quintero condemned what to him were the barbaric therapeutics of the city's physicians during Mexico City's 1737 epidemic, writing that patients were being repeatedly bled ("tormented") by the practitioner, who "pretends that he removes the problem, and though [the patient] may appear to recover from the treatment, it is no more than a lie and punishment for their sins." For Cabrera, this excessive treatment helped explain why Indian residents were refusing to be seen by physicians when they took ill again.<sup>738</sup> In preparations of the patient for vaccination, manipulation of dietary regimen, which might also include purges and exercise or bed rest, was key, and in this contemporaries made reference to a tradition in which it was thought that the humors could be disposed to receive an illness well. The French physician Esteban Morel referenced the widespread use of an extractive mechanism in healing when he tried to convince parents to submit their children to inoculation. In order to prove that the practice was not as novel as some thought, he observed that the same mode of action was behind other fashionable remedies of the day, such as purgatives, emetics, caustics, and bloodletting. With all of them, he wrote, "one hopes to evacuate the cause of some sickness, or at least part of it, through the veins . . ."<sup>739</sup> Morel clearly thought that the similarity of immunization's action might result in successful assimilation by the populace.<sup>740</sup>

To stress the ubiquity of this mechanism in the late colonial period is not to say that all medicine boiled down to it. On the contrary, a domestic therapeutic practice such as bloodletting could involve many other aspects – prayers, holy water, images of Jesus Christ, the saints, or Mary, and ritualized verbal exchanges with the patient or even the illness – and thus cannot simply be reduced to its technical motions. Nevertheless, over

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see ideas about humors shared by professionals and laypeople. See *Pestilence and Headcolds: Encountering Illness in Colonial Mexico* (New York: Columbia University Press, 2008), 128-9 and 141-2. As Fields concludes (p. 129), "the humoral model was a strong one. Laypeople perfectly understood the need to expel corrupted matter from their bodies when they fell ill, something that is revealed in the countless number of references to the evacuant therapies in contemporary writings. Thus, a sixteenth-century letter writer matter-of-factly relates his experience with an illness that lasted two months in which 'they led me twenty-two times from the arch vein in my right arm, and they purged me four times.'"

<sup>738</sup> Cabrera y Quintero, *Escudo de armas*, 91.

<sup>739</sup> Esteban Morel, "Disertación," AHDF vol. 3678, exp. 2, 41v-42v: ". . . si, con los vomitorios, si con las purgas, si con las vejigatorios, se pretende lo mismo, con diferencia de lugares, con la inoculación se pretende lo mismo . . . No fiar pues de la inoculación, fiando en aquellos remedios, es caer en una contradicción manifiesta."

<sup>740</sup> For the eighteenth century some more extraordinary examples can be added, such as a case of *pecado nefando* tried before Mexico's Holy Office of the Inquisition. In defending himself, the *mulato* offender, who was employed in the mines of Real del Monte a hundred miles north of Mexico City, justified his year-long sexual partnership with a *mestizo* employee claiming that a physician had prescribed ejaculation as an effective cure for illness. He added that he had similarly been "healed" by a local woman on the basis of this recommendation. Whether the advising physician existed and had actually prescribed this remedy, the fact that he was imagined to say it, and that his advice was repeated several times before inquisitors as a seemingly plausible prescription, indicates the wide purchase of the mechanism of extraction of secretions as an effective road to recovery. Bancroft Library, M-M 96/95 13:1, folios 12-13. I am indebted to Zeb Tortorici and Samuel Blodgett for sharing the details of this case, of which both have made in-depth studies.

time and place blood extraction and its analogues consistently helped purify the body and reveal a schema of health and balance that informed many therapies shared by professionals and the laity alike. Though the humoral theory found in the writings of Hippocrates or Galen may have informed the practice of the former, moreover, the fact that the underlying knowledge remained implicit during visits makes an initial analytical delineation of distinct systems seem out of place.

If the principles of extraction were often shared, there remains the fact that, as discussed previously (see Chapter Two), a reforming impulse in New Spain coded or valued ways of going about it differently. This enlightened impulse evolved more or less independent of the programs implemented by the Bourbon and sought to regulate, if not eliminate, much of what were deemed excesses in this activity. In the case of therapeutics, the initiative was present in José Ignacio Bartolache's 1779 *Instruction*, composed in the midst of a smallpox epidemic in Mexico City and cited previously as exemplifying a less invasive trend in medicine among some elite physicians in the capital. In a reverse of what one would expect, the instruction had defined smallpox as a *remedy*, nature's way of coping with corrupted humors mankind had inherited from birth.<sup>741</sup> Consequently, when alleviating its unsightly and frequently painful effects, less was more. The worst possible approach for the patient was for the healer to interfere with nature's work, to use *too many* medications or "vary them each day, giving in to interested parties who prefer it, especially women."<sup>742</sup> Excessive bleeding, which hurried along the natural healing process, was to be avoided as well, for the same reasons. Similar advice appeared in the extracted version of Spanish surgeon Francisco Gil's treatise on preventing smallpox, circulated in New Spain in 1788 for use in future epidemics. It suggested physicians and surgeons prescribe "tart fruits, like Morello cherries, oranges, limes, pomegranate, pears, apples, or use of water and vinegar . . ." Basically prophylactic in nature, consumption of these fruits was to give the blood a healthy disposition ("*disposición saludable*") and thereby help prevent against spread of contagion, as assured by the English physician John Huxham (d. 1768).<sup>743</sup>

These seemingly minor adjustments intended to moderate intervention on the part of lay and professional healers alike nevertheless posed major problems in times of disease crisis. How were they to know when a method of relief was working? Consumption of apples, lemons, and vinegar and water alone, though convenient and relatively straightforward, would have little salient physiological effect. The new

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<sup>741</sup> Most likely, Bartolache was led to this conclusion by the secretions discharged through the pustules on the skin, but his familiarity with inoculation might also have influenced him; he knew, after all, that these same secretions were being taken from smallpox victims and injected into healthy patients, which presumably made them better after a brief period of mild illness.

<sup>742</sup> Ignacio Bartolache, *Instrucción que puede servir para que se cure a los enfermos de las viruelas epidémicas que ahora se padecen en México, desde fines del estío, en el año corriente de 1779* (Mexico City, Zúñiga y Ontiveros, October 26, 1779), in Moreno, 193-199. [". . . variar todos los días, por contemplar a los interesados que gustan de eso, especialmente las mujeres."]

<sup>743</sup> *Extracto de la Obra publicada en Madrid el año pasado de 1784 con el título de Disertación Físico-Médica ... compuesta por Don Francisco Gil, Cirujano del Real Sitio y Monasterio de San Lorenzo*, México 28 mayo 1788, in AGN Epidemias 7 exp. 1, fs. 9-14, under article XVIII. [". . . frutas ácidas, como guindas, naranjas, limones, granadas, peras, manzanas, o el uso de agua y vinagre, que aconseja Rasis, y le siguen los mejores Prácticos."]

philosophy of healing, in which less was often more, ultimately had to respond to the expectations of patients, which it appears is what happened in the village of Santa Marta in the fall of 1773. To return to the afflicted community, besieged by fevers and by the unsolicited intrusions of foreigners and their proscriptions and prescriptions, the popular therapies of extraction can be seen to have prevailed in several ways. To the unctions of cool fruit and hot chile and spells in the cool doorways of huts or beside the hot brazier, as reported by witnesses, can be joined the priest's admission, in the previously cited report, of continual bleedings: perhaps influenced by parishioners prevailing upon him to allow it – they were accustomed to it, they had said – the priest reported that the distance between villages and barrios was so great that the bleeder-surgeon who remained in the village was limited to performing bloodlettings when visiting patients, apparently the most basic and necessary of remedies.<sup>744</sup>

In general, these sources reveal communities desperate to expel the morbid materials from their bodies despite the interdictions of the government, and physicians, as well as priests and administrators, were left to cope as best they could with these expectations. In most of the regimens prescribed by physicians, in fact, the underlying schema of sickness would not change much, a reminder that when reformers attempted to moderate therapies, as they increasingly did, they articulated enlightened ideas about temperance that did not necessarily negate ideas about the efficacy of their action. Elite physicians and scientists were simply advising moderation in healing, as in eating, drinking, and recreating – a posture typical of the period, in other words – without challenging the underlying principles of bodily health. The remarkably resilient humoral tradition provided an opportune arena for conversation, as well as a contentious one for distinction, as minor adjustments in disposition toward a familiar therapy came to signify very different things – backward and barbaric, enlightened and civilized – in the following years.

### ***Generaliter Loquendo: The Putrid Fever Outbreak of 1806***

A new philosophy of health care was not by any means uniform in its implementation, appearing piecemeal in the course of an epidemic and its management and passed between bureaucrats, physicians, and priests. Late in 1805, authorities in Mexico City received word of an eruption of putrid fevers in the districts just north of the capital. As the Protomedicato sent physicians to inspect and care for the victims, Viceroy Iturrigaray turned to Archbishop Francisco Xavier de Lizana y Beaumont to instruct parish priests to receive the medical teams favorably. In missives to Tacuba, San Cristobal Ecatepec, Tultitlán, Cuautitlán, and Tizayuca, the prelate ordered their pastors to cooperate with the physicians, to disabuse their parishioners of the use of “*curanderas ignorantes, o de medicinas inútiles*” and to remind them to confess fully and not sin again, for the current outbreak was surely punishment from God.<sup>745</sup> The religious hierarchy thus aligned with medicine, the provisional Junta de Sanidad (health board) convened in Mexico City to oversee management and avert a crisis, with Royal Audiencia *oidor* Ciriaco González Carvajal as president. He, along with the members of

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<sup>744</sup> AGN IV 5531 exp. 70, 5 diciembre 1773, Miguel Dávila Galindo to Viceroy, 212v: “*de modo que solo a sangrar ha ido el que está aquí con el título de Sangrador, o Cirujano a los otros pueblos . . .*”

<sup>745</sup> See Chapter Five and the correspondence in AGN IV 4062 exp. 9.

the Protomedicato and the two fiscales, determined that the epicenter of the fevers was in San Bartolomé Cuautlalpan, to the northeast of the city on the border of the modern state of Hidalgo, in the parish of Tizayuca. In the following month the committee would receive disconcerting reports from two very large personalities.

