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THE PRACTICE OF MEDICINE IN YUCATAN AND THE SOUTHERN

GULF COAST, 1600-1830

A Dissertation in

History

by

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ABSTRACT

This study addresses issues of legitimate/illegitimate medical practices as they pertained to socially constructed and enforced identities in Yucatan and the southern Gulf Coast region, 1600-1830. Through an in-depth examination of colonial sources, I demonstrate that the social and legal legitimacy of medical practices were continuously negotiated between practitioners, patients, and the Spanish colonial authorities. Furthermore, I argue that existing historiographical analysis has reified boundaries and identities which existed only in law. While traditional scholarship has considered the categories of legitimate physician/illegitimate *curandero* to be oppositional, I show instead that such distinctions were, in practice, quite porous. Similarly, categories of illegitimate practice are often considered to be representative of the medical practice of women, indigenous peoples, and/or Afro-Mexicans, while Spanish physicians and surgeons alone performed the legitimate work of medicine. Yet in colonial Yucatan and the southern Gulf Coast region, medical practitioners could and did simultaneously occupy both legitimate and illegitimate categories of practice as well as move freely between those categories, depending on the circumstances. The exigencies of daily life, early modern beliefs about the nature of evil, and local politics all became factors in the determination of the legitimacy of medical practice and practitioners in a region characterized by the circulation of ideas and movement of people.

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ABBREVIATIONS

| | |
|-------|---------------------------------------|
| AGEY | Archivo General del Estado de Yucatán |
| AGI | Archivo General de Indias |
| AGN | Archivo General de la Nación |
| AGS | Archivo General de Simancas |
| HUN | The Huntington Library |
| JCBO | The John Carter Brown Library Online |
| PUDL | Princeton University Digital Library |
| PARES | Portal de Archivos Españoles |

Glossary of Foreign-Language Terms

| Spanish/Mayan | English | Note |
|--------------------|--|--|
| <i>Baluarte</i> | Bastion | |
| <i>Batab</i> | Community leader | Yucatec Mayan |
| <i>Brujería</i> | Witchcraft | Falls under the umbrella of “maléfico” |
| <i>Casta</i> | Caste, lineage | See page 42 for a discussion of <i>casta</i> in terms of <i>limpieza de sangre</i> . |
| <i>Curandería</i> | Medicine performed by a lay practitioner | |
| <i>Curandera/o</i> | Healer/lay medical practitioner | |
| <i>Encanto</i> | Charm (spell) | |
| <i>Ensalmo</i> | Charm (spell) | May also imply charms that are ineffective, fake |
| <i>Hechicería</i> | Witchcraft, sorcery | Especially that which involves making spells. |
| <i>Hechizo</i> | Spell | especially one that is mixed or cooked. |

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| <i>Intendente</i> | Can refer to a bureaucrat in charge of pay, rents, or other administrative business | In modern Spanish, this is an overseer or supervisor. |
| <i>Librete</i> | A small, low-value printed text | |
| <i>Limpieza de sangre</i> | Purity of blood | See discussion on pages 40-41. |
| <i>Maléfico</i> | Maleficent, evil | |
| <i>Maleficio</i> | Curse, hex | |
| <i>Mestizo</i> | Casta status: indigenous and Spanish | |
| <i>Pactos con demonios</i> | Demonic pacts | |
| <i>Peninsulares</i> | Spaniards, specifically those born in Spain. | |
| <i>Polvos</i> | Powders | See discussion on pages 115-116. |
| <i>Presidio</i> | Fort | In modern Spanish, <i>presidio</i> refers to a prison. That connotation is not relevant in the colonial context. |
| <i>Protomedico</i> | The head physician of the Protomedicato | Occasionally used to refer to medical faculty. |

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|-----------------------|---|--|
| <i>Protomedicato</i> | A court and governing body with jurisdiction over medical practice and practitioners. | |
| <i>Reportório</i> | Commonplace book. | |
| <i>Supersticiosos</i> | Superstitiousness. | |
| <i>Visita</i> | Literally, visit. An inspection performed away from the metropole by a bureaucratic, judicial, or investigative body. | <i>Visitas</i> were performed by the Protomedicato and the Holy Office of the Inquisition. |

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For Derek.

Chapter 1 Introduction

In 1783, Bartholomé Guijón, a French physician working in Merida as surgeon to the city's infantry and volunteer battalions, wrote a letter to the governor of Yucatan about discoveries he had made concerning the medical properties of some of the local flora.¹ “I have,” claimed Guijón, “conducted favorable experiments against tertiary fever [using] the powders of a tree grown in this country, called in the local language “Choóch,” and I need to go personally to the court to inform [you] about other medicines that I have experimented with propitiously against other ills.”² In his letter, Guijón wrote that he wanted to apprise other practicing physicians of his discovery's health benefits and to secure exclusive license for developing and publishing information about the many medicinal uses of the plant.³

¹ Guijón (written as both “Guijón” and “Gouyouin” in his letter) identified himself as a “natural de San Bertrand de Comínguez” (from Saint-Bertrand-de-Comminges), but he did not elaborate on his national identity. It is not noted in his letter whether he was a naturalized citizen or whether he was licensed to practice in New Spain. See chapter two for more on the legal and social legitimacy of foreign physicians in the region. AGEY, Reales Cédulas, vol. 1 exp. 13, 3 fols. 1-3, 1783; Also cited in Luz María Hernández Sáenz, *Learning to Heal: The Medical Profession in Colonial Mexico, 1767-1831* (New York: Peter Lang, 1997), 115.

² “Haber experimentado muy favorable contra el mal de las tercianas [illegible] los polvos de un árbol que produce este país, que llaman en idioma “Choóch, y necesitando ir personalmente a esa corte a comunicar otros medicamentos que así mismo tiene experimentados favorables contra otros accidentes.” AGEY, Reales Cédulas, vol. 1 exp. 13, 1783; The “Choóch” tree named here was likely *Lucuma hypoglauca*, commonly known as “Choch” or “Cho’och” in modern Yucatec Mayan (Ceiba trees, generally speaking, are “Cho”). *Lucuma hypoglauca* is now found throughout Mexico, El Salvador, and in Florida, according to gbif.org (Global Biodiversity Information Facility); See also Víctor Suárez Molina, *El español que se habla en Yucatán: Apuntamientos filológicos*, 3rd ed. (Mérida: Universidad Autónoma de Yucatán, 1996), 103, 116, 141; Also see Ralph L. Roys, *The Ethno-Botany of the Maya* (New Orleans: Tulane University of Louisiana, 1931), 322. Roys also identified “Cho’och” as *Lucuma hypoglauca*; see also Ryan Amir Kashanipour, “A World of Cures: Magic and Medicine in Colonial Yucatán,” (PhD diss., University of Arizona, 2012), 237.

³ Antonio Barrera-Osorio, *Experiencing Nature: The Spanish American Empire and the Early Scientific Revolution* (Austin: University of Texas Press, 2010), 13, 15-23; Barrera-Osorio notes that requesting exclusive license to experiment with and even to market specific remedies became common in the Spanish American colonies (at least, in the Viceroyalty of New Spain) from the sixteenth century forward. The

Guijón's short letter is a window into the social history of medicine in Yucatan and the southern Gulf Coast region. Medical practitioners often used their knowledge and the ensuing support of colonial administrators to establish and protect their positions within the colony. Foreign medical practitioners such as Guijón, for example, often circumvented legal barriers to the practice of medicine by forming alliances with colonial administrators.⁴ Medical practitioners could form such alliances by making themselves indispensable to the Spanish colonial project through research, the care of soldiers and sailors, and the provision of succor to the sick poor.⁵ Guijón's reliance on colonial administrators to validate his research and his professional identity highlights the role that the colonial state played in legitimating medical knowledge and practice.

Guijón's appropriation of and experimentation with a Maya remedy also illustrates the acquisitive and hybrid nature of early modern medicine. Spanish exploration of New Spain was characterized by the discovery and acquisition of indigenous knowledges and cures. The resulting acculturation of knowledge and practice profoundly affected the practice of medicine in both Europe and the Americas during the early modern period. Indigenous and Afro-Mexican cures were widely accepted by colonial administrators and other colonial residents, but they could also provide a mechanism by which colonial authorities exercised social control over undesirable actors and/ or actions. In this project, while I contend that Spanish hegemony shaped the practice of medicine in Yucatan and the southern Gulf Coast region, I also recognize—as

crown could and did provide such licenses to many physicians working in New Spain, sometimes granting several "exclusive" rights to a medicine or other material.

⁴ Medical practice by non-Spaniards was, strictly speaking, illegal. See chapter two for details.

⁵ For a fascinating study of medical humanitarianism in colonial Guatemala, see Martha Few, *For All of Humanity: Mesoamerican and Colonial Medicine in Enlightenment Guatemala* (Tucson: University of Arizona Press, 2015).

did colonial Spaniards—that elements of medical culture and practice had roots in indigenous and West Central African remedies.⁶

I. Context and Project Description

This project began in the Archivo General de la Nación (AGN) in Mexico City in 2013. While researching witchcraft and *curandería* cases from colonial Yucatan, I realized that many of my cases involved the military in some way. Lieutenants, colonels, buglers, captains, and rank-and-file soldiers and sailors often turned up in denunciations to the Holy Office of the Inquisition, accusations in civil and military courts, and in testimonies of all kinds as the accused, as victims, or simply as witnesses to many acts of medico-magical healing. Where were these men stationed, I wondered, and how was it that their lives were so entwined with those of civilians? What was access to professional medical care like for the many soldiers and sailors garrisoned in the region, and why did they dabble in *curandería*, as patients and as practitioners? And under what circumstances did soldiers and sailors consult *curanderos*, phlebotomists, or surgeons?

As I shifted my focus and began to dig into hospital and presidio records, I realized that many of the medical practitioners working in the towns and garrisons of the region could not have been practicing legally. How, then, could so much illegal medical activity be occurring within the military, presumably with the knowledge of the colonial administration? Also, why did communications, texts, medicines, and personnel move

⁶ First generation Afro-Mexicans in the region had diverse origins. Most people came from West and (primarily) West Central Africa directly to the port of Veracruz, but others arrived in Yucatan after time spent in circum-Caribbean ports. For further discussion of this topic, see Matthew Restall, *The Black Middle: Africans, Mayas, and Spaniards in Colonial Yucatan* (Stanford: Stanford University Press, 2009), 18, 6-33.

back and forth between Spain, Veracruz, Campeche, and the Presidio del Carmen more consistently than they did between (for example) Merida and Mexico City? What was the relationship between illegal medical activity in the towns and illegal medical activity in the garrisons? Did race, national origin, status, or gender determine the ability of an illegal medical practitioner to work unhindered? And finally, why were some illegal practices and practitioners prosecuted, while others were allowed to continue without intervention?

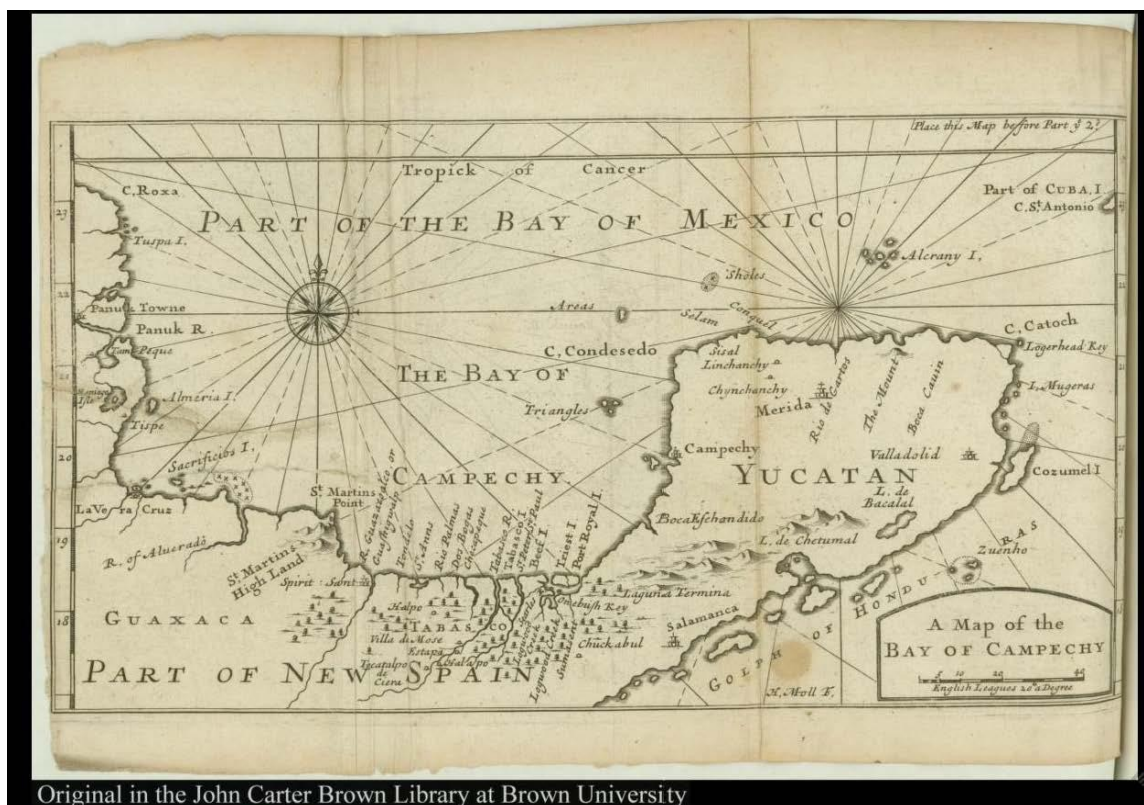


Figure 1-1. Herman Moll, *A Map of the Bay of Campeche*, in William Dampier, *Voyages and Descriptions, Vol. II* (London: printed for James Knapton, at the Crown in St. Paul's Church-Yard, 1699), 14.9 x 27.9 cm. JCB Map Collection No. 30843-1. Accessed through JCBO. See Figure 1-2 for detail.

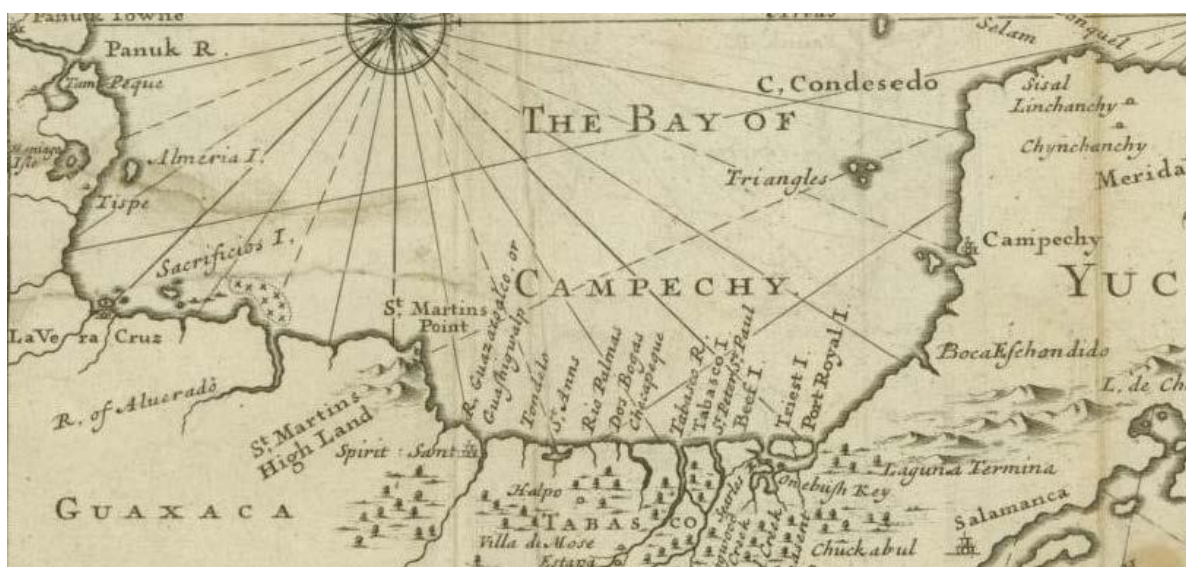


Figure 1-2. Detail of Moll, *A Map of the Bay of Campeche*; center right, “Triest Island” [Isle of Tris], on which the Presidio del Carmen was built.

In the process of finding answers to the above questions, I came to realize that the presidial system itself and, by association, the soldiers, sailors, and civilians who worked in and around the presidios were integral to the social history of the medicine in the region. The interactions between the people residing in the presidios and port towns surrounding the Bay of Campeche and the inland towns and presidios of the Yucatan peninsula created an interconnected medical culture in which disease, medicines, medical practitioners, and knowledges were in constant motion. Army surgeons and physicians, ship’s surgeons, Maya and Afro-Mexican curanderos, and many other medical practitioners of various legal and professional statuses lived and worked in the towns and presidios surrounding and looking outward toward the Bay of Campeche (Figures 1-1, 1-2, 1-3). Not only did the presidios feature a constantly changing cast of characters (many of them *peninsulares*) in positions of authority as administrators and as medical practitioners, the presidios also served as direct links to a wider Spanish colonial world.

Waterways and ports serve as both spaces and places of social, economic, and cultural connection.⁷ Early modern Iberian states looked toward the Atlantic and Pacific oceans to build their empires, expanding a longstanding Mediterranean system that used shipping lanes as important pathways for communication, administration, trade, and knowledge acquisition.⁸ Just as the Atlantic connected Spain to New Spain, the Bay of Campeche connected Veracruz to Campeche and, importantly, to the Presidio del Carmen and the Laguna de Términos.⁹ The port of Campeche, in turn, looked inland to Merida, Valladolid, and other towns of the peninsula, with military personnel and civilians moving constantly between these locations (Figures 1-3, 1-4). The ports and presidios at Veracruz and Campeche in particular were hubs of social, military, and economic activity, making them ideal local connections for the presidios at Isla del Carmen/Tris (in 1729) and later, across the peninsula at Bacalar.¹⁰ Smaller fortifications also dotted the

⁷ Leif Jerram, “Space: A Useless Category for Historical Analysis?,” *History and Theory* 52 (October 2013), 400-419, 404. “Space” “location” and “place” have various and often conflicting meanings depending on discipline, field, area of inquiry, and/or scholarly preference. Here, I follow Leif Jerram’s call to rigidly define space, place, and location, using his briefly summarized definitions: “space is material, location is relational or positional, place is meaningful.” As such, the Gulf of Mexico/Bay of Campeche is both physical space and a place imbued with meaning.

⁸ Charles R. Boxer, *The Portuguese Seaborne Empire 1415-1825* (Middlesex: Penguin Books, 1969); John Horace Parry, *The Spanish Seaborne Empire* (New York: Alfred A Knopf, 1967). Parry defined seaward-looking nations as those that must expand and conquer, whereas I take the littoral focus to be one of movement, knowledge exchange, and communication; early modern natural historians like Buffon noted similarities between the Gulf of Mexico and the Mediterranean Sea. For example, Buffon wrote that “the Mexican gulph (... must be looked upon as a Mediterranean Sea).” Georges Louis Leclerc Buffon, *Buffon’s Natural history: Containing a theory of the earth, a general history of man, of the brute creation, and of vegetables, minerals, &c. &c. From the French. With notes by the translator. In ten volumes* (London: H. D. Symonds, 1797), 158.

⁹ José Antonio Calderón Quijano, *Historia de las fortificaciones en nueva España, 2ª edición* (Madrid: Escuela de Estudios Hispanoamericanos, 1984), 409. Quijano’s *Historia de las fortificaciones de Nueva España* remains the authority on the presidial system, particularly for the period after 1700—which includes most of the presidios in Yucatan and the Southern Gulf Coast region.

¹⁰ Quijano, *Historia de las fortificaciones*, 466-467; Jorge Victoria Ovieda noted that Veracruz was known as the “key to the Viceroyalty of New Spain” (“el llave del Virreinato de Nueva España”), while other locations in the region, though less important, had similar connotations: The Laguna de Terminos was the “llave de la Capitanía General de Yucatán” (key to the Captaincy-General of Yucatan), the port of Campeche was the “llave del comercio de la madera preciosa” (“key to the precious wood trade”) and

coast between Campeche and the Presidio del Carmen and up the coast to Tampico, the remains of which now largely lie within modern towns and cities.¹¹

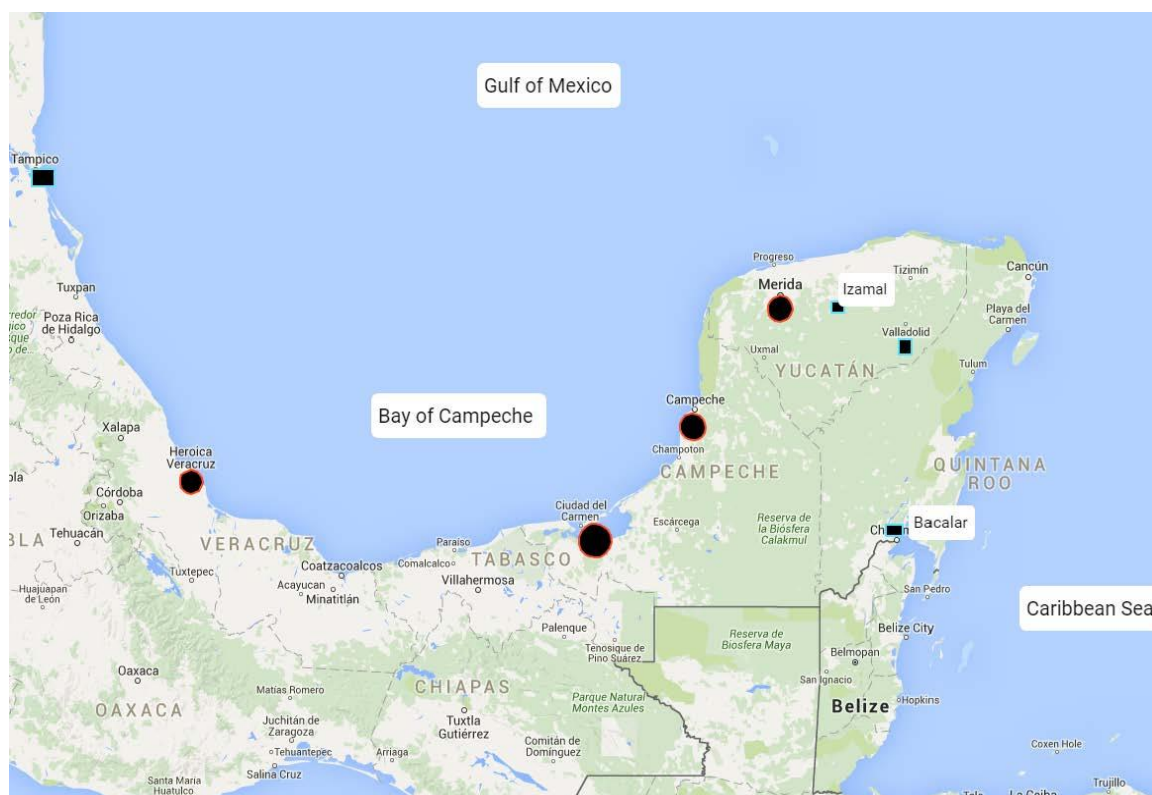


Figure 1-3. Map showing the locations of the towns, ports, and presidios linked by the Bay of Campeche and discussed in this study.

The presidios of the southern Gulf Coast were designed to protect trade and shipping as well as Spanish colonial ports and towns.¹² Ben Vinson III describes the Spanish colonial presidio system as “a loose conglomeration of medieval-style defensive

Bacalar was the “llave del contraband Ingles” (“key to English contraband”).” Jorge Victoria Ojeda, “Arquitectura militar en la región de Jaina, Campeche, México: Falsedades en la historia defensiva colonial,” *Anuario de Estudios Mexicanos*, vol. LVI, no. 1 (1999):253-271, 253.

¹¹ Quijano, *Historia de las fortificaciones*, 450-466.

¹² Thomas H. Naylor and Charles W. Polzer, eds., *The Presidio and Militia on the Northern Frontier of New Spain: A Documentary History, vol. 1, 1570-1700* (Tucson: The University of Arizona Press, 1986), 18.

forts that held anywhere between six and a hundred men.”¹³ However, the colonial authorities viewed the presidial system as much more than the sum of its parts. The presidios represented not only defensive structures, or even simply the men stationed in those structures, but also the implied “military, imperial, and civil relationships” that connected the presidios with other locations in New Spain and in the metropole.¹⁴ Furthermore, the presidios surrounding the southern Gulf specifically represented the first (and in some cases, final) defense against threats from the sea, making the healthy function of those fortifications and the men who served there vital to the colonial project. In investigating the presidial system, I identified a number of military and civilian connections to the interior, particularly to Merida and Valladolid.¹⁵ Vinson notes, for example, that although the main armed forces in New Spain consisted largely of peninsulares, the majority of soldiers assigned to the presidios were “neither true militiamen nor regulars,” and were drawn largely from the local population, not from Spain.¹⁶ Militiamen and volunteers assigned to the presidios that protected Yucatan and the Gulf Coast region came from all over the peninsula, from both urban and rural areas.¹⁷ Both soldiers and sailors, then, could and did disperse inland frequently during

¹³ Ben Vinson III, *Bearing Arms for His Majesty: The Free-Colored Militia in Colonial Mexico* (Stanford: Stanford University Press, 2003), 13.

¹⁴ Naylor and Polzer, *The Presidio and Militia on the Northern Frontier of New Spain*, 15-18.

¹⁵ For littoral and inland connections, see Boxer, *The Portuguese Seaborne Empire*, 13; Parry, *The Spanish Seaborne Empire*, 39-64.

¹⁶ Vinson, *Bearing Arms for His Majesty*, 13.

¹⁷ For the demography of the Yucatan peninsula, see Restall, *The Black Middle*, 163-177.

the seventeenth and eighteenth centuries, only to be recalled to the coast in times of renewed conflict.¹⁸



Figure 1-3. View toward the town of Campeche and the interior of the peninsula from the the Puerta del Mar (sea gate). The Puerta del Mar is set into Baluarte de Nuestra Señora de Soledad.

¹⁸ Kris Lane, *Pillaging the Empire: Piracy in the Americas, 1500-1750* (London: Routledge, 1998). Piracy plagued the Bay of Campeche, especially during the seventeenth and early eighteenth centuries; For a brief summary of attacks on the Bay of Campeche and especially on the port of Campeche, see Restall, *The Black Middle*, 166-171.



Figure 1-4. View towards the Bay of Campeche from Baluarte de Nuestra Señora de Soledad. During the colonial period, the bay reached the wall. Now, the shoreline has been moved (by human agency) and a line of seafront structures obscures the view of the bay. Photo by the author.

Yucatan and the Gulf Coast presidios were part of an active shipping and administrative region that reached not only across the Bay of Campeche, but also across the Atlantic.¹⁹ The southern Gulf Coast presidios and the inland towns of the peninsula constituted a region that was on the “internal periphery” of the Spanish Empire.²⁰ Not only was it administratively peripheral to Spain, it was also on the periphery of New

¹⁹ For a discussion of the connection of local and regional medical cultures to the metropole, see Few, *For all of Humanity*, 7-9.

²⁰ Jürgen Osterhammel, “The Imperial Viceroy: reflections on an Historical Type,” in Jeroen Duindham and Sabine Dabringhaus, eds., *The Dynastic Centre and the Provinces: Agents and Interactions* (Leiden: Brill, 2014), 16. Osterhammel defines the periphery as “consisting of both home-country provinces and of colonies, the latter being less tightly integrated into central administrative structures than provinces of imperial structures.”; Amy Turner Bushnell and Jack P. Greene, “Peripheries, Centers, and the Construction of Early Modern Empires,” in Christine Daniels and Michael V. Kennedy, eds., *Negotiated Empires: Centers and Peripheries in the Americas, 1500-1820* (New York: Routledge, 2002), 1-14. Bushnell defines the “internal periphery” as those areas settled by Spaniards that maintained local or regional power and authority; See also Amy Turner Bushnell, “Gates, Patterns, and Peripheries” in *Negotiated Empires: Centers and Peripheries in the Americas, 1500-1820* (New York: Routledge, 2002), 19. As Bushnell demonstrates, historical use of “center-periphery paradigms” may, at this point in the historiography, be addressed as a concept that is totally disconnected from world systems theory.

Spain (which had its center in Mexico City). Its physical and administrative position on the periphery did not mean, however, that the Gulf Coast presidios or the towns and villages of Yucatan were completely isolated from other parts of the Viceroyalty or from the empire in general. On the contrary: the constant movement of people and ideas through official and unofficial channels and the connections between colonial authorities, local and European soldiers, and lay and professional medical practitioners created a regional medical culture that was characterized by interconnected local, regional, and imperial knowledges.²¹ Although it was peripheral (a position that allowed for considerable administrative autonomy), the region was not isolated from European and central New Spanish people and ideas.

II. Presidio Demography

The presidios in particular served as places of connection to the towns of the interior and to the metropole for the diverse populations living in the presidios and the surrounding villages. The presidios' administration considered people living in the region to be their responsibility and, as such, under their authority; the Presidio del Carmen's 1790 end-of-year report, for example, included the "towns and rural areas under its jurisdiction," all of which surrounded the Laguna de Términos and were within twenty leagues of the presidio itself (Figure 1-2, 1-6, 1-7).²²

²¹Osterhammel, "The Imperial Viceroy," in *The Dynastic Centre and the Provinces*, 19-28.