Toward the end of January, Doctor José Rafael Valdés de Anaya, in charge of the parish of Tizayuca, wrote the viceroy a lengthy report extemporizing on the causes of the epidemic (which for seven years, he noted, had been festering in the region). Fourteen years of experience as a minister had taught him that in spite of the time that elapsed since their conquest and various sage laws legislated to protect them, the moral and political instruction of the Indians of the kingdom had advanced hardly at all. Despite the serious efforts of Cardinal Lorenzana as archbishop of New Spain to change this, the Indians continued to live like domestic animals (“*como unas fieras domésticas*”), easily given to vices of drunkenness and idolatry and inclined to theft of cattle, rapine, and pillaging. The current disaster was the inevitable outcome of this lamentable situation. Residents were “drowning in many manners of superstition, particularly with respect to medications; they are allowed the barbaric use of those they call *temascales*, which gives rise to so many harms in questions of morality and governance” and led to their death.<sup>746</sup> Through the use of this “infernal bath,” the healthy were disposed to contract the contagion, while the heat amplified the putrefaction in the sick, and those who had recovered naturally (“*luchando con la naturaleza*”) relapsed. Despite his and others’ attempts to care for them there was little that could be done: the Indians lived and died in a drunken state (“*así viven y así mueren*”). They despised and looked with horror on “our medicines,” and in the epidemic used those harmful ones to which they were accustomed: *friegas* and infused drinks made from the leaves and dark red berries of the “poisonous” *Árbol del Perú*, or from another tree “that they call *colorines*” – perhaps the deciduous naked coral tree – “all ground up and boiled in pulque or urine.” And they were cared for poorly by their own: patients slept in beds made out of the branches of the trees and were given chile and tortillas to eat, “and this when the patient asks for food, and if not, they forget about it, simply because he does not ask.”<sup>747</sup> Now the contagion continued to propagate owing to the porous walls of their huts and resistance to burning the straw mats and clothing used by infected patients, which “is founded, as I have found out, in the crudest and most superstitious error, because they think and are persuaded that with said operation ‘the sickness gets angry’ and insistent, and pursues them.”<sup>748</sup>

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<sup>746</sup> [“... *empapados en muchas maneras de superstición, particularmente en orden a sus medicinas; se les consiente el uso bárbaro de los que llaman temascales, que acarrea tantos perjuicios en lo moral y político* . . .”]

<sup>747</sup> [“... *en la presente epidemia han usado en friegas y bebidas, las hojas y frutilla del árbol venenoso del Perú, u otra, que llaman colorines, machacado todo y cocido en pulque u orines; su cama las ramas del mismo árbol; su alimento el chile y tortilla, y esto cuando el enfermo lo pide que si no, lo abandonan, sin otra razón que por que éste no lo pide.*”]

<sup>748</sup> AGN IV 3885 exp. 4, Parroquia de Tizayuca 23 enero 1806, Doctor José Rafael Valdés de Anaya to Viceroy, 36-39. He added that everything in the subdelegation of San Cristobal Ecatepec was going well, except that the sick could not be brought to the hospital; the friars sent by order of the Junta de Sanidad from the convent-hospital of San Juan de Dios in Mexico City at the beginning of 1806, with the purpose of persuading the Indian residents to allow themselves to be healed in the hospital, had “*fomentado las ideas de los Yndios*” by “*reprobando en presencia de estos el método de curación que observa el facultativo con acuerdo de la Junta de Salud publica,*” and now the Indians were fleeing the hospital. For the original

Without doubt the cleric had strong ideas about the barbarities and superstitions of the villagers of San Bartolomé. If he is to be trusted, and it is difficult to see how he can be, almost half of its 800 residents had been lost in roughly one year (since February 1805), and they for the most part were to blame. Some interesting popular perceptions of illness appear here, such as the personification of the sickness, reminiscent of the furious divinities of the Nahua pantheon responsible for the infirmities of humankind.<sup>749</sup> But to the extent that Valdés was eagerly looking for such superstitions, it is difficult to know what to make of these attributions of belief. What can be said with more certainty is that in repeated references to use of sweat baths, fear of his parishioners' declining health was not all that was at stake. In Mexico City, ideas of propriety had led to frequent and contentious prohibitions on intoxicating drinks and mixing of the sexes in the previous decades, and it appears that attempts to reform healing practices, with overtones of morality in denouncements of certain habits, were contiguous to this process.<sup>750</sup> Mixing implied impurity, as suggested in a postscript to his communication, where Valdés added that he had just learned that two women were found deceased in one of these baths, clinging to one another, in the village of San Marco Yxtlahuaca (jurisdiction Pachuca).<sup>751</sup> Temascalas were apparently dangerous for many reasons, in his eyes, and these led him to make plans to collect the sick in a makeshift hospital, where they could be kept and watched by an empiric or *curandero* from the village of Zumpango, to the southeast. Instead, he had abandoned these plans when orders stipulating otherwise arrived from the capital, and now Doctor Anastasio Bustamante, future vice president and president of Mexico, was in the village, working efficiently with two nurses at his side.

A mere twenty-five years old at the time of the epidemic, Bustamante arrived in the morning of December 17 and set to work immediately, reporting to the president of the Protomedicato that the illness indicated the use of mild evacuants, "and bleeding, once, with the proper circumspection and considerations . . ." (*con las circunspección y consideraciones debidas*) He requested small dosages of tartaric emetic, to induce vomiting; enemas; and as "antiseptics," to fight putrefaction, quinine (in general use as a reliever of fevers and pain); *serpentaria*, or canker weed (a stimulant, a diaphoretic, producing perspiration, or a digestive, producing nausea and vomiting in large enough doses); solutions of alkaline salts (*agua mefítica alcanforada*) and wine, and a tincture of the aromatic Winter's Bark (*drimis de Winter*), which was mixed with oil for massages.<sup>752</sup> Judging by requests from other physicians, these were common at the time: the list of another physician healing during the epidemic included tartaric, sulfuric acid, quinine, mustard, vinegar, common salt, lime cough syrup (*jarabe de limón*), camphor,

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commission, see AGN IV 1815 exp. 4, Mexico City 9 enero 1806, Junta de Sanidad, 55-56. [" . . . *se funda, según tengo averiguado, en un error el más grosero, y supersticioso, porque creen y están persuadidos de que con tal operación la enfermedad se enoja, se obstina y los persigue.*"]

<sup>749</sup> Aguirre Beltrán, *Medicine y magia*, 43ff.

<sup>750</sup> For prohibitions on drinking and mixing of the sexes in the theater, see Viqueira Albán, *Propriety and Permissiveness*, passim.

<sup>751</sup> AGN IV 3885 exp. 4, Tizayuca 23 enero 1806, José Rafael Valdés to Oidor Ciriaco González Carvajal, 40r-v.

<sup>752</sup> AGN IV 1815 exp. 4, San Bartolome Quautlalpan 17 diciembre 1805, Anastasio Bustamante to García Jove, 14-15r, where he confirmed that the sickness has in fact carried off more than half of the population.

and canker weed.<sup>753</sup> A month later, Bustamante elaborated on the characteristic symptoms of the disease: indications of a good outcome included sweating, copious urination, or “plentiful diarrheas of a serous, yellowish humor, without stench.” He went on to identify seven primary causes of the spread of contagion through the village, three atmospheric and four having to do with lifestyle: 1) miasmas exhaled from the three lakes and various swamps surrounding it; 2) the frequent changes in atmospheric temperature; 3) the predominance of irregular winds blowing from the southwest and southeast; 4) the narrowness and poor protection of the huts of residents; 5) crude and unwholesome foods; 6) lack of hygiene in homes and in dress; and 7) drunkenness, abuse of *temascales*, and use of berries from the *Árbol del Peru* (“*La embriaguez y abusos de los temascales y frutos de el Árbol de el Pirú.*”) Those Indians who lived “like those commonly called *de razón*,” however, along with other castes, were not succumbing to the contagion.<sup>754</sup>

Although Bustamante articulated similar reservations as the priest about intoxicating beverages, *temascales*, and the widespread *Árbol del Peru* (*Schinus molle* L.) – possibly in use as a diuretic, analgesic, digestive, purgative, or stimulant – it is unclear how, therapeutically speaking, his own solutions differed in their effects. As he later clarified, his method consisted in emetics, sudorifics, dry rubs or massages with a mixture of oils and aromatic herbs, foot rubs (*pediluvios*), blistering plasters (*vejigatorios*) applied to the neck, arms, or legs, an infusion of tamarind, and lime in the *caldo* – and bleeding, “with proper circumspection and considerations . . .”<sup>755</sup> Written in a level tone, these reports belie the emotions and frustrations experienced over the course of his visit, evidenced by a tantrum carried out two weeks earlier in an update to the Protomedicato’s president. Clearly in a rage about the delays caused by the lack of an authority figure to put his orders into effect, Bustamante singled out the individual commissioned to carry out the subdelegate’s duties, Vicente Ramón Jaen, who was well intentioned but young and overburdened by the many duties of the subdelegation. The Indian governor, he added, was equally unfit, “because the sons [of the village] neither obey nor respect him . . .” He asked that the government deputize someone with sufficient authority to accompany him on his rounds, revealing the source of his frustrations:

in this manner I will manage to get them to bring the sick to me on time and not leave for other villages, or remain hidden in their homes, with the risk of spreading the contagion; by means of said commissioner, all of the *temascales* could be demolished as necessary (theaters of impurities and various abuses that are as harmful to the soul as the body) . . .

In addition to the *temascales*, “theaters of impurities,” this person could help him destroy the small, poorly constructed, contaminated homes; help moderate “drunkenness, so well established in this pueblo, and so detrimental in the present moment; excesses in the consumption of *tunas* and other harmful things will be corrected; one will no longer see

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<sup>753</sup> AGN IV 1815 exp. 4, Tultitlán 19 diciembre 1805, Patricio Yeper to García Jove, 22-23.

<sup>754</sup> AGN IV 3885 exp. 4, San Bartolome Quautlalpan 28 enero 1806, Anastasio Bustamante to García Jove, 21-22. [“. . . *diarrea abundante de un humor seroso, amarillento y sin hedor.*” “. . . *como los que vulgarmente se llaman de razón . . .*”]

<sup>755</sup> AGN IV 3885 exp. 4, San Bartolome Quautlalpan 28 enero 1806, Anastasio Bustamante to García Jove, 21-22.

circling the tombs a multitude of mourners, who all go blindly to contract contagion by embracing the cadavers in order to say goodbye (a harm that neither the parish priest nor I have been able to remedy).”<sup>756</sup>

What the young physician faced, in short, was a problem of authority, his own and otherwise, even if his remedies resembled those in common use. It was not certain that the community would respect his expertise in medicine, as indicated by the matter of sweat baths. The *teniente* mentioned by Bustamante, serving in place of an ailing subdelegate, had been instructed to prohibit use of *temascales* by the sick and convalescent in infected villages, “destroying them if necessary.”<sup>757</sup> A month later he reported only prohibiting their use; it had not been necessary to destroy them “by virtue of not having known of having had any violators.”<sup>758</sup> Yet other reports from the village indicate that he had not actually had any success limiting their use, to be expected given their popularity. Was he simply afraid of the consequences of such an act of destruction? For years administrators had attempted similar prohibitions: when responding to an order in Villa Alta, Oaxaca that smallpox patients avoid *temascal* baths as potentially harmful to their constitution,<sup>759</sup> the priest of Atitlán, pledging obedience, asked that the official order the *temascales* demolished, presumably the only way his parishioners would stop using them.<sup>760</sup> Targeted for a number of reasons – places that promoted the spread of contagion, nodes of licentious socialization – *temascales* remained in use, too popular to prohibit. But the issue could turn community members against a physician, which leads one to wonder whether prohibition was worth attempting in the first place.

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<sup>756</sup> AGN IV 1815 exp. 4, San Bartolome Quautlalpam 13 enero 1806, Anastasio Bustamante to García Jove, 57-58. [“. . . por que los hijos no le obedecen ni respetan . . .” “. . . de este modo conseguiré que me traigan los enfermos a tiempo y que no se marchen a otros pueblos, o se mantengan ocultos en sus casas, con riesgo de extender el contagio; por medio de dicho comisionado se demolerán sobre la marcha todos los temascales (teatros de impurezas y de varios abusos tan perjudiciales a la alma como el cuerpo) . . .” “. . . la embriaguez tan establecida en este pueblo, y tan perjudicial en la época presente, se corregirán los excesos en comer tunas y otras cosas nocivas; ya no se verá alrededor de los sepulcros una multitud de dolientes que iban a recoger ciegamente el contagio abrazando a los cadáveres, en ademán de despedirse (daño que no hemos podido remediar ni el párroco ni yo).”]

<sup>757</sup> AGN IV 1815 exp. 4, Mexico City 22 diciembre 1805, Junta de Sanidad to Encargado de Justicia don Vicente Ramo Jaen, 43r-v. [“. . . destruyéndoselos en caso necesario.”]

<sup>758</sup> AGN IV 3885 exp. 4, San Bartolome Quautlalpam 20 enero 1806, Vicente Ramon Jaen to González Carvajal, 17-18. [“. . . no habiendo procedido a destruirlos por considerar que no es necesario, en virtud de no saberse halla habido algunos contraventores.”]

<sup>759</sup> The other five items and the responses they provoked are discussed in Chapter Three. See AHJO Villa Alta Civil 32 exp. 4, Villa Alta 15 mayo 1797, for the instructions from the subdelegate.

<sup>760</sup> He also asked for an order to prohibit administering “*agua de chile*” to the patient to drink, which villagers were claiming gave the patient strength. AHJO Villa Alta Civil 32 exp. 4, Atitlán 25 mayo 1797, José Antonio Meneses to Subdelegado, 14r-v. The priest of neighboring Cajonos responded similarly, asking for a magistrate sent with official orders to destroy the *temascales* in the event that the contagion did appear in his parish. Ibidem, Caxonos 24 mayo 1797, Juan José to Subdelegado, 11r. How many believed the *temascales* were dangerous is unclear, although more certain in the case of the subdelegate. A month earlier he had been notified by the justices of Lachirio of a single smallpox patient, a young man who had recently returned to the town from Antequera; when asked a week later about him, the justices reported that he had been buried. The subdelegate noted that the victim had been sent into a *temascal* by the village’s curandero, “y así era necesaria su muerte.” AHJO Villa Alta Civil 32 exp. 15, Villa Alta 18 abril 1797 (in handwriting of Ruiz de Conejares), 16v.

In Mexico City, meanwhile, members of the Junta de Sanidad – *oidor* González Carvajal, the two crown attorneys, several elite physicians – gathered in the former’s home to read reports such as those arriving from San Bartolomé, on the basis of which they adjusted policies over the course of the year. They imagined decimation and general resistance from impressionistic correspondence like the following (originally written to the archbishop to redeem a priest accused of getting in the way of the physician), which described the situation in the nearby village of Tultitlán:

the Indians refuse to go to the Hospital, because they believe that the remedies that are administered harm them, and because of this they hide and deny their sickness, healing themselves there privately in their manner and performing other remedies that look more like those of brutes than rational beings, like bleeding themselves from their temples until they spill a considerable amount of blood, for which the current priest has acridly admonished them . . .<sup>761</sup>

Whether the priest had encouraged this flight and rejection of the physician’s medicine, as charged, the unmistakable impression left is that Indians were fleeing from care. Assessments from the countryside in turn responded to and augmented the missives leaving the capital, such as this one from the Junta de Sanidad: in addition to toms, “the wretched constitution of the Indians, as well as their poor nourishment and worse inclination to be cured, is the cause of the propagation [of fevers], and what is more, once they become victims they bleed themselves according to their manner, and go inside their temascales, which excesses give more fuel to the fire . . .”<sup>762</sup> The discourse was cyclical, a circuit of simplifications that grew until it spiraled out of control, as if the certification of a Oaxacan priest in a 1780 epidemic – “all of the Indians, *generaliter locuendo*, have such horror and fear of the hospitals that it is not possible to persuade them to go there to be healed, because they respond that they die . . .”<sup>763</sup> – simply reverberated down through the years and epidemics, an incredible montage of fearful Indians refusing to approach a hospital.

As argued in previous chapters, the problem with generalities is that in some cases an observed aversion to a hospital, or procedure, or a physician, often had to do with

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<sup>761</sup> AGN IV 3885 exp. 4, Quautitlan 13 enero 1806, Josef Antonio Frera to Arzobispo Francisco Xavier de Lizana, 11-13. [“. . . los Yndios rehúsan el ir al Hospital, porque creen que les dañan los remedios que se les aplican, y por este motivo se ocultan y niegan su enfermedad, curándose en lo privado allá a su modo, y haciéndose otros remedios que más parecen de brutos que de racionales como es el sangrarse de las sienas hasta echar porción considerable de sangre, lo que se les ha reprehendido acremente por el Señor Cura actual, de que piadosamente creo que ni directa ni indirectamente ha prestado influjo para que sus hijos huyan del Hospital, y menos haber manifestado disgusto a vista de los enviados para la curación de este mal . . .”]

<sup>762</sup> AGN IV 1815 exp. 4, Mexico City 3 enero 1806, Junta de Sanidad, 53-4. [“. . . la constitución miserable de los Yndios como su mal nutrimento y peor disposición en curarse, es la causa de que se propague [las fiebres], y lo que es más, el que de su orden acometidos del accidente se sangran, y entran en sus temascales, cuyos excesos dan más pábulo al accidente . . .”]

<sup>763</sup> AGN IV 5724 exp. 12, San Martin Tileagete 20 febrero 1780, Joseph Antonio Rincón, Vicario, 42r-v. [“. . . que todos los Yndios *generaliter locuendo* le tienen tanto horror y miedo a las casas de Hospitalidad, que no es dable persuadirlos a que vayan a curarse a ellas, porque la respuesta que dan, es decir que se mueren . . .”]



political circumstances beyond the matter of medicine itself. The political dynamics of intervention in a community's affairs, among other things, determined how medical care was put into effect and received. When individuals did object to hospitals, or a particular healer or medication, it was rarely in general or as a whole, the reasons rarely uniform, and resistance rarely wholesale. The remaining pages turn to the progression of the epidemic in other localities to suggest, at best, a future path of inquiry that may complicate the generalities left in the record by a good deal of homogenizing discourse.

At the end of 1806 Doctor José Osorio was commissioned to heal in San Pablo Tlaquilpan, Zempoala, where the epidemic of fevers appeared late in the summer. While inhabitants initially cooperated, they soon began objecting to entering the hospital he had established, saying that no one was being healed. They ignored dietary prescriptions and instead requested blankets and other kinds of support for the sick in their homes, at the hospital's expense, and Osorio found himself bombarded by contrary opinions about his methods. Residents proved more cooperative, however, in the matter of vaccination. An absentee subdelegate claimed credit for having "corrected" the Indians' excesses, and now, he claimed, many were voluntarily seeking out the physician for the procedure. It appears that this was no exaggeration: two months after his arrival, Osorio reported 548 vaccinations, which continued even after the neglected hospital was closed. It was a great success, the relieved doctor claimed, although he noted that the operation's effect in about a third of these cases was unknown because those patients had not returned for inspection: "although I visit daily the homes I can and order the officials of the republic to summon them, I learn nothing." Perhaps related to this obstinacy – witnessed, it is worth stressing, in only part of the population – was the fact that he had tried to convince the vaccinated to bathe once or twice (apparently to keep the incision clean), but because he had instructed them not to do it in a temascal they had not complied.<sup>764</sup>

Why, after such a turnaround and with so much conflict behind him, did the physician insist on dictating the terms of washing? Sweat baths were at the center of an eighteenth-century struggle that had as much to do with ideas of propriety as ideas about contagion, but it is doubtful that a local healer, a curandero or barber, would have made an issue of this point. These baths, at one time highly sacred spaces presided over by a deity, remained important sites of purification and cleansing, often involving fumigations and elaborate rituals that sometimes lasted several days.<sup>765</sup> At least some, though not all of the residents of the community clung to these spaces, even as they incorporated the new technique into their repertoire. For these members, the one did not necessitate or imply the elimination of the other, and the result is a far messier version of medical change over time. One would like to know what groups within the community were following the doctor's orders and what groups saw it as unacceptable, but unfortunately this is precisely the kind of detail missing from these sources. We know that at an early moment a breach, seemingly insurmountable, had appeared between the physician and his would-be patients, and that it had been bridged by the intervention of a local

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<sup>764</sup> AGN IV 3885 exp. 8, Tlaquilpan 20 diciembre 1806, José Osorio to González Carvajal; *ibidem*, Zempoala 3 enero 1807, Francisco Veyra Pardo, subdelegado, to González Carvajal; *ibidem*, Tlaquilpan 19 enero 1807, José Osorio to González Carvajal; *ibidem*, Tlaquilpan 4 febrero 1807, José Osorio to González Carvajal. ["... aunque ando todas las casas que puedo, y mando a los de la republica que los citen no consigo saber de ellos."]

<sup>765</sup> On the sacredness of temascal baths, see Aguirre Beltrán, *Medicina y magia*, 152.

authority, in this case, a subdelegate, who boasted of his persuasions. And despite this experience, the physician continued to pursue his principles. Perhaps the most that can be said is that in the midst of a good deal of cooperation, something about the doctor's lack of tact clearly rubbed some the wrong way.

How the physician presented himself in rural Mexico, it turns out, mattered greatly. As Roy Porter has argued for early modern Europe, medical practice was always a performance of sorts, a ritualized interaction between patient and practitioner in which success could not and cannot retrospectively be judged "solely in terms of technical proficiency, scientific breakthroughs and cure-rates."<sup>766</sup> Dismal success rates for most of the medical profession meant that healers of all stripes were compelled to demonstrate their relevance anew to each household or community.<sup>767</sup> They had to give their patients reasons to be confident in their remedies, as argued in previous chapters for Mexico's early vaccination campaigns, and the seemingly arbitrary withholding of some therapies, like bleeding, or the imposition of strict regulations in others, was unlikely to inspire such confidence. In the logic of local healing, medicine was not a zero-sum game, even if some administrators, often observing in Mexico City, wanted it that way.

In a fascinating turn of events, the same physician, who could boast of success vaccinating in San Pablo, was expelled months later from another village after failing, presumably, to perform his role to the satisfaction of its members. While accompanying the replacement physician on rounds of villages infested by the raging *fiebre maligna*, the pastor of San Juan Temamatla (jurisdiction Chalco) found in the head town thirty sick individuals, apart from the seventy he had already buried. All refused to go to the hospital, however, which struck great fear in them. In a familiar refrain, "they said that all who entered it died," and the pastor was apprised of the reason why: "it had happened that the nurse, the brother of Doctor Osorio, who preceded [the current physician] Salazar, had died, and they said that 'if the physician could not heal the Spaniard, much less could he heal the Indian' . . ."<sup>768</sup> Witnessing the death of the previous physician's own brother from the fever had left serious doubts in the minds of some. Would an alleged medical expert apparently unable to cure his own brother, an *español*, have any chance of healing *indios*? How would he anticipate and control the physiological effects of his drugs in them? How would he know what counted as normal in them, they might

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<sup>766</sup> Roy Porter, *Bodies Politic: Disease, Death and Doctors in Britain, 1650-1900* (Ithaca: Cornell University Press, 2001), 22-26.