²²"Pueblos y rancherías de su jurisdicción." AGI, Mapas y Planos México no. 587.

Estado y Padrón General que manifiesta el numero de Habitantes que tiene el Presidio de S. J. del Carmen: Pueblos, y Rancherías de su dominio; con distinción de sus Castas, Clases, Colejas, y Castas; noticia de su Comercio, Agricultura, y Dotes cobradas, y demas que se adverten, correspondiente al año de 1790 segun, y como se expresa.

Figure 1-5. 1790 report for the Presidio del Carmen and the villages surrounding the Laguna de Terminos. See figures 1-7 and 1-8 for detail. Source: AGI, Mapas y Planos, México no. 587.

The 1790 report indicates that Spanish and masculine historical representations of the presidios (gleaned from the many sources written by and about men—male soldiers, sailors, laborers, governors, and surgeons) were not at all representative of life in and near the garrisons. The population of the Presidio del Carmen included Spanish, Maya, and *casta* men, women, and children (Figure 1-5; Tables 1-1, 1-2, 1-3, 1-4).²³ While the populations of the presidios undoubtedly varied between locations and from year to year, the 1790 report provides a glimpse into the demography of the presidio at the end of the eighteenth century. In that year, the Presidio’s residents included 751 men and 715

²³ *Casta* refers to colonial residents of non-Spanish descent, particularly those of “mixed” race. The term *casta* is discussed in greater detail in chapter two.

women, representing several colonial race and status categories, ages 15-100. There were also 228 children of both sexes; twenty had been born at the Presidio within the last year (Figure 1-5, Table 1-1, 1-2).²⁴

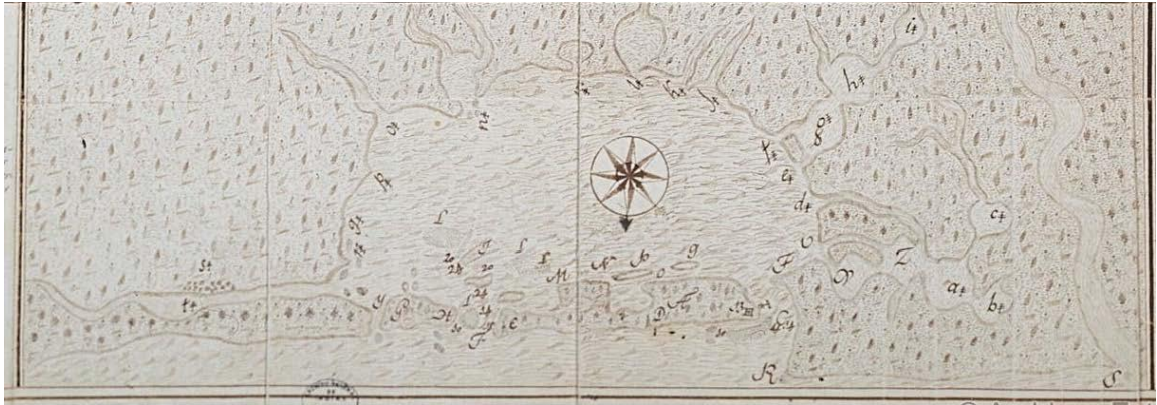


Figure 1-6. Detail of 1790 Presidio del Carmen report. Map of the Laguna de Términos. The Presidio del Carmen (center right) is represented here as “A.”Source: AGI, Mapas y Planos, México No. 587.

| Nombres de las Parajes de la jurisdicción de la Cita de Tizimin y Presidio de S. J. del Carm. | Españoles | | Solitarios | | Caciques | | Hombres de color | | | De Indios | | | De Negros y Mulatos | | | Hombres en Gen. | | | Mujeres de color | | | Total Gen. de Hombres y Mujeres | Chaltemenes | Mestizos | | | | | | | | | | | | | | | | | | | |
|---|-----------|----------|------------|----------|----------|----------|------------------|----------|----------|-----------|----------|----------|---------------------|----------|----------|-----------------|----------|----------|------------------|----------|----------|---------------------------------|-------------|----------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|----|----|----|-----|----|----|----|----|
| | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | De color | | | | | | | | | | | | | | | | | | | | | | |
| Presidio del Carmen | 2 | 3 | 333 | .. | 24 | 167 | 155 | 19 | 14 | 6 | 3 | 1 | 29 | 31 | 7 | 152 | 156 | 35 | 4 | 7 | 1 | 1 | 206 | 270 | 160 | 24 | 754 | 229 | 48 | 58 | 379 | 12 | 735 | 124 | 6 | 6 | 20 | 48 | | | | | |
| Pueblo de la Palizada | 1 | 1 | 155 | 18 | 46 | 30 | 18 | 2 | 11 | 3 | 3 | .. | 57 | 43 | 3 | 125 | 109 | 21 | 1 | .. | .. | .. | .. | 239 | 175 | 40 | 6 | 460 | 75 | 15 | 105 | 221 | .. | 429 | 25 | 5 | 3 | 12 | 17 | | | | |
| Pueblo de Gabaney | 1 | 1 | 104 | 14 | 10 | 6 | 11 | .. | 10 | 10 | 9 | .. | 58 | 24 | 6 | 116 | 77 | 7 | .. | .. | .. | .. | .. | 133 | 132 | 51 | 6 | 272 | 20 | 32 | 162 | 14 | .. | 228 | 20 | 5 | 2 | 7 | 15 | 6 | | | |
| Presidio del Carm. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | | |
| Presidio de San Juan y San Pedro | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | |
| Mamanté y Saurat | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Totales | 4 | 5 | 663 | 68 | 157 | 219 | 142 | 21 | 53 | 49 | 17 | .. | 176 | 136 | 46 | 344 | 244 | 73 | 5 | 7 | 10 | 1 | .. | 707 | 612 | 279 | 36 | 1654 | 330 | 119 | 331 | 64 | 12 | 1432 | 322 | 6 | 6 | 39 | 135 | 74 | | | |

Figure 1-7. Detail of 1790 Presidio del Carmen report. Demography of the Presidio and related towns. Source: AGI Mapas y Planos, México No. 587.

The surrounding towns and rural areas were similarly diverse, demonstrating a cross-section of colonial status and race identifications living and working in and near the presidio (Figure 1-5, Table 1-3, 1-4). Indigenous and free Afro-Mexican men and women comprised the majority of the population outside of the Presidio proper, while the

²⁴ AGI, Mapas y Planos, México No. 587, 1790.

population of the Presidio was largely made up of Spaniards (*españoles*) and free Afro-Mexican men and women (*negros y mulatos libres*) (Tables 1-1, 1-2, 1-3, 1-4). Most Mayas (*indios*) lived outside of the Presidio.

| <i>Casta</i> status | Españolas | Mestizas | Indias | Negras y Mulatas Libres | Esclavas |
|---------------------|-----------|----------|--------|-------------------------|----------|
| Number of women | 223 | 41 | 58 | 373 | 12 |

Table 1-1. Women residing in the Presidio del Carmen in 1790. Women were not differentiated by age in the census. Source: AGI, Mapas y Planos, México 587, 1790.

| Age | 15 and younger | 15-40 | 40-60 | 60-100 |
|--------------------------------------|----------------|-------|-------|--------|
| Spanish Men | 24 | 167 | 115 | 19 |
| Mestizo Men | 14 | 6 | 3 | 1 |
| Maya Men | 21 | 31 | 7 | 0 |
| Free Black and <i>Mulato</i> Men | 152 | 56 | 35 | 4 |
| Enslaved Black and <i>Mulato</i> Men | 7 | 10 | 1 | 0 |

Table 1-2. Men residing in the Presidio del Carmen in 1790. Source: AGI, Mapas y Planos, México 587, 1790.

| <i>Casta</i> status | Spanish Women | Mestiza Women | Maya Women | Free Black and <i>Mulata</i> Women | Enslaved women |
|---------------------|---------------|---------------|------------|------------------------------------|----------------|
| Number of women | 107 | 70 | 273 | 267 | 0 |

Table 1-3. Women residing in the towns and rural areas under the Presidio del Carmen's jurisdiction, excluding the presidio. Source: AGI, Mapas y Planos, México 587, 1790.

| Age | 15 and younger | 15-40 | 40-60 | 60-100 |
|----------------------------------|----------------|-------|-------|--------|
| Spanish Men | 63 | 46 | 24 | 2 |
| <i>Mestizo</i> Men | 39 | 43 | 14 | 0 |
| Maya Men | 147 | 102 | 39 | 9 |
| Free Black and <i>Mulato</i> Men | 186 | 129 | 33 | 1 |
| Enslaved Men | 0 | 0 | 0 | 0 |

Table 1-4. Men residing in the towns and rural areas under the Presidio del Carmen's jurisdiction (excluding the presidio). Source: AGI, Mapas y Planos, México 587, 1790.

III. Negotiated Legitimacy

The diversity and interconnectedness of the towns and presidios of the region allowed for a broad spectrum of medical practice and practitioners. Local representatives of military, civil and religious colonial institutions administered the lives of the people in the region throughout the colonial period. As noted above, much of that medical practice functioned

outside of legal definitions of that time and place. Therefore, I have defined two types of medical legitimacy that functioned in the region: legal and social.

Here, I use the term legitimacy to indicate that a medical practitioner was able to perform their work without legal or social interference. Such interference could take the form of denunciation to the Holy Office of the Inquisition, investigation by the *Protomedicato* (defined and discussed below), lawsuits or summary punishments enacted by colonial civil or military authorities, or simply active disapprobation from the public. The legality of practice did not always (or even often) play a role in the determination of legitimacy. Illegal practice was frequently allowed and even encouraged by colonial agents and by colonial residents, while legal practitioners and practices were sometimes prosecuted, denounced, or forced out of their positions as medical practitioners of all kinds for real or perceived transgressions.

Legal legitimacy was that which was conferred on professional and para-professional medical practitioners by Spanish colonial and ecclesiastical law. Laws also delineated the roles of practitioners, marking their rights, duties, responsibilities, and practices under particular and defined circumstances. While legislation regarding medical practice was designed to sanction the contention of physicians and surgeons that they were the only legitimate practitioners of medicine, it also required the loyalty of physicians to and collaboration with the colonial state. Colonial administrators and authorities often positioned practitioners as legal “agents,” of the state, creating definitions and situations that (for example) required that professional medical

practitioners enact and police public health reforms and investigate crimes.²⁵ In this way, legal legitimacy created a mutual relationship in which medical practice was intimately bound to the service of the state.

Social legitimacy held no such formal associations. For many lay and para-professional practitioners operating outside legal definitions, their work in providing medical care to locals and succor for the sick poor earned them the approbation of their clients as well as of colonial administrators, marking their work as socially—if not legally—legitimate. Fiscal, religious, and kinship ties bound both licensed and unlicensed medical practitioners to socially legitimated behaviors. Social legitimacy did not necessarily or even typically correspond to education or socio-economic status. Successfully operating as a socially legitimated practitioner was entirely possible for women and/or people of color. Colonial authorities often ignored legal mandates in order to support practitioners who displayed socially legitimated behavior. Similarly, law-abiding professionals often found themselves disgraced and socially delegitimized, despite the protections allegedly afforded to them by law. At times, social delegitimization was enough to remove them from positions as professional medical practitioners.

Negotiated legitimacy is related to the concept of “negotiated authority,” in that it takes place on the periphery of empire and is linked to the relative autonomy of colonial

²⁵ Jeroen Duindham and Sabine Dabringhaus, eds., *The Dynastic Centre and the Provinces: Agents and Interactions* (Leiden: Brill, 2014). I use “agent,” to mean power and/or authority invested in individuals by the Spanish colonial (or imperial) state; I use the term “public health” in this context to indicate any agents of the state who were involved, in word or action, in curtailing or preventing the spread of sickness and disease and/or educating the public about factors leading to morbidity or mortality (as understood by state and medical authorities during this period). Colonial physicians and authorities used the term “public health/*salud pública*” to mean many things, ranging from the prevention of smallpox to the prevention of uneducated medical practice to the imprisonment of medical practitioners.

institutions and administrators in those areas. Here, the primary negotiations take place not between imperial and colonial authorities, nor even specifically between Europeans, *castas*, and Mayas, but instead between colonial authorities, the community, and medical practitioners. At times, force was threatened or applied in these negotiated relationships: administrators, medical practitioners, and the public could and did intervene in practices and remove or subdue practitioners that they deemed illegitimate.²⁶

Social and legal legitimacy overlapped in a colonial world with little state oversight and significant local autonomy. Fear, politics, corruption, personal relationships, local knowledge and custom, and many other factors influenced the constantly shifting negotiations of what constituted acceptable or allowable practice. In this way, the social legitimacy of medical knowledge and practice may be compared to religious heterodoxy in New Spain. Acceptable religious knowledge and practice, as understood by local peoples, was not always or even typically the same as religiosity as it was understood by ecclesiastical authorities in the metropole. Such heterodoxy was historically condemned by religious intellectuals as evil and in need of correction, but in practice, heterodoxy was the rule, not the exception. Curandería was, like unorthodox religiosity, condemned in writing and law but generally allowed in practice. Religious heterodoxy characterized religion in early modern Spain and its colonies much more than did religious orthodoxy, despite significant and often violent efforts by civil and religious authorities to standardize practice and belief.²⁷ Similarly, curandería was the primary

²⁶ Bushnell, "Gates, Patterns, and Peripheries," in *Negotiated Empires*, 16-17. My definition differs from that of Bushnell, who defines it as "mechanisms other than force that deliver balance to relationships and keep disparate societies in equilibrium."

²⁷ See, as examples in the Spanish and New Spanish cases, Mark Christensen, *Nahua and Maya Catholicisms: Text and Religion in Colonial Central Mexico and Yucatan* (Stanford: Stanford University

mode of healing practice in the region and, although it was legally illegitimate, it was rarely investigated, much less prosecuted, by colonial authorities.

My interpretation of the heterogeneity of medical practitioners and practices in the region differs from that posited by existing analyses. Accepted medical practices in the Spanish Empire have historiographically been framed as existing within a binary system of legitimate and illegitimate medicine.²⁸ Yet as historian Roy Porter demonstrates, “such watertight compartments break down in the teeth of actual examples.”²⁹ In colonial Yucatan and the southern Gulf Coast, medical practitioners could and did simultaneously occupy both legitimate and illegitimate categories of medicine as well as move freely between those categories, depending on both circumstance and perspective. Legal categories and restrictions, too, could be interpreted in various ways, creating conflict between colonial residents, practitioners, and administrators.

The three main categories of practice that I use in this study reflect colonial labels and are based on legal rhetoric.³⁰ Professionals, according to law, were legitimate, lay practitioners were illegitimate, and para-professionals were inconsistently and often imprecisely regulated throughout the colonial period.³¹ In practice, these categories

Press, 2013); William A. Christian Jr., *Local Religion in Sixteenth-Century Spain* (Princeton: Princeton University Press, 1989); Elizabeth Graham, *Maya Christians and their Churches in Sixteenth-Century Belize* (Gainesville: University Press of Florida, 2011); William F. Hanks, *Converting Words: Maya in the Age of the Cross* (Berkeley: University of California Press, 2010).

²⁸ Kashanipour, “A World of Cures,” 9-10, 153-154; Sáenz, *Learning to Heal*, 2-6. Sáenz and Kashanipour both acknowledge the presence of many kinds of practitioners in New Spain and in Yucatan, respectively.

²⁹ Roy Porter, “Introduction,” in *Patients and Practitioners: Lay Perceptions of Medicine in pre-Industrial Society*, edited by Roy Porter (Cambridge: Cambridge University Press, 1985), 8.

³⁰ See Part V of this chapter for a brief discussion of colonial labels for medical practice.

³¹ John Tate Lanning, *The Royal Protomedicato: The Regulation of the Medical Profession in the Spanish Empire*, ed. John Jay TePaske (Durham: Duke University Press, 1985)16-19. Spanish law was not entirely clear either, leaving a great deal of room for legal interpretation and opinion. Lanning notes that the *Fuero Juzgo* (640 CE), the *Fuero Real* (1255 CE), the *Siete Partidas* (1348), the *Nueva Recopilación* (1640) and eventually, the *Novísima Recopilación de Castilla* (1805) all contained perfectly valid and often dissenting

overlapped significantly; lay, para-professional, and professional practitioners operated both in and outside of legally defined categories. Below, I use a Venn diagram to represent the fluidity of categories of medical practice (Figure 1-9).³²

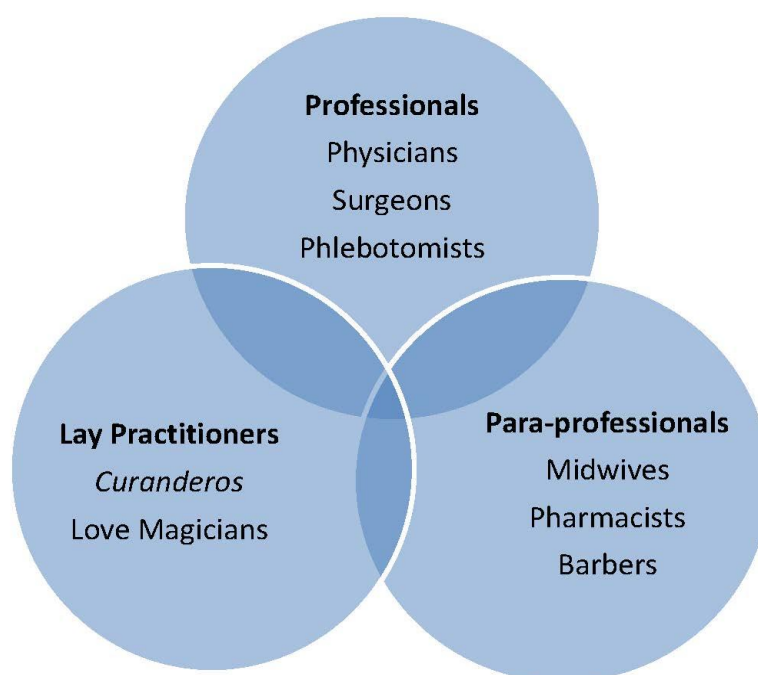


Figure 1-8. Categories of medical practice.

The practice of medicine was ostensibly regulated by a royal council of physicians known as the Protomedicato in the sixteenth through nineteenth centuries in the Spanish Empire. The Protomedicato—which had offices in the Americas by the

legal regulations, protections, crimes, and punishments for physicians and surgeons. Whether the actions of a surgeon or physician constituted a crime and whether that individual rated special protections was broadly interpretable; it is nearly impossible to say what, legally, a physician's rights and responsibilities were in most situations. Indeed, Lanning notes that lawyers during the colonial period probably had no idea which laws were most applicable in any given situation, either, although in practice the *Siete Partidas* appears to have been authoritative.

³² David Gentilcore, *Healers and Healing in Early Modern Italy* (Manchester: Manchester University Press, 1998), 1-11. Gentilcore also used a Venn diagram to represent overlap in healing categories; Harold J. Cook, *The Decline of the Old Medical Regime in Stuart London* (Ithaca: Cornell University Press, 1986), 28-69. Cook's concept of the medical marketplace aligns well with most existing work on medicine in New Spain; for a recent example, see Jemima Miéville, "Medical Pluralism in Central Mexico in the Early Colonial Period" (PhD Thesis, King's College London, 2012).

seventeenth century—was responsible for monitoring the practice of medicine, both legal (that performed by licensed physicians) and illegal (that performed by everyone else).³³

The Protomedicato did not, however, have an established office in Yucatan, and regular inspections of physicians and other healers by the *protomédico* in New Spain never reached the peninsula.

The lack of an established legal body to monitor harmful curandería meant that colonial residents could and did rely on representatives of the Holy Office of the Inquisition to investigate magico-medical rituals that appeared to have maleficent intent.³⁴ “Witchcraft” in general was a concern to the Holy Office of the Inquisition in the Iberian Peninsula by the end of the sixteenth century.³⁵ During this period, the Counter-Reformation Church and, by association, the Holy Office of the Inquisition in Europe and the colonies “turned its attention increasingly to cases of superstition, magic, and sorcery. It prosecuted numerous cases of divination, love magic, therapeutic magic and spells, and at the same time it tried people for witchcraft.”³⁶ Representatives of the Holy Office in

³³ Lanning, *The Royal Protomedicato*, 24-57. The earliest date of a Protomedicato in New Spain is contentious. A protomédico was appointed in New Spain in 1527 by local authorities, but the king in Spain did not appoint a protomédico in New Spain until 1570; two positions thus existed until at least the 1590s; John Tate Lanning, *Academic Culture in the Spanish Colonies* (London: Oxford University Press, 1940), 18-28, 110. Legally, obtaining a license in the seventeenth- and eighteenth-century Spanish Empire required that one attend one of three universities in Spain, undergo and pass an examination by the Protomedicato, and pay a large licensing fee. In locations far from the metropole, these regulations were difficult to enforce (see discussion in this chapter).

³⁴ Richard M. Golden, “Introduction,” in Richard M. Golden, ed., *Encyclopedia of Witchcraft: The Western Tradition*, vol. 1 (Santa Barbara: ABC-CLIO, 2006), xxxiv; Andrew Keitt, “the Devil in the Old World: Anti-Superstition Literature, Medical Humanism and Preternatural Philosophy in Early Modern Spain,” in Fernando Cervantes and Andrew Redden, *Angels, Demons, and the New World* (Cambridge: Cambridge University Press, 2013), 15-39. “Maleficium” may be simply defined as “harmful magic,” regardless of whether it was worked through the involvement of demonic pacts (diabolism) or the manipulation of natural or poorly understood angelic or diabolic forces (preternatural); See chapter three for more on this topic.

³⁵ Henry Kamen, *The Spanish Inquisition: a Historical Revision* (London: Weidenfeld and Nicolson, 1997), 270.

³⁶ Brian P. Levack, *The Witch-Hunt in Early Modern Europe* (New York: Longman Group, 1987), 102.

New Spain had legal jurisdiction to prosecute crimes against the faith, which often included curandería, which was denounced, described, and prosecuted as *brujería*, *hechicería*, *supersticiosos*, or simply, *maléfico*.³⁷ By this mechanism, the Holy Office of the Inquisition had authority over unlicensed medical practitioners.³⁸

The authority of the Holy Office had a profound effect, particularly on the periphery of empire, which lacked other administrative bodies to monitor and discipline curanderos. Disgruntled and disaffected patients and family members denounced medical practitioners to the Holy Office for crimes against the faith in the absence of a formal system of medical regulation in the peninsula. This was because the Holy Office of the Inquisition, unlike the Protomedicato, maintained an excellent communications and administration network throughout the Americas; Yucatan and the southern Gulf Coast were no exceptions.³⁹ John F. Chuchiak notes that commissary judges of the Holy Office “operated in distant outlying regions, far from the seat of the Tribunal in Mexico City.”⁴⁰ Crimes against the faith were investigated by local commissary judges in Yucatan and the southern Gulf Coast throughout the period under discussion.⁴¹ The Inquisition’s authority thus extended far from the metropole, as did the power to enforce that authority through regional and local Inquisitional authorities, clerical cooperation (the regular reading of edicts of faith and instruction in orthodoxy) and of course, local people, upon whom the Holy Office relied for denunciations and testimony against accused enemies of the

³⁷ Keitt, “The Devil in the Old World,” in *Angels, Demons, and the New World*, 19.

³⁸ John F. Chuchiak, *The Inquisition in New Spain, 1536-1820: A Documentary History* (Johns Hopkins University Press, 2012 Kindle Edition), Location 299.

³⁹ Chuchiak, *The Inquisition in New Spain*, Location 7235 to 7379.

⁴⁰ *Ibid.*, Location 7869-7875.

⁴¹ See chapter three for many examples of cases investigated in Yucatan.

faith.⁴² Lay medical practitioners were often denounced to the Holy Office for offenses ranging from casting malevolent spells to make people ill, unwanted love treatments, ineffective healing treatments, and treatments that were intended to be beneficial but instead caused physical harm.

IV. Historiography

This study rests at the intersection of historiographies of environmental history, knowledge exchange, indigenous and Afro-Mexican medicine, Latin America in early modern Atlantic context, and the power and authority that the Spanish colonial church and state held over colonial residents.

Historians and anthropologists have taken increasing notice of the role that the transmission of diseases, plants, and animals between the Americas and Europe has played in colonial projects. A seminal work in this area, Alfred Crosby's *The Columbian Exchange: Biological and Cultural Consequences of 1492*, frames cultural and religious conflict as a clash of physicality: of plants, animals, viruses, bacteria, and parasites that multiplied and conquered new hosts on both sides of the Atlantic.⁴³ Crosby's work has since been advanced by another generation of historians, such as John Robert McNeill,

⁴² Kamen, *The Spanish Inquisition*, 174-192, particularly 177-180. Kamen has written extensively on the roles that a climate of fear and its subsequent community involvement played in perpetuating the power of the Holy Office of the Inquisition in Spain. Fear, he notes, was not always so much fear of the Holy Office or divine disapproval as it was fear of denunciation by one's neighbors and friends. He writes that "the fear generated by the tribunal, in short, usually had its origins in social disharmony." In locations that lacked significant internecine conflict, denunciations were rare. Kamen, *The Spanish Inquisition*, 174-192, particularly 177-180.

⁴³ Alfred A. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport: Praeger, 1973); Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Austin: University of Texas Press, 1986).

who have taken biological exchange between Europe and the Americas into account in their colonial histories.⁴⁴

Historians have also increasingly explored the significance of the knowledge exchanges that accompanied those of disease, flora, and fauna during the colonial period. A medical culture of experimentation and of adaptation of cures and knowledge dominated healing throughout the Spanish Empire. Physicians frequently acted as natural historians and as experimentalists, seeking and investigating new cures around the known world. Professional medical practitioners prided themselves on their control over and their exclusive ability to understand multiple medical knowledges.

Scholarly work exploring the role that colonialism and the acquisition of indigenous knowledge played in early modern scientific and medical advancement has become more prevalent in recent years.⁴⁵ Antonio Barrera-Osorio has advanced the thesis, arguing that not only were the colonies a major component of early modern scientific development, but also were, in fact, an important impetus for the new emphasis on empirical science that, in part, sparked the medical Enlightenment.⁴⁶

Exploration, scientific and otherwise, brought generations of Europeans, Africans, and indigenous Americans into contact and conflict with one another. Nonetheless, early

⁴⁴ John Robert McNeill, *Mosquito Empires: Ecology and War in the Greater Caribbean, 1620-1914* (Cambridge: Cambridge University Press, 2010), 2.

⁴⁵ See, for example, Iris H.W. Engstrand, *Spanish Scientists in the New World: the Eighteenth-century Expeditions* (Seattle: University of Washington Press, 1981); Simon Varey, Rafael Chabrán, and Dora B. Weiner, eds., *Searching for the Secrets of Nature: The Life and Works of Dr. Francisco Hernandez* (Stanford: Stanford University Press, 2000); Londa Schiebinger and Claudia Swan, eds., *Colonial Botany: Science, Commerce, and Politics in the Early Modern World* (Philadelphia: University of Pennsylvania Press, 2005); Barrera-Osorio, *Experiencing Nature*; Daniela Bleichmar, Paula De Vos, and Kristin Huffine, eds., *Science in the Spanish and Portuguese Empires, 1500–1800* (Stanford: Stanford University Press, 2009); and for an inter-disciplinary perspective, John Slater, Maríaluz López-Terrada, and José Pardo-Tomás, *Medical Cultures of the Early Modern Spanish Empire* (Burlington: Ashgate, 2014).

⁴⁶ Barrera-Osorio, *Experiencing Nature*, 3, 28, 101-116, 128.

medical histories of the colonies largely focused on the practice of professional medicine by Spaniards in colonial central Mexico.⁴⁷ The focus has shifted in the last twenty years toward the inclusion of the voices and histories of non-European historical actors.⁴⁸

Historian Martha Few, for example, investigated female love magic practitioners and other types of medico-religious healers in her first book, *Women who Live Evil Lives: Gender, Religion, and the Politics of Power in Colonial Guatemala, 1650-1750*. Few's work uncovered the histories of female healers in colonial Guatemala, arguing that despite their persecution by the Holy Office of the Inquisition, they were essential members of their communities whose services were actively sought by both subaltern and elite members of colonial society. Few further argues that the popularity of female love magic practitioners and healers in Guatemala constituted feminine resistance to both colonial and masculine authority, disrupting traditional power and authority narratives.⁴⁹

Many recent studies of medical history in New Spain have also sought to include the perspectives of people from different race, gender, and status backgrounds in colonial society. Largely because of this shift, the history of illness, health, and medicine in New

⁴⁷ Lanning, *The Royal Protomedicato*. Lanning's work is very much a history of law and institutions, and he rejected the work of unlicensed practitioners as superstition, not medicine. He did, however, argue that unlicensed practitioners—however superstitious he may have found them—occupied an important place in the medical history of the colony; Sáenz, *Learning to Heal*. Sáenz also concentrates on central Mexico and her work constitutes a more nuanced follow-up to that of Lanning.

⁴⁸ For the early history of this shift, see Warwick Anderson, "Where is the Post-Colonial History of Medicine?," *Bulletin of the History of Medicine* 72, no. 3 (1998): 522-530; Shula Marks, "What is Colonial about Colonial Medicine? And what has Happened to Imperialism and Health?," *Social History of Medicine* 10, no. 2 (1997): 205-219; David Arnold, *Imperial Medicine and Indigenous Societies* (Manchester: Manchester University Press, 1988).