<sup>767</sup> As the Guatemalan physician José Flores admitted in his proposal for a vaccinating expedition, "we physicians forget our limited success in practice," possessing among them "barely four drugs that might deserve the name remedy," and these herbs that mostly provided relief and had been acquired from indigenous communities ("the savages"). AGI Indiferente 1558a, Madrid 28 febrero 1803, Proposal submitted by Doctor Joseph Flores, 327v-328r. [" . . . olvidamos nuestros pocos aciertos en la práctica; y que entre la infinidad de brebajes, y composiciones desagradables, con que se consuela la credulidad de los enfermos, apenas tenemos cuatro drogas, que merezcan el nombre de remedio, y éstas las hemos adquirido de los Salvajes."]

<sup>768</sup> AGN IV 1860 exp. 3, 20r, Certification of Manuel Lopez Escudero, cura por S.M. y Juez Ecco. del Pueblo de San Juan Baptista, 31 October 1807. [" . . . el número de treinta [enfermos] a más de haberseme muerto sesenta, por no querer ellos ir al hospital, a causa del grande horror, que le habían cobrado, por que decían, que todos los que entraban en él, morían por que habiendo sucedido la contingencia, de haber muerto el enfermero hermano del Médico Bachiller Osorio, antecesor a Salazar: decían que si el Medico no podía sanar al Español, mucho menos al Yndio . . ."]

have wondered, and would he ever be as caring and careful in his dealings with them as with his own brother?

Refusing to enter the hospital where the certified physician presided, community members thus passed judgment from without on his supposed expertise, whatever the source of their doubts. Within the setting of the corporate community, he knew no more than they, or knew differently, or simply cared less, than their own healers. The episode implies that the medical man's demonstration of his expertise to the community mattered to a great degree; he could hardly prove his relevance if early treatments were unsuccessful, and a community would be reluctant to submit to his ministrations thereafter.<sup>769</sup> Noteworthy is what appears to have been the community's assumption of an ethnic component in their assessment of the physician's powers to cure: care derived from familiarity; a physician presumably interested in the health of his own brother, who was ethnically and socially more proximate than a community of *indios*, should have no trouble saving his life if minimally competent. A particular kind of knowledge in healing was being articulated on the basis of such interactions, one that belies the simplistic portrayals of uniform nonconformity that appear in the documentation.

By looking for the particular criticisms leveled by residents rather than relying on generalities, it is thus possible to understand some of the ways they participated in (as opposed to simply resisted) medical intervention and health programs during colonial crisis. On December 3, 1806, Dr. Pedro Ramírez arrived in the pueblo of Juanico, in the jurisdiction of the Shrine of Guadalupe north of Mexico City. He, the *teniente*, and the *prebendo* were instructed by health committee president González Carvajal to bury the sick deeply and far away from the pueblo, fumigating with vinegar, using it in burials, and even sprinkling it onto the laundered clothes of the deceased, if possible, for their reuse (burning was by then abandoned). A provisional hospital was constructed after a search of houses by *prebendo* Antonio Maria Campos revealed more than seventy sick and thirty deceased Indian villagers. New Spain's royal representatives, in conjunction with Mexico City's health committee, settled on a course of vaccination as the best preventive measure.

Although the reasons why remain unclear, by the end of the month Dr. Ramírez, the practitioner at the center of the contingency plan, had been replaced. As reported by Campos, who held a prestigious position and likely enjoyed some familiarity with the community, since the doctor's arrival residents had received him poorly: the condition of only ten of the twenty-nine sick people who entered the hospital had improved, and as a result others would not go near the hospital, or even allow Ramírez to cure them in their own homes. "In attending to the matter I proposed to the *indios* that they choose the physician to whom they would like to be brought," Campos wrote, "and they agreed that it should be don Diego Cansinos, who since the thirty-first of the last month has been attending them." Unfortunately almost nothing is known about Ramírez, his replacement, or their methods – the description of the preferred healing method of the second doctor, which officials requested, apparently never arrived. From other reports, we can surmise

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<sup>769</sup> Among others, Christopher Lawrence has written on the importance of bodily presentation and comportment in establishing the authority and scholarly knowledge of English physicians and surgeons. See "Medical Minds, Surgical Bodies: Corporeality and the Doctors," in *Science Incarnate: Historical Embodiments of Natural Knowledge*, eds. Christopher Lawrence and Steven Shapin (Chicago: The University of Chicago Press, 1998), 156-201.

that it involved much of the sweating, purging, and rubbing typical of period. What the sources do show is that residents changed their opinion of the hospital once the substitution had been made: as a result, the prebend reported, those sick patients and their families who had refused care before now went voluntarily to the hospital, with twenty-three new patients arriving in a week's time and the majority faring well.<sup>770</sup>

Perhaps a dismal survival rate in the first few weeks under Ramírez's care and resentment over the doctor's assignment to the community without its consent were enough to produce dissatisfaction and rejection in the first instance. In this place, at least, the complaint of residents appear not to have been with hospitals in general, or an outsider *per se*: villagers embraced the intervention and aid of a university-trained doctor once they found, with the help of the prebend, the right person and the appropriate manner in which to dispense care.

The ways peasants and an urban underclass ultimately leveraged their positions to shape the preventive programs put into place by the state, and the reasons for their successes and failures, are more complex, but two consequences follow a shift in emphasis and perspective. First, objection no longer appears as blanket resistance to new medical science, but rather can be placed within a constellation of values, knowledge, and certainties about healing. Residents subjected medicine to a number of criteria, not least of which was the success of the particular provider, his relation to the community's political hierarchies, and his willingness to treat residents with dignity. Second, different methods cannot be seen as mere commodities, exchangeable in a marketplace by buyers who would try virtually anything without reflection on the transaction. The perception of familiarity and even race in the provision of health care had its basis in colonial political and social realities: at issue was not only a disease, but also a person, a community, and ultimately an acutely sensed relationship to power. All of these considerations factored into decisions about where to acquire medicine, and from whom.

It is worth remembering that in the midst of a great deal of suffering, no one did not want to get better, despite the insistence of numerous frustrated observers. Good medicine, as Gonzalo Aguirre Beltrán wrote in his study of Aztec healing systems, "is what gives security to the society itself; bad, that which raises anxiety."<sup>771</sup> The same can be said of epidemic crises: good medicine could be many things so long as it did not tear apart a family or a community in the course of its administration.

## Conclusion

The two moments considered here indicate that popular therapies were not simply irrational vestiges waiting to be replaced by the measured interventions of trained physicians. This narrative of change over time is most familiar through the work of Michel Foucault, who wrote that a "surplus of power" was bestowed upon the eighteenth-century physician in consequence of his growing presence and function as social

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<sup>770</sup> AGN IV 1860 exp. 7, Juanico 8 enero de 1807, Antonio María Campos to González Carvajal, 27-28v. "*En atención a esto, propuse a los Yndios que eligieran el Médico, que les gustase para llevárselos, y convinieron en que fuese D. Diego Cansinos, quien les asiste desde el día treinta y uno del pasado. Se ha conseguido con esto el que los enfermos vayan voluntariamente al Hospital, y en los pocos días que contamos han entrado veinte y tres, de los cuales la mayor parte parece que van bien.*"

<sup>771</sup> Aguirre Beltrán, *Medicina y magia*, 41. ["... *es la que da seguridad al grupo propio; mala, la que aumenta la ansiedad.*"]

observer, reformer, and hygienist.<sup>772</sup> This picture breaks down upon closer inspection of the situation in late colonial Mexico, and not simply because fewer physicians were available to travel to the countryside. When physicians arrived to impose regimens of diet and hygiene, the situation was mixed. A parish priest often mediated conflicts and disagreements, and as a result what was most distasteful or otherwise impracticable was often never put into practice.<sup>773</sup> Physicians shared with communities a good deal of common ground in medicine, moreover, while the latter were not in any way passive recipients of city doctors, if for no other reason than that the former were subject to the social conventions regulating interactions in rural Mexico. In a number of cases rural villagers leveraged their positions as members of legally constituted corporate republics of Indians to compel doctors to respect local traditions of healing and political assessment. In situations of treatment, physicians and administrators abandoned what some saw as an intellectually faddish stress on moderation; at the end of the day many doctors remained “over-prescribers” (*recetadores*), as Bartolache complained in his medical journal. “The physician who makes two consecutive visits in a home without ordering more than a good regimen or some simple, common, domestic medicine earns his dismissal, replaced by another who has more knowledge of the medicinal jungle.”<sup>774</sup> Enlightened ideals often gave way to a messier reality, in cities as in the countryside.

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<sup>772</sup> Michel Foucault, “The Politics of Health in the Eighteenth Century,” in *Power/Knowledge: Selected Interviews and Other Writing, 1972-1977*, ed. Colin Gordon (New York: Pantheon Books, 1980), 166-182.

<sup>773</sup> That the priest played such an important role in the oiling of this machinery, in emergencies as in the administration of vaccination, is worth stressing again. So is the observation that this reality of healing was not restricted to the heartland of New Spain, where most of the documentation I have consulted is centered. As far north as Monterrey, when a poor hospital was established for the 1798 smallpox epidemic, the governor put Franciscan friar Antonio de la Vera in charge as director of the hospital; this individual was referred to, in a *relación de méritos* from the city’s cabildo to the king following the conclusion of the epidemic, as “*único facultativo de medicina*,” and when the provisional hospital was dissolved, the remaining medications were sold, for 46 pesos, to the friar for his own personal pharmacy. Monterrey, with around 4,000 inhabitants, was a far cry from the more scattered frontier regions to the north, and it is significant in that a friar at the end of the eighteenth century could hold a “professional” monopoly on medical practice in such an important place. Raúl García Flores, “Morbilidad y vulnerabilidad en una epidemia de viruela: Nuevo Reino de León, 1787,” *Relaciones* 114 (Spring 2008), 55.

<sup>774</sup> *Mercurio volante* no. 12 (January 13, 1774), in Moreno, 122-3. [“*El que hiciere dos visitas consecutivas en una casa, sin ordenar más que un buen régimen o alguna medicina simple, usual, doméstica, no necesita más para ser despedido y que se llame a otro que sepa mejor la selva medicinal.*”]

Among other things, cannabis was among those remedies for which popular demand was forcing healers to bow. In response to assaults on the medicinal use of this herb, an Indian cacique by the name of Pascual Ángeles de los Reyes, possibly the creation of a parish priest (see Chapter Two), wrote the editor defending it. Not even a small part of the alleged abuse in fact took place, and if God had given it its natural virtue as to other plants, and cures could be performed, why did the physicians spurn it? To the danger of diabolism, the author responded that God protected Christians from this and that, even if all herbs ran this risk of malicious use, all could not simply be removed from the pharmacy. What was needed was punishment of the wretched sorcerers (“*malditos hechiceros*”) who abused it. “Though when it comes to *pipiltzintlis* it is true that the *curanderos* in the villages prescribe it in beverage form for everything, they do it to heal as best they can and because they are paid for the cure, without anyone thinking of the devil. They do the same with other drinks and medicines of the poor here in these sparsely populated villages, where nothing else can be done.” *Mercurio volante* no. 7 (December 2, 1772), in Moreno, 73-4. [“*Aunque en esto de los pipiltzintlis lo que hay de cierto es que los curanderos y curanderas entre los naturales de los pueblos los dan a beber para todo cuanto hay pero para curar buenamente y porque les paguen la cura sin*”]

Those scholars who have made studies of nineteenth-century attempts to introduce “Western” medicine within Native American communities suggest that new practices were frequently incorporated willingly into an older repertoire as long as modernizers did not hail the new therapies and medicines as replacements, hunting the traditional practices into extinction.<sup>775</sup> Something similar can be argued for many of the rural villages in colonial Mexico considered in this dissertation. Their conception of good medicine was capacious, but they were prone to object when timeworn therapies were called into question rather than allowed to coexist with the new. On the whole, one easily finds something of the wild enthusiasm for prescriptions and drugs noted by observers, especially when the immediacy, sustained suffering, and uncertainty of an epidemic made the non-interventionist, minimally invasive style of treatment untenable. In these settings, less was not necessarily more, and in fact could be taken as a sign of defeat. Remedies such as bleeding and *friegas* remained common among physicians who would have considered themselves in gross neglect of their patients’ needs if they had followed the advice of cosmopolitan physicians such as Gil and Bartolache, and this provided a point of entry into communities, a common language in which both could converse.