⁴⁹ Martha Few, *Women Who Live Evil Lives: Gender, Religion, and the Politics of Power in Colonial Guatemala* (Austin: University of Texas Press, 2002); Linda A. Newson, "Medical Practice in Early Colonial Spanish America: A Prospectus," *Bulletin of Latin American Research* 25, no. 3 (2006): 373-375. Newson argues that while unlicensed medical practice was legally unacceptable for all individuals in New Spain, people of color, especially women, were particularly prone to persecution because of their racial and gender identities.

Spain has increasingly been treated as one of hybridity rather than of duality. Sherry Fields was among the first to examine the ways in which quotidian illness and medical care both shaped and reflected society and culture for both Spaniards and Nahuas (concentrating on central Mexico). Her work emphasizes the superstitious and religious nature of the experience of illness and medical care in the eighteenth century, while emphasizing that “divine and rational medicine, two seemingly opposed systems of thought ... tended to complement each other.”⁵⁰ Similarly, Jemima Miéville’s recent dissertation, “Medical Pluralism in Central Mexico in the Early Colonial Period,” focuses on both lay and professional medical practice.⁵¹ She investigates the culture of healing in New Spain and critically examines the use of medicines, public and private healing spaces, and colonially-produced knowledge.

Ryan Kashanipour’s dissertation, “A World of Cures: Magic and Medicine in Colonial Yucatan,” moves away from central Mexico to consider the practice of Maya, Afro-Yucatecan, and Spanish medicine in the Yucatan peninsula. Kashanipour contends that medicine and magic “lacked clear boundaries in seventeenth- and eighteenth-century Yucatan” and argues for the expansion of colonial categories of medicine and magic, largely based on indigenous knowledges.⁵² Kashanipour’s work is primarily focused on medical knowledge as a unifying aspect of Yucatecan culture: that the fear of death and disease transcended “colonial barriers of ethnicity and status,” creating opportunities for

⁵⁰ Sherry Fields, *Pestilence and Head Colds: Encountering Illness in Colonial Mexico* (New York: Columbia University Press, 2008), 1.

⁵¹ Jemima Miéville, “Medical Pluralism in Central Mexico in the Early Colonial Period” (PhD Thesis, King’s College London, 2012).

⁵² Kashanipour, “A World of Cures,” 95.

women and people of color to identify as medical practitioners.⁵³

Better understanding of the ways that the acquisition and acculturation of knowledge and materials functioned in the colonial context has led to the inclusion of the Spanish American colonies in medical enlightenment narratives. Few's recent work, for example, has argued for "placing the history of colonial medicine in Latin America within the larger dynamic processes that inflected formal and informal exchanges of medical knowledge and material culture during the eighteenth-century Enlightenment."⁵⁴ Few's study concentrates on the eighteenth century, but as historian Ian MacLean has argued, "it is a mistake to delineate the 'late tired and sterile' phase of Aristotelianism and Galenism and the 'dynamic and innovative' experimental philosophy which succeeded it."⁵⁵ In other words, these processes may be said to define the early modern period as a whole, not simply a single century of change.⁵⁶

The juncture of these multiple historiographical narratives of the social history of colonial medicine defines my perspective. I examine medical culture in the region with a focus on the trans-Atlantic exchange of people, diseases, and medical knowledge that characterized the early modern world. Diverse racial, ethnic, and gendered points of view are vital to understanding the medical culture of the broader community of the Yucatan peninsula, the presidios of the Gulf Coast, and of the colony as a whole. I focus not only on Spanish perceptions of Maya medicine but also on Maya and Afro-Mexican medical theories and practices, when possible, from the perspective of those patients and healers.

⁵³ Kashanipour, "A World of Cures," 8-9, 95.

⁵⁴ Few, *For the Benefit of Humanity*, 13.

⁵⁵ Ian Maclean, "Evidence, Logic, the Rule and the Exception in Renaissance Law and Medicine," *Early Science and Medicine*, 5 no.3 (2000), 227-257, 228-229.

⁵⁶ For a different perspective, see Andrew Cunningham and Roger French, eds., *The Medical Enlightenment of the Eighteenth Century*, (Cambridge: Cambridge University Press, 1990), pp. 1-3.

I focus primarily on the ways that medical knowledge was socially and legally delegitimized through the interaction of authorities, practitioners, and patients. I also retain colonial categories of knowledge and practice, when possible, and avoid the artificial and anachronistic separation of concepts of medicine and magic. I recognize, too, that medical knowledges and practices in the colonial context were at times hybridized to such a degree that it is impossible for historians to definitively identify their origins. I agree with José Pardo-Tomás' interpretation of medical practice in the Americas: "it proves impossible to reduce the medical knowledge of the Spaniards and the creoles of New Spain to categories that derive from a simplistic comparison with the situation in Europe."⁵⁷ The long history of exchanges of medical knowledge that underpin the history of medicine in the early modern Spanish Empire is such that even 'Spanish' medicine is merely another constructed category. Although I recognize the probable indigenous, West Central African, or European origins of certain treatments or knowledges, I have chosen to focus instead on the ways that the legitimacy of those materials, rituals, theories, and medical practices were negotiated in the colonial milieu.

Additionally, I acknowledge that historians and ethnographers have long been plagued by a need to identify and categorize medical and magical practices, which need not be labeled separately. I argue, like many of the authors noted above, that to colonial residents, sickness and health involved mind and body and did not distinguish between

⁵⁷ José Pardo-Tomás, "Opening Bodies in a New World: Anatomical Practices in Sixteenth-Century New Spain," in *Anatome: Sezione, scomposizione, raffigurazione del corpo fra medioevo e età moderna*, Giuseppe Olmi and Claudia Pancino, eds. (Bologna: Bononia University Press, 2012), 200; For a particularly nuanced treatment of this topic, see Carolyn Dean and Dana Leibsohn, "Hybridity and its Discontents: Considering Visual Culture in Colonial Spanish America," *Colonial Latin American Review* 12, no.1 (2003): 5-35.

the physical and the supernatural in diseases or cures.⁵⁸ The social legitimacy of medical practice was in no way predicated on its separation from magical practices, but instead relied on a complex mix of labels and identifications structured by colonial administrators and identified and enforced by local politics and interpersonal relationships. By applying concepts of social and legal legitimacy to colonial medical culture, it is possible to analyze why and how medical practice could be suppressed or allowed to flourish.

V. Chapter Descriptions

In Chapter Two, I focus on the negotiation of legal and social legitimacy between colonial physicians, administrators, and para-professionals during the seventeenth through early nineteenth centuries. I demonstrate that professional legal status was constructed by law and socially upheld, to the degree possible, by professional medical practitioners throughout the Spanish colonial empire. I further demonstrate that in Yucatan and the southern Gulf Coast region, legal legitimacy had little bearing on the success or failure of medical practitioners. I examine interactions between the community and colonial administrators in determining the legitimacy of medical practice, emphasizing the roles of surgeons, pharmacists, barbers, and curanderos in the towns and presidios of the region.

In Chapter Three, I consider the role of social legitimacy in cases in which legal legitimacy did not exist. I show that the social legitimacy of illegal (but ubiquitous) practice by curanderos and love magic practitioners from the seventeenth through early

⁵⁸ Rebecca Earle, *The Body of the Conquistador: Food, Race, and the Colonial Experience in Spanish America, 1492-1700* (Cambridge: Cambridge University Press, 2014).

nineteenth centuries was negotiated between the community, colonial authorities (often, the Holy Office of the Inquisition) and the practitioners themselves. Lay medical practice was an intrinsic part of the medical culture of the region, and its legitimacy was entirely socially determined. Lay medico-magical practices were not always understood to be fundamentally evil, nor were the men and women who performed such rituals always labeled as such. Taking into account status, material culture, race, and circumstance, I examine the ways in which otherwise innocuous medical rituals could be deemed maleficent. The same practices and materials could be used in one situation and be determined to be socially illegitimate, and in another situation be deemed socially legitimate: I explore the reasons for such ambivalence.

In Chapter Four, I address the presence and influence of Mayan- and Spanish-language medical texts in the region during the seventeenth through early nineteenth centuries. Medical manuals provide a lens through which to view socially legitimated medical ideas and practices. Texts may also demonstrate the ways that the towns and presidios of the region were connected to wider medical cultures. By examining the similarities and differences between printed and manuscript texts, I show that the broad cultural understanding of illness and health in the region was not simply the result of the dominance of Spanish medical culture or of Maya medical culture. Instead, the social legitimacy of medical knowledge and practice was, in part, the result of European influences that supported Maya, Afro-Mexican, lay European, and other hybrid practices that were adopted or adapted into the shared medical culture of the region.

In Chapter Five, I return to the negotiation of legitimacy between professional medical practitioners and the colonial state during the eighteenth and early nineteenth

centuries. In many ways, the practice of medicine in Yucatan and the southern Gulf Coast region during the late colonial period became a state project, in which medical practitioners served as agents of the state in public health initiatives. Professional medical practitioners were legitimated, in part, by their work with colonial and military authorities in the prosecution of criminal violence, the construction of hospitals, and their cooperation with public health initiatives aimed at care for the sick poor. However, while public health was a concern for both professional medical practitioners and the colonial authorities, they frequently disagreed on which ideas and practices best protected public health. In many ways, this early and uneasy partnership between professional medical practitioners and the colonial authorities during the late colonial period presaged the public health policies of the Mexican nation later in the nineteenth century.

VI. Note on Terms

During the seventeenth through early nineteenth centuries, a number of descriptors were commonly used to label medical practitioners of different levels of medical education and methods of practice. In Hispanophone regions, the term *curandero* has described unlicensed and informally educated healers since at least the rise of the medical university in the High Middle Ages. Additionally, pejorative labels such as *médicos intrusos* and *médicos falsos* could be applied in colonial documents to lay practitioners. Other common descriptors for curanderos are also used by modern historians, particularly those who study the Atlantic World and/or early modern Europe: these labels are usually some variation on the term “empirics” and are intended to separate them from academic

physicians.⁵⁹ Here, I instead use the terms “curandero” and “lay practitioner” to refer to Spanish, Maya, Afro-Mexican, and all other practitioners who lacked licensure and likely had little to no formal education.⁶⁰ Additionally, I use the term “status” rather than “class” to indicate individual historical actors’ relative power and position in the colonial context. While status is related to wealth and therefore power, the term “status” privileges the roles that birth, reputation, and filial and non-filial connections played in historical actors’ positions in colonial society.⁶¹

Licensed, professional medical practitioners in the early modern period in Europe

⁵⁹ See, for example, Luis García-Ballester, “Academism versus empiricism in practical medicine in sixteenth-century Spain with regard to morisco practitioners,” in *The Medical Renaissance of the Sixteenth Century*, edited by A. Wear, R.K. French, and I.M. Lonie (Cambridge: Cambridge University Press, 1985), 246-247. He uses the term “empiricism” to describe “Arabicized Galenism” in non-academic medicine among *moriscos* in Spain; Andrew Wear, “Puritan Perception of Illness in Seventeenth-century England,” in Porter, *Patients and Practitioners*, 79. Wear uses “empirics”; Carole Rawcliffe, *Medicine and Society in Later Medieval England* (London: Sandpiper Books, 1995). Rawcliffe also uses “empirics”; Nancy G. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (Chicago: University of Chicago Press, 1990). Siraisi uses the term “unlicensed practitioners” interchangeably with “empirics.”

⁶⁰ Few, *For All of Humanity*, 7-13. Few also notes the term *curandero sangrador* in use in the audiencia of Guatemala, but I have not found that term to have been used in Yucatan and the Gulf Coast presidios.

⁶¹ Max Weber, *Economy and Society: An Outline of Interpretive Sociology*, ed. Guenther Roth and Claus Wittich, trans. by Ephraim Fischoff, et al (New York: Bedminster Press, 1968), 302-307. Weber distinguished the many permutations of “class” identifications from “status” identifications, although the concepts are and were closely related and considerably more complex than I explore here. Weber’s definitions, relevant to this work, are as follows: On the one hand, “‘Class situation’ means the typical probability of 1. Procuring goods 2. Gaining a position in life and 3. Finding inner satisfactions, a probability which derives from the relative control over goods and skills and from their income-producing uses within a given economic order.” On the other hand, “‘Status’ shall mean an effective claim to social esteem in terms of positive or negative privileges; it is typically founded on a) style of life, hence b) formal education, which may be [1] empirical training or [2] rational instruction, and the corresponding forms of behavior, c) hereditary or occupational prestige. In practice, status expresses itself through [1] connubium [2] commensality, possibly [3] monopolistic appropriation of privileged modes of acquisition or the abhorrence of certain kinds of acquisition, [4] status conventions (traditions) of other kinds.”; Anthony Giddens, *The Class Structure of The Advanced Societies* (London: Hutchison & Co, 1973), 42-45. Weber’s definitions and their meanings and applications have been the subject of considerable ongoing academic debate. Giddens both critiques and clarifies Weber’s position by noting that “classes and status groups tend in many cases to be closely linked, through property: possession of property is both a major determinant of class situation and also provides the basis for following a definite ‘style of life.’”; Tak Wing Chan and John H. Goldthorpe, “Class and Status: The Conceptual Distinction and its Empirical Relevance,” *American Sociological Review* 72, no.4 (August 2007): 512-532. Chan and Goldthorpe provide a recent and readable take on Weberian class and status definitions and interpretations.

are often referred to in the historiography as “Romance doctors” or tellingly, simply “doctors.” In the period under discussion, formally educated and licensed healers were often referred to by their level of education: therefore terms such as *licenciado*, *bachiller*, or *doctor* were in common use. In colonial texts, multiple terms could be used: *medicos*, *médicos aprobados*, *profesores*, *cirujanos*, *licenciados*, and several others.⁶² To avoid confusion, I consistently use the terms “physician” or “professional medical practitioner” to refer to university-educated and formally licensed medical practitioners. Likewise, I use “surgeon” to identify those who identified as such, and especially those who had obtained degrees from Spanish universities in surgery, not medicine (a distinction that dates to the sixteenth century in Spain).⁶³ These categories, too, were often blurred or elided in practice, and I note and explicate those situations when they arise. Finally, I use the term “para-professional” to identify those medical practitioners who occupied medical positions such as midwives, barbers, phlebotomists, and pharmacists who fell, legally and socially, in between professional and lay practice. Para-professionals were licensed in some times and places and in others they received similar training to that of lay practitioners.

Finally, when quoting from colonial sources, I have standardized spelling and capitalization according to modern conventions, except when referring to names and to book titles. I also use the English-language version of commonly used place names throughout this study: Merida instead of Mérida, Cadiz rather than Cádiz, and so on. I italicize commonly used Spanish-language terms the first time they are used. All un-

⁶²This topic is discussed in more detail in chapter two.

⁶³ Guenter B. Risse, “Medicine in New Spain,” in Ronald L. Numbers, ed., *Medicine in the New World: New Spain, New France, and New England* (Knoxville: The University of Tennessee Press, 1987), 21-24.

translated Spanish-language terms are listed and defined in the glossary.

Chapter 2 Negotiated Legitimacy in Professional and Para-Professional Medicine

Like many other professional medical practitioners of his time, Francisco Rubio, an eighteenth-century Spanish physician and medical author, was an outspoken critic of lay and para-professional medicine. Colonial-era surgeons and physicians such as Rubio argued that only professional medical practice, which combined medical education with appropriate experience, was legitimate. Rubio defined the difference between simple experience (lay medicine) and education supplemented by experience (professional medicine) in his 1774 textbook, *Medicina hipocrática: arte de conocer, y de curar, las enfermedades por reglas de observación y experiencia*: “There are two paths to learning medicine and by which you can obtain your skills. One is experience that we may acquire by the practice of curing illnesses, and the comparisons which we make in this [practice]. The first is to be an empiric, and is risky ... the second [to be a physician], through reason, and that reason comes supported by the same experience.”⁶⁴

Rubio’s description indicates that experience was necessary for legitimate medical practice, but that experience alone—without the medical education provided by Spanish medical and surgical colleges—was delegitimizing. European medical universities taught students to utilize both “rational” (classical dogmatism as taught in the university) and empirical (that which was gained from observation and experience)

⁶⁴ “dos son los caminos que hay para instruirse en la medicina, y poder conseguir su arte. El uno es la experiencia, que adquirimos por la práctica de curar las dolencias, y las comparaciones que en esto hacemos. El primero por ser empírico es arriesgado...el segundo, por racional, y venir apoyadas sus razones con la misma experiencia.” Rubio’s work was intended for both medical students and practicing physicians and surgeons. Francisco Rubio, *Medicina hipocrática: arte de conocer, y de curar, las enfermedades por reglas de observación y experiencia* (Madrid: 1774), prologue.

knowledge in the practice of medicine.⁶⁵ Professional medical practitioners who lived and worked in Yucatan and the southern Gulf Coast region were by and large educated at Spanish (or other European) universities, where they read works such as Rubio's and absorbed ideas about the exclusivity of legitimate practice.

Rubio further argued that lay and para-professionals were not only socially illegitimate, but also incompetent and dangerous. His work contains numerous examples of the illegitimacy of such categories of practice, including that of midwives. Rubio wrote: "They are in such a hurry, the midwives...they distress and worry the poor woman, who is pushing, and they force her to strain herself, without preventing the exhaustion that is found so [caused] by the efforts of labor, and the lack of strength, and the loss of blood, and consequently she is then weakened, by her frailty, and the pushes of the womb."⁶⁶ Rubio's criticisms of midwives were based largely in the lack of medical education available to such practitioners, making them incompetent to attend at childbirth. Professionals during the early modern period tended to argue that medical legitimacy was a matter of life and death, contributing to calls for exclusivity in medical practice.

Spanish surgeons and physicians based their claims to exclusive social and legal legitimacy on three factors. First, they believed themselves to be morally and

⁶⁵ Andrew Wear, "Explorations in Renaissance Writings on the Practice of Medicine," in A. Wear, R.K. French, and I.M. Lonie, eds., *The Medical Renaissance of the Sixteenth Century* (Cambridge: Cambridge University Press, 1985), 124, 313 n23.

⁶⁶ "Se dan mucha prisa las comadres y comadrones... se azoran, y congojan a la pobre mujer, que se halla sofocada, y quieren obligarla á que por fuerza se anime, sin que se les prevenga lo cansada que se halla así por los conatos del parto, como por la falta de fuerzas, y dispendios de sangre, y consiguientemente son entonces muy débiles, por su flojedad, los empujes por la matriz." Rubio, *Medicina hipocrática*, 42.

intellectually superior.⁶⁷ For example, admission to medical and surgical universities was based on the race and status of the candidate, and therefore reinforced beliefs that educated surgeons and physicians were members of an exclusive group.⁶⁸ Moreover, according to Spanish law and imperial custom, only Spanish medical and surgical colleges and universities were considered legitimate. Foreign education was unacceptable, and would render one ineligible for a license to practice in the Spanish Empire.⁶⁹ Second, professional medical practitioners believed themselves to be servants of humanity, a calling that they considered to be exclusive to professionals.⁷⁰ Service to humanity included the discovery of new medicines and diseases, the study and use of the latest medical theories and practices, and the provision of succor to the sick poor.⁷¹ Third,

⁶⁷ Faith Wallis, ed., *Medieval Medicine: A Reader* (Toronto: University of Toronto Press, 2010), 361-362. The self-identification of professional medical practitioners as morally and intellectually superior was not a specifically early modern phenomenon. Medieval historian Faith Wallis argues that the superior self-identification of physicians in the twelfth through the fifteenth centuries was motivated by a desire to “protect the value of their [the university’s] product.”; In colonial New Spain, the professional ideal of exclusivity and superiority remained an ideal, not a practical reality, despite increasing legislative support for university-trained physicians.

⁶⁸ Las Siete Partidas, *Partida* vii, título vi, leyes i-viii. Robert I. Burns, ed., and Samuel Parsons Scott, trans., *Las Siete Partidas Volume Five* (Philadelphia: University of Pennsylvania Press, 2001), 1333-1336. Spanish law required that to matriculate in medical and surgical colleges, candidates had to be Spaniards, Old Christians, and of legitimate birth—in other words, they could not be *infame* under the law and must be able to prove *limpieza de sangre*, or purity of blood. Scott translates ‘*infame*’ as both “infamous” and “infamy.”; See also Lanning, *The Royal Protomedicato*, 15-19, 175-176; María Elena Martínez, *Genealogical Fictions: Limpieza de Sangre, Religion, and Gender in Colonial Mexico* (Stanford, Stanford University Press, 2008). Martínez provides an excellent overview of the legal concept of “infame.”

⁶⁹ Lanning, *The Royal Protomedicato*, 154-174. Foreign professional medical practitioners could apply for licensure to practice in the Spanish Empire, especially if they had lived in the empire for twenty years, but this was not typical. They had to first be naturalized, then they could apply for licensure by the *Protomedicato*. That did not prevent foreign professionals from practicing in New Spain, although they did so illegally. The Spanish case appears to have been somewhat unusual: French, Italian, and English physicians and surgeons at least sometimes traveled to obtain their degrees, particularly if they wanted to pursue a particular course of study (e.g. anatomy at Bologna or Padua). This kind of travel did not always preclude returning to one’s home country to practice. Lanning addresses this phenomenon as it pertained to New Spain in some detail.

⁷⁰ Few, *For the Benefit of Humanity*. Few writes about the role of the medical Enlightenment in colonial Guatemala.

⁷¹ Andrew Cunningham and Roger French, eds., *The Medical Enlightenment of the Eighteenth Century* (Cambridge: Cambridge University Press, 1990), 1-3. According to Cunningham and French, the conflation of pious charity for the sick poor and the practice of professional medicine became part of the identity of

they positioned themselves as being on the side of regnal and colonial laws, which backed their claims to exclusive legitimacy. In some cases, professional medical practitioners employed legal rhetoric or even brought lawsuits against colonial administrators in order to call attention to legally illegitimate practices. However, while professionals' positions were protected by law, they did not always turn to the law when making accusations of illegitimacy. Spanish medical professionals also sometimes referred to social illegitimacy in their work in order to highlight what they viewed as the ineptitude of lay practitioners. This is apparent in Rubio's brief discussion of midwifery above: illegitimacy could be framed as dangerous incompetence rather than as illegal practice.

In this chapter, I argue that the self-identification of early modern Spanish physicians as the only legitimate practitioners of medicine was not always or even typically recognized by colonial administrators. In fact, the distinctions between various legal categories of legitimate and illegitimate practice were often poorly understood or actively ignored by medical practitioners of all descriptions, by colonial administrators, and perhaps most of all, by the general public. Professional medical practitioners learned in medical textbooks and from professors and colleagues that the acceptance, training, and licensure of a surgeon or physician qualified him alone for legitimate practice. Nonetheless, patients and colonial administrators often had other ideas. This led to more than one kind of medical legitimacy in Yucatan and the southern Gulf Coast during the

professional medical practitioners during the "medical enlightenment" of the eighteenth century. This association is likely closely related to the hospital reforms and the increase of such institutions in the eighteenth century. Professional physicians and surgeons began to be employed by charitable hospitals in the thirteenth and fourteenth centuries, but charitable hospital work was not associated with professional identity until much later.

colonial period. Legal legitimacy was exclusive to professionals and para-professionals and supported by law.⁷² Social legitimacy was more complex: for many lay and para-professional practitioners, their work in succoring the sick poor and in providing medical care to locals often earned them the approbation of their clients as well as colonial administrators, marking their work as socially—if not legally—legitimate. Furthermore, law-abiding professionals often found themselves disgraced and socially delegitimized, despite the protections supposedly afforded to them by law.

I. Legal Legitimacy: Professional and Para-Professional Practitioners

i. Professional education

Spanish professional medical practitioners believed that only educated men of high social status could legitimately heal the sick. Such a philosophy of medical education and practice may be traced back to the twelfth century, concomitant with the rise of the medical university and a new ideology of medical professionalization in Western Europe. The university-centered process of medical professionalization required a clear division in both law and popular imagination between the incantations and medicines used by professionals and the (similar or even identical) incantations and medicines used by lay healers.⁷³ Urso of Salerno, a thirteenth-century philosopher and one of the earliest European scholars to argue for the exclusivity of professional medical practice, posited

⁷² The legal legitimacy of para-professionals was often questioned and poorly understood, depending on the place, time, gender and race identity of the practitioner, and of course, the type of medicine they practiced. Para-professional legitimacy is explored later in this chapter.

⁷³ See, for example, Nancy G. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (Chicago: University of Chicago Press, 1990), 13-16.

that the incantations of physicians were successful (and those of other healers were not) because of the morality and learned charisma of the physician.⁷⁴ The superior and beneficent spirit of the educated physician aided healing in a way that lay practitioners could not reproduce. Ideas about medical legal legitimacy, beginning with scholars such as Urso, continued to influence European medical education into the early modern period.

The process of the professionalization of medicine in Europe and by extension, in the overseas colonies was slow and uneven. The Spanish crown had a history of and, indeed, a reputation for choosing experienced laypersons over credentialed professionals for important skilled and scientific work. Barrera-Osorio notes, for example, that Spanish officials preferred to hire experienced pilots over those who had earned university credentials, but who had little experience at sea.⁷⁵ In part, a continued popular preference for experience over education meant that professionals from a number of increasingly professionalized disciplines sought both exclusivity and recognition throughout the colonial period.

Medical education in particular had not always been as exclusive as it was during the sixteenth through eighteenth centuries. As Nancy Siraisi notes, both men and women learned practical healing at the earliest medical universities, such as the one at Salerno, between the late ninth and early twelfth centuries. Gender exclusivity was one of the first divisions in professional eligibility, as professionalization and categorization of medical knowledge began to change in the late twelfth century. The exclusion of Jews from

⁷⁴ Maiike van der Lugt, "The Learned Physician as Charismatic Healer: Urso of Salerno on Incantations in Medicine, Magic, and Religion," *Bulletin of the History of Medicine* 87, no. 3 (2013): 307. Urso of Salerno was also known as Urso of Calabria.

⁷⁵ Barrera-Osorio, *Experiencing Nature*, 49.

medical education, in fact, preceded the exclusion of women from the same.⁷⁶ These shifts towards exclusivity mean that by the sixteenth century, professional medical practitioners, administrators, professors, and students at medical and surgical universities worked to restrict professional medical knowledge and to limit its acquisition to only Spanish men of legitimate birth. This exclusion was the first step in a system that was intended to limit access to the medical profession based on status.⁷⁷

Proof of *limpieza de sangre* was the primary admissions requirement for those who wished to pursue medical training. *Limpieza de sangre*, or purity of blood, was a concept that dated back to the fourteenth century in Spain and was intended to separate *conversos* from “Old Christian” families. So-called “Old Christians,” or those who could trace their families’ Catholicism back through several generations, were considered to have avoided the physical and spiritual taint of Jewish and Muslim blood that was thought to have unavoidably corrupted those “New Christian” families who converted to Christianity, usually under duress, during the fourteenth and fifteenth centuries.⁷⁸ By the seventeenth century in the colonies, *limpieza de sangre* had, as demonstrated by María Elena Martínez, “produced a hierarchical system of classification in Spanish America that

⁷⁶ Siraisi, *Medieval and Early Renaissance Medicine*, 13-16; R.I. Moore, *The Formation of a Persecuting Society: Authority and Deviance in Western Europe, 950-1250* (Oxford: Blackwell Publishing, 2007), 89-93, 62, 123, 186. R.I. Moore has demonstrated that the large-scale and methodical persecution and exclusion of Jews and other marginalized groups was not common before the eleventh century; royal and ecclesiastical authorities intensified the persecution of Jews, lepers, and heretics with particular vigor from the eleventh through thirteenth centuries. “Collective sentiment” also played a role in exclusion, marginalization, and persecution.

⁷⁷ See, for example, AGN, “Estatutos del real colegio de cirugía de Cádiz,” *Bandos*, vol. 4 exp. 4, fols.16r-18r, 1748.

⁷⁸ María Elena Martínez, *Genealogical Fictions: Limpieza de Sangre, Religion, and Gender in Colonial Mexico* (Stanford: Stanford University Press, 2008), 27-29. The concept of *limpieza de sangre* arose roughly concomitant with the establishment of the Spanish Inquisition. Race and status categories were always intertwined with conceptions of *limpieza de sangre*, but the colonial context created its own specific definition. The term *moriscos* was sometimes used to describe those who had converted from Islam.

was ostensibly based on proportions of Spanish, indigenous, and African ancestry [and] the *sistema de castas* or “race/caste system.”⁷⁹ The term *casta*, by the seventeenth century in New Spain, meant “any individual of mixed ancestry” and was often used in common parlance to refer to Afro-Mexicans. Thus, longstanding laws which excluded those who could not prove *limpieza de sangre* extended to exclude those who were classified as indigenous, *mestizo*, Afro-Mexican, or any combination thereof.⁸⁰ Medical education during the colonial period was thus limited to those who could prove they were not *castas* as well as those who could prove their families’ longstanding Catholicism.

The prerequisites were even more stringent for advancement in the university system, or for positions of authority at military posts in desirable locations. Such positions included that of head surgeon at army garrisons, aboard ships, and in the military hospitals staffed by the armies and navies of the empire.⁸¹ For example, the statutes of the Royal College of Surgery at Cadiz, one of two Spanish surgery colleges operating in the eighteenth century, detailed the following requirements of birth for candidates for the position of head surgeon: “All of the applicants must, by certification or by true testimony, make a declaration that they are children of fathers [who are] clean of evil race and [who are] not engaged in vile trades.”⁸² “Vile trades” was coded language that couched socio-economic status in terms of *limpieza de sangre*.⁸³ Not only did

⁷⁹ Martínez, *Genealogical Fictions*, 64.

⁸⁰ *Ibid.*, 161-163.

⁸¹ “Cirujano Mayor.” AGN, “Estatutos del real colegio de cirugía de Cádiz,” *Bandos*, vol. 4 exp. 4, fols.16r-18r, 1748.

⁸² “Todos aquellos muchachos, que por certificación, o testimonio auténtico, hagan constar ser hijos de padres limpios de mala raza, y no de oficios viles.” AGN, “Estatutos del real colegio de cirugía de Cádiz,” *Bandos*, vol. 4 exp. 4 fol. 16v, 1748.

⁸³ Martínez, *Genealogical Fictions*, 64. Martínez notes that by the seventeenth century, candidates for positions of authority in the Holy Office of the Inquisition also had to answer to being free of “vile or

candidates need to be Old Christians and “clean of evil race,” they also needed to be of high (or at least middling) socio-economic status. Questions of legitimate birth were also intrinsically linked to such requirements.⁸⁴ Similarly, candidates had to possess basic social and mechanical skills associated with higher status and education: “Candidates will also know how to read, and write, and figure, [and they will] have good behavior and inclinations.”⁸⁵

Requirements for surgical positions that included both general knowledge and desirable personal habits created status barriers, controlling access to the best paid and most influential professional medical positions in the armies and navies of the empire. By narrowing the definition of desirable medical professionals for positions of authority, students from lower status (but still Old Christian) families could gain access to medical education, but could also be legally barred from specific posts, such as that of head surgeon in presidios or aboard ships.⁸⁶ Such strict requirements allowed medical and government administrators to deny positions of authority to those they deemed unsuitable due to their socio-economic status or lineage.⁸⁷

Professional medical practice in early modern Europe was closely linked to classical education in the university. Reading the works of Hippocrates and Galen was,

mechanical trades,” indicating a broader trend in determining suitability and legitimacy of birth that went beyond religious, racial, or ethnic identity; also see Chuchiak, *The Inquisition in New Spain*, Location 1612.

⁸⁴ Ann Twinam, *Public Lives, Private Secrets: Gender, Honor, Sexuality, and Illegitimacy in Colonial Spanish America* (Stanford: Stanford University Press, 1999). Twinam investigates the intricacies of social and legal categories of legitimate birth.

⁸⁵ “Harán también constar los elegidos saber leer, escribir, y contar, tener buenas costumbres, e inclinaciones.” AGN, Bandos vol. 4, exp. 4, fol.16v, “Estatutos del real colegio de cirugía de Cádiz,” 1748.

⁸⁶ AGN, Bandos vol. 4, exp. 4, fols. 16r-18r, “Estatutos del real colegio de cirugía de Cádiz,” 1748.

⁸⁷ Lanning, *The Royal Protomedicato*, 176-179. Lanning notes that the late medieval laws of admission to medical schools in Spain were sometimes circumvented in the sixteenth century, but that during the seventeenth and eighteenth centuries, the Protomedicato in Spain actively worked to make sure that colleges were adhering to regulations (such as those enacted much later at Cadiz).

from the eleventh century onward, considered vitally necessary to the legitimate practice of medicine.⁸⁸ The vast corpus of professional medical and surgical textbooks in use during the early modern period emphasized the importance of classical education as a prerequisite and foundation for the new science of empirical observation and experimentation.⁸⁹ Many medical works that emphasized these principles were read and circulated in Spain and New Spain.⁹⁰

Knowledge of ancient Greco-Roman and Arab medical works was necessary to legitimate empiric methods of healing. Because of this, early modern medical writers emphasized the role of classical education in professional medical training.⁹¹ Juan de Cárdenas, for example, a professional medical practitioner who wrote a sixteenth-century natural history of “the Indies,” began his text with a declaration that he had read and understood the works of Pliny, Avicenna, Dioscorides, and others, before beginning his observations in the Caribbean. His study of the classics was legitimizing, marking his

⁸⁸ See, for example, Gaspar Casal, *Historia natural, y medica del principado de Asturias: Obra póstuma* (Madrid: En la oficina de Manuel Martin, Calle de la Cruz, Año de 1762), 1-35. Casal references Pliny, Hippocrates, Boerhaave, Bacon, and Nicolas Monardes in his introduction, casually mixing classical and contemporary references; See chapter four for examples printed in Europe that found their way to Yucatan and the southern Gulf Coast region. The classics maintained pride of place in European medical education from at least the twelfth century, but numerous contemporary works also influenced Spanish medical practice. Contemporary works were increasingly incorporated into the canon of medicine in Europe during the fifteenth century and following, and the ideas of foreign authors and philosophers (medical and otherwise) such as Boerhaave and Bacon appear in many of these works.

⁸⁹ Schiebinger and Swan, *Colonial Botany*; Bleichmar and De Vos, *Science in the Spanish and Portuguese Empire*; Barrera-Osorio, *Experiencing Nature*. Although the “New Hippocratism” and the ‘Medical Enlightenment’ have historiographically been framed as purely eighteenth-century phenomena, new works on the history of medicine in colonial empires indicate that the broadest foci of these medical philosophies (experimentation, empiricism, clinical medicine, and environmental causes) may be traced to the fifteenth century. The preceding works, particularly Barrera-Osorio’s, collectively indicate that colonialism itself spurred broader changes in medical knowledge and practice that became widely apparent in the eighteenth and early nineteenth centuries.

⁹⁰ Although an exhaustive study of each text is beyond the scope of this project, several such examples are discussed in chapter four of this study.

⁹¹ Rubio, *Medicina hipocrática*, 4-6.

suitability to write a work of observation.⁹² Manuel Irañeta de Jáuregui, too, in his much later *Tratado del tarantismo, o enfermedad originada del veneno de la tarántula*, noted that not only had he studied the works of Rhazes, Galen, Avicenna, and many others, but that he, through a combination of education and careful experimentation, had achieved a greater understanding of tarantula venom than had those classical authors.⁹³

Many medical texts produced during the colonial period included prefaces that invoked scholars of classical antiquity. Rubio's focus on classical medical education permeated his work: he argued that clinical observation—that is, empiric medicine as understood by early modern physicians—could only take place if the healer was educated and understood the classifications of disease as laid out in classical and amended in medieval medical literature.⁹⁴

Although the classical authors and medieval commentaries thereon remained at the core of medical education, both lay and professional medical works were increasingly published in the vernacular during the sixteenth through nineteenth centuries.⁹⁵ Some medical authors decried the shift from the Latin texts, while others embraced the spread of vernacular knowledge. Some textbooks, such as Rubio's *Arte de conocer*, were

⁹² Juan de Cárdenas, *Primera parte de los problemas, y secretos maravillosos de las Indias*, (México: Casa de Pedro Ocharte, 1591), 3.

⁹³ Manuel Irañeta de Jáuregui, *Tratado del tarantismo, o enfermedad originada del veneno de la tarántula* (Madrid: la Imprenta Real, 1785), 47-52.

⁹⁴ Francisco Rubio, *Medicina hipocrática: arte de conocer, y de curar, las enfermedades por reglas de observación y experiencia* (Madrid: Imprenta Real de la Gaceta, 1774), Libro II, 7-8; Andrew Cunningham, "Medicine to Calm the Mind: Boerhaave's Medical System, and why it was Adopted in Edinburgh," in Andrew Cunningham and Roger French, eds., *The Medical Enlightenment of the Eighteenth Century* (Cambridge: Cambridge University Press, 1990), 40-66. "Clinical" medicine as pioneered by Sydenham and popularized by Boerhaave's medical system became part of the New Hippocratism of the eighteenth century (largely through the work of Boerhaave). Cunningham provides a concise summary of Boerhaave's medical theory and his use of Sydenham's clinical medicine.

⁹⁵ See chapter four for a list of lay and professional medical and surgical texts found in Yucatan and the southern Gulf Coast region in the eighteenth and early nineteenth centuries, published or written in Latin, Catalan, Italian, Mayan, and Spanish.

published in Spanish as well as Latin. Rubio defended his vernacular edition by arguing that classical authors, too, had written in the vernacular without any fear of their work being misappropriated by the uneducated: “I acknowledge that the mysteries of the art are not to be revealed to the commoners: doubtless, because not understanding one’s allusions, or delicacy, they can, if they want to use them, make many mistakes: yet, I know, that this did not hinder Hippocrates, or Galen, or other Greeks, to have written their works in the same vernacular language.”⁹⁶ Rubio went on to say that his work would be completely inaccessible to those lacking a classical education, even if they could read Spanish: “the truth is, [for] one who has not made a formal and thorough study of the craft, although you speak in their language, it is as if you speak to them in Greek.”⁹⁷ To Rubio, the accessibility of knowledge meant much more than simple literacy: it required exclusive knowledge that made professional medical practice that was acquired at the university, rooted in the classics, and augmented with clinical experience unattainable to casual readers.

ii. Professional and para-professional roles

European university-trained physicians and surgeons were not the only legally legitimate medical practitioners in Yucatan and the southern Gulf Coast. They also shared patients with para-professional practitioners such as barbers, phlebotomists, pharmacists, and

⁹⁶ “Me hago cargo, señor, que los arcanos del arte no se han de revelar a los vulgares: sin duda, porque no comprendiendo sus alusiones, o miramientos, pueden, si quieren usar de ellos, cometer mil errores; pero con todo, sé, que no sirvió esto de estorbo, así a Hipócrates, como a Galeno, y otros griegos, para haber escrito sus obras en su misma idioma vulgar.” Rubio, *Medicina hipocrática*, 5.

⁹⁷ “Porque a la verdad, el que no ha hecho estudio formal, y radical de un arte, aunque le hablen en su misma lengua, es lo mismo que hablarle en griego.” Rubio, *Medicina hipocrática*, 4.

midwives, all of whom also enjoyed a degree of legal legitimacy, provided they met the legal requirements imposed on their particular trade.⁹⁸ Para-professionals often, but not always, held licenses from the office of the Protomedicato and were permitted by law to perform certain kinds of medical treatments, such as blood-letting, midwifery, or compounding medicines. Some para-professionals were not individually regulated by the Protomedicato, but instead had legal restrictions imposed on their activities and on the ways by which they identified themselves to patients. Some medical practices were limited to those with specific licensures and titles. However, as noted with professional medical practitioners, para-professionals probably had little to no contact with regulatory institutions such as the Protomedicato in Yucatan and the southern Gulf Coast region, making prosecution for misrepresentation unlikely.⁹⁹

Despite the legal ideal of a strict hierarchy among professionals and para-professionals, specific medical titles and statuses do not appear to have been meant much to most colonial residents in Mexico City, much less those of Yucatan and the southern Gulf Coast region. This was due to a great deal of popular and professional confusion as to what the legally legitimate work of a surgeon, barber, physician, or phlebotomist actually entailed. Legislation was frequently adopted and repeatedly re-issued with the

⁹⁸ The term '*sangrador*' may be translated simply as 'blood-letter,' but practitioners with that title performed other services as well, making the modern term 'phlebotomist' more appropriate, if somewhat anachronistic. Modern historians use phlebotomist/blood-letter/bleeder more or less interchangeably. Spanish barbers, a title that had been undifferentiated from surgeons in the Middle Ages, began to be differentiated from surgeons (a professional status) with the establishment of surgical colleges. In Spain, surgery became a separate professional degree, setting surgeons apart from both barbers and phlebotomists, in 1588. The separation of barbers/phlebotomists is less clear; see the discussion of eighteenth-century legislation regarding those two para-professions (in this chapter, below).

⁹⁹ Kashanipour, "A World of Cures," 123, 177-178, n40. No evidence has been cited to date of a formal *visita* of the protomedicato anywhere in the region outside of Veracruz. Medical faculty did live and work in Yucatan, however; Kashanipour lists three Inquisition trials (from 1707, 1733, and 1753) in which a representative of the Protomedicato took part.

purpose of reminding colonial residents of the legality of some practices and the illegality of others, but in general, most patients and practitioners consulted lay, para-professional, and professional practitioners with little prejudice. It is possible that colonial residents simply preferred some practitioners over others for reasons of personal or political affiliation or for other reasons, such as the cost of services. Regardless of the reasons for their choices, however, it is clear that most residents were disinclined to uphold legal definitions of practice.

The failure of the idealized legal legitimacy of para-professionals may be seen, for example, in late-colonial legislation that attempted to impose categories of difference on barbers and phlebotomists.¹⁰⁰ Viceroy don Miguel Joseph de Azanza decreed in March 1799 that barbers and phlebotomists throughout New Spain must publicly elucidate their titles and status to avoid any confusion or illegal activity.¹⁰¹ Barbers, unlike phlebotomists, were not required to seek licensure from the Protomedicato, and thus were disallowed from performing certain procedures: “Barbers that are strictly occupied with trimming or shaving with a knife or scissors, they do not need an examination or a license, provided that they abstain from bleeding, pulling teeth, applying leeches or cups [cupping], or practicing any other operations belonging to the art of phlebotomy; in order to [perform those operations] they must first have the

¹⁰⁰Noemí Quezada, *Enfermedad y Maleficio: el curandero en el México colonial* (México: UNAM, 1989), 20. Quezada indicates that the two offices were typically listed together as *el sangrador-barbero*, but that in practice, they had different roles.

¹⁰¹Such legislation in the metropole indicated that even in a region over which the Protomedicato exercised some influence, legally illegitimate activity continued to occur. Regions like Yucatan and the southern Gulf Coast region undoubtedly experienced even less compliance, considering the absence of any sort of oversight.

approval and permission of the royal court.”¹⁰² Barbers were allowed only to perform shaves and haircuts, while phlebotomists had license to pull teeth, let blood, cup, and apply leeches. In order to publicly declare each practitioner’s qualifications, Azanza’s legal decree included requirements that publicly differentiated barbers from phlebotomists, so that even illiterate customers could not be confused about their title and services: “In order that barbers not be confused with phlebotomists, and that the public does not endure misunderstandings on this matter, I [Azanza] command that barbers put in the door of their shops a curtain and a shaving bowl and that phlebotomists distinguish their shops, as always, with a lattice and a plaque.”¹⁰³ Azanza’s notice ends with the threat that barbers who pulled teeth or bled patients would be subject to prosecution by the Protomedicato.¹⁰⁴ As previously noted, the Protomedicato’s power, even in Mexico City, was minimal by the end of the eighteenth century. Lanning argues that the Protomedicato did not have the power implement this decree outside of the metropole. The empty threat of prosecution in Mexico City was even less enforceable in Yucatan

¹⁰² “Los barberos que puramente se ejercitan en afeitar o rasurar de navaja o tijera, no necesitan de examen ni de licencia, con tal que se abstengan de sangrar, sacar muelas, echar sanguijuelas o ventosas, y practicar ninguna de las demás operaciones propias del arte de flebotomía, para ejercitar el cual debe precisamente preceder la aprobación y permiso del expresado real tribunal.” AGN, Bandos vol. 20, exp. 18, fol. 19r, 1799. An “order from the royal court” undoubtedly referred to licensure by the Protomedicato.

¹⁰³ “Y porque conviene que los puros barberos no se confundan con los sangradores, y el público no padezca equivocaciones en este punto, mando que los primeros pongan indispensablemente en las puertas de sus tiendas cortina y bacía y que los segundos distinguan las suyas como hasta ahora con celosía y tarja.” AGN, Bandos vol. 20, exp. 18 fol. 19r, 1799. Barbers’ poles date back to at least the fifteenth century in Europe. The lattice (*celosía*) in this case appears to have functioned much like a barber’s pole (*polo de peluquería* in modern Spanish).

¹⁰⁴ AGN, Bandos vol. 20, exp. 18 fol. 19r, 1799. Although issued from Mexico City, this decree was a colony-wide edict and was to be posted and announced in every village and town in New Spain.

and the Southern Gulf Coast region, although the notice of the law was duly read throughout New Spain.¹⁰⁵

Legal notices such as Azanza's highlight the medical culture of colonial residents who, when they needed to be bled, to have a tooth pulled, or to have leeches applied, consulted barbers and phlebotomists indiscriminately. The lack of distinguishing roles may have had multiple causes. On the one hand, colonial residents may have failed to differentiate between consulting barbers and phlebotomists in their daily lives. On the other hand, lay and para-professionals may have simply been misrepresenting the legality of their services. In fact, the distinction between barbers and phlebotomists was probably unimportant to anyone but the viceroy himself and his allies on the board of the Protomedicato. Azanza may have backed this legislation as a show of support for the Protomedicato, which was severely truncated in size and influence after Viceroy Branciforte's systematic destabilization of its power and authority.¹⁰⁶ Azanza's insistence on distinguishing the legal legitimacy of barbers from that of phlebotomists firmly gave power over para-professional titles to the Protomedicato, as the only real difference between the two offices was whether or not the individual had been examined and licensed by that council.

Neither phlebotomists nor barbers required any formal medical education. Barbers as well as phlebotomists typically served apprenticeships or inherited their businesses.¹⁰⁷ Considering the limited influence of the Protomedicato outside of central Mexico, it is

¹⁰⁵ Lanning, *The Royal Protomedicato*, 290-297. Lanning presents the presentation of this ineffective legislation as the result of a negotiated alliance between the Protomedicato and viceroy Azanza.

¹⁰⁶ Lanning, *The Royal Protomedicato*, 290-297.

¹⁰⁷ Ibid.

probable that many, if not all, self-professed phlebotomists in Yucatan and the southern Gulf Coast were unlicensed practitioners. The administration's desire to enact and enforce such legislation suggests that colonial residents systematically ignored the subtle differences between the legal and illegal status of the two occupations.¹⁰⁸

Titular confusion existed in the upper echelons of medical practice, as well. Medical professionals themselves often blurred the lines between different types of licensure and the concomitant duties associated with those titles. Professional medical education could provide practitioners with the title of *bachiller/licenciado* (those who had completed the equivalent of a bachelor's degree and received a license to practice), *médico* or *profesor* (medical faculty: those who had completed post-graduate training and thus were eligible to teach as well as practice medicine), or *cirujano*, a title which since 1588 had indicated the completion of separate training and licensure from that of medical doctors.¹⁰⁹ Professional medical practitioners did not limit themselves to earned titles, however. Some Spanish physicians did hold degrees in both medicine and surgery, but many others chose to refer to themselves as *medicos*, despite having earned only a surgery degree.¹¹⁰

The adoption of multiple titles and roles was relatively common, particularly in the military hospitals and presidio infirmaries at the farthest reaches of the Spanish

¹⁰⁸ AGN, Bandos vol. 20, exp. 18, fol. 19r, 1799.

¹⁰⁹ AGN, Bandos vol. 4, exp. 4, fol. 18r, 1748. The College of Surgery at Barcelona alone produced Spain's surgeons before the Surgery College of Cadiz was chartered in 1748; Risse, "Medicine in New Spain" in *Medicine in the New World*, 15. Legally professionalizing surgeons meant de-professionalizing barbers and phlebotomists. Surgeons received the equivalent of a *bachiller* degree; many physicians (especially those who called themselves "*profesor*,") sought to distinguish themselves from those holding surgery degrees. Surgeons, on the other hand, were less likely during this period to carefully mark the distinction; Michael Burke, *The Royal College of San Carlos: Surgery and Spanish Medical Reform in the Late Eighteenth Century* (Durham, Duke University Press, 1977). The Royal College of San Carlos was chartered in Spain in 1787, but graduates of that college have not appeared in the documentation used in this work.

¹¹⁰ Risse, "Medicine in New Spain," 13.

empire. The dearth of qualified medical personnel often required each individual to fill several offices at once, often to the chagrin of professional medical authors who argued for strict distinctions in medical practice. Casal noted with despair that that he once worked with a surgeon who, while stationed in an isolated part of Asturias, Spain (Pravia), was forced to fill “the offices of physician, surgeon, phlebotomist, and nurse” simultaneously.¹¹¹ And on the southern Gulf Coast of Yucatan, Pedro Pirolle, the head surgeon at the Presidio del Carmen, formally held the titles, duties, and concomitant salaries of surgeon, pharmacist, and hospital administrator. To add to the confusion, after his retirement, Pirolle began to use the title of *médico*, indicating that he had completed a higher faculty of medicine—an impossibility in Yucatan.¹¹²

The lines between professional and para-professional practice were often blurred as well. This was most apparent in pharmacy, as professional medical practitioners also sometimes served as pharmacists, compounding medicines for their own patients and possibly for a wider clientele. Pharmacy had been considered a separate occupation in Europe since the High Middle Ages, and pharmacy at times continued to function as a separate lay or para-professional occupation in New Spain during the colonial period (depending on date and location).¹¹³ However, by the sixteenth century, Spanish professional physicians and surgeons were also expected to know something about

¹¹¹ “los oficios de médico, cirujano, sangrador, y enfermero.” Casal, *Historia natural*, 17.

¹¹² AGS, leg. 7002, exp. 3, fols. 167-171, 1793. Nowhere in the extensive documentation of Pirolle’s career is his awarded degree or the college he attended actually noted, and his letters of recommendation variously refer to him as *medico*, *cirujano*, *administrador*, and *boticario*, according to his duties; Sáenz, *Learning to Heal*, 107. Sáenz argues that Pirolle was “related by marriage” to higher-ups in the garrison, which was why his career was allowed to flourish at the expense of the new surgeons who were assigned to the presidio.

¹¹³ See AGN, Protomedicato, vol. 2. Pharmacists were also ostensibly regulated by the Protomedicato. Pharmacists were not always licensed, but pharmacies were subject to regular inspection visits (*visitas*) and were expected to meet certain standards of stocks and compounding capability. In the region under discussion, only Veracruz received pharmacy inspection visits by the Protomedicato.

compounding as well as prescribing. Textbooks such as the *Avisos sobre el metodo de recetar*, for example, were written to provide basic training for surgery students at the College of Barcelona in the art and science of compounding.¹¹⁴

The broadening of medical training to include pharmacy also appealed to the integrity of the students and their responsibilities to the sick poor. *Avisos sobre el método de recetar*, for example, reminded physicians and surgeons to consider whether it would be more economical for their patients to compound cures themselves, rather than remanding them to a pharmacist. Additionally, students were advised never to prescribe a more expensive medicine when a cheaper one would do, and if possible, to rely on easily obtainable household items when prescribing medicines.¹¹⁵ The insistence that educated medical practitioners learn pharmaceutical notation and principles indicates a theoretical shift from pharmacy as a separate occupation. However, para-professional pharmacists, ostensibly or at least ideally approved and inspected by the Protomedicato, continued to staff garrisons and hospitals in the region. Pharmacy, at least for the time being, remained a separate para-professional occupation.

In addition to pharmacy, medical education by the late seventeenth and eighteenth centuries also encouraged professional medical practitioners to take an interest in pregnancy and parturition.¹¹⁶ As noted in the introduction to this chapter, the self-

¹¹⁴ The *Avisos* is among the printed medical texts brought to the southern Gulf Coast during the colonial period (see chapter four). *Avisos sobre el método de recetar: en que se contienen las reglas más seguras para que los jóvenes facultativos sepan disponer con acierto las recetas...compuestos para el uso de los reales colegios de cirugía por uno de sus maestros* (Barcelona: por Thomas Piferrer, 1769).

¹¹⁵ *Avisos sobre el método de recetar*, 7-8.

¹¹⁶ Cunningham and French, *The Medical Enlightenment of the Eighteenth Century*, 1-3. This was due in part to the ideological shift from childbirth as physiology (not needing the intervention of medical professionals) to childbirth as pathology (necessitating medical professionals). In previous centuries, uncomplicated childbirth was not considered a medical problem worthy of professional medical attention.

fashioning of medical professionals as experts in women's health led professionals like Rubio to question the social legitimacy of midwives. Midwifery was, outside of the opinion of professionals, sometimes legally and nearly always socially tolerated. Nonetheless, it was deemed a lesser occupation by physicians like Rubio, who urged newly qualified physicians to prevent patients from consulting midwives. He argued for the social illegitimacy of midwives based on their lack of formal medical training and their use of dangerous and outdated techniques and folk remedies. Rubio accuses midwives, for example, of forcing the heads of infants into pleasing shapes: "The midwives, when they want to remedy large heads [in infants], they drench the little angels [with oil], and squeeze and stroke them on the head with oil, and knead them [into shape] as if they were wax, and then later they apply a poultice, and fasten it with a ribbon; with this method they are very satisfied, that the little head of the child remains so composed: afterwards, (as I have seen) the creatures expel their little brains through their nostrils...and they die in five or six days."¹¹⁷ Rubio's grim depiction of the way that midwives cared for women and infants was directed at his readers, the men who studied

Cunningham and French identify the medicalization of pregnancy and parturition as part of the medical enlightenment of the eighteenth century; Burke, *The Royal College of San Carlos*, 97-100. Actually, when this shift occurred is the subject of some debate. Burke, like Cunningham and French, indicates that these subjects were not taught in Spanish medical schools (and thus were not of significant interest to professionals in New Spain) until 1787; Martha Few, "Medical *Mestizaje* and the Politics of Pregnancy in Colonial Guatemala, 1660-1730," in Bleichmar, De Vos, and Huffine, *Science in the Spanish and Portuguese Empires*, 132-133; Few, however, dates the rise in state and professional interest in pregnancy and parturition (specifically in Guatemala) to the 1650s. The enormous discrepancy in these dates could be resolved with a thorough examination of medical texts and medical curricula in Spain and the Spanish colonies; such a study is beyond the scope of the current project.

¹¹⁷ "Padecen los comadres, que quieren enmendar las cabezas grandes, que lacan las criaturas, a cuyo fin les dan sus sobos en ella con aceite, y las amasan como si fuera de cera, ponen luego una bisma, y la sujetan con una cinta: con lo cual quedan muy satisfechas, que la cabecita del niño quedó compuesta: su siendo después (como yo lo he visto) echar las criaturas los sesitos por las narices, como si fuera destilación crasa, y morirle a las cinco, o seis días." Rubio, *Medicina hipocrática*, Libro II, 69; Rubio sometimes distinguishes between "comadres" and "parteras." Here, he uses 'comadre' to refer to both.

medicine and surgery and who believed that only classical education, in the hands of pious men of status, could overcome the gruesome errors committed by uneducated midwives and curanderos. The invective leveled at midwives by respected medical authors like Rubio and the laws that attempted to control the activities of midwives did not, however, appear at any time to have much impact on anyone except, perhaps, medical professionals.

In part, this is because although curandería was legally illegitimate in New Spain throughout the colonial period, midwifery as a specialty typically was not.¹¹⁸ From 1567 to 1750, midwives were exempt from civil regulation within Spain and in its colonies. This was an important legal status: because women who practiced midwifery were not subject to the Protomedicato's regulation during that period, they were also not subject to laws requiring that professional and para-professionals prove *limpieza de sangre* in order to practice legal medicine. In most cases during this period, they were also not required to follow any sort of formal education program or licensing procedures, although some hospitals that employed midwives had regulations and conditions for their employment.

The social legitimacy of midwives as lay medical practitioners may be seen in the value of their testimony in criminal cases, even after the colony-wide imposition of midwifery licensing in 1750. Restall describes a 1766 case from Yucatan in which a

¹¹⁸ Risse, "Medicine in New Spain," 15. After 1567, Phillip II decreed that midwives and apothecaries were exempt from licensure, investigation, and arrest by the *Protomedicato*. Some locales still regulated midwifery, however, and the Bourbon Reforms brought increasing medical regulation of all practitioners, including midwives, after 1750. Midwives were not permitted to perform other types of medical practice outside of prenatal, natal, and postnatal care. I have not seen any evidence that the practice of midwifery changed at all with the imposition or revocation of such laws, particularly outside of the metropole; For European examples of early modern shifts in the licensure of para-professionals, see Mary Lindemann, *Medicine and Society in Early Modern Europe* (Cambridge: Cambridge University Press, 2010); Siraisi, *Medieval and Early Renaissance Medicine*; Roy Porter, ed., *The Popularization of Medicine 1650-1850*, *Wellcome Institute Series in the History of Medicine* (London: Routledge, 1992).

mulata midwife's testimony was central to a legal case against a Spaniard named don Diego Rejón. Rejón was accused of raping a Maya girl named Josepha. In response to this serious accusation, the *batab* of barrio San Román in the port of Campeche, don Pedro Poot, ordered that a midwife be brought to examine the young girl in order to corroborate her testimony.¹¹⁹ However, the girl's mother, Magdalena Chi, refused the *batab*'s choice of midwife and instead hired another local medical practitioner to examine her victimized daughter: "Then, later on, we discovered that she [Magdalena] called on a comadre of hers, Fabiana Gómez, a *mulata* midwife, to discover whether her daughter's virginity had been taken; and that having examined her, she [the midwife] told her that it had not been a week since this young virgin had been ruined."¹²⁰ The *batab* accepted the testimony of Fabiana Gómez, whom Magdalena preferred to consult and who appears to have had a personal relationship with the family.¹²¹

At this time, because of her legal race (under which she would not have been able to prove *limpieza de sangre*), Gómez would not have been eligible for a license and thus was certainly practicing as an illegal midwife. However, the disapproval of medical authors and the imposition of restrictive laws do not appear to have been considered in this case. Although derided by medical authors and restricted by law, midwives were not always at odds with elites, with their communities, nor with colonial institutions. The actions of midwives as legal witnesses and as reliable, respected lay or para-professional practitioners belies any suggestion that midwives were not part of the medical

¹¹⁹ Matthew Restall, Lisa Sousa, and Kevin Terraciano, *Mesoamerican Voices: Native Language Writings from Colonial Mexico, Yucatan, and Guatemala* (Cambridge: Cambridge University Press, 2005), 165-166.