More troublesome in Foucault’s model is the assumption of a predetermined or uniform relationship of medical doctors to a state apparatus. Medical practitioners were not the unthinking pawns of institutions more or less able to carry out their agendas through them. Some recognized their limited abilities; others acknowledge local experience in the communities they visited; still others rejected the authority supposed to have come with their social position, or had it rejected for them. It seems worth extracting these personalities from their archetypical representation.<sup>776</sup> The reports from the front lines reveal a remarkable array of attitudes and voices not fully articulated in the preceding pages. While representatives of medicine were interested in fees, and in some cases were closely monitored by bureaucrats and regulating institutions in Mexico City, they also had their own opinions, dispositions, ideas of propriety, and preconceptions of the peasants and impoverished city dwellers they confronted. They were more or less dedicated to their work, more or less concerned with their patients’ well being, and often the person in which the contradictions of scientific efficiency, on one hand, and the needs and expectations of communities, on the other, came into tension. Though the physicians who appear in this chapter are hardly representative of professional developments and affiliations, they at least suggest the diversity of their ways of dealing with patients and the occasional ability to find a more humble disposition to rural knowledge.

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*acordarse unos ni otros de tal diablo. Lo mismo hacen con otras bebidas y remedios de pobres acá en los despoblados donde otra cosa no se puede.]*

<sup>775</sup> Here as in the practice of preventive medicine generally, there is a regrettable lack of comparable studies for the period prior to 1850. For Navajo reservations in New Mexico after 1863, see Robert A. Trennert, *White Man’s Medicine: Government Doctors and the Navajo, 1863-1955* (Albuquerque: University of New Mexico Press, 1998), especially 32ff, 43-52, and 107-117; see also Helen Lambert, “Plural Traditions? Folk Therapeutics and ‘English’ Medicine in Rajasthan,” in *Western Medicine as Contested Knowledge*, eds. Andrew Cunningham and Bridie Andrews (New York: Manchester University Press, 1997), 191-211.

<sup>776</sup> As William Taylor noted for parish priests in colonial settings, the tendency to think of actors as stock characters in a Mexican drama has been strong, and yet stereotypes, whether of priests, nuns, indigenous governors, bureaucrats, caudillos, or peasants, gloss over a great deal of deviation in historical settings from abstract types. Priests resist easy generalization in their professions and work with parishioners, and the same can be said of medical practitioners.

To return to the question posed in the first chapter: is this medical practice best understood within a framework of medical mixture, or *mestizaje*? At the level of repertoires of healing, many communities were clearly willing to appropriate medicine foreign to their way of coping with disease. But the implication of the repertoire model is that one begins with two or more distinct medical frameworks in the early modern period, and this is not necessarily the case. To whom belonged the humoral view of the body as an always precarious and dangerous interaction with an unstable environment? Contemporaries – elite and commoner, literate and illiterate, European and indigenous, urban and rural – both agreed and disagreed on many problems of medicine and health, in epidemics and beyond. Perhaps the most pressing question is whether the framework can account for the political contingencies that underlay these sensitive exchanges. The syncretism hypothesis implies an inevitable marriage between global science and local knowledge, when success often was stymied as a result of political circumstances particular to a village. Rarely was a “system” present or accepted tout court, moreover, but rather single therapies and innovations were submitted to rigorous tests of viability, and dispensed with once their moment or usefulness passed. As argued in prior chapters on vaccination, success turned on the manner of a reformer’s introduction and varied by place: the will of the reformer, his relationship to the community, the way in which the timelines of bureaucrats and villagers converged, the availability of a priest or a governor to mediate, and the nature of the crisis were factors in exchanges as interesting as the results.

It may be that suspicions about the anachronism of *mestizaje* frameworks – propagated with great enthusiasm through nationalist narratives of the nineteenth and twentieth centuries – should compel a rethinking of their utility in explaining and describing the art of healing in earlier moments. I think it makes more sense to speak of syncretic healing for the period following the bifurcation of the late-nineteenth century’s microbial revolution, when biomedicine and folk healing grew apart in their assumptions, methods, and institutions, even as they coexist today.<sup>777</sup> It may be that Charles Rosenberg’s warning about continuity in the nineteenth century – “Practice changed a good deal less than the rhetoric surrounding it would suggest.” – applies to the Mexican case as well.<sup>778</sup> Medical science continued to be a predominantly local scenario in which personalities, politics, and ritual shaped the encounter.

What the sources reveal beyond doubt is that medical interventions in the pursuit of public health were a collective endeavor. That laypeople in rural Mexico participated as consumers and critics of modern medicine, in the process augmenting the store of knowledge, continues to be overlooked owing to a tendency to speak in generalities of popular attitudes toward medical science. The swine flu scare that erupted in Mexico in May of 2009 resulted in a litany of commentators reporting that Mexicans preferred healing themselves and refused to visit hospitals, which was meant to explain how it was that so many cases of early illness had remained undetected. The refusal to see a

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<sup>777</sup> It can more appropriately be said, for example, that for the communities of the Sierra Santa Marta in southern Veracruz there is a coexistence of multiple perspectives and cultures of healing, as Jacques Chevalier and Andrés Sánchez Bain argue, in *The Hot and the Cold: Ills of Humans and Maize in Native Mexico* (Toronto: University of Toronto Press, 2003).

<sup>778</sup> Rosenberg, “The Therapeutic Revolution,” in *Explaining Epidemics*, 26.

physician was in turn explained by reference to cultural predisposition and the poor medical conditions to be found in third world countries. We continue to speak in generalities, in other words, perhaps inevitably; for modern nations as for a modernizing colony, there is much at stake in the public's health.



## CONCLUSION

In the 1830s and 1840s justices in Huajuapán, Ejutla, and Ocotlán, in the central valleys of Oaxaca, called on tailors, hatters, shoemakers, tanners, bakers, merchants, barbers, and widows to serve as expert medical witnesses in criminal cases. These *aficionados* were repeatedly asked to inspect wounds in homicides, tend to injured victims, and occasionally visit sick prisoners in holding cells. The certifications are mostly silent regarding the nature of the individual's medical training, but in a few cases, as in testimony provided by Josefa Juliana González, a fifty-year old widow from Huajuapán's district seat, the source of this knowledge is specified. In 1834 González was called on in a case involving an unmarried woman from Oaxaca's capital. She averred that a sharp weapon, perhaps a knife, had caused the woman's wound. González had some experience with such lacerations, but did not like the victim's prospects: a "cancer" had infected the injury, and it would likely prove mortal. The widow could not sign, but claimed that she spoke "with experience, because she has been a healer [*curandera*] of wounds for a long time, as her husband, the deceased don Manuel Robles, who was a practitioner of medicine, instructed her and commissioned her to heal."<sup>779</sup>

That Oaxaca's legal system depended on the expertise of a group of informally trained healers like Josefa González was not out of the ordinary. In many ways, it was a continuation of the viceregal government's willingness years earlier to draw on a variety of local healers and laypeople to introduce preventive medicine. The oppositions we have come to expect – urban versus rural, elite versus lower class, professional versus lay, Spanish versus indigenous, literate versus oral, science versus religion – conceal much of this cooperation and mutual exchange in the art of healing in late colonial Mexico. This is true even of the most cosmopolitan centers, where access to trained physicians and surgeons – representatives of what has been called "medical empiricism" – was greater than in the countryside. Take as an example the meeting minutes of Puebla's health committee (Junta de Sanidad) during the pestilential months of 1812-14. Members were frustrated with apothecaries and shamans, condemning the former for reportedly filling prescriptions haphazardly, in some instances even dispensing the wrong drugs, and the latter for practicing without prior training or certification.<sup>780</sup> If such attempts to monitor

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<sup>779</sup> AHJO Huajuapán Criminal 14 exp. 1, Huajuapán de León 18 enero 1834, Certification, 2r-v. The patient did die, and the attorney of the accused challenged the legality of the case on the grounds that González had failed to identify the width and profundity of the wound, whether it was grave or superficial, and the kind of weapon used, and that the two witnesses required to certify her observations had not been present. My sense is that the *curandera* was more interested in the life of the patient in this case than in the legal formalities, but the case and numerous others like it demonstrate how crucial the medical assessment could be in furthering or delaying the judicial process. [". . . habla con experiencia por que hacen mucho años que es curandera de heridos por que su esposo el finado don Manuel Robles que era práctico en medicina la instruía, comisionaba a hacer curaciones."]

<sup>780</sup> Archivo General Municipal de Puebla 78 leg. 885, Junta convened 3 octubre 1814, 268r-9r; and *ibidem*, Junta convened 10 octubre 1814, 269v-270v;

and even foreclose the participation of allegedly inept healers implies a circumscribed legitimacy in medicine, contradictory evidence appears in the scope and heterogeneity of the relief effort: among those “partners” (*socios*) of the Junta listed for their help in bringing about an end to the 1813 epidemic are names of twenty-two physicians, thirty-two barbers, and an overwhelming 127 ecclesiastical members.<sup>781</sup> These individuals, many filling in for elite physicians reluctant to minister to the poor for meager compensation, were not easily monitored, but they performed an indispensable role as caregivers, joined by many more whose names did not make it into the registers.

In implementing reforms in disease management, there were many reasons to include non-specialists, but three stand out. First, the populations affected by the reforms were extremely diverse. In the period covered by this dissertation, viceregal interventions in disease management were applied over an extremely varied terrain that included agricultural communities in southern New Spain, from the low Isthmus of Tehuantepec up into the rugged sierras of central Oaxaca; the center-west regions of Michoacán, Guadalajara, the Bajío; the swathe of territory north of Mexico City up to the mining centers, stretching as far north as Zacatecas and Durango; the northeastern Yucatán up through the Gulf Coast to Veracruz and its hinterland; the corridor from Puebla down to Antequera and radiating outward; the populous Valley of Mexico; and major urban centers such as Mexico City and Puebla. In part because of the vastness of this territory, enlightened programs of health care could not be uniformly imposed. Vaccination campaigns, to take the most obvious example, were spotty and often haphazardly thrown together when an epidemic loomed on the horizon.