¹²⁰ I have reproduced Restall's translation. Restall, Sousa, and Terraciano, *Mesoamerican Voices*, 165-166.

¹²¹ *Ibid.*, 167-168.

community at the local or regional level, even after the attempted reintroduction of *limpieza de sangre* laws for midwives during the mid-eighteenth century.¹²²

iii. Attending the sick

The titles and legal legitimacy of lay, para-professional, and professional medical practitioners were not relevant to most colonial residents at any time during the seventeenth through early nineteenth centuries, at least for certain illnesses. People were concerned primarily with the most effective treatment outcomes, and the social legitimacy shaped by successful medical interventions did not always or even often align with legal legitimacy at any level of practice. In fact, para-professionals and curanderos often shared patients with professional medical practitioners for illnesses arising from perceived magical as well as physical causes. For example, in a 1678 Inquisition case from Veracruz, several practitioners of varying professional, para-professional, and lay statuses examined a sick young woman named Antonia, who appeared to have been the victim of a maleficent spell.¹²³ Antonia's sudden and grave condition was characterized by insensibility and by periodic vomiting of strange objects, including sticks, hair, and twists of blue wool. When Antonia fell ill, she was examined by a number of healers who testified in the Inquisition's court as to her condition and its probable cause.

¹²² Enrique Perdiguero, "Medicine during the Spanish Enlightenment," in Porter, *The Popularization of Medicine*, 160-193. Perdiguero argues that the lack of control over medicine in Spain, at least, was due to the urban-rural divide. Arguably, this was true of Yucatan and the southern Gulf Coast region as well. Laws made in Mexico City at the center of the viceroyalty, although diligently read out in the towns and villages of the Gulf Coast, did not always have significant impact on the medical culture of the periphery.

¹²³ HUN, Mexican Inquisition Papers Series I, vol. 38, Part II., fols. 1r-120v, "Trial of Maria de Arceo, alias Maria de San Nicolas, a free mulatta, for witchcraft," 1678.

In the court of the Holy Office, the progression of Antonia's medical treatment came to light. Initially, an unnamed local *india* woman, a curandera, had first been called to Antonia's bedside.¹²⁴ While the curandera treated the patient, a man named Alonso de Montes de Oca, who owned a "surgery and barber shop," was also called in by the family to provide care.¹²⁵ Montes de Oca told Antonia's family that they should consult a physician, a *médico*, in this case. The family next asked for the opinion of a surgeon named Alonso Ríos, who concurred with Montes de Oca that a physician should be brought in to treat Antonia. In fact, Ríos and Montes de Oca both later testified that they refused to treat Antonia until the physician they recommended, Ambrosio de Lima, had seen her. When Ambrosio de Lima arrived at last, he started treatment. Later, when the case was brought before the Holy Office of the Inquisition, he testified that Antonia's illness was not caused by any known poison and may have been the product of a malevolent spell.¹²⁶

Ambrosio de Lima, as a professional medical practitioner with both legally and socially legitimated status, was considered by his colleagues to be the best choice to diagnose a difficult (and possibly, magically induced) illness. However, Antonia's illness did not immediately lead her family to call a professional medical practitioner to her

¹²⁴ HUN, Mexican Inquisition Papers Series I, vol. 38, Part II, fols. 32r-32v, "Trial of Maria de Arceo," 1639. A woman named Maria Sebastiano, "*india viuda de Francisco Simon*," was called to the Holy Office and asked if she was the curandera who had treated Antonia. Maria Sebastiano replied that it was not her, and that another *india* whose name she did not know worked in that part of town and was probably the one who treated Antonia. The unnamed *india* was neither located nor brought in for questioning.

¹²⁵ "tienda de barbero y zirujano." HUN, Mexican Inquisition Papers Series I, vol. 38, Part II," fols. 16r-17v, 1678; Sáenz, *Learning to Heal*, 189. It is unclear from this case whether Montes de Oca was actually a surgeon, a phlebotomist, a barber, all, or none of these. Sáenz, writing about him in another context, indicates that Montes de Oca was working as a surgeon, and certainly identified as such, but that he was not necessarily a graduate of a surgical college (he had served an apprenticeship, and may have attended a college, but he probably had not graduated or been licensed).

¹²⁶ HUN, Mexican Inquisition Papers Series I, vol. 38, Part II, fols. 19r-20v, "Trial of Maria de Arceo," 1639.

sickbed. In fact, they called at least one curandera and a local barber first; whether this was due to cost, proximity, or other factors (possibly even Lima's status as a legally legitimate professional) is not apparent from the documentation of this case. In the end, no fewer than four different healers attended Antonia on her sickbed. All of those healers (excepting the *india curandera* who provided initial treatment) recommended that in a case so serious, a professional physician was needed. His testimony as a learned physician became a vital component of the Holy Office's prosecution of the purported witch, María de San Nicolás, who was accused of causing Antonia's illness by enchanting three figs. Ambrosio de Lima's social legitimacy was apparent in the value of his testimony as well as in the deference the other medical practitioners showed to him.

It is possible, too, that the practice of consulting several medical practitioners was a strategy that ensured the best possible health outcomes for oneself and/or one's family. As noted in the case of Antonia in late seventeenth-century Veracruz, it was common practice in New Spain to consult several practitioners, sometimes of different professional statuses, when an individual or a member of their household fell ill.¹²⁷ Many people called several medical professionals out at the same time, as well; some physicians and surgeons may have been afraid to travel at night, especially if they thought the illness or injury was not urgent. Physicians and surgeons were well aware of

¹²⁷ José Sáenz, *Observación quirúrgico-médica de una hidra-sarcocele: o tumor escirrosos en un testículo con quiste, o saco, lleno de pus en el escroto* (México: Oficina de Dona María Fernández de Jáuregui, 1814), 8. The infidelity of patients to their physicians was lamented by professionals in printed medical texts as well as in law well into the nineteenth century. For example, José Sáenz, a physician treating a patient in Mexico City for a debilitating testicular tumor (*hidro-sarcocele*), experienced significant frustration with patient compliance. His patient was being treated simultaneously by several curanderos, other physicians, and various other practitioners, and he flatly refused to restrict his care to one physician (Sáenz himself). One result of his multiple treatment plans was profound mercury poisoning from multiple applications of the same.

the phenomenon. They sometimes failed to attend the patients they had been called to treat, possibly assuming that another practitioner had already been called and would tend to the patient, or perhaps, that the patient would not be able to pay them for their trouble, should they attend.¹²⁸

The tendency to call for several practitioners continued well into the nineteenth century, causing legislation to be adopted in 1818 that required medical professionals to attend all patients, every time they were called, whether or not they were likely to be paid for their services, at any hour of the day or night.¹²⁹ The legislation specifically addressed the problem of patients calling multiple medical practitioners to a home in the middle of the night: “[one should not] call three or four physicians at one time, as sometimes happens, but only will resort to one, and in case of an impediment of some kind or another ... [ensure] that he be accompanied by guards for his [the physician’s] security until he is returned to his home.”¹³⁰ Essentially, colonial residents were asked to support professional medical practitioners by avoiding calling several practitioners at once as well as by helping to ensure the safety of those who ventured out at night to care for the sick. Likewise, the legislation was intended to protect patients by requiring attendance on the sick, regardless of danger or compensation considerations.

This early nineteenth-century legislation did not remand punishment to the Protomedicato, but instead placed the colonial authorities in charge of applying

¹²⁸ The shaming of medical practitioners for taking money for the provision of medical care dates back to the Middle Ages in Europe and the rise of the medical university. Failure to provide care was often framed as greed.

¹²⁹ AGN, Bandos vol. 28, exp. 43, fols. 78r-79r, 1818.

¹³⁰ “no llamaran a tres o cuatro médicos a un tiempo como sucede algunas ocasiones, sino que solo se acudirá a uno, y en caso de impedimento de esta u otro... acompañado al que fuere dichos guardas para su seguridad, hasta que se restituya a su casa.” AGN, Bandos vol. 28, exp. 4, fol. 71r, 1818.

punishments for those who broke the law: the first time a physician refused a plea for medical help, they would be fined 20 pesos, and on the second offense, they would be fined fifty pesos and exiled from their city of residence for two years.¹³¹

II: Social Legitimacy: Professionals and Colonial Administrators

i. Professional medical practitioners as lawbreakers

As previously noted, both a classical education in medicine and/or surgery as well as proof of *limpieza de sangre* was necessary for access to positions of authority as professional medical practitioners during the colonial period. Such high-status positions could include appointments as city doctors, as physicians who worked for the Holy Office of the Inquisition, as court physicians, or even as the *protomédico* (usually later in one's career). Many of the graduates of surgery colleges in Spain trained to serve as physicians and surgeons in the armies and navies of the empire. For a surgeon or physician to be placed in those military support positions, they needed to embody the social responsibilities that were considered necessary for the legitimate practice of medicine by professional medical practitioners as well as by administrators. The social

¹³¹AGS, Leg. 6966, exp. 43, fol. 236r, "Pedro Pirolle, retiro," 1793. To give some idea of what twenty pesos meant to a physician, the salary of Pirolle, who acted as surgeon, pharmacist, and administrator at the Presidio del Carmen, was forty-two pesos a month; Sáenz, *Learning to Heal*, 44-54. Sáenz notes that salaries were often much less than this for professional physicians and surgeons in Mexico City at the end of the eighteenth century: salaried physicians who worked for towns, hospitals, or for the military often earned between 500 and 700 pesos annually. Famous and/or influential private physicians, such as the *Protomédico*, could earn more than 3,000 pesos per year, and some retired physicians and surgeons received salaries (essentially honoraria) from multiple hospitals, bumping their income up to thousands of pesos. Sáenz also indicates that the highest paid physicians employed by the *Protomedicato* often received significant bribes from numerous pharmacies and small private practices, further supplementing their income. However, most private practitioners outside of Mexico City probably made less than 800 pesos per year.

responsibilities of professional medical practitioners were reflected in medical textbooks, in surgical college charters, in legislation, and in practice: professional medical practitioners were expected to exhibit good moral conduct, provide succor to the sick poor, and to protect the public health.¹³²

The morals and character of candidates were emphasized in the selection of medical professionals to serve in the armies and navies of the empire, as was their physical suitability to carry out the responsibilities of the position. The cost of sending physicians and surgeons directly from Spain or from other European posts meant that the colonial authorities sought candidates who would not be likely to succumb to illness or disease after being (expensively) shipped to their new destination.

A demonstrated ability to survive the perceived deadliness of the tropical environment was important in the Spanish colonies of the greater Caribbean region. In the Presidio del Carmen in 1791, the retirement of the presidio's long-term head surgeon and physician, Pirolle, left the colonial authorities scrambling for a replacement.¹³³ A name was immediately submitted for consideration and approved by Viceroy Branciforte: that of don José Antonio Moxica, who was, at the time, serving as head surgeon at Trinidad de Barlovento. Moxica had already worked for a short time at the remote and tropical presidio on Trinidad, making him an excellent candidate for the post at the

¹³² Physicians as guardians of public health are discussed in chapter five. Few also addresses this topic in *For all of Humanity*, see, in particular, 197-201.

¹³³ Pirolle actually remained at the presidio after his retirement, to the consternation of his successor José Castells (see discussion below). The post of head surgeon included the duties of physician and surgeon as well as, sometimes, pharmacist and administrator. Because of this, such military posts were often held by surgeons who awarded themselves other titles, earned or not, such as *médico* or (in the case of Pirolle, also discussed below) *profesor*.

Presidio del Carmen.¹³⁴ Part of the nomination of Moxica reads as follows: “don José Antonio Moxica, head surgeon of the Island of Trinidad Barlovento... has demonstrated that he may adapt his health to the environment of that island, which on Trinidad is harmful”¹³⁵ Such affirmations of Moxica’s health were duplicated by another correspondent in Trinidad, who wrote to the Isla del Carmen’s governor: “don José Antonio Moxica, head surgeon of the island of Trinidad, having spent a season here, [has] demonstrated that he can adapt his health to that natural environment.”¹³⁶ Moxica’s adaptability was an important factor in the consideration of his ability to take up the vacant position of head surgeon at the Presidio del Carmen.¹³⁷

¹³⁴AGS, leg. 6966, exp. 43, fols. 234r-v, “Pedro Pirolle, Retiro,” 1791. It is not noted in this source, but undoubtedly the cost of transferring from Trinidad was less than transferring a surgeon from Spain. The cost of transport does come up in the nominations of later surgeons to posts in Isla del Carmen and Bacalar.
¹³⁵“don José Antonio Moxica, cirujano mayor de la Isla de Trinidad de Barlovento... y le expuso le adaptaría a su salud el temperamento de aquella isla, que en la dicha Trinidad le era nocivo.” AGS, leg. 6966, exp. 43, fols. 234r-v, “Pedro Pirolle, Retiro,” 1791.

¹³⁶“don José Antonio Moxica, cirujano mayor de la isla de la trinidad, que habiendo pasado á a sazón por allí, manifestó que adaptaría a su salud aquel temperamento.” AGS, leg. 6966, exp. 43, fol. 241v, “Pedro Pirolle, Retiro,” 1791.

¹³⁷ The tropical environment as causative of disease and fundamental to human development became a rich topic for medical philosophers during the colonial period. Although probably not the first, one of the best-known eighteenth-century scholars on this topic, Johannes Friedrich Blumenbach, both entrenched the eighteenth-century category of medicalized racial difference as environmental artifact and that of the tropical environment’s ability to fundamentally change the body in *On The Natural Variety of Mankind*, 1776 (1865 translation, http://www.blumenbach.info/_/De_Generis_humani_1st_Ed.html), part one. Medicalized perceptions of tropical environments and of bodies as products of environments have a rich historiography of their own, but a lacuna remains in documenting the pre-nineteenth-century colonial history of the medicalization of tropical locales, particularly in the Hispanophone context. As previously noted, the eighteenth century in particular saw a rise in Hippocratic environmental causes of disease in medical philosophy: in the Spanish colonial record, this manifested in increased reports of tropical disease and difficulty in staffing colonial environments. Most literature on this historical phenomenon, even now, concentrates on nineteenth- and twentieth-century Anglophone and Francophone colonies. For coverage of this topic, see (for example): M.T. Ashcroft, “Tercentenary of the First English Book on Tropical Medicine, by Thomas Trapham of Jamaica,” *The British Medical Journal*, 2 no. 6188 (August 1979). Ashcroft argued that tropical medicine did not become a distinct discipline until the twentieth century, a statement that I think is belied by the overwhelming amount of printed material on specifically tropical diseases from the sixteenth century and following in a period before such specialization was systematized; Daniela Bleichmar has since begun the work of naming and extending this topic in both time and space to the colonial Spanish context, concentrating on the eighteenth century. See her categorization of the extant literature in Daniela Bleichmar, “Exploration in Print: Books and Botanical Travel from Spain to the Americas in the Late Eighteenth Century,” *Huntington Library Quarterly* 70 no.1 (March 2007).

Physical adaptability and endurance was only one of the requirements for the post of head surgeon in the region. Moral and social suitability (and thus, legitimacy) also played a role in approving the appointment of a new head surgeon, a post that carried both prestige and responsibility.¹³⁸ Despite Moxica's promising qualifications and the approval of his nomination by Branciforte himself, the authorities at Trinidad de Barlovento and on the Isla del Carmen in Yucatan, seeking to confirm his eligibility for the post, found him to be unsuited to the position. In December of 1791, Moxica was discovered to be engaging in criminal behavior during his tenure on Trinidad, "having been apprehended [with] fifty-five barrels of rum that had been hidden on the tiny islet of Panlas, twelve leagues away from the presidio [in Trinidad], with the object of introducing it [into Trinidad] clandestinely... surely he hoped to settle there [in Trinidad] entirely with the intention of engaging in illicit commerce."¹³⁹

Moxica's legitimacy was called into question on both legal and moral grounds. Moxica's illegal and purportedly immoral actions rendered him ineligible for the position safeguarding the health of troops and locals on the Isla del Carmen.¹⁴⁰ Moxica was a qualified surgeon, according to the authorities, who was demonstrably able to survive the

¹³⁸ Military positions were often framed as surgery rather than medicine postings. Surgeons historically followed armies and served aboard ships long before surgery was repositioned in the hierarchy of medicine as a professional occupation during the early modern period. However, surgeons absolutely served as physicians in the presidios and aboard naval vessels in the region, often (as discussed above) even calling themselves *médico*, an honorific that was echoed by colonial residents and administrators. In this particular place and time, the differences between the surgery and medicine degrees appeared to mean little to surgeons and administrators and, in fact, it is nearly always impossible to tell from the documentation of the presidio what degree (if any) a surgeon actually held (see discussion in this chapter, above).

¹³⁹ "Habérsele aprehendido cincuenta y cinco varilles de aguardiente de caña que había ocultado en un islote llamada Panlas; doce leguas distante del presidio; con el objeto de irlo introduciendo en el clandestinamente... y que seguramente aspiraría á establecerse allí con el solo fin del comercio ilícito." AGS, leg. 6966, exp. 43, fols.241r-v, "Pedro Pirolle, Retiro," 1791. The pagination in this section is unclear; 241 is repeated.

¹⁴⁰ AGS, leg. 6966, exp. 43, fols.241r-v, "Pedro Pirolle, Retiro," 1791.

“harmful” environment of the region. However, his criminal activities outweighed his qualifications. Because of his actions, he could not legally fill the position of head surgeon at the Presidio del Carmen. His underhanded scheme to obtain a position of authority in order to smuggle rum out of Trinidad rendered him socially as well as legally illegitimate.¹⁴¹ The nomination in his favor was withdrawn, and another candidate, José Castells (whose career will be discussed later in this chapter), was nominated for the position.¹⁴² In any event, Moxica disappeared after his illegal activities were discovered, fleeing to Veracruz.¹⁴³

Not all medical practitioners’ lawbreaking activities were as dramatic as that of Moxica. In general, Spanish law supported professional medical practitioners. In addition to the restricted right to practice medicine, physicians and surgeons also enjoyed common law *fueros*, hereditary rights and exemptions from taxation and service, that were specific to their profession.¹⁴⁴ *Fueros* made physicians and surgeons subject to their own courts of law and allowed them access to trial and investigation by their peers in the Protomedicato rather than in the civil courts.¹⁴⁵ With *fuego* rights, professional medical practitioners

¹⁴¹ Rum was not illegal, but stealing it and/or failing to pay taxes and duties on it was, particularly if one then sold it. The exact charges against him are not made clear in this account, but the fact that Moxica was up to no good with his stash of rum was obvious to the authorities. AGS, leg. 6966, exp. 43, fols. 241r-v, “Pedro Pirolle, Retiro,” 1791. The pagination in this section is unclear; 241 is repeated.

¹⁴² AGS, leg. 6966, exp. 43, fols. 241r-v, “Pedro Pirolle, retiro,” 1791.

¹⁴³ The authorities considered the possibility that he was part of a larger ring of smugglers that had been running the black market in the region. His professional qualifications were not questioned in this document, but one can’t help but wonder if he was a qualified surgeon at all. The authorities make it seem as though smuggling was his purpose in securing presidial appointments was predicated on smuggling. AGS, leg. 6966, exp. 43, fols. 241r-v, “Pedro Pirolle, retiro,” 1791.

¹⁴⁴ Vinson, *Bearing Arms for his Majesty*, 173. Although military *fueros* sometimes applied to physicians and surgeons employed by the military (see the trial of Vicente Flores later in this chapter), physicians and surgeons had their own *fuego* that allowed cases concerning professionals to be tried before the Protomedicato. Vinson, *Bearing Arms for his Majesty*, 173; Lanning, *The Royal Protomedicato*, 15-19.

¹⁴⁵ Lanning, *The Royal Protomedicato*, 15-19.

could manage legal matters pertaining to their profession on their own, without recourse to outside authority.¹⁴⁶

While ecclesiastical oversight was rarely invoked to investigate problems involving professional and para-professional practitioners, it did provide a mechanism with which to regulate moral fitness and social legitimacy in the community.¹⁴⁷ Military and professional *fueros* could not and did not shield professional and para-professional medical practitioners from ecclesiastical prosecution, which had jurisdiction over everyone, regardless of status. For example, the barber and phlebotomist don Pedro Antonio Calderón was tried before the Holy Office of the Inquisition in 1779 for bigamy.¹⁴⁸ Calderón had a wife in Cartagena (Spain), who he left behind when he sought work in the port of Campeche. Soon after his arrival, he also married a Campeche woman.¹⁴⁹ When the authorities caught on to his crime, his status as a licensed para-professional in no way protected him from prosecution by the Holy Office, either legally or in practice.

Only rarely was the office of the *Protomedicato* consulted by the colonial authorities in Yucatan or the surrounding region, and inspections of professionals and para-professionals were never carried out, with the exception of a single visita to Veracruz.¹⁵⁰ In the absence of that legal and regulatory body, professional and para-

¹⁴⁶ Lanning, *The Royal Protomedicato*, 93-134. The lack of any significant protomedical presence in the region may have made the provision of legal rights provided by the *fuego untenable*.

¹⁴⁷ See chapter three for the Holy Office's role in regulating the social legitimacy of lay practitioners.

¹⁴⁸ "doble matrimonio." AGN, Inquisición vol. 1162, exp. 4. fols. 137r-146v, 1779. Calderón is described, apparently indiscriminately, as barber/ phlebotomist. It is not clear from the case whether or not he legally occupied the status of phlebotomist (*sangrador*).

¹⁴⁹ AGN, Inquisición vol. 1162, exp. 4. fols. 137r-146v, 1779.

¹⁵⁰ *The Protomedicato* ostensibly conducted regular inspections of pharmacists, surgeons, phlebotomists, and medical doctors by the eighteenth century. By law, all professional medical practitioners in New Spain

professional medical practitioners often were made to answer to civil and military courts.¹⁵¹

Perhaps in part due to the absence of regulatory bodies like the Protomedicato, colonial administrators routinely broke the law in order to staff the presidios, ships, and villages of the region with medical professionals. For example, the initial recommendation for the appointment of Moxica (before he was discovered to be a smuggler) was made by Viceroy Branciforte rather than by the protomédico, an unusual situation that may have been intended as a show of political support for the viceroy.¹⁵² This is because technically, the presidio's governor should have consulted with the office of the Protomedicato in Mexico City on this matter, but instead, he wrote directly to Branciforte to recommend and to authorize a new surgeon for the presidio. At this time, Branciforte was actively maneuvering to curtail the Protomedicato's already limited

were to be inspected annually and para-professionals (including pharmacists) were to be inspected every two years. The only inspections that I have found records of have been conducted in central Mexico, and even those were sporadic. The Protomedicato came to the region in a formal capacity only once, when they carried out a single inspection of physicians and pharmacists in Veracruz in the eighteenth century. They certainly did not have the infrastructure outside of Mexico City to conduct regular trials of or provide representation to professionals with legal problems. A discussion of the legal precedent for regular inspections may be found in AGN, Protomedicato vol. 2, exp. 2, fols. 63-73.

¹⁵¹ Medical professionals working for the military could be subject to military fueros as well; see, for example, the case against don Vicente Flores later in this chapter.

¹⁵² Lanning, *The Royal Protomedicato*, 102-103. According to Lanning, the Marquis de Branciforte worked tirelessly throughout his time in office to dismantle the authority of the Protomedicato in Mexico City. Branciforte served as the civil judge on the protomédico's board in Mexico City, a position that was typically only a formality. Branciforte considered himself in charge of the Protomedicato as a result of his position, and his authority over medical matters would be hotly contested in a high-profile case before the Council of the Indies in just a few short years (1798). Branciforte would be successful in his claim of authority over medical matters, essentially erasing the already limited autonomy and authority enjoyed by the Protomedicato in Mexico City. The tension between the *Real Hacienda*, the Council of the Indies, and the Protomedicato came about because, in the case of the protomedicato, a royal representative needed to be present at all trials to represent the person of the king, who from the late medieval formation of the Protomedicato in Spain had been "present" to protect the interests of the people in medical cases. Apparently the right of civil judges to oversee Protomedicato affairs was strongly resented by the protomédico in Mexico and in Peru. Branciforte essentially forced the end of the protomedicato's limited power by assuming civil control over its day-to-day affairs (including showing up at meetings to which he had not been invited).

power and authority in Mexico City, a political situation that would come to trial before the Council of the Indies in 1798, ending in Branciforte's favor.¹⁵³ In Yucatan, four years before affairs in Mexico City came to trial, the presidio's governor was politically savvy enough to write directly to Branciforte, who held both power and authority over medical appointees.¹⁵⁴

ii. Social legitimacy

In some cases, colonial administrators simply ignored law and convention when hiring professional medical practitioners. One of the ways that colonial administrators in the region routinely favored social legitimacy over the letter of the law was the practice of allowing non-Spanish (but still white and Catholic) Europeans to work as professional medical practitioners in the region.¹⁵⁵ Lanning argues that by the eighteenth century, this was due to both the dearth of qualified professionals in the region and to a culture in New Spain of finding it "fashionable to look to foreigners, especially Frenchmen, for everything superior in medicine."¹⁵⁶ These factors provided non-Spanish physicians with

¹⁵³ Regina María del Carmen González Lozano and María Guadalupe Almeida López, "El Protomedicato," in *Memoria del III Congreso de Historia del Derecho Mexicano*, José Luis Soberanes Fernández, ed. (Mexico City: UNAM, 1983), 315. The Protomedicato lost power and authority under Branciforte, but it was not completely disbanded until 1830. It enjoyed a brief renaissance of localized power under Azanza. See, for example, Azanza's support of legislation empowering the Protomedicato earlier in this chapter.

¹⁵⁴ Lanning, *The Royal Protomedicato*, 102-103.

¹⁵⁵ Kashanipour, "A World of Cures, 183-186. Kashanipour lists 12 foreign physicians and surgeons practicing in Yucatan between 1542 and 1810; Lanning, *The Royal Protomedicato*, 153-168. Lanning also notes several physicians and surgeons specifically in Yucatan, all of whom appear in Kashanipour's list; Sáenz, *Learning to Heal*, 115. Sáenz adds Pirolle, Poumián, and Trial, as well as identifying Petit and Guijón as French, bringing the total to 17.

¹⁵⁶ Lanning, *The Royal Protomedicato*, 158. Lanning's "region" is New Spain.

social legitimacy, and their illegal practice was often supported by the colonial authorities as well as by their patients.¹⁵⁷

Lanning argues that the majority of English and French medical practitioners entering New Spain came to Yucatan, especially through the port of Campeche, “where there were no Mexican physicians to denounce them as “unlicensed.”¹⁵⁸ This does appear to have been the case. Several foreign physicians and surgeons settled in the region for the greater part of their lives, integrating into the community and providing medical care without significant intervention from the authorities. For example, between 1745 and 1758, a French surgeon named don Baltasar Rous practiced surgery in Merida and Campeche without a license from the Spanish colonial government.¹⁵⁹ In 1758, he applied for naturalization in order to protect himself from the possibility of deportation (although he was in the country legally, he was not a naturalized citizen).¹⁶⁰ The colonial authorities considered his case and decided to allow him to continue to practice medicine in the region.¹⁶¹ In particular, they lauded Rous’ commitment to providing succor to the sick poor in Merida and Campeche. Lanning notes that Rous’ credentials as a surgeon were never presented or discussed, and appeared to be much less important than was his practical skill and, most importantly, his acts of charitable healing in the villages of the peninsula.¹⁶²

¹⁵⁷ Lanning, *The Royal Protomedicato*, 157-158. Lanning notes that in spite of considerable legislation designed to prevent the practice of medicine by non-Spaniards, “viceregal officials” remained unconcerned about the influx of foreign practitioners.

¹⁵⁸ Lanning, *The Royal Protomedicato*, 165.

¹⁵⁹ Lanning, 165-166; Kashanipour, “A World of Cures,” 178.

¹⁶⁰ Lanning, *The Royal Protomedicato*, 165-166; Kashanipour, “A World of Cures,” 166-167.

¹⁶¹ Lanning, *The Royal Protomedicato*, 165-166.

¹⁶² *Ibid.*

Non-Spanish physicians could also be engaged for service in the presidios by the colonial authorities. In July of 1748, the French surgeon Pirolle “arrived in the port of Campeche, practicing his profession aboard a Spanish corsair.”¹⁶³ While his ship was docked, he began providing medical services to locals in the small port. News of his selfless healing work quickly traveled to the nearby military hospital at the Presidio del Carmen. The governor of the presidio, lacking appropriate medical personnel, asked Pirolle to come to work at the Isla del Carmen. Pirolle later reported that he “was called [to service] by the governing authorities of the presidio, because of a shortage of medical professionals, although they said he would only need to work there a few months, [because] they had many sick people there, and it would only be until they could find another physician.”¹⁶⁴ Pirolle went to the Presidio del Carmen, as requested, and worked as surgeon, physician, cook, and pharmacist to the “many sick people” in the vicinity.¹⁶⁵ He was responsible for providing medical care “for the benefit of the locals, and the soldiers,” seeing to their feeding and housing (in the absence of a hospital administrator) as well as to their medical care.¹⁶⁶ He also provided medical services, frequently without remuneration, to the locals who were formally unaffiliated with the presidio.¹⁶⁷ Perhaps

¹⁶³ “arribado al Puerto de Campeche ejerciendo su profesión en un corsario de Guerra de su corona.” Pirolle’s nationality was never in question; he is described by colonial authorities as a “native of the village of Fonsac in France” (“natural de la villa de Fonsac en el reino de Francia.”) “Pedro Pirolle, retiro.” fols.235r-236r.

¹⁶⁴ “Fue llamado por los superiores que en aquel entonces gobernaban este dicho presidio a causa de la escasez en que se hallaban de individuo de individuo de la profesión del que expone, y aunque le manifestaron que asistiría por pocos meses puede hallaban con muchos enfermos y que solo sería en ínterin se les proporcionaba otro facultivo.” “Pedro Pirolle, retiro,” fol. 236r. It is unclear whether Pirolle came to the presidio under duress. In his long portfolio pleading his case for retirement pay, Pirolle mentions that he asked to leave the presidio several times.

¹⁶⁵ “muchos enfermos.” Pedro Pirolle, retiro,” fol. 236r.

¹⁶⁶ “por el beneficio de este vecindario, y tropa.” “Pedro Pirolle, retiro,” fols. 237r-v.

¹⁶⁷ “Pedro Pirolle, retiro,” fol. 237r-v. See chapter one for a discussion of the range and demography of those in local towns receiving medical care from the presidio.

most importantly, he exercised “singular charity with the poor of the village, attending and healing with equal care and vigilance the wretched poor.”¹⁶⁸

Pirolle never left Isla del Carmen, remaining there as a professional medical practitioner until his death. Pirolle’s long and successful career was predicated not on his degrees, medical training, or techniques, but instead on his dedication to the presidio and to his patients.¹⁶⁹ He described his own years of work in the presidio in terms of selfless dedication. In his application for retirement, he wrote: “being a foreigner, I have had the honor, the pleasure, and the satisfaction ... of being employed in service [to the crown and to the presidio] my entire life.”¹⁷⁰

Colonial administrators found it difficult to find medical professionals to tend to the health of the troops and the many other individuals living at and near the presidios.¹⁷¹ As one administrator lamented in the process of finding a replacement for Pirolle, “in this kingdom, surgeons are in short supply.”¹⁷² The dearth of medical professionals was due in part to the relative isolation of the garrison and to fear of the tropical environment of Yucatan. The Presidio del Carmen may not have been the most prestigious assignment, either: when applying for a continuation of his pension after his death, Pirolle’s widow,

¹⁶⁸ “ejercicio de caridad con los vecinos pobres de este pueblo ha sido singular, asistiendo y curando con igual cuidado y vigilancia al mísero insolvente.” “Pedro Pirolle, retiro,” fol.237v.

¹⁶⁹ Sáenz, *Learning to Heal*, 115. Sáenz notes that in addition to Pirolle, three other French surgeons (Antonio Petit, José Poumían, José Trial) worked at the presidio between 1767 and 1831, and that two more, Guijón (see chapter one of this study) and Escofiet worked as civilians in the peninsula.

¹⁷⁰ “Siendo extranjero, he tenido la honra, gusto, y satisfacción de server... a un empleando todo su vida en el dicho servicio.” “Pedro Pirolle, retiro,” fols. 233r-256v.

¹⁷¹ See chapter one for a discussion of the demography at the Presidio del Carmen.

¹⁷² “En este reino, escasean mucho los cirujanos.” “Pedro Pirolle, retiro,” fols. 242-243r-v; Kashanipour, “A World of Cures,” 176-178. Kashanipour argues there were six medical professionals in Yucatan; Noemí Quezada, “The Inquisition’s Repression of Curanderos,” in Mary Elizabeth Perry and Anne J. Cruz, eds., *Cultural Encounters: The Impact of the Inquisition in Spain and the New World* (Berkeley: University of California Press, 1991), 37.

Juana Antonia Lopez, emphasized that she had been forced to spend her whole life in “that miserable place.”¹⁷³

iii. Legitimation through colonial authorities

Conflicts between surgeons and colonial administrators recurred in the Presidio del Carmen during the late eighteenth and early nineteenth centuries. It is probable that significant corruption plagued the presidio, as a few long-term employees, with the help of the Presidio’s governor, prosecuted and removed two surgeons from their positions during this period for a variety of alleged crimes.¹⁷⁴ Both surgeons, employed by the Presidio del Carmen in the late eighteenth and early nineteenth centuries, launched counter-suits against the military hospital’s administration and demanded investigations into the qualifications of the medical professionals and para-professionals employed at the Presidio. Both men, too, claimed that the poor administration of the hospital and the lack of qualifications of the men working there constituted significant threats to what they described as the public health. The Presidio’s administrators had different perspectives on these complaints, and both surgeons, José Castells and Vicente Flores de Estévez, ended up imprisoned and disgraced.¹⁷⁵

¹⁷³ “aquel miserable destino.” AGS, “Pensión de viudedad,” Leg. 6977, exp.7, fols. 285r-287v.

¹⁷⁴ Remollan, the phlebotomist, and García, the hospital administrator/ “*hombre práctico*,” appear in both cases. Pirolle testifies in Castells’ case, but he did not launch the investigation against Castells, despite Castells’ queries into his [Pirolle’s] purported lack of qualifications.

¹⁷⁵ Sáenz, *Learning to Heal*, 107. Flores’ case refers to his military fuero rights, not his rights as a licensed surgeon. Sáenz posits specifically that these men, Castells and Flores, were the victims of significant administrative corruption in the presidio.

José Castells was appointed surgeon of the military hospital at the Presidio del Carmen in June 1793.¹⁷⁶ Castells had previously served at the presidios in Gibraltar and in Mahon [Minorca], and he had been preparing to transfer to Malacca when he was convinced, with the offer of forty pesos a month and double pay for his travel expenses, to come to work at the Presidio del Carmen instead. Castells was relatively inexperienced (he had graduated from the College of Surgery in Barcelona in 1786), but he was recommended for the position partly because of the hard work and dedication that had earned him accolades from his superiors at his previous posts.¹⁷⁷

Castells' legal troubles started when he clashed with Pirolle, the retiring surgeon who he replaced at the presidio.¹⁷⁸ Castells argued that Pirolle not only was continuing to work as a physician in the community for extra money after his retirement, but that he lacked any legitimate medical or surgical qualifications in the first place. Furthermore, he argued that Rafael de la Luz, the presidio's governor, actively supported Pirolle's (allegedly) illegal activities, in spite of Pirolle's apparent lack of qualifications: "The governor of this presidio, don Rafael de la Luz, Lieutenant Colonel of the Royal Army, allows don Pedro Pirolle, a Frenchman, lately surgeon of this garrison, and now retired, to act as medical and surgical faculty in this presidio, and to fill his prescriptions in the pharmacy of the military hospital; and it is common knowledge that he [Pirolle] is not approved by any royal college of Spain or by the proto-medico of these kingdoms."¹⁷⁹

¹⁷⁶ AGS, leg. 6992, exp. 16, fol. 284r-v, "Pedro Pirolle, retiro."

¹⁷⁷ AGS, leg. 6966, exp. 43, fol. 239v, "Pedro Pirolle, retiro."

¹⁷⁸ AGN, Cárceles y Presidios vol. 8 exp. 5, fols.91r-92v, 1795; AGN, Cárceles y Presidios vol. 8 exp. 7, fols.123r-140r, 1795. Castells' charges were essentially a rebuttal or counter-suit: he made these accusations on April 16, 1795, and the charges against him had been brought on February 25, 1795.

¹⁷⁹ "Que el gobernador de este presidio don Rafael de la Luz teniente coronel de los reales ejércitos, consiente en que don Pedro Pirolle Francés cirujano que fue de esta guarnición, y jubilado actualmente:

Castells' angry accusations, directed at Pirolle's constant presence in the hospital pharmacy and his continued work around town were one thing, but his fatal error appears to have been specifically accusing Rafael de la Luz, the governor of the Presidio, of knowing about Pirolle's alleged lack of qualifications and still allowing him to practice medicine.¹⁸⁰

The accusations that Castells made against Pirolle were not formally listed as reasons for his disgrace. Castells' crimes "against humanity," according to Governor de la Luz, were crimes of negligence committed in the course of his work:¹⁸¹ "The governor of the Presidio del Carmen, [equipped with] with a file that instructs in healing methods, observes that the new surgeon José Castells, [is accused] for such errors that he appears to have committed, and continues to commit, against humanity."¹⁸² The governor notes specifically that there was no Protomedicato in the region, so he had no recourse to a qualified individual (one deputized by and a member of the protomedicato) who could observe Castells' work. It was highly irregular and frankly bizarre for the governor of the presidio to observe Castells' medical practice armed with a file ("*expediente*:" possibly an existing set of investigative questions about medical practice) about medicine. In many ways, this encounter is emblematic of the power that colonial administrators had

ejerza la facultad medico-cirugía en este presidio, y que se la despachar sus recetas en la botica del hospital militar; siendo la voz común que no es aprobado por ningún real colegio de España ni el proto-medico de estos reinos." AGN Cárceles y Presidios vol. 8 exp. 5 fols. 76r, 91r-92v, 1795.

¹⁸⁰ Cárceles y Presidios vol. 8 exp. 5 fol. 92r; Cárceles y Presidios vol. 8 exp. 7 fols.126r-129r, 1795.

Pirolle's status as army surgeon is confirmed in the case, but no note is made of his formal education. Castells may very well have been right about Pirolle, although twenty years of service would have been sufficient for naturalization, at least; Sáenz, *Learning to Heal*, 107, 115. Sáenz specifically argues that Pirolle's family connections meant more than did his "national origin" to the colonial authorities.

¹⁸¹ "cometiendo contra la humanidad." Cárceles y Presidios vol. 8 exp. 3 fol. 61r, 1795.

¹⁸² "El gobernador del Carmen, acompaña un expediente que instruye el método curativo, que observa este nuevo cirujano don José Castells...por tales los yerros, que al parecer ha cometido, y sigue cometiendo, contra la humanidad." AGN Cárceles y Presidios vol. 8 exp. 3 fol. 61r, 1795.

over the social legitimization of medical practice on the periphery. As governor, De la Luz certainly had authority over the presidio's personnel, but he was operating outside of the standards of the Protomedicato and overstepping his authority by acting as an investigator into the value of Castells' medical work.

De la Luz accused Castells of dereliction of his professional duties in his write-up of the new surgeon. For example, he wrote that Castells' fellow practitioners had complained about his habit of bleeding patients at all hours of the day and night, without regard to the patient's specific needs.¹⁸³ Additionally, Castells' failure to alert clergy when it was time to administer the last rites to dying patients was entered into his file as grave negligence:¹⁸⁴ "José Castells, surgeon of this garrison...by his carelessness and lack of zeal in carrying out his duties, it seems that many of the sick have died in this royal hospital [military hospital] without divine aid."¹⁸⁵ These accusations, among others, were sent to the governor of Yucatan for adjudication. As De la Luz noted briefly in his summary of the case, the presidio lacked any medical faculty (those holding the title of *profesor* or *médico*, who would have been members and thus representatives of the Protomedicato) to either formally accuse or defend the hapless Castells.¹⁸⁶

Castells conveniently died at the Presidio del Carmen before the final disposition of his case, leaving behind books, clothes, and Pedro Pirolle, who came out of retirement to take over the role of surgeon at the Presidio's hospital again, now using the title of

¹⁸³ "sin consideración a edades y sexo, en cualesquiera hora y tiempo." AGN, Cárceles y Presidios vol. 8 exp. 3 fol.59r, 1795.

¹⁸⁴ AGN, Cárceles y Presidios vol. 8, exp. 3 fol. 59v, 1795.

¹⁸⁵ "José Castells, cirujano de esta guarnición, como también de que por su descuido y poco celo en el cumplimiento de su encargo, según parece, han muerto algunos enfermos en este real hospital sin los divinos auxilios." AGN Cárceles y Presidios vol. 8 exp. 3 fol.59r, 1795.

¹⁸⁶ "no habiendo en este presidio un tribunal de Protomedicato, ni otro facultativo que sigue." AGN Cárceles y Presidios vol. 8 exp. 3, 1795.

médico.¹⁸⁷ Pirolle returned to his position caring for the sick and injured at the presidio with the help of a medical student named don Felipe García.¹⁸⁸ The retired Pirolle and his intern were in charge of the presidio until the following year, when a qualified surgeon named don Antonio Petit applied for the job. None of Castells' accusations against Pirolle were investigated or corroborated by any other witnesses, but pages of accusations against Castells are included in the case. Pirolle had the support of the authorities at the Presidio, while Castells manifestly did not.

Castells was not the last medical professional to challenge the authorities on legal matters at the presidio. Less than a decade later, in 1815, another surgeon at the Presidio del Carmen, Vicente Flores y Estévez, was imprisoned by the new governor of the presidio, Antonio Urgiola, for the crimes of "barratry and insubordination."¹⁸⁹ Flores, like Castells, had filed claims against the administration of the Presidio del Carmen, leading

¹⁸⁷ AGS Leg. 7002, exp. 3, fols. 167-171; AGN Intestados vol. 170 exp. 3, ff. 238r-319v, 1795. The title implies his status as medical faculty, a position that itself implies a formal and ongoing connection with a medical or surgical college. It is unclear how he came by this title, but as previously noted, the use of specific titles was more or less arbitrary.

¹⁸⁸ "hombre práctico y instruido en la medicina." AGS, Leg. 7002, exp. 3, fols. 167-171. In modern Spanish, this would indicate an intern, someone who has not yet finished medical training but who has legitimate access to patients. However, as there was no medical school in the area at this time, García's status is unclear, as is Pirolle's new role as lecturer and medical supervisor. These appear to be *ad hoc* titles that "legally" legitimated existing practice, although that is not entirely demonstrable from the extant documentation. It is possible that García had trained in Mexico City with a medical faculty member at the Royal Indian Hospital or even at the Real Escuela de Cirujía. Considering the European identities of the surgeons, physicians and administrators at the presidio and throughout Yucatan, this would have been even more unusual.

¹⁸⁹ "baratería y insubordinación." AGN, Hospitales vol. 69 exp.13 fol.278, 1815; The legal issues between Flores and the presidio were complicated, to say the least. It appears that Flores was under investigation for writing false medical discharges (see below) when he was arrested, but his countersuits (for his release and for payment of wages, as well as accusations against para-professionals at the presidio) seem to have been filed around the same time; Richard Ford, *The Spaniards and their Country* (New York: Putnam, 1848), 266. "Baratería," in the eighteenth- and nineteenth-century popular context referred to "cheating or foul play" and had the connotation of taking bribes. Richard Ford, *The Spaniards and their Country* (New York: Putnam, 1848), 266.

to his arrest for insubordination “driven by hatred.”¹⁹⁰ Flores had also repeatedly sued Urgiola for his pay, stating that it was being withheld from him to prevent him from leaving the Isla del Carmen with his family.¹⁹¹ He was soon imprisoned, apparently for his failure to repent of his litigiousness.¹⁹² Governor Urgiola wrote: “don Vicente Flores y Estevez, when he should exhibit humiliation and repentance, only becomes every day more insolent, and his previous writings [his accusations, below] are insulting.”¹⁹³ Flores vigorously protested his innocence, writing directly to the viceroy and complaining of the corruption at the presidio’s hospital.

Flores, among his many counter-suits, accused para-professional phlebotomist José Remollón of acting as pharmacist in the presidio without the requisite qualifications, a crime that, he argued, constituted a threat to the “public health.”¹⁹⁴ Worse, according to Flores, was Remollón’s habit of attending patients and prescribing remedies in the community, a practice that was, he wrote, against the law of the land and again, destructive to public health.¹⁹⁵ Flores also accused the Presidio’s administration of giving Remollón inappropriate and illegal permission to practice medicine: “They [the administration] have managed it that Remollón, lacking entirely every principle ... and

¹⁹⁰ “movido por odio.” AGN Hospitales vol. 69 exp.13, fol, 278r-279r, 1815. Also see AGN, Hospitales vol. 7 exp. 2 f. 18r, 24v, 1815. The insubordination charge appears to stem wholly from Flores’ resistance to his pay being withheld and his false imprisonment, although his attempts to flee justice may have had something to do with it (see discussion, below).

¹⁹¹ AGN Colonial Hospitales vol. 8 exp. 2 fols. 19r-19v, 1815.

¹⁹² Sáenz, *Learning to Heal*, 115.

Sáenz argues that Flores was hounded out of his job and into prison by the presidio’s governor and by the phlebotomist, (presumably Remollón, although she does not name him).

¹⁹³ “Don Vicente Flores y Estévez, cuando debía dar muestras de humillación y arrepentimiento, se manifiesta cada día más insolente y su anterior escrito insultante.” AGN Colonial Hospitales vol. 7 exp. 2 fol. 24v, 1815.

¹⁹⁴ “la salud pública.” AGN, Hospitales vol. 7 exp 2, fol.19v, 1815.

¹⁹⁵ AGN Hospitales vol. 7 exp. 2, fol.19r, 32r, 1815; AGN Cárceles y Presidios vol. 8 exp. 3 fol.53r-56r, 1815. Interestingly enough, Remollón himself saw no problem with his extra-phlebotomist activities, describing himself as “sangrador, con funciones de practicante.”

without approval it happens that he can cure in the town against repeated superior orders of our exalted viceroy that do not permit him to, it being against the [best interests of] humanity, and against the sovereign laws that are meant to protect the public health.”¹⁹⁶ Flores went on to allege that the presidio’s governor was involved in breaking the laws of medical practice: “Don José Remollón, being neither a physician nor a surgeon, has been said to cure the sick by order of the governor.”¹⁹⁷ Remollón, it seems, occupied the spheres of both lay practitioner and para-professional, his various roles emphasizing the fluidity of medical identities. His work as a phlebotomist was both legally and socially legitimate, while his role as lay practitioner, while illegal, was socially legitimated by the people of the town and by the Presidio’s governor.

Flores’ accusations were not entirely dismissed. Remollón’s alleged extralegal medical practice was investigated as part of Flores’ military trial. Witnesses were asked “if they knew or had heard it said that don José Remollón was hated by more than half the town, and that only to please the governor and paymaster of this island did they ask him for cures against their will, and for that reason, they do not employ don Vicente Flores?”¹⁹⁸ The responses tended to vindicate the social legitimacy of Remollón by reason of his charity and caring towards the sick poor, and to insist that Flores was never

¹⁹⁶ “Han conseguido que Remollon, careciendo de todo principio en el facultad, y por lo mismo sin aprobación sea el que cure en el pueblo contra repetida superiores ordenes del exmo. Señor virrey, para que no se le permita, por ser contra la humanidad, y contra las leyes soberanas, que conspiran al bien conservación de la salud pública.” AGN, Hospitales vol. 7 exp. 2 fol. 19r-19v.

¹⁹⁷ “don Jose Remollon, sin ser medico ni cirujano ha citado curando a los enfermos por mandado de señor gobernador.” AGN, Hospitales vol. 7 exp. 2 fol. 28r.

¹⁹⁸ “si sabe o ha oído decir que don José Remollón sea odioso de más de medio pueblo, y que por solo complacer al señor gobernador y el señor ministro pagador de esta isla lo solicitan para curan contra su voluntad, y no ocupan al cirujano don Vicente Flores, por la razón dicha.” AGN Hospitales vol. 69 exp. 13 fol. 343, 1814 (phrase is repeated, *passim*).

available to help the sick and neglected them, marking him as socially illegitimate.¹⁹⁹

Governor Urgiola, who reviewed the case and sent his verdict along to the viceroy, found that Flores was “uncharitable and derelict in his treatment of the sick troops.”²⁰⁰ Flores may, in fact, have been guilty of the many charges leveled against him by the presidio’s administration. He certainly tried to avoid arrest: when soldiers arrived at Flores’ home to give him three hours to get his affairs in order prior to his imprisonment, they found him outside with a saddled horse, ready to leave town.²⁰¹ Then, when they returned to retrieve him hours later, they found that Flores had “taken refuge in the church.”²⁰²

Flores’ attempts to exonerate himself by appealing to the legal illegitimacy of the practice of Remollón and, by extension, the complicity of Governor Urgiola were ultimately unsuccessful. He tried to invoke his own legal legitimacy as a medical professional in his pleas for clemency to the viceroy, writing that his arrest was “against humanity, and against the sovereign laws that tend to the common good and the conservation of public health.”²⁰³ It appears, however, that the governor and the local people supported Remollón’s practice; Flores was thrown in prison and denied a salary, while Remollón continued to practice medicine in the region with the support of the

¹⁹⁹ AGN, Hospitales vol. 69 exp. 13, fol. 343, 1815.

²⁰⁰ “falta de caridad y abandonado con que el cirujano don Vicente Flores trataba a los enfermos de la tropa.” Hospitales vol. 69, exp. 13, fol. 340, 1815

²⁰¹ AGN Hospitales vol. 69, exp. 13, fols. 326-327, 1815.

²⁰² “se refugió en la iglesia.” He launched his countersuits from the church, but he was eventually removed and imprisoned. AGN, Hospitales vol. 69, exp. 13, fols. 326-327, 1815.

²⁰³ “contra la humanidad, y contra las leyes soberanas, que conspiran al bien y conservación de la salud pública.” AGN Hospitales vol. 69, exp. 13 fol. 328, 1815.

colonial administration.²⁰⁴ Despite applying for clemency to the viceroy by on three separate occasions, he was not pardoned.²⁰⁵

III. Conclusion

Sáenz argues that the administration's obvious persecution of Flores and Castells and clear support of Pirolle was entirely due to local politics, stating that "national origin was overshadowed by individual interests, personal relations, and local politics."²⁰⁶

Persecuted in his workplace and, he believed, unjustly imprisoned, Flores actively sought recourse in the law to defend what he saw as transgressions of the legitimacy of medical practice. However, none of his accusations of illegal actions occurring in the presidio mattered to the colonial authorities. At no point was governor Urgiola chastised or charged for his support of illegal medical practice in the presidio. Likewise, Castells' attempts to distract attention from the accusations against him with tales of legally illegitimate medical practice occurring with the support of governor de la Luz went uninvestigated.²⁰⁷ Presidio authorities overlooked legal legitimacy and, at times, supported illegal practice, when it supported their own aims.

The social and legal legitimacy of medical practitioners of all descriptions varied according to circumstance and was negotiated between patients, practitioners, and the

²⁰⁴ The viceroy ordered that Flores be set free and his pay given to him; the governor resisted this order, writing that Flores still had not repented of his crimes.

²⁰⁵ AGN, Hospitales vol. 69, exp. 13, fol. 374, 1815. The disposition of his case is unclear. His pardon was denied, but the governor was ordered by the viceroy to release him from prison—which the governor then refused to do. The final outcome of the case itself is clear (he was guilty, and his appeals were unsuccessful), but the fate of Flores is not.

²⁰⁶ Sáenz, *Learning to Heal*, 107.

²⁰⁷ AGN, Cárceles y Presidios vol. 8, exp. 3 ff.53r-56r, 1795.

colonial authorities. Medical legitimacy in practice was not always the same as it was in law, and at times, agents of the Spanish colonial state broke the law in order to position medical practitioners in the villages and presidios for which they were responsible.²⁰⁸ At times, they supported specifically illegal activities and even persecuted those professionals who tried to stand up for the legal protections ostensibly afforded to their status.

Physicians' access to exclusive legal legitimacy was emphasized by medical writers, legislated by the crown, and entirely ignored by local administrators and by the general population on the periphery. Colonial administrators sometimes supported illegal healing activities. It is impossible to know why, precisely, administrators chose to overlook the law. It may be that they believed that it was in the best interest of the community to have medical practitioners who could heal the sick and injured, regardless of their qualifications. It is possible, too, that administrators supported those who supported them. Or, as Saénz suggests, it may have been simply kinship ties that legitimated the work of all kinds of medical practitioners in the presidio. What is apparent from the historical record is that barbers, pharmacists, phlebotomists, and surgeons in the presidios of Yucatan and the southern Gulf Coast often worked in a variety of roles in their communities that were, strictly speaking, illegal. These socially legitimated practices, supported by colonial authorities, were sometimes violently opposed by professionals who felt their own status was threatened by the disregard for their legal legitimacy.

²⁰⁸ Bushnell, "Gates, Patterns, and Peripheries," in *Negotiated Empires*, 17; Osterhammel, "The Imperial Viceroy," in *The Dynastic Centre*, 13.

The case studies in this chapter show the negotiation of legitimacy in Spanish medical culture between professionals, colonial administrators, and lay and para-professionals. Viceroys appointing surgeons without the approbation of the protomedico, governors setting medical standards, patients consulting pharmacists for medical care, medical interns practicing medicine and pharmacy, surgeons using the title of *médico*, and physicians practicing medicine without the benefit of a Spanish medical degree were all examples of socially legitimated practice, negotiated between colonial authorities, patients, and practitioners. In the absence of choice and in the vacuum of protomedical power, Spanish authorities appointed and supported medical practitioners who were socially, not necessarily legally, legitimate.

Chapter 3 Love Magic and Curandería

In 1639, Catalina Blanco confessed her knowledge of the following two incantations to the Holy Office of the Inquisition:²⁰⁹

“With two I see you,
With five I capture you,
Your heart I tear,
Your blood I drink,
The peace the Queen of the Angels had
With her precious Child,
May you have with me.”²¹⁰

“[May] the great father of God,
Fortress of the faith,
Virginity of the Virgin Mother,
Free me and defend me.”²¹¹

Catalina made her confession before representatives of the Holy Office of the Inquisition in order to “clear her conscience” and, although she could not have known it at the time, her declaration was not relevant to the case in which she testified.²¹² Catalina, like many

²⁰⁹ AGN, Inquisición vol. 388, exp. 18, fol. 419r, 1639; Chuchiak, *The Inquisition in New Spain*, 50. The invocation of saints and aspects of the Holy Trinity were sometimes incorporated into *curandería* rituals. Chuchiak notes that invoking the trinity, saints, or religious figures did not necessarily protect one from ecclesiastical prosecution during this period; Wallis, *Medieval Medicine*, 47-48. In earlier centuries in Europe, the invocation of aspects of the trinity and of the Virgin Mary would have legitimized the use of such chants—but only if invoked by a holy person or a trained physician. This was likely no longer the case in seventeenth-century New Spain, despite the fact that those who heard Catalina’s confession saw no evidence of crimes against the faith in her 1639 incantation. The reason for Catalina’s exoneration is not entirely clear.

²¹⁰ “Con dos te miro, con cinco te prendo, el corazón te parto, la sangre te bebo, la paz que tubo la reina de los ángeles con su hijo precioso tengas tú conmigo.” AGN, Inquisición vol. 388, exp. 18 fols. 419r - 420v. 412r-424v1639; AGN, Inquisición vol. 360, exp. 94, fols. 244-255, 1627 ; Also cited in Kashanipour, “A World of Cures,” 145.

²¹¹ “el gran padre de dios, la fortaleza de la fe, la virginidad de la virgen madre me libre y me defienda a mí, Catalina de Juan.” AGN, Inquisición vol. 388, exp. 18, fols. 419r - 420v, 1639. Similar spells were cast in Spain around the same period: see below for details.

²¹² “por descargo de su consciencia.” AGN Inquisición vol. 388, exp. 18, f. 419r, 1639. Here, Catalina was testifying in a case brought against three women named Francisca Negra, Juana Delgada, and María de Salas for “*supersticiosos*.” Neither witnesses nor those accused of crimes were told why they had been brought before the Holy Office, and irrelevant confessions sometimes followed. Catalina was not denounced; she merely confessed her own knowledge in the process of giving evidence in the case. Considering her 1627 denunciation (for *hechicería*) a decade before, Catalina may have feared being

of her contemporaries, probably confessed out of fear that her knowledge of these incantations had already been condemned as a crime against the faith by the Inquisitors of the Holy Office.²¹³ Confessions like Catalina's highlighted not only the confusion that many individuals felt when they were called before the Holy Office, but also the ritual behaviors that colonial residents believed might constitute crimes against the faith. Prayers or incantations, specially prepared or secret medicines and materials, and physical movements that were used in both love magic and medicine rituals could be considered either maleficent or beneficent, depending on the circumstances.²¹⁴ Catalina's concern that the above incantations, which she had known since childhood, might be heretical is emblematic of the uncertainty of what constituted socially legitimate and illegitimate lay medicine and magic in the colonial period.

identified as an accomplice. AGN, Inquisición vol. 360, exp. 94, fols. 244-255, 1627. Also cited in Kashanipour, "A World of Cures," 145.

²¹³ Kamen, *The Spanish Inquisition*, 174-175. Kamen writes of the Inquisition in Spain that "the coming of the Inquisition to a town was, in principle, designed to cause fear." Although this was not always a successful strategy, readings of the edict of faith, admonitions to those with knowledge of heresy to come forward, and the secrecy with which denunciations, investigation, and trials were conducted could incite fear and thus provoke confessions and denunciations. Kamen adds that the participation of communities and of individuals within those communities was what allowed for some measure of success of the Holy Office of the Inquisition, a claim that holds true for the Inquisition in New Spain. As in Spain itself, if the community did not participate, then the system could not be perpetuated.