Second, non-specialists were so often relied upon because there was an expectation that consent to proceed with innovations in medical practice would first be secured from communities. This colonial obligation – to secure consent before effecting major change – was of course more widespread, but no reform was more meaningful or directly relevant to residents than one in which the government asked parents to put the health of children in the hands of bureaucrats. In order to proceed, appeals were made directly to parents, or generally speaking to the expectations and cultural capacities of urban and rural populations, through ritual celebrations and exchanges and other attempts to translate medical science for lay audiences. This necessity was related to the fact that the authority of medical science was still in formation: its utility would have to be demonstrated in each instance to a populace that was not yet convinced of its benefits.

The third reason, then, is that the innovations and techniques being introduced remained uncertain at the time. In this last respect, interventions in early modern medicine in Spanish America were a far cry from those of Latin American states in the late-nineteenth century, even if traces of the confidence on full display in the scientific fields of eugenics, hygiene, and urban renewal could already be found.<sup>782</sup> Put otherwise,

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<sup>781</sup> Archivo General Municipal de Puebla 78 leg. 885, Junta convened 29 octubre 1813, 240-244.

<sup>782</sup> As Theresa Meade argued for the violent resistance to Rio de Janeiro’s health reforms in 1904, “the more the elite were able to wrap their cause in the legitimacy of science, the easier it was to discredit the opposition, labeling it, as they did, the recalcitrance of superstitious, ignorant, and backward poor people unable to comprehend the necessity of health and sanitation.” Meade, “Civilizing” Rio, 115f. On the authoritarian and insensitive pursuit of the vaccinator’s ends, see Sidney Chalhou, *Cidade febril: cortiços e epidemias na Corte imperial* (São Paulo: Companhia das Letras, 1996), 161f. More residents were vaccinated in their very own communities and residences than ever before, with a record 87,711 in the year of the uprising alone.

it was never inevitable that the “simplifications” of universal projects of health care pursued in Spain and its American colonies would necessarily override local knowledge.<sup>783</sup> Attempts to impose global medical programs at the turn of the nineteenth century did disrupt relationships between family members, challenge communal processes of negotiation, and ignore the shared meanings and values, but for the most part these simplified programs for disease prevention and disaster relief were short lived. When and where reforms were implemented, lay communities, religious institutions, and local governments repeatedly revised imperial and viceregal policies before applying them. Because of this, medical ideology acquired a partial legitimacy for a number of communities, but it was an ideology that colonial societies helped craft, in which empiricism and efficacy in treatment were important aspects, but not to the exclusion of ideas about ceremony, religion, local autonomy, and charity. It was more inclusive insofar as peasants exercised a good deal of political leverage and that roles for local healing knowledge were reaffirmed. If not initially, then, by the time they were implemented enlightened health programs were joint endeavors, the result of a variety of past experiences in epidemics. This realization about the way Mexico underwent early medical modernization affords a clearer view of how institutions impacted society, constrained by the communities they sought to shape.<sup>784</sup>

My sense is that among other factors, the primacy accorded cities in the historiography of science and medicine has led to scholarly neglect of such local patterns and lay contributions. Studies of science in colonial Mexico continue to place its practice within frameworks of proto-nationalism, in which a creole elite’s complexes of inferiority, pride, and patriotism are the stuff of scientific discovery and intellectual pursuit.<sup>785</sup> Despite reigning theoretical statements on processes of state formation, which insist on the state’s “negotiation from below” as peasant political culture intersects with elite politics, in science most of New Spain’s population has until recently played no part.<sup>786</sup> They appear irrelevant because they had a tenuous relationship to the European discourses against which elite identity was being defined, because they were peripheral to industrial development, or because most of the population was illiterate and not, strictly speaking, part of modern science’s “public.” At best, New Spain’s indigenous population becomes of interest as symbolic foils for a nascent creole identity, the silent specimens that gave shape to a nation crafted by historians, botanists, archaeologists, and scientists.

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<sup>783</sup> In his study of totalitarian projects, James Scott called “state simplifications” the de-contextualized, utilitarian reductions of situated knowledge. Situated knowledge is not better *per se*, but is “locally superior” knowledge. (*Curanderos* in the highlands of Oaxaca would have a difficult time applying their knowledge in Europe, although they may apply it reasonably well in a neighboring pueblo). Scott, *Seeing Like a State*, 316-319.

<sup>784</sup> In all likelihood, the willingness of the state to lean on alternative healers did not begin with the introduction of inoculation and vaccination at the end of the eighteenth century. The testing of this hypothesis requires more research in the eighteenth century; the records left by the diocesan courts responsible for regulating indigenous healers in the countryside may provide one route to a better answer.

<sup>785</sup> See the contributions to Juan José Saldaña, ed., *Historia social de las ciencias en América Latina* (México, D.F.: UNAM, 1996).

<sup>786</sup> For a theoretical overview of negotiation, see Gilbert Joseph and Daniel Nugent, “Popular Culture and State Formation in Revolutionary Mexico,” in *Everyday Forms of State Formation: Revolution and the Negotiation of Rule in Modern Mexico*, eds. Joseph and Nugent (Durham: Duke University Press, 1994).

A proto-nation was at best a vague entity for most of the communities considered in this study, and yet members of corporate villages were far from isolated from transnational and viceregal processes of change. If not necessarily in the interest of national identity, villagers interacted in numerous ways with the world beyond the borders of the pueblo, pursuing legal advocates or work in cities, receiving medical practitioners and vaccinating expeditions, coping with reforms mandated in urban centers, and even experiencing a transatlantic science in more familiar ways, as in the parish spectacles produced in honor of enlightened medicine. The consequences of attempts to put quarantines in place or limit processions serve as a reminder of the dangers of neat definition of the units of analysis. The sick and their families would not be easily contained: they insisted on visits to sown fields, to loved ones separated in isolation hospitals, and on processions to saints' images and shrines. Each objection, by pointing up the impracticality of the boundaries imposed, signaled connections between villages and regions and serves as a warning to exercise caution in restricting the worldview of peasants in the interest of clear definition of the appropriate units of analysis. At various moments, the parish, the barrio, the village, the *cuartel* (a seemingly arbitrary but nonetheless useful division of cities used for purposes of policing, distribution of alms, census taking, and other administrative tasks), and the region appear most compelling to actors. Epidemics, in general, entail in acute ways the problem of boundaries, and not merely the fact of their existence, but their apprehension, probing, testing, creation, and destruction. Analytical concepts such as nation, class, city, region, and crisis are provisional; they tend to erode, as Michel de Certeau suggested, through the process of writing history.<sup>787</sup>

The epidemic years 1737, 1747, 1761-63, 1773, 1779-80, 1785-6, 1796-7, 1806-8, and 1813-15 pose a related problem of analysis. They did not, after all, exist as isolated crises, but spilled into what historians characterize as periods of normalcy. Individuals, institutions and communities remembered, made connections from one crisis to the next, and applied the lessons learned in past epidemics to new occurrences, and those patterns in health care established in the colonial period endured in the Republican era. In the tumultuous years following Independence, a period characterized by political rupture and instability in both secular and religious government, one nevertheless finds in the handful of official publications attempts to perpetuate old patterns and lessons. Early on, the Superior Health Council (*Junta Superior de Sanidad*) resumed efforts to distribute vaccine to district seats in the state of Mexico and issued regulations to this end for the creation of vaccinating committees. These bodies were to include two "professors in the science of healing," but in their absence the regulations allowed for vaccination by the curious amateur ("*curioso aficionado*") responsible for public health. In smaller populations, moreover, *alcaldes*, prominent residents, and also priests were to serve on the committees alongside this resident healer, and vaccinators without medical training were advised to use the *Instruction* published by order of Viceroy Calleja in 1814 (reprinted in 1829 for this purpose).<sup>788</sup> If parents proved reluctant to submit their

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<sup>787</sup> Michel de Certeau, *The Writing of History*, trans. Tom Conley (New York: Columbia University Press, 1988), 97.

<sup>788</sup> *Instrucción formada para ministrar la vacuna, como único preservativo del contagio de las viruelas, y en defecto de su fluido inocular con el pus de esta; del modo de conocer y distinguir las calidades de las naturales, y el método de curarlas* (México: Don Mariano Ontiveros, 1814).

children, the Health Council advised the following: “the parish priest and other authorities will try to convince them, and encourage by whatever means they can,” pointing out its usefulness as an antidote against smallpox, as demonstrated in 1814.<sup>789</sup> In other words, prior epidemic experiences and colonial wisdom about healers, priests, and the need for persuasion became a consistent point of reference around which more recent attempts to immunize were organized.

Yet these regulations were prescriptive: who can say how many shared their point of view, consulted them, or followed the advice? A second indicator of continuity comes from extra-official patterns of response and relief carried out at the level of the village, the barrio, the parish, and even on rural estates. In the summer of 1833 the Hacienda de la Compañía, owned by Mariano Riva Palacio – a prominent national figure then just beginning his political career as deputy of the Congress in Mexico City – experienced an outbreak of cholera, a disease until then unknown in Mexico. The hacienda’s overseers and workers in the nearby shantytown (*ranchería*) and *rancho* of San Lucas were struck hard (and abruptly in some cases, collapsing virtually mid-sentence). Riva Palacio was compelled to forward medications to the estate, including mustard, pepper, and camphor for *friegas*; painkillers such as laudanum, to be ingested with chamomile tea; and wormwood (*sal de ajenjos*), ingested with the juice from a lime or mixed into cold *atole*. He included instructions to the resident administrator for their use and reminded him, among other things, to prohibit the sale of aguardiente to workers for the duration of the epidemic, even if this meant closing the company store. In turn, the administrator responded with regular updates, noting, for example, the usefulness of the wormwood concoction, or the difficulty acquiring limes for medicine and foods. (A run on these during the epidemic had apparently made them rather scarce, and muleteers sent to *tierra caliente* to acquire them returned empty handed after authorities in Amilpas placed restrictions on their sale.)<sup>790</sup>

Riva Palacio’s interventions were not disinterested; he was a businessman, after all, trying to ensure that his hacienda prospered. But in so doing he illustrated an argument advanced in previous chapters about the paternalistic tendencies of health care in the final decades of the colonial period. Medicine, much of which consisted in fulfilling basic needs of diet, clothing, and shelter, was paternalistic in the sense of being a tactical fulfillment of the obligations of middle- and upper-class patrons – an elite

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<sup>789</sup> *Reglamento formado por la Junta Superior de Sanidad del Estado de México, para que se propague y perpetúe la vacuna en todos los Pueblos de la comprensión de aquel* (Tlalpam: Juan Matute y González, 1829 [México 8 noviembre 1824]). For evidence that trained physicians continued to be circumvented later in the century, see *Instrucción para ministrar la vacuna en las poblaciones donde no hubiere facultativos* (México: Consejo Superior de Salubridad, 1854). [“. . . los Párrocos y demás Autoridades, los tratarán de convencer, y estimularán por cuantos medios puedan . . .”]