²¹⁴ Gonzalo Aguirre Beltrán, *Medicina y magia: el proceso de aculturación en la estructura colonial* (México: Instituto Nacional Indigenista, 1963); Quezada, *Enfermedad y maleficio*, 72-73. Quezada also uses the related term "maleficio" (curse or hex) to describe the rituals of curanderos who fell under the scrutiny of the Holy Office for using harmful magic; "Maleficence" (from maleficium: an evil deed, misdeed, wickedness, offence, crime) has been used as a historiographical term to describe the guiding principles of Inquisitors in European witchcraft trials from the sixteenth through the eighteenth centuries. A few of the cases consulted in this chapter use the word "malefico" as the alleged crime of the accused (see tables 3-2 and 3-3); Rhonda M. Gonzalez, "No Friends in the Holy Office: Black and Mulata Women Healing Communities and Answering to the Inquisition in Seventeenth Century Mexico," *The Journal of Pan African Studies*, vol. 6 no. 1 (July 2013), 6. The term "maleficent" has occasionally, but not often, been applied to magic and magico-medical practice in New Spain. It was used as a legal category of crimes against the faith during the colonial period; Also see, for a European example of early modern "maleficence," Johannes Dillinger, "Terrorists and Witches: Popular Ideas of Evil in the Early Modern Period," *History of European Ideas* vol. 30 no. 2 (2004), 167-182.

Lay medicine was legally illegitimate throughout the colonial period, leaving the legitimacy of lay medical practices to be entirely socially determined.²¹⁵ I argue that the denunciation of love magic practitioners and *curanderos* to the Holy Office of the Inquisition was predicated on the social illegitimacy of their work as perceived by friends, patients, neighbors, family members, and other concerned members of the community. The community monitored the social legitimacy of lay medical practice and reported perceived transgressions to the colonial authorities. Socially illegitimate actions, once reported to the Holy Office, were then evaluated by the ecclesiastical authorities.²¹⁶ Uncertainty about the legitimacy of domestic medical practice could also lead to self-denunciations, such as that of Catalina, who feared that her protective prayers might in some way be viewed as maleficent.

Medical practices and practitioners constantly moved back and forth between categories of social legitimacy and illegitimacy. Restall notes that reasons for denunciation and prosecution of previously unexceptionable practices could include internecine problems in the community provoked by racial and ethnic tensions, jealousies of position and power, injury or illness caused to a patient, and “the fair-weather nature

²¹⁵ Here, I concentrate on the ubiquity of *curandería* in Yucatan and the southern Gulf Coast region, but *curandería* was probably equally common in other parts of New Spain, as well as in Spain itself. Beltrán’s *Medicina y magia* remains a good study of the diversity of medical practice in central Mexico with a focus on indigenous practices, while Sáenz, *Learning to Heal* focuses on Spanish physicians and the later colonial period.

²¹⁶ Once remanded to the colonial authorities, the final disposition of the case was a matter of legal legitimacy as determined by ecclesiastical law and as interpreted by colonial inquisitors. Analyzing the legal illegitimacy of the crimes and their punishments in the context of specific ritual and material action is a rich subject for further study: were the uses of specific objects, movements, words, or other ritual elements identified as breaking specific ecclesiastical laws or theological principles? In this chapter, I instead concentrate on the rituals, materials, and other contexts that led to the social illegitimacy of the practitioner (and thus, to the denunciation or confession). In understanding social legitimacy, the disposition of the case is less important than the rejection of the practitioner or practice by the self or by the community.

of public belief in any healer or doctor.”²¹⁷ Quezada argues that reporting curandería to the Holy Office stemmed from “feelings of impotence in the face of illness, fear of the unknown, envy, competition, and fear inspired by love, all impelled New Spaniards to the Holy Office.”²¹⁸ Kashanipour adds that, because curandería was illegal and thus lacked an administrative body for monitoring its practice, the Holy Office of the Inquisition could also function as an *ad hoc* arena for the prosecution of “malpractice” by curanderos.²¹⁹ There is some evidence for the Inquisition as a replacement for civil courts to investigate wrongdoing in medical practice; as Andrew Keitt notes, “physicians and critics of superstition found common ground in the denunciation of lay healers.”²²⁰ That is not to say that it was malpractice in the contemporary sense, but that such healing was believed to be superstitious and, perhaps, dangerous. Other interpretations of the denunciation and prosecution of love magic and curandería have focused on the ways that the prosecution of magico-medical practices was carried out against women, the poor, and indigenous and Afro-Mexican curanderos in an effort to reduce their power and autonomy.²²¹

²¹⁷ Restall, *The Black Middle*, 270.

²¹⁸ Quezada, “The Inquisition’s Repression of Curanderos,” 47.

²¹⁹ Kashanipour, after Restall, also notes the role of community transgressions. Kashanipour, “A World of Cures, 189-193; Chuchiak notes that by the seventeenth century, the Holy Office of the Inquisition saw an increase in cases of *brujería*, *hechicería*, and *pactos con demonios*, charges that are typically associated with curandería and love magic. Chuchiak, *The Inquisition in New Spain*, Location 7235 to 7379.

²²⁰ Keitt, “The Devil in the Old World,” 28. He continues, “anti-superstitious discourse could serve as a means of discrediting the competition.”

²²¹ Kashanipour, “A World of Cures, 106-108, 189-193. Kashanipour analyzed 134 cases of medicine and magic brought before the Holy Office and found that being Afro-Yucatecan, specifically *mulato*, was the greatest indicator for denunciation risk, followed (somewhat unexpectedly) by being Spanish; Joan Bristol and Matthew Restall, “Potions and Perils: Love-Magic in Seventeenth-Century Afro-Mexico and Afro-Yucatan,” in Ben Vinson III and Matthew Restall, eds., *Black Mexico: Race and Society from Colonial to Modern Times*, (Albuquerque: University of New Mexico Press, 2009), 174-175. Bristol and Restall, on the other hand, found no evidence that Afro-Mexicans were targeted more than other groups in specifically love magic cases; For a discussion on the role of race in Inquisition cases of all kinds (in Yucatan, specifically) see Restall, *The Black Middle*, 274-275; For a discussion of specific curandería crimes

I argue that while race and status identities played a part in the social determination of lay medical illegitimacy, as did all of the reasons listed by Restall and by Kashanipour, specific attributes of the rituals used by lay practitioners were also significant. In this chapter, I focus on four delegitimizing factors in lay medicine: intent to harm instead of heal; summoning and intervention of demons; use of secret or otherwise distasteful materials; and rituals that appeared to be maleficent or heretical in action or intention.²²² Significantly, the descriptions of these factors were entirely

associated with race, see Noemí Quezada, "The Inquisition's Repression of Curanderos," in Mary Elizabeth Perry and Anne J. Cruz, *Cultural Encounters: The Impact of the Inquisition in Spain and the New World* (Berkeley: University of California Press, 1991), 37-57; Race and gender biases were inherent structural problems in the Holy Office of the Inquisition in New Spain, which was focused on "social control and the quest for religious uniformity in a multiethnic and multiracial society where the majority of the population (the indigenous people) lay beyond the Inquisition's jurisdictional control." Identity bias may be assumed to have been a factor in every denunciation and investigation. See Chuchiak, *The Inquisition in New Spain*, Locations 499-504; for studies of witchcraft and the Inquisition that concentrate on race and gender identity as a determining factor in persecution see, for example, Laura Lewis, *Hall of Mirrors: Power, Witchcraft, and Caste in Colonial Mexico* (Durham: Duke University Press, 2003); Few, *Women who Live Evil Lives*; Joan Bristol, *Christians, Blasphemers, and Witches: Afro-Mexican Ritual Practice in the Seventeenth Century* (Albuquerque: University of New Mexico Press, 2007); for a short general discussion of this topic, also see Newson, "Medical Practice in Early Colonial Spanish America," 373-375.

²²² Fernando Cervantes, *The Devil in the New World: The Impact of Diabolism in New Spain* (New Haven: Yale University Press, 1994), 20-25; There are many possibilities as to why love magic was so widely practiced in New Spain. Most interpretations assume that love magic is a European import. One reason that colonial inquisitors perceived maleficence in healing and love magic rituals may be that those rituals, in subverting natural processes, attempted to interrupt the exercise of free will in their patients. Love magic in particular was frequently denounced to colonial Inquisitors because of its power to make people act against their nature: for example, to travel from one place to another, to leave a lover or to stay with a lover, or to be kind to those they usually treated cruelly (practices that were not considered to need interference, given structural power differentials). Complicating the thesis that denunciations were, in fact, an issue of free will is that most colonial inquisitors were Dominicans, the only order to follow Thomist teachings from the time of Aquinas' death in the 13th century. Thomist interpretations of free will indicate that nothing can interrupt its practice; the devil can only tempt man into evil, but never can make him act against his will, which was granted by God. Fernando Cervantes argues that Thomist precepts should, in theory, have precluded a belief in devils and demons as having influence over humanity. However, this was not the case, as "unmistakably Thomist" principles inspired and permeated sixteenth and seventeenth-century demonology. He also notes that even the Dominicans did not follow Thomism so totally as has been previously thought; See also Maclean, "Evidence, Logic, the Rule and the Exception in Renaissance Law and Medicine," 227-257. Maclean argues that legal theory of the time relied on the presumption of free will as an important precept, an assumed notion that made individuals responsible for their actions (in other words, the devil can never make you do it). Jurists also relied on the precept that some individuals were good by nature, while others were by nature predisposed to evil; Lyndal Roper, *Witch Craze: Terror and Fantasy in Baroque Germany* (New Haven: Yale University Press, 2004). The rejection of the notion that love magic could override free will was an important legal question; some Christian theologians argued that

subjective, allowing the same actions and materials to shift between socially legitimate and illegitimate categories of practice (table 3-1). Medicine and magic of all sorts were perceived by locals as well as, in some cases, by authorities as existing on the same spectrum of practice. Maleficent magic in particular could and did include medicinal magic, particularly when curandería rituals caused harm.²²³

| | | | | | |
|-----------------------|--|--------------|----------------------|-------------------------------|-------------|
| Socially Legitimate | Mundane materials/ herbs | Prayers | Invocation of saints | Competence/ effectiveness | Beneficence |
| Socially Illegitimate | Secret or distasteful herbs/ enchanted objects | Incantations | Summoning of demons | Incompetence/ Ineffectiveness | Maleficence |

Table 3-1. Characteristics of Socially Legitimate and Illegitimate Lay Medicine.

“love magic required the tacit agreement of the victim to work, for the passions can only be swayed with the individual’s free will”; Claire Fanger, “Christian Ritual Magic in the Middle Ages,” *History Compass* vol. 11 no. 8 (2013, 610-618), 610. It is also possible that love magic as a method of controlling others was a remnant of the medieval practice of necromancy. Fanger has noted that love magic in medieval Europe was the domain of necromancers, as it involved controlling the body and will of another without their complicity or aid. Depriving an individual of free will was probably conceptually abhorrent to the Spanish Catholic Church, but whether they believed it was effected through necromancy or other means in this context is impossible to say: free will is not mentioned in any of the cases I have examined. Necromancy as a specific label for crimes against the faith that interrupted free will had gone out of fashion along with the rise of general witchcraft prosecutions in the fifteenth century, but artificially gaining spiritual power over others continued to represent maleficent action; also see Kamen, *The Spanish Inquisition*, 270-271.

²²³ Magic in early modern Europe was divided into that which was maleficent (witchcraft) and that which was helpful (sometimes termed “white magic”). Brian P. Levack, *The Witch-Hunt in Early Modern Europe* (London: Longman Group, 1987), 4-6; Andrew Keitt, “The Devil in the Old World: Anti-Superstition Literature, Medical Humanism and Preternatural Philosophy in Early Modern Spain,” in Fernando Cervantes and Andrew Redden, *Angels, Demons, and the New World* (Cambridge: Cambridge University Press, 2013), 15. Keitt defines the distinctions between the preternatural and the supernatural as follows: “preternatural encompassed ‘wonders,’ marvels’ and ‘prodigies’ that departed from the normal course of nature yet remained outside the miraculous realm of the supernatural; See also Cervantes, *The Devil in the New World*, 92. Fernando Cervantes notes in particular the distinction between the “benign” and “malevolent” powers of indigenous “holy men.”

I. Lay Medical Practice

i. Labeling *curandería* and love magic

Here, I group various kinds of “malefic” witchcraft using the same legal terms that colonial inquisitors did, defined as crimes against the faith based on the nature of the denunciation and the evidence presented (Tables 3-2, 3-3).²²⁴ Cases that historians identify as love magic often fell into the same categories of crimes against the faith as did *curandería* cases (Tables 3-1, 3-2).²²⁵ The conceptual label of “love magic” was used to describe *ensalmos*, *encantos*, *pactos con demonios*, *supersticios*, and other crimes against the faith that were intended to artificially incite love, desire, or kindness. Colonial inquisitors did not define love magic differently from other forms of crimes against the faith; both love magic and *curandería* appear in the records of the Holy Office as any number of religious transgressions (Tables 3-2, 3-3). Legal definitions of crimes against the faith fell into several specific categories, but the community members who denounced those practices understood them, generally, to be maleficent in intent or effect.²²⁶

²²⁴ Noemí Quezada, *Amor y magia amorosa entre los aztecas* (Mexico City: UNAM, 1984). Quezada probably coined the term love magic (*magia amorosa*); Quezada, *enfermedad y maleficio*; Ortega, “Sorcery and Eroticism in Love Magic,” in *Cultural Encounters*, 37-92, 87 n 2. Ortega defines love magic in Spain as being “typically feminine manipulations” in magic practices; Kashanipour, “A World of Cures, 167-168, 189-193. Kashanipour argues that the Holy Office was the only venue for prosecuting lay medical practice in the region, complicating legal legitimacy; Chuchiak, *The Inquisition in New Spain*, Locations 367-373, 1618. Chuchiak points out that inquisitorial judges were relatively autonomous and did not have strict oversight of their judgments: as the only arbiters of legal medical legitimacy in the region, this placed even more importance on social factors. This is especially relevant, as very few cases brought before the Holy Office resulted in convictions; Sáenz, *Learning to Heal*; Lanning, *The Royal Protomedicato*.

²²⁵ Quezada, *Amor y Magia Amorosa entre Los Aztecos*, 44-45. Quezada notes that love magic practitioners and *curanderos* were different practitioners in indigenous (central Mexican) culture, but that their practices were loosely related in the pre-Columbian as well as in the colonial context.

²²⁶ For a concise discussion of love magic and *curandería* as maleficent and the reasons for those categorizations, see (for example), Levack, *The Witch-Hunt*, 6-10. Levack argues that because of the

Although colonial residents may not have conceived of love magic and curandería as existing on the same spectrum of malefic practice, the colonial authorities certainly did, as love magic and curandería cases shared many of the same illegitimate elements—animal and vegetable materials, healing objects, prayers, and incantations—that led to denunciations. Love magic rituals, like those associated with other types of lay healing, often had material as well as spoken components. Bodily fluids, plants, and animal materials were used to cause and cure love, just as they were used to cause and cure other physical ailments.

Social legitimacy applied to love magic as well as to curandería. Curandería was focused on healing specific illnesses or injuries, while love magic was used “to gain power over other people’s emotions (especially sexual desire) through the subversion of free will.”²²⁷ Women and men who performed love magic rituals were sometimes denounced and punished for, as historian María Helena Sánchez Ortega describes it, “their deviation from one of the fundamental tenets of the Catholic Church, the exercise of free will, and for the misuse of the sacred liturgy and the names of God, the Virgin Mary, and the saints.”²²⁸

Curandería and love magic rituals could be maleficent, whether by accident or design. Both could be undertaken by summoning and forging pacts with demons, a level of magical ability and specifically heretical action that does not appear in the cases under

potential to misuse or lose control of their healing magic, those who cured with magic were sometimes viewed as maleficent witches.

²²⁷ Daniela Hacke, “Love Magic,” in Richard M. Golden, ed., *The Encyclopedia of Witchcraft: The Western Tradition, Volume III* (Santa Barbara: ABC-CLIO, 2006), 673.

²²⁸ María Helena Sánchez Ortega, “Sorcery and Eroticism in Love Magic,” in Mary Elizabeth Perry and Anne J. Cruz, eds., *Cultural Encounters: The Impact of the Inquisition in Spain and the New World* (Berkeley: University of California Press, 1991), 59.

discussion here. While accusations of “*pactos con demonios*” sometimes appears in denunciations and witnesses’ statements, colonial Inquisitors in the region during the seventeenth and eighteenth centuries rarely ascribed that degree of diabolism to curanderos and love magic practitioners.²²⁹

Additionally, historians typically include only midwives and ritual or herbal healers in the colonial category of curanderos.²³⁰ I have included love magic practitioners in this category because of similarities in the denunciation of both maleficent and harmful magic, failed curative magic, and love magic spells as crimes against the faith (Tables 3-2, 3-3). Love magic serves as a useful foil to more typical healing magic, as the practice of love magic is representative of the socially illegitimate practices that colonial residents often denounced to the Holy Office. Restall and Bristol have noted that love magic is, in essence, an “inversion of hierarchies” which could be used to change the actions and feelings of enslavers as well as of male household and community members.²³¹ All types

²²⁹ The exception in this data set is Ana de Ortega, who was accused of “superstición con invocación; Levack, *The Witch-Hunt*, 7. Levack argues that diabolism was reserved for those of educated status. Keitt, *The Devil in the Old World*, 16. Keitt argues the opposite, that in early modern Spain, superstition “provided a link between elite conceptions of the devil and an extensive catalogue of popular rituals and techniques”; Fernando Cervantes, *The Devil in the New World*, 36. Cervantes argues that “the modern tendency to distinguish between a popular level of culture imbued with magic and superstition and a more sophisticated level characteristic of the élites is, more often than not, an artificial anachronism when applied to New Spain in the early modern period.” I take Cervantes’ view.

²³⁰ Quezada, *Enfermedad y maleficio*, 22-25. Quezada categorizes midwives as “professionals. Modern *curanderos* include bonesetters, shamans, and spiritualists as well. Spiritualism arrived in modern Mexico in the 1860s and remains an important aspect of curandería. For a brief anthropological overview of spiritualism and medicine in contemporary Mexico, see, for example, Kaja Finkler, “Sacred Healing and Biomedicine Compared,” *Medical Anthropology Quarterly* vol. 8 no. 2 (June 1994), 178-197. The origin of bonesetters is less clear; although they appear in contemporary European and Maya populations, I have not seen reference to bonesetters in the colonial Spanish-language literature thus far; Servando Z. Hinojosa tackles the origins of Maya bonesetting in “The Hands Know: Bodily Engagement and Medical Impasse in Highland Maya Bonesetting,” *Medical Anthropology Quarterly*, vol. 16 no. 1 (March 2002), 22-40; see also Robert Redfield, *The Folk Culture of Yucatan* (Chicago: University of Chicago Press, 1941), 312; and Benjamin D. Paul, “The Maya Bonesetter as Sacred Specialist,” *Ethnology* vol. 15 no. 1 (January 1976), 77-81.

²³¹ Bristol and Restall, “Potions and Perils,” 168-171.

of lay medical practice in colonial Yucatan and the southern Gulf Coast allowed for a degree of social mobility, if not the total “inversion” of the social order: love magic and lay medical practice opened up opportunities for women, for slaves, *castas*, and other marginalized individuals to practice a sought-after and relatively lucrative profession.²³² With few exceptions, women and *casta* men were forbidden from practicing medicine, but they could work as socially legitimated lay medical or love magic practitioners.²³³ Women typically used, purchased, or concocted love magic remedies to improve their daily lives by inciting feelings of love, care, or desire in men. Men sometimes purchased such spells, too, although women more typically appear in love magic cases.²³⁴

| Name | Crime (accused) | Modern Label |
|-----------------|-----------------------------|--------------|
| Bonifacio Bote | Sospecho de hechicero | Curandería |
| Juana Delgada | Supersticiosas | Love magic |
| Maria Maldonado | Hechicerías | Love magic |
| Ana de Ortega | Superstición con invocación | Love magic |

²³² Bristol and Restall, “Potions and Perils,” 168-171, 173.

²³³ Women could sometimes practice legally legitimate midwifery, as discussed in chapter two.

²³⁴ See, for example, AGN, Inquisición, vol. 620, exp. 7, fol. 601v, 1672, in which Manuel Maldonado was accused of purchasing a love magic spell. See also Bristol and Restall, “Potions and Perils,” 156. The testimony against Manuel was a short part in the much longer case against María; It is not clear why women were somewhat over-represented in love magic cases. It is possible that women would have a greater need to exert magical power over men as wage earners or protectors, although the historiography is contentious on this point. For colonial-period women of low socio-economic status as employable and largely independent of male earning power, see (for example) Ida Altman, Sarah Cline, and Juan Javier Pescador, *The Early History of Greater Mexico* (New Jersey: Pearson, 2003), 13-15; For colonial-period women of low socio-economic status as dependent on men for earning power in rigid social roles, see (for the European example) María Helena Sánchez Ortega, “Sorcery and Eroticism in Love Magic,” 61; For the New Spanish case, see (for example) Richard Boyer, *Lives of the Bigamists: Marriage, Family, and Community in Colonial Mexico* (Albuquerque: University of New Mexico Press, 1995), 41-42; Sánchez Ortega notes 92:28 women to men in love magic cases in Madrid. She argues that “masculine magic” differed from “feminine magic.” Sánchez Ortega, “Sorcery and Eroticism in Love Magic,” 87 n 1.

| | | |
|---------------------------|------------|-----------------------|
| Jacinta Camelo | Maléfica | Love magic |
| Joseph Zavala | Maléfico | Curandería |
| Maria de la Luz | Hechiceras | Love magic |
| Catalina Blanco | Hechicería | Love magic |
| María de la Luz Rebolledo | Hechiceras | Love magic |
| Rufina | Hechiceras | Love Magic |
| Juan Germán | --- | Curandería |
| María Morena | Hechiceras | Love Magic |
| María de Salas | --- | Love magic/Curandería |

Table 3-2. Defendants and their crimes against the faith. Sources: AGN, Inquisición vol. 1241, exp. 24 fol. 234r, 1758 (Bonifacio); AGN, Inquisición vol. 443, exp. 6 fol. 491r, 1659 (Ana); AGN, Inquisición vol. 620, exp. 7, f ol. 595r, 1672 (María Maldonado); AGN, Inquisición vol. 1164, exp. 23, fol. 210r, 1724 (Joseph); AGN, Inquisición vol. 388, exp. 18, fol. 412r, 1639 (Juana); AGN, Inquisición vol. 1267, exp. 6, fol. 17r, 1789 (Jacinta); AGN, Inquisición vol. 1254, exp. 9, fol.102r, 1782 ; AGN, Inquisición vol. 1170 exp. 2, fol. 28r, 1777 (María de la Luz).

| Name | Crime (confessed) | Modern Label |
|-------------------|---|--------------|
| Lucrecia (negra) | Polvos [labeled by confessor ²³⁵] | Love magic |
| Catalina (mulata) | Polvos [labeled by confessor] | Love magic |

²³⁵ AGN, Inquisición vol. 388, exp. 18, fols. 412r-424v, 1639. Catalina appears to have made this declaration during confession.

| | | |
|-----------------|--------|------------|
| Catalina Blanco | [none] | Love magic |
|-----------------|--------|------------|

Table 3-3. Confessions of crimes against the faith. Sources: AGN, *Inquisición* vol. 388, exp. 18, fols. 412r-424v, 1639 (Catalina Blanco); AGN, *Templos y Conventos* vol. 156, exp. 38, fol. 653r, 1623 (Catalina); AGN *Templos y Conventos* vol. 156, exp. 51, fol. 631r, 1633 (Lucrecia).

ii. Identity and education

Lay practitioners of love magic and curandería came from every race, status, and ethnicity in colonial society. Many probably had specializations that affected their training and practice, whether that specialization was love magic or something else, such as the treatment of tooth pain.²³⁶ Because of their heterogeneity, their legal illegitimacy, and their socio-economic status, it is difficult to know what steps an apprentice curandero would have taken to qualify as a lay practitioner during the colonial period.²³⁷ The general model was undoubtedly one of apprenticeship, in which an aspiring healer was trained by an established practitioner. Some lay medical practitioners may also have had access to written or (perhaps, less likely) to printed medical texts.²³⁸ A number of curanderos may have had formal medical training as well, and been unable to complete it or to obtain licensure because of extenuating circumstances (such as financial limitations).²³⁹ Additionally, it is important to note that not all of the lay practitioners

²³⁶ I elide specialties here as a way of looking at lay medical practice as a whole. For a different methodology and interpretation based on Maya categories of healing, see Kashanipour, “A World of Cures,” especially 167.

²³⁷ The extant documentation for curanderos in New Spain in general largely comes from criminal investigations undertaken by institutions like the Holy Office of the Inquisition and the office of the Protomedicato. Other evidence for their work typically comes from lay medical texts (discussed in chapter four) and literature (not addressed in this project).

²³⁸ For a discussion on the distribution of lay and professional written and printed medical knowledge in Yucatan and the southern Gulf Coast, see chapter four.

²³⁹ Sáenz, *Learning to Heal*, 235-236.

discussed in this chapter worked only or even primarily as curanderos; some had other occupations. Some curanderos were licensed para-professionals, operating outside of the confines of their licensure and thus their legal legitimacy. For example, Remollón, who was a licensed phlebotomist, also acted as a lay practitioner on the Isla del Carmen with the explicit social legitimization of his community and local military administrators.²⁴⁰ Other curanderos and love magic practitioners worked as prostitutes, as soldiers, and in any number of other occupations.²⁴¹

It is possible that curanderos during the colonial period, like professional and para-professional medical practitioners, chose foods, medicines, and other methods of care through a careful consideration of the humoral nature of the illness (hot/cold/wet/dry) and the temperament of the patient.²⁴² Other considerations, such as the season, the environment, the age of the patient, and the positions of the stars were probably important to diagnosis.²⁴³ Healing rituals in New Spain in general often

²⁴⁰ AGN, Hospitales vol. 7, exp. 2 fol.19v, 1815. The term “curandero” was not applied to Remollón in this document, although the accusation is essentially that he practiced medicine far beyond that allowable through his para-professional licensure. See chapter two for more on Remollón.

²⁴¹ Juan Germán, for example, (discussed later in this chapter), was a soldier. Prostitution is a problematic label to assign or to accept in the historical record, as many women may have worked part-time as prostitutes and many others were not prostitutes at all, having been labeled as such by others. For a slightly different interpretation in the Spanish context, see Sánchez Ortega, “Sorcery and Eroticism in Love Magic,” 84.

²⁴² Although little is known about the training of curanderos during the colonial period, we can make some educated guesses based on the contents of lay medical texts (see chapter four) and cultural anthropology. Robert Redfield noted that humoral balance and the qualities profoundly affected health in rural Maya villages at the beginning of the twentieth century. He attributes this to Spanish influence over medical culture during the colonial period. Robert Redfield, *The Folk Culture of Yucatan* (Chicago: University of Chicago Press, 1941), 128-131; Humoralism in general is discussed in greater detail in chapter four.

²⁴³ Medical knowledge was not static over the course of the colonial period for either lay or professional practitioners. Astrology was still strongly represented in medical texts during the sixteenth century. See, for example, Juan de Cardenas’ *Primera parte de los problemas, y secretos maravillosos de las Indias* (Mexico: Pedro Ocharte, 1591), 14; Astrology was declining in importance to medical professionals by the end of the seventeenth century. That is not to say that all physicians stopped using astrology as a diagnostic tool; in the mid-eighteenth century, Rubio wrote that astrology was “useless for the physician” (“inútil para el medico.” Presumably this sort of polemic would be unnecessary if astrology were not still popular in

included specifically European folk and professional medical practices as well as Afro-Yucatecan and indigenous elements.²⁴⁴ Professional medical practitioners had been encouraged to identify and appropriate indigenous cures from the first decades of contact, and local knowledge was both consciously and unconsciously adapted to the needs of the colonial community.²⁴⁵

Materials and rituals from all over the Atlantic world were used in the region.²⁴⁶ Restall and Bristol have argued that love magic as practiced in Yucatan was quintessentially linked to the Atlantic world, a claim that is underscored by the regional mobility of many of the practitioners discussed in this chapter.²⁴⁷ Historians may, in some cases, reconstruct the process by which Spanish professionals integrated indigenous cures into the standard medical narrative, but tracing the same process by which lay practitioners obtained their medical knowledge is much less straightforward. Few argued that “while it is possible to uncover separate Mesoamerican and European conceptions of healing that continued to operate into the seventeenth and eighteenth centuries, it is important to note that these medical traditions interacted and came into conflict with each other, and were reshaped over time by local contexts and social relations under

some medical circles. Rubio, *Medicina hipocrática*, 84; Astrology was also prominent in some lay medical texts in Yucatan in use into the nineteenth century, such as books of *Chilam Balam* (see chapter four for more on these connections; Bristol and Restall, “Potions and Perils,” 158. Love magic cases are found overwhelmingly in the seventeenth century.

²⁴⁴ Few, *Women who Live Evil Lives*, 74-75.

²⁴⁵ Arnold, “Introduction,” in *Imperial Medicine and Indigenous Societies*, 11-12. See also Bleichmar, De Vos, and Huffine, *Science in the Spanish and Portuguese Empires*; Kashanipour, “A World of Cures,” 98-110. As Kashanipour points out, indigenous or indigenous-appearing ritual was roundly condemned by the colonial authorities.

²⁴⁶ Bristol and Restall, “Potions and Perils,” 159. Bristol and Restall argue compellingly, for example, for several West African components of love magic. As is discussed in other chapters, the Spanish medical establishment incorporated treatments from all over the globe as well. See also Bristol, *Christians, Blasphemers, and Witches*; Restall, *The Black Middle*.