<sup>790</sup> Benson Latin American Collection, UT Austin, Mariano Riva Palacio Papers: no. 249, Mexico City 14 agosto 1833, Mariano Riva Palacio to José María Caballero, administrador de la Hacienda de la Compañía; no. 250, Hacienda de la Compañía 20 agosto 1833, José María Caballero to Riva Palacio; no. 252 Compañía Agosto 22 de 1833, José María Caballero to Riva Palacio; no. 253, Mexico City 23 agosto 1833, Riva Palacio to José María Caballero; no. 260 Hacienda de la Compañía 3 septiembre 1833, José María Caballero to Riva Palacio, Riva Palacio also initially sent 198 patches (*parches*) with orders that all *peones* place them over the mouth of the stomach (*en la boca del estómago*), but changed his mind after inspections of cadavers in Mexico City with the patch turned up with great quantities of blood (*una bola de sangre*).

broadly defined, including hacienda owners, priests, merchants on municipal councils, bureaucrats, royal agents – toward their “dependents,” also broadly defined. The remittance of pain relievers, botanicals, and domestic provisions such as limes in the 1833 epidemic (its treatment here superficial, but not, I think, misleading) demonstrates the ways public health continued to be not only paternalistic but also collaborative, carried out in the absence of intervention by a central state or even trained physicians (at the hacienda, the mayordomo and parish priest of San Gregorio were both active participants). As far as medical hegemony is concerned, the epistemology underlying these relations cannot be seen as radically new or coercive in any straightforward sense.

The recent efforts of archivists and historians have made available an eclectic array of sources that speak to this occluded history of informal practice. This process of forgetting has a long history, however, and a great deal of what has been left out remains to be recovered. Already at the end of the nineteenth century, advances in modern medicine, and especially successes in vaccinating, led Mexico’s authoritarian state to trumpet these feats in service of a narrative of national progress.<sup>791</sup> In this vein, a curious commemoration of Edward Jenner’s discovery of vaccination took place in Mexico City in May 1896, in which nation’s Superior Health Council (Consejo Superior de Salubridad) issued a special edition of its *Boletín* with articles implying that, in the capital, the procedure had been in “few but expert” hands since its introduction. Qualified medical men, in other words, had practiced over the course of the century, but few others.<sup>792</sup> Even in focusing on Mexico City, this retrospective assessment ignored the many “inexpert” hands through which the technique passed along the way, to say nothing of trials and errors and outright failures within the medical community.<sup>793</sup> What it

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<sup>791</sup> The number of smallpox victims declined steadily over the century, made possible by continuing vaccination campaigns in Mexico City, municipal legislation (an 1882 decree mandating vaccination before the age of six months), and finally the extension of this provision to the entire Mexican Republic at the turn of the century. See Robert McCaa, “Revisioning Smallpox in Mexico City-Tenochtitlán, 1520-1950: What Difference Did Charity, Quarantine, Inoculation and Vaccination Make?” in *Living in the City, 14<sup>th</sup> – 20<sup>th</sup> Centuries*, ed. Eugenio Sonnino (Casa Editrice, 2004), 460-463.

<sup>792</sup> Seeking to repay the debt of gratitude owed the Englishman, the Consejo Superior de Salubridad published an homage to Jenner’s memory, which included a short article on the success of the operation in Mexico, a history of Jenner’s experimentation with cowpox (written by the city’s current Conservador de la Vacuna, Dr. Fernando Malanco), and a paeon in verse by the Consejo’s resident chemist, along with reproductions of several documents pertaining to the propagation of smallpox vaccine by the Royal Expedition. It was a fitting reference to Mexico City’s successful battle against smallpox, but largely myopic: its initial dedication stated that vaccine had been in “few but expert” hands and listed as vaccinators Balmis, Antonio Serrano, José Miguel Muñoz, who passed the torch in 1842 to his son, Luis Muñoz, who served as chief vaccinator for the next thirty years, until the current vaccinator, Dr. Malanco, assumed charge in 1872. “*Ya sea porque ha pasado por tan pocas manos; ya, lo que es más probable, porque todos los médicos que la han conservado han puesto en ello el más prolijo empeño, el hecho es que aquí nunca ha degenerado la vacuna . . .*” “Iniciativa para celebrar el primer centenario del descubrimiento de la vacuna,” *Boletín del Consejo Superior de Salubridad* (Special Edition of May 22, 1896): 7.

As Paul Ross notes, this was an era of great international pride in the modernization of Mexico’s public health, and the health council was an active participant. See “Mexico’s Superior Health Council and the American Public Health Association: The Transnational Archive of Porfirian Public Health, 1887-1910,” *Hispanic American Historical Review* 89:4 (2009): 573-602.

<sup>793</sup> Among historians well informed of the history of vaccination, a similar bias exists: for example, Michael Smith, in an otherwise informative and subtle article, wrote of the challenges to the sure

projected – and this was of course the point – was the total confidence we have come to expect of modern science.

Stories of science’s discoveries and breakthroughs, particularly when harnessed to a project of state formation, suffer from an interpretive stance common to the human sciences, in which so much of what we seek to understand is canceled out.<sup>794</sup> Foremost among those things brushed aside are the seeming intangibles appearing in the record of epidemic disasters: expressions of sorrow and suffering, of love and hope invested in healing and divine aid, and of deep exhaustion, as men transported barrels of clean water to supply an ailing community or women scoured walls and floors with vinegar. How to do justice to these human sentiments? In the preceding chapters they appear in the pleas of parents to see their children and in the rumors of subterfuge and deceit that were exchanged between suspicious villagers, but for the most part these anxieties are muted. “You have to tell the story twice,” Ashis Nandy and Shiv Visvanathan conclude, “only to reaffirm that even criticisms with limited access to empirical data, even criticisms couched in the language of anti-empiricism, can, if the critic’s moral sensitivities are not blunted, show greater empirical sensitivity than those wedded to empiricism but unwilling to confront the problems of suffering without reifying it.”<sup>795</sup>

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establishment of vaccination facing Balmis in New Spain: “*El éxito de la empresa dependía en gran parte de él mismo. Balmis necesitaba la resolución, la inteligencia, el valor, y el tacto para superar cualquier obstáculo físico, humano, o burocrático que pudiera frustrar su misión.*” (127) In the same volume, Ramón Navarro García, following a review of the documents pertaining to the expedition available in two large volumes at the Archive of the Indies in Seville – volumes full of letters referring to the numerous adjustments that had to be made by bishops, viceroys, and intendants – concludes that even in the territories where vaccination preceded the expedition, “*ni se había extendido suficientemente la vacuna, ni se había perpetuado. La rigurosa metodología que implantaba Balmis con sus Juntas Centrales y Subalternas dotadas de minuciosos reglamentos, garantizaba la continuidad de las vacunaciones, su extensión y por tanto su éxito.*” There is repeated insistence on one point: juntas were “established” by the time Balmis left New Spain, by which these authors mean they were more or less permanent fixtures with influence in society, but the reality of establishment ranged from the temporary to the superficial. Imagining a system that is in place ignores not only a diverse group of participants but also the variability of reception, which depended on the capacity or willingness of communities to be moved to receive the juntas and the medical procedure. See Smith, “Balmis en la Nueva España,” and Ramón Navarro García, “Análisis de los documentos esenciales sobre la Real expedición de Balmis-Salvany,” in *ibidem*, 74.

<sup>794</sup> Paul Ricoeur calls *distanciation* the stance that renders possible the objectification of a phenomenon for study, but simultaneously “destroys the fundamental and primordial relation whereby we belong to and participate in the historical reality we seek to describe.” Paul Ricoeur, “On Interpretation,” in *From Text to Action: Essays in Hermeneutics II*, trans. John B. Thompson (Evanston: Northwestern University Press, 1991), 75.

<sup>795</sup> Ashis Nandy and Shiv Visvanathan, “Modern Medicine and Its Non-Modern Critics,” 182.

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## Appendix

[Villa de Etna, Oaxaca, December 7, 1804]\*

Nos el D<sup>or</sup> D<sup>n</sup> Antonio Bergosa y Jordán por la Gracia de Dios y de la Santa Sede Apostolica Obispo de Antequera de Oaxaca, Caballero de la Real y Distinguida Orden Española de Carlos Tercero, del Consejo de S[u] M[ajestad] &<sup>a</sup>

A nuestros amados Parrocos, Vicarios, y demas Eclesiasticos, y a todos los Fieles de este nuestro Obispado salud en nuestro Señor Jesucristo.

Que felices fuerais, amados hijos mios, si quanto se esmera nuestro Catolico Soberano en procuraros vuestro bien os esmerarais vosotros en corresponder a sus amorosas insinuaciones! Ademas de sus repetidos encargos sobre vuestro socorro en lo espiritual con abundancia de zelosos ministros, que os expliquen la doctrina cristiana, y administren los Santos Sacramentos, a vuestra felicidad espiritual conspiran sus repetidas reales ordenes, para el establecimiento, y conservacion de las escuelas, y para la enseñanza del idioma Castellano. Ni se ha satisfecho tampoco el Rey nuestro Señor con procuraros en lo temporal muchos ramos de industria, agricultura y artes, ia con el cultibo del lino, ia con los muchos medios promobidos en el semanario de agricultura, que adoptados por vosotros aumentarian seguramente vuestros intereses y conveniencias, sino que con el maior empeño, y amor paternal os procura su real beneficencia la salud y la vida. La salud, bien el mas precioso de quantos se numeran entre los bienes de la naturaleza, os procura S.M. a costa de mui crecidos gastos de su real Erario, ansioso de preservaros de la contagiosa enfermedad de las viruelas naturales, que siendo asi inevitablemente necesaria, arrebatada a tantos inocentes parvulos de los brazos de sus Padres, y a tantos adultos del centro de sus familias, singularmente en la dilatada extension de ambas Americas, despobladas en gran parte por este cruel azote de la naturaleza. Contra este pues os provee de remedio generosamente nuestro Catolico Monarca por medio de la vacunacion, o infusion del fluido vacuno.

Este sencillo remedio debido mas que al ingenio del hombre a una casualidad, o por mejor decir, a la divina providencia, para la qual no hay casualidades, es tan experimentado en Ynglaterra, Francia, España, y casi toda la Europa, que seria temeridad ia poner en duda la seguridad de sus beneficos efectos. Observase en el condado de Gloucester, y en otros paises inmediatos, que las Bacas padecen una especie de enfermedad, reducida a salirles algunos granos en los pechos, singularmente en los pezones; y el sabio Fisico Jenner, habiendo obserbado alli mismo que no padecian viruelas naturales las personas, que con motibo de ordeñar las Bacas se habian contagiado del fluido vaccino, o vacuno, se determinó a comunicar a los hombres por el medio artificial de la inoculacion la dicha enfermedad, de las Bacas: y en el año de mil setecientos noventa y siete, publicó ia sus primeras felices observciones. Desde aquel tiempo quedó demostrado por una multitud de experiencias hechas succesivamente con el maior cuidado en diferentes partes del mundo

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\*Copies of the circular can be found in Oaxaca' Diocesan Archive, Sección Gobierno, Serie Parroquias, 1800-1813, "Libro Tercero de las Cordilleras que vienen a San Francisco Caxonos...," folios 6-9r, and also in duplicate in the Archive of the Indies, Indiferente, legajo 1558a, folios 816-822. This transcription is taken from the second and maintains the original orthography.

“que la inoculacion de la vaccina, o vacuna preserva para siempre de las viruelas a los hombres.”

Esta es la verdad interesante, amados hijos mios, que deseamos haceros conocer: y esta la practica que debeis adoptar gustosos para preservar a vuestros hijos, y nietos del cruel contagio de las viruelas, que de tiempo en tiempo os acomete. Acomodandonos pues a vuestra corta capacidad, nos abstenemos de relaciones historicas, y elegantes que pudieran amenizar esta nuestra paternal exhortacion, y os aseguramos sencillamente: Lo primero que la vacunacion, o inoculacion de la vaccina no necesita preparacion alguna, ni remedio que deba precederla, acompañarla, ni seguirla; y que puede practicarse con el mismo feliz suceso en todas edades, y en todas las estaciones del año. Lo segundo que la vaccina no perjudica a la sociedad, porque no propaga su infeccion como las viruelas, ni se comunica por el aire, ni por los vestidos, ni por el simple contacto, sino precisamente por la incision; y hecha la inoculacion de la vaccina, como la picadura de la ahuja [aguja] es mui ligera, y no arroja sangre, o es mui poca, se cicatriza prontamente. Lo tercero que la inoculacion de la vaccina es tan segura, que jamas la acompaña, ni sigue daño grave, ni pide antes mas precaucion, que el que se haia de vaccinar esté sano, y libre de otra enfermedad; y bastará, que despues de vacunado observe aquel metodo de vida, o regimen, que la prudencia dicta deber obserbar todos los que estan sanos y buenos para no enfermar, con el uso prudente de comida, y bebida. Lo quarto que la operacion es facil, y poco o nada dolorosa, porque consiste unicamente en hacer en la piel algunas ligeras picaduras o incisiones con la punta de una ahuja, o de otro instrumento punzante mojado, o untado en el humor fluido, que se halla en los granos vaccinos, esto es de los ya vacunados, obserbandose, que las picaduras en los niños, quanto mas delicados, sean mas ligeras, y superficiales, y en los adultos mas profundas, para que penetre bien el fluido; y asi la pueden hacer sin temor con igual felicidad, y buen efecto los Padres, Madres, o Chichiguas, pues realmente es operacion mas propio de mugeres por la maior suavidad de manos. Lo quinto que el efecto de la vacunacion es producir al quarto o quinto dia, y a vezes antes, en la parte picada un grano irregular, que al sexto dia es del volumen de una lenteja, con una hondura en medio de color obscuro, y al rededor una elevacion de color palido, llena de un fluido claro, y cristalino con su circulo rojo algo inflamario; y este es el verdadero grano vaccino preserbativo de las viruelas, el qual al dia doce comienza regularmente a desecarse, y se cae por si mismo al dia veinte uno, o a mas tardar al treinta. Lo sexto que para hacer la operacion, y escoger el mejor fluido se deberá elegir el verdadero grano vaccino en la maior perfeccion, y madurez, que es regularmente desde el septimo al undecimo dia de la vacunacion, porque antes del septimo dia la vejiguilla del grano está mui poco descubierta, y el fluido no está bastante liquido, y despues del undecimo dia el fluido está demasiado espeso, y se seca prontamente. Lo septimo que aunque la picadura se puede hacer en qualquiera parte del cuerpo, conviene elegir aquella que está habitualmente cubierta; y especialmente la parte media, e interna del brazo, en donde se deberá introducir con suavidad la ahuja mojada ya en el fluido del grano vacuno bajo la epidermis, o piel delgada que cubre la principal: de suerte que el fluido pueda penetrar bien la picadura, y quedarse en ella, y convendrá hacerse dos o tres picaduras en cada brazo para maior seguridad de quedar bien hecha la operacion. Lo octavo que hai vaccina verdadera, que es la que preserva de viruelas, y cuias señales quedan ya expresadas; y vaccina falsa, que no libra de las viruelas naturales, y se conocerá en que junto a las picaduras sobreviene grave irritacion, y el grano que sale, en lugar de la hondura en el centro, está levantado en punta,

y su fluido en lugar de claro es espeso, palido sanguinolento, y se seca prontamente; y esta vaccina falsa se produce comunmente por executar mal la operacion, tomando el fluido vaccino fuera del estado de perfeccion que se ha indicado. Finalmente lo nono os advertimos que aunque se hagan ordinariamente quatro o cinco picaduras suele no salir mas que un grano, pero si está bien caracterizado, como queda dicho es mui suficiente para libertarse de las viruelas naturales, y se debe vivir con seguridad de ello: pero al contrario si, como sucede alguna vez, no sale grano alguno, y queda el muchacho vacunado como si nada se le hubiera hecho, no queda libre de viruelas, y convendrá hacerle segunda vez la inoculacion, o vacunacion.

Bajo de estos supuestos verdaderos, indubitables, y bien acreditados por repetidas experiencias, y observaciones de sabios ilustrados nos atrevemos a aseguraros, amados fieles mios, que este preciosos descubrimiento, y remedio preserbativo de las viruelas naturales; esta operacion estraña a vuestra vista, desconocida de vosotros en su origen, en sus causas, y en sus efectos, ademas de ser tan benefica a la humanidad, tan segura, tan facil, y tan barata, es una suerte, o fuego en que siempre se va a ganar mucho, y nada puede perderse: Que bien executada la operacion os preservará para siempre a vosotros, y a vuestros hijos de las viruelas naturales; de esa peste devoradora, singularmente de los Yndios, que tanto os horroriza: Y que desde que se descubrio este precioso preserbativo, no consta, que ni un solo sugeto de los muchos vacunados, que el año pasado ascendian a doscientos mil, y en el día ia no se pueden calcular, haia padecido despues viruelas naturales, ni las haia adquirido aun andando entre los violentos.

Vuestro es el interes, y utilidad; y nuestro será el consuelo, si dociles a nuestro consejo, y a las beneficas intenciones de nuestro Catolico Soberano, admitis el remedio preserbativo de la vacunacion que su real piedad os proporciona en vuestras mismas casas, y si la practicais de suerte que en todos los Pueblos, o al menos en todas las cavezeras de Curatos de este Obispado se conserve en estado de perfeccion el fluido vacuno, para continuarla sin intermision en quantos niños nazcan. No malogreis este precioso tesoro, que á tanta costa de su real Erario os franquea liberalmente con amor de Padre el mas piadoso, y benefico de los Monarcas. Y quando su compasivo corazon real, y el de su Augusta Esposa se enternecen de gozo al saber los felices progresos de sus beneficas providencias, y la propagacion de este precioso preservativo de viruelas en otras Provincias no querais acibararlo con vuestra indiferencia, e inaccion en ocurrir a disfrutarlo. No mireis como insensibles un remedio que nada os cuesta, y que tanto os importa. No deis lugar a que una repentina peste de viruelas naturales, cubriendo de luto vuestros corazones y pobres chozas os arrebate de entre vuestros brazos para el sepulcro vuestros hijos, y nietos, sino vacunadlos oportunamente, que será lo mismo que libertarlos de viruelas, y de la muerte.

Y vosotros amados hermanos, venerables curas Parrocos, cooperadores nuestros en nuestro Sagrado Ministerio, consuelo nuestro, y recurso despues de Dios en nuestras muchas amarguras, y aflicciones, no os mostreis insensibles a este precioso descubrimiento de la vaccina, y seguro remedio contra las viruelas, para la salud corporal de vuestros feligreses, de que pende la espiritual de las almas. No permita Dios, que se halle entre vosotros ninguno tan indolente que se crea desobligado, y se atreva a decir groseramente, que él es medico de las almas, y no de los cuerpos porque acreditaria su ignorancia y falta de caridad, debiendo saber por su ministerio, que no crio Dios al hombre para si solo, sino para el bien de muchos; y que quien pudiendo conservar la vida corporal de su proximo lo omite, es como un verdadero homicida. ¿Y que perjuicio no causaria un semejante Parroco

entre sus incautos feligreses? Pues sí, amados hermanos, venerables curas, no será buen medico espiritual de las almas, quien pudiendo tan facilmente no procure conserbarles la vida corporal a sus feligreses.

Por lo que á Nos toca convencidos intimamente de la importancia del remedio de la vaccina, para preservarse de las viruelas naturales: y obligados suavemente de la [821r] justicia, generosidad, y bondad, con que nuestro Catolico Soberano desea promoverlo en todos sus dominios, habemos persuadido eficazmente de palabra, y por escrito a adoptarlo, practicarlo, instando á ello oportune et importune en quantas ocasiones se nos han proporcionado; y para mas facilitarlo habemos costeadado un gran numero de punzones á modo de lancetas de hierro, en la forma que los facultativos nos han dicho ser mas a proposito, los cuales se dan de balde en nuestra Secretaria de Camara, y Gobierno á todos los Curas, y Vicarios, que acudan a pedirlos, y á otras muchas personas que haian de hacer el debido uso de ellos. Y os aseguramos, amados Diocesanos, que miraremos como el obsequio mas agradable, y mas benefico a la humanidad el que todos los que no haian tenido viruelas naturales se presten gustosos a vacunarse, y con la prudente prevision de que se execute sucesivamente, de suerte que se conserve siempre el fluido vaccino en alguno de los Pueblos de cada curato, para poder comunicarlo a otros, pues con que a los dos meses de bautizados los niños se llevasen a vacunar acaso no habria curato en que entre todas las personas no hubiese algunos recién vacunados, en quenes se pudiese conservar el fluido para trasmitirlo a otros.

Advertimos tambien á nuestros venerables Curas, Vicarios, Eclesiasticos, y á todos los que aspiren a los sagrados ordenes, que miraremos como mui singular merito el dedicarse en beneficio de la humanidad, de la poblacion, y de todo el estado a persuadir, estender, y executar por si mismos, esta facilisima operacion, y inquiriremos sobre ello en nuestra santa Visita, para premiar a los diligentes, y reprehender a los omisos en este importante asunto, atendiendo a aquellos, y desatendiendo a estos en los ascensos. Y que estamos tan firmemente convenados del bien y utilidad del remedio, que habemos mandado por regla general a nuestra Secretaria de Camara y Gobierno, que quantos se presenten en solicitud de ordenes, a titulo de Ydioma han de prometer en las diligencias previas entre los demas puntos a que se obligan con juramento, el promover y coadiubar a la practica de la vacunacion con su persuasion por todos los medios prudentes, que tengan arbitrio; y que castigaremos con rigor sin ofensa de la justicia a qualquiera Eclesiastico, que de obra, o de palabra se manifieste contrario á este bien de la humanidad. Y finalmente exhortamos á todos nuestros amados fieles por las entrañas de Jesucristo, que por este medio facil y barato exerciten su caridad con los proximos que por ignorancia, y rusticidad necesitan de consejo y explicacion en la materia; y concedemos quarenta dias de indulgencia a cada uno de los vacunados, y de los que exerciten bien, y caritativamente esta operacion por cada vez que la practicaren, y lo mismo a los que con su persuasion, explicacion, o exemplo convencieren á todos á usar de este preciso remedio preserbativo de las viruelas: y a todos damos nuestra Pastoral bendicion. En esta Villa de Etna a siete de Diciembre de mil y ochocientos quatro años.

Antonio Obispo de Antequera

Por mandado de S.S.Y. el Obispo mi Señor, Licenciado Joseph Maria de Hermosa, Secretario.

Note: Es copia que concuerda con su original, que en cinco exemplares, se despacharon, segun estilo por otros tantos derroteros a los Curatos de este Obispado de Oaxaca; y de orn. de S.S.Yll.a el Obispo mi Señor hice sacar, y saqué la presente que es fecha en esta Villa de Etlá a trece días del mes de Diciembre de mil ochocientos, y quatro a<sup>s</sup>. Manuel Maria Megia, Secretario de Visita. [rubric]