²⁴⁷ Bristol and Restall, “Potions and Perils,” 159.

colonialism.”²⁴⁸ In other words, it is possible and even necessary to assume that multiple ways of knowing were integrated into medicine as practiced in Yucatan and the southern Gulf Coast during the colonial period. Many indigenous cures were appropriated and adapted into local medical knowledge along with European cures and African knowledge brought by slaves from West Africa and from various points in between: local knowledge, practice, and presumably, training was fundamentally hybridized.²⁴⁹ However, European love magic and healing materials and rituals are also strongly identifiable in the historical record.²⁵⁰

II. Legitimacy and Illegitimacy in Lay Medical Practice

i. Common elements

Although curanderos and love magic practitioners were at times denounced and tried before the Holy Office of the Inquisition, there is no evidence to suggest that they were often or even typically viewed as socially illegitimate practitioners in their communities.²⁵¹ As Quezada has shown, “on the one hand, their services were required as

²⁴⁸ Martha Few, “Medical *Mestizaje* and the Politics of Pregnancy in Colonial Guatemala, 1660-1730,” in Daniela Bleichmar, Paula De Vos, and Kristine Huffine, eds., *Science in the Spanish and Portuguese Empires, 1500-1800* (Stanford: Stanford University Press, 2009), 146.

²⁴⁹ For a critical discussion of the term hybridity, see Carolyn Dean and Dana Leibsohn, “Hybridity and its Discontents: Considering Visual Culture in Colonial Spanish America,” *Colonial Latin American Review*, vol. 12 no. 1 (2003), pp. 5-35; Kashanipour terms this phenomenon “mélange.” Kashanipour, “A World of Cures,” 213, 225, 230.

²⁵⁰ Love magic in Europe during the early modern period appears to have been more strongly linked with divination and fortune-telling than was love magic in Yucatan. See, for example, Daniela Hacke, “Love Magic,” in *The Encyclopedia of Witchcraft*, 674.

²⁵¹ Despite the representation of curandería cases (particularly if love magic cases are included) in the documentary record, the probable large number of curanderos in the colony indicates that few lay practitioners were ever actually accused of wrongdoing—at least through formal channels.

experts on the human body, as able surgeons, and as superior herbalists; on the other hand, they were harshly repressed for the magical part of their treatment...²⁵² Indigenous medicine, for example, may have been vilified as idolatrous under certain circumstances, but it was also considered socially legitimate medical knowledge to be experimented with and appropriated into professional and legally legitimated medical knowledge.²⁵³ The majority of lay medical practitioners probably escaped prosecution for their work, indicating that the majority of *curandería* cases were socially legitimated by the community. In fact, Kashanipour notes only 400 cases against *curanderos* in all of New Spain during the colonial period, a small number indeed considering the preponderance of lay medical practice.²⁵⁴

ii. Rituals, materials, and incantations

Most lay practitioners used a complicated mix of ritual action, material, incantation, and intention that could be both legitimate and illegitimate (Table 3-1). Lay medical and love

²⁵² Quezada, “The Inquisition’s Repression of Curanderos,” in *Cultural Encounters*, 38. Quezada included a broad geographical range in her study and this privileges the role that hallucinogens played in *curandería* denunciations; See also Quezada, *Amor y Magia Amorosa*, 111.

²⁵³ For a different perspective, see Michael Taussig, *Shamanism, Colonialism, and the Wild Man* (Chicago: University of Chicago Press, 1991). Taussig has argued that the binaries inherent in shamanism (what he labels healing) are fundamentally rooted in colonialism and in the binaries created by that process. The divisions that the violence of colonialism emphasized (good/bad Indians, idolatry/Catholicism, god/the devil, afflicted/healer and of course, beneficent/maleficent magic) created the concept of “*indio* magic” as something entirely separate and other.

²⁵⁴ Quezada, *Enfermedad y maleficio*; Kashanipour, “A World of Cures,” 188; Jorge Cañizares-Esguerra, *Puritan Conquistadors: Iberianizing the Atlantic, 1550-1700* (Stanford: Stanford University Press, 2006), 26. The Spanish Inquisition in the Americas, from its formal establishment in 1571, was intended to “stem the demonic plots of *conversos...alumbrados* (those whose emphasis on silent prayers and direct communication with God suspiciously resembled Lutheran notions of grace), and witches, blasphemers, and sexual offenders within the “Hispanic” urban communities; Cervantes, *The Devil in the New World*, 125-137. Cervantes argues that belief in diabolism in particular began to decline at the end of the seventeenth century; Peter Elmer, “Science and Witchcraft,” in *The Oxford Handbook of Witchcraft*, 556-557. Elmer argues that other social, political, and economic factors besides the Enlightenment undoubtedly played a role in the decline in the institutional punishment of witchcraft.

magic rituals included any number of elements, including but not limited to the use of food or drinks, the invocation of spirits or saints, chanting, dancing, placement of ritual objects, and a variety of other practices.²⁵⁵ Materials used in medicine and love magic rituals also included surgical or domestic tools, papers on which spells were written, and any number of other items.²⁵⁶ Such items could also be used in divination spells and other forms of magic.²⁵⁷ Incantations, materials, and other ritual elements helped *curanderos* and other ritual specialists to focus healing power, ward off maleficent medicine from one's enemies, and to aid them in the restoration of physical health. The use of incantations, ingested materials, and other ritual elements to cause as well as to cure illness was a widely accepted phenomenon, and individuals sought treatment from curanderos for both magical and more quotidian illnesses.²⁵⁸ Many curanderos incorporated Catholic religious imagery or prayers in their healing practices, along with vegetable matter, bones, teeth, textiles, animal products, and much more, all of which were frequently used in both charms and curses.²⁵⁹

Most lay medical practices that were denounced to the Holy Office included both material and ritual elements that were reported over the course of the investigation.

During the spring of 1672 in Merida, a Spanish lieutenant named Joseph de Montalvo y

²⁵⁵ Few, *Women who Live Evil Lives*, 8.

²⁵⁶ See, for example, Few, *Women who Live Evil Lives*, 47, 49; Kashanipour, "A World of Cures," 191-192.

²⁵⁷ Kashanipour, "A World of Cures," 191-192.

²⁵⁸ See, for example, HUN, Mexican Inquisition Papers vol. 38, part 2, fols. 3-4, 1678. In this case, a physician testified that a maleficent enchantment could have caused the patient's illness; See also Enrique Perdiguero, "The Popularization of Medicine during the Spanish Enlightenment" In *The Popularization of Medicine, 1650-1850*, Roy Porter, ed. (Routledge: New York, 1992), 168-180; Sáenz, *Learning to Heal*, 232; Joan Bristol, "From Curing to Witchcraft: Afro-Mexicans and the Mediation of Authority," *Journal of Colonialism and Colonial History*, vol. 7 no. 1 (2006), *passim*; Earle, *The Body of the Conquistador*, 218.

²⁵⁹ Few, *Women who Live Evil Lives*, 47, 49; For a European perspective on both popular and professional medicine, see Siraisi, *Medieval and Early Renaissance Medicine*.

Vera told a fellow soldier that he was suffering from a terrible toothache. After days of agony and at the urging of his friend, Montalvo called upon a local part-time curandero named Juan Germán to come to his home to treat his condition.²⁶⁰ Montalvo described the following cure that Germán carried out in his home:

The aforementioned [Juan Germán] ordered [Montalvo] to bring a board a hand span long and eight fingers wide, a knife, a hammer, and a little bit of mint, and asked for pen and ink which [Montalvo] brought to him, and he wrote on the board some letters or characters, four or five of them, and in each letter or character he hammered the point of the knife with blows from the hammer, saying certain words, some that [Montalvo] understood and which named the Holy Spirit and others that although he heard them, he did not understand... [Montalvo], by order of Juan Germán, had inside his mouth, above the painful molar, some mint tightly pressed against the tooth... Germán, having said the words, seized the knife in his hand and hammered it into the middle of each letter or character... Germán ordered Montalvo to dig a hole in his house a yard deep... and Juan Germán grabbed the board and the knife that he had hammered into it and buried them in the hole, with the knife standing fixed in the board.²⁶¹

Montalvo later reported that he had initially experienced relief from his pain after this treatment. However, he soon became curious and dug up the board and the knife, at which point his pain returned, stronger than before.²⁶²

Montalvo later reported the treatment he received from Germán “by reason of the edict of faith that he heard read and published yesterday” at Mass.²⁶³ Montalvo told the

²⁶⁰ AGN, Inquisición vol. 425, exp. 20 fols. 611r-616v, 1672. Germán was also a soldier, serving as a bugler in the army; Also cited in Kashanipour, “A World of Cures,” 191-194.

²⁶¹ “el susodicho mando traer una tablilla de un palmo de largo y ocho dedos de ancho y un cuchillo y un martillo y un poco de yerbabuena y pidió tintero y pluma y habiendo sele traído todo escribió en la dicha tablilla unas letras o caracteres como cosa de cuatro o cinco y en cada letra o carácter clavaba la punta del cuchillo con golpes que daba con un martillo diciendo ciertas palabras que algunas que percibió este declarante nombraba el espíritu santo y las otras aunque las oía no las entienda...este denunciante por orden del dicho Juan Germán tenía dentro en la boca sobre la muela que la dolía la dicha yerbabuena apretándola la dicha muela...Juan Germán, habiendo dicho las palabras que llena referidas, cogió el cuchillo en la mano y lo clavó en la letra o carácter que estaba en el medio de los de mas caracteres...este denunciante, mando el dicho Juan Germán, hacer un hoyo en la casa de este denunciante y que fuese demás de una vara de hondo y estando abierto el dicho hoyo el dicho Juan Germán cogió la tabla y cuchillo que había clavado en ella y la entierra en el dicho hoyo que dando el cuchillo parado y fijo sobre dicha tabla.” AGN, Inquisición vol. 425, exp. 20, fol. 612r-v, 1672.

²⁶² AGN, Inquisición vol. 425, exp. 20, fol. 612r-v, 1672.

authorities that despite its initial efficacy, he feared the ritual healing he had received at the hands of Juan Germán. When questioned further about his illness, he reported that he had eventually consulted a local surgeon when the pain returned, and that he was now cured.²⁶⁴ Montalvo's recitation of the elements of Germán's toothache cure included prayer and invocation (the chant that invoked the Holy Spirit, along with some unidentifiable words), identifiable quotidian medicines (the mint that he held over the painful tooth), beneficent intentions (to cure Germán's toothache), and both competence and incompetence (the treatment worked, until the ritual elements were unearthed).

It is unclear whether Germán's social illegitimacy and thus his denunciation by Montalvo stemmed from genuine fear of the ritual, fear of the Holy Office, or some other socially delegitimizing element. Apparently, Montalvo's initial trust of Germán, represented by his initial consultation of the healer and his submission to treatment, degraded at some point after the treatment had been completed. Montalvo's reference to the edict of faith may indicate that he was afraid that he, Montalvo, could be the target of

²⁶³ “en virtud de edicto general de la fe que oyó leer y publicar ayer.”AGN Inquisición vol. 425, exp. 20 fol. 612r, 1672. As Chuchiak reported in his work on the Holy Office of the Inquisition in New Spain, versions of the edict of faith were read and posted nearly every week from the later sixteenth through the early nineteenth century. By the end of the seventeenth century, edicts of faith often urged the faithful to report on any possible superstitious activities and actively encouraged the denunciation of friends and neighbors—who complied in large numbers. Chuchiak, *The Inquisition in New Spain*, Locations 2926-2927; Quezada notes that “seeking good health, they [colonial residents] appealed to the curanderos, yet when undergoing treatment, sometimes positive and sometimes negative, they often fell into the contradictory position of thinking they had violated the norms imposed by the Holy Office.” Quezada, “The Inquisition's Repression of Curanderos,” 41.

²⁶⁴ Probably the surgeon simply pulled the tooth, but a surprising and fascinating variety of cures for tooth pain may be found in the medical texts used by colonial medical practitioners. For example, see *Avisos sobre el método de recetar: en que se contienen las reglas más seguras, para que los jóvenes facultativos sepan disponer con acierto las recetas, exponiéndose muchas de ellas, a fin que les sirvan de ejemplo* (Barcelona: por Thomas Piferrer, impresor del rey nuestro señor, Plaza del Ángel, 1769). The anonymous author's cures for tooth pain included a poultice made from herbs mixed with vinegar; Ruth Gubler, *Fuentes Herbolarias Yucatecas Del Siglo XVIII* (Mérida: UNAM, 2010), 134. *Quaderno de Medicinas de Las Yervas de la Provincia*, a written manuscript, also recommends the use of a poultice of herbs and vinegar in order to pull a tooth without pain (“para sacar muelas sin dolor”).

a witchcraft investigation if he was not proactive in reporting Germán. In this way, Montalvo's reaction to the edict of faith and subsequent denunciation of Germán may have been a result of his fear of Germán's skills or fear of the Holy Office itself. Montalvo's initial acquiescence to treatment suggests, however, that curandería was not necessarily something to be feared: it was only later, after Germán's treatment had failed, and when he was admonished to seek out and report crimes against the faith, that Montalvo considered his experience at the hands of Germán to be maleficent.

Prayers, as appeals for divine aid, often featured in love magic spells as well. In some cases, witnesses described themselves as passive recipients of such protective spells. For example, Catalina Blanco's introduction to love magic charms as a child was apparently freely offered to protect her from the abuses of the man who served as the head of her household, Juan Martín Blanco. In the course of the Holy Office's investigation of another woman named Juana Delgada, Catalina testified before the Holy Office of the Inquisition that when "[she, Catalina] was nine or ten years old and living in *recogimiento* at the house of Juan Martín Blanco... a woman called 'la Isleña' (but whose name was Ana Gonzalez) called out to her and said that she should learn two phrases which she wanted to teach her and that she [Catalina] could say them when Juan entered the house in a rage."²⁶⁵ Love magic spells, such as the prayers that Ana González taught young Catalina to say to the Holy Family for protection from Blanco, could be beneficent and have nothing to do with inciting desire or romantic love. In this case, Catalina

²⁶⁵ "Que siendo este declarante de edad de nueve a diez años y estando en el recogimiento de la casa de Juan Martín Blanco... una mujer que llamaban la isleña por nombre propio Ana González... llamo a esta declarante y le dijo que aprendiese dos oraciones que le quiera enseñar la dicha Ana González para que esta declarante las dijese cuando entrase en casa [illegible] enojado el dicho Juan." AGN, Inquisición vol. 388, exp. 18, fol.419r, 1639. Catalina's protective incantations/prayers are reproduced at the beginning of this chapter.

confessed the knowledge of these particular incantations herself in 1639 and was not found culpable of any wrongdoing at that time. Several years earlier, however, Catalina had been denounced to the Holy Office of the Inquisition for witchcraft. The very same prayers she learned as a child had been used as evidence of maleficent incantations in that trial, highlighting the fluidity of what constituted socially legitimated materials and practice in *curandería*.²⁶⁶

Heterodox incantations were not limited to the peripheral region of the southern Gulf Coast. Prayers and chants that were markedly similar to Catalina's appear in the Inquisitional record from Nueva Castille as well. Ortega cites two such love magic incantations from the sixteenth and seventeenth centuries (below):

“With two I watch you,
 With five I bind you,
 your blood I drink,
 your heart I rend.”²⁶⁷

A similar incantation, also from Nueva Castile, was reported by Sebastián Cirac Estopañán:²⁶⁸

“With two I see you,
 And with five I harvest you

²⁶⁶ AGN, Inquisición vol. 360 exp. 94 fols. 244-255, 1627. Also cited in Kashanipour, “A World of Cures,” 145. See also his discussion of several other material and ritual charms that Catalina was accused of using. In both cases, the point stands: Catalina was taught the spells by another woman who had access to such knowledge, apparently without remuneration.

²⁶⁷ “con dos te miro, con cinco te ato, tu sangre te bebo, el corazon te parto.” I have reproduced Ortega's transcription and translation. Ortega, “Sorcery and Eroticism in Love Magic,” 68

²⁶⁸ Ortega, “Sorcery and Eroticism in Love Magic,” 68; Sánchez Ortega cites this case from Sebastián Cirac Estopañán, *Los procesos de hechicerías en la inquisición de Castilla la Nueva: tribunales de Toledo y Cuenca* (Madrid: CSIC, 1942). Ortega's wording differs slightly (*bebo* instead of *chupo*, *ato* instead of *cato*) but the meaning is quite similar.

Your blood I suck,

Your heart I tear.”²⁶⁹

A third, recorded by both Ortega and Estopañán, is as follows:

“With two I watch you,

With three I toss you,

With five I captivate you,

Quiet fool, I’ll bind you...you will come to me humble as the sole of my shoe”²⁷⁰

Incantations such as those included above indicate connections between the lay magico-medical rituals that were performed in the center (Spain) and on the periphery in Yucatan.

Some rituals and practitioners were unequivocally terrifying to their targets. For example, a woman named María de la Luz Rebolledo, also known as “La Zeybana,” was accused in 1777 of casting a spell with the help of several friends (María Morena, Rufina, and Antonia Xeke) in order to force her seagoing lover, Captain Francisco Puig y Clausell, to return to the Port of Campeche and thus, to her affections.²⁷¹ The actions of La Zeybana and her accomplices alerted a friend of Clausell’s, who overheard them

²⁶⁹“Con dos te miro, y con cinco te cato, la sangre te chupo, y el corazón te parto. Translation mine.

Sebastián Cirac Estopañán, *Los procesos de hechicerías en la inquisición de Castilla la Nueva: tribunales de Toled y Cuenca* (Madrid: CSIC, 1942), 126.

²⁷⁰ “con dos te miro, con tres te tiro, con cinco te arrabato; Calla, bobo, que te ato, tan humilde vengas a mí, como la suela de mi zapato.” Translation from Ortega, “Sorcery and Eroticism in Love Magic,” 68; Sánchez Ortega cites this case from Estopañán, *Los procesos de hechicerías en la inquisición de Castilla la Nueva*, 126.

²⁷¹ AGN, Inquisición vol. 1170, exp. 2, fols. 28r-51v, f. 48r, 1777. Clausell was the captain of a packet boat that had its home port in Campeche; Also cited in Kashanipour, “A World of Cures,” 150-152.

chanting Clausell's name as part of some kind of ritual; he immediately ran to warn his friend of the maleficent spell.²⁷²

The precise nature of Clausell's liaison with La Zeybana was a matter of some disagreement. La Zeybana said that she and Clausell were lovers. One of the witnesses in the case against La Zeybana described the affair between the two as an "indecorous relationship."²⁷³ Clausell actually denied having had any romance at all with La Zeybana, instead calling her a prostitute and describing his visits to her over several months in such terms.²⁷⁴ Despite his apparent indifference, La Zeybana attempted to use magic to bring Clausell back to her. Witnesses described the use of a number of strange-sounding and apparently maleficent materials and rituals, noting in particular the fact that La Zeybana's Maya accomplice, Xeke, spoke in an incomprehensible language to cast her spells.²⁷⁵ Like unidentifiable herbs and powders, unintelligible written and spoken words often signaled the maleficence of a ritual to colonial residents and authorities.

The existing social illegitimacy of the women involved in La Zeybana's love magic rituals permeated the case. Everyone who testified identified the three women as "enchantresses, or sorceresses," and stated that they feared the women's widely known abilities to cast curses.²⁷⁶ Josefa Dominguez, one of the witnesses called to testify in the case, said that "María de la Luz Rebolledo, known as La Zeybana, and her two companions.... appear to be unlawful, and she [La Zeybana] does not conform to the doctrine taught by our lady mother the Apostolic Roman Catholic Church and she [La

²⁷² AGN, Inquisición vol. 1170, exp. 2, fol. 39r-v, 1777.

²⁷³ "torpe correspondencia." AGN, Inquisición vol. 1170, exp. 2, fols. 28r-51v, 1777.

²⁷⁴ AGN, Inquisición vol. 1170, exp. 2, fol. 40r, 1777.

²⁷⁵ AGN, Inquisición vol. 1170, exp. 2 fol. 48r, 1777.

²⁷⁶ "encantadoras, o hechicerías." AGN, Inquisición vol. 1170, exp. 2, fol. 48v, 1777.

Zeybana] has rejected the sacred religion.”²⁷⁷ The magic of La Zeybana and her companions was socially illegitimate prior to her oddly public attempt to procure Clausell’s affections through magic. The rituals and materials they used were delegitimized in part because of the bad reputations of the women and the relatively high social status of Captain Puig y Clausell.²⁷⁸ Their rituals were believed by local community members to be effective, but they were also generally understood to be maleficent in action and intention.

Love magic practitioners were often socially delegitimized due to the fear of the efficacy of their maleficent spells. In one example from Merida in 1672, a *mulata* woman named María Maldonado was denounced to the Holy Office by María de Casanova, a former housemate of Maldonado’s.²⁷⁹ Maldonado was accused of *hechicería* for using love magic spells she had acquired from several local women: Catalina Álvarez, a woman known only as “Ursula,” another known as “Ana,” and a fourth named Micáela Montejo.²⁸⁰ The denunciation against Maldonado describes her use of incantations and the preparation of “a spell to bewitch and enchant a certain man.”²⁸¹ Her denouncer explained the love magic ritual that she had seen her use in some detail: “Among other enchantments that she made to keep him in her thrall, was [one in which] she cropped

²⁷⁷ “María de la Luz Rebolledo, conocida por la Zeybana, y otras sus dos compañeras, que son una negra llamada Rufina, y una india vecina del barrio San Román, nombrada Antonia Xeke, que por no parecerle lícito, ni conforme a la doctrina que enseña Nuestra Señora Madre Iglesia Católica Apostólica Romana y sagrada religión le ha repugnado.” AGN Inquisición vol. 1170 exp. 2 f. 47v-48r.

²⁷⁸ “mala fama.” AGN, Inquisición vol. 1170, exp. 2, fols. 47v-48r, 1777; Few has described such women as living “la mala vida.” Few, *Women who Live Evil Lives*.

²⁷⁹ AGN, Inquisición vol. 620, exp. 7, fols. 595r-614v, 1672; This case is also cited in Bristol and Restall, “Potions and Perils,” 155-159; and in Kashanipour, “A World of Cures,” 205-206.

²⁸⁰ AGN, Inquisición vol. 620 exp.7, fols. 598r.-598v, 1672.

²⁸¹ AGN, Inquisición vol. 620, exp. 7, fols. 595r-614v, 1672. Marías crime was *hechizeras*, fol. 595r, 598r. The original of the above accusation (with some spelling adjustments): “un hechizo para hechizar y encantar a cierto hombre.” fol. 598r.

hairs from the shameful parts, and cut her fingernails, and a piece of the skirt from her dress, and burned them all together and mixed and ground the powders in a slab of chocolate, and [then] she washed her genitals, and she sprinkled the chocolate with the washing water, and gave it to the man that she desired to drink.”²⁸² Hairs, menstrual blood, and water used for washing the genitals like those used in María’s *hechizo* were often added to maleficent love magic spells. Menstrual blood was included to inspire desire, while venous blood was sometimes used to inspire love or affection, such as between a servant and a master or between an enslaver and a slave.²⁸³ In this case, the spell was believed to have been effective. The maleficent intention of María’s attempt to control the desire of the object of her affection led directly to her denunciation.

Not all of the materials used in curandería and love magic rituals were associated with body and blood. Many lay practitioners, such as Juan Gérman, used herbal preparations alone or in conjunction with incantations and other elements. These could range from the quintessentially Mesoamerican *copal* to varieties of mint.²⁸⁴ The mint used in Germán’s healing ritual, for example, figured prominently in cures used by professional medical practitioners: Rubio recommended mint in some of his cures, as did

²⁸² “entre otros encantos que hizo para tenerlo sujeto, fue que se rapaba los pelos de los partes vergonzosas, y cortaba las puntas de las uñas, y un pedacito de la falda de la camisa, y todo junto lo tostaba y con los polvos mezclados en una tablilla de chocolate los molía y se lavaba la natura, y con el agua del lavatorio chorreaba el chocolate, y se lo daba a beber al hombre con quien trataba para que la quisiese mucho.” AGN, Inquisición vol. 620, exp. 7, fol. 600r-v, 1672.

²⁸³ The distinction is drawn by Colin Palmer, *Slaves of the White God: Blacks in Mexico, 1570-1650* (Cambridge: Harvard University Press, 1976), 159.

²⁸⁴ AGN, Inquisición vol. 1164, exp. 23, fols. 210r-319v, 1724. Joseph Zavala, a *mulato* curandero, used copal in the healing ceremony that got him denounced to the Holy Office for “malefico.” *Copal* appears on fols. 212r-213v; Germán used mint in his healing ceremony as well. AGN, Inquisición vol. 425, exp. 20, fols. 611r-616r. Mint appears on f. 612r. *Copal* is a tree resin; the Nahuatl word (*copalli*) and the modern term, *copal*, is the one used in this Yucatec document. *Copal* and its use have been extensively documented in the pre-Columbian context. For a short discussion of pre-Columbian *copal* use, see for example, Miranda K. Stockett, “Performing Power: Identity, Ritual, and Materiality in a Late Classic Southeast Mesoamerican Crafting Community” *Ancient Mesoamerica* 18 no. 1 (March 2007): 91-105.

many other early modern medical writers.²⁸⁵ Copal, too, was used in love magic preparations as well as in curandería; María Maldonado used copal in her love magic, and Joseph Zavala, a curandero from Merida, used it in his healing preparations.²⁸⁶

Medicines made from plants and foodstuffs were easily obtainable and affordable. Oils and powders derived from plant materials were typical aspects of domestic cures touted by Spanish professional medical practitioners as well as by curanderos. For example, a woman named Leonor de Medina y Chavéz used herbs provided by a Maya woman named Ixcach to treat her ulcerated skin condition.²⁸⁷ Saffron, myrrh, dragon's blood, corn flour, onions, and wheat flour (to name only a few) were typical elements of domestic cures that found their way into even the most traditional professional European medical texts.²⁸⁸ Phytopharmaceutical materials used in lay and domestic medical practice were often innocuous, inexpensive, and widely available.

²⁸⁵ Rubio, *Arte de conocer*, 158. Mint grew many places and was always a sought after material for food and for medicine and, undoubtedly, for commercial purposes. The colonial works in which it appears do not distinguish between the (quite different) American and European varieties. English mapmaker William Hacke marked several locations of mint production in New Spain in his 'Buccaneer's Atlas.' He used the Spanish ("yerbabuena"). William Hacke, *The Buccaneer's Atlas* (1684), 94-95.

²⁸⁶ AGN, Inquisición vol. 620, exp. 7, 1672 (Maldonado); AGN, Inquisición vol. 1164, exp. 23, fols. 210r-319v, 1724 (Zavala). Copal appears (variously) on fols. 212r-213v.

²⁸⁷ AGN, Inquisición vol. 360, exp. 90, fols. 243r-245v, 1627; also cited in Kashanipour, "A World of Cures," 191, 202.

²⁸⁸ Agustín Farfán, *tratado breve de anatomía, y cirugía, y de algunas enfermedades, que más comúnmente suelen haber en esta nueva España. compuesto por el muy reverendo padre fray Agustín Farfán, doctor en medicina, y religioso de la orden de San Agustín* (En México, en casa de Antonio Ricardo. Año de 1579), 178-192; Francisco Xavier Ribera, *El médico y cirujano de balde, o Prontuario del arte de curar: Obra en la que se han recocado los más selectos remedios para curar todas las enfermedades, sin socorro, o más bien sin exponerse a los desaciertos de los médicos y cirujanos, y por lo mismo* (Barcelona: Imprenta de Tomas Gaspar bajada de la cárcel, 1838), 14-16, 105-106. Newer works on "domestic medicine," (such as Buchan's) were incredibly popular in the eighteenth and nineteenth centuries and typically focused on accessible foodstuffs and plants. For more on the transmission of these texts to Yucatán and the southern Gulf Coast, see chapter 4; Dragon's blood (*sangre de drago*) is *Croton lechleri*, which remains a popular lay and domestic herbal remedy among contemporary herbalists.

Plant materials, such as flowers, featured in many lay medical cures, especially in love magic preparations.²⁸⁹ Juana Delgado, for instance, was accused of using “enchanted or ensorcelled roses” to capture the loyalties of men in Campeche in 1639.²⁹⁰ Like many other love magic practitioners, Juana used these enchanted flowers to help a woman named Margarita de los Angeles temper her husband Pedro's cruel treatment of her. Juana's social illegitimacy was much more ambivalent than that of La Zeybana (above); Juana was called a “witch” in the testimony against her, although her spells were intended to help keep Margarita safe from her husband's “ill-founded jealousies.”²⁹¹ Juana had several methods of protecting Margarita, all of which were designed to give her control over her husband's passions. Juana said that “for this effect [of improving treatment of Margarita] I would send a little cacao that she could put in some rolls and give to her husband to drink in chocolate.”²⁹² Margarita complained that she had tried this treatment three times to little effect, so Juana eventually gave her more powerful medicine, saying that “she sent some enchanted or bewitched roses, not saying what

²⁸⁹ Flowers were unsurprisingly common in pre-Columbian and colonial medical preparations. Cacao flowers, for example, could be used as treatments for the eyes. Nathaniel Bletter and Douglas C. Daly, “Cacao and its Relatives in South America: An overview of Taxonomy, Ecology, Biogeography, Chemistry, and Ethnobotany,” in *Chocolate in Mesoamerica: A Cultural History of Cacao*, Cameron McNeil, ed. (Gainesville: University Press of Florida, 2006), 55; See also Roys, *The Ethno-Botany of the Maya*. Roys compiled phytopharmaceutical cures from several colonial Mayan-language sources. Many of the entries refer to local, indigenous plants, making pre-Columbian use likely, if impossible to demonstrate unequivocally; Medicinal plants were grown in Central Mexico at the time of the conquest in the gardens of Huastepic. See, for example, Patrizia Granziera, “Concept of the Garden in Pre-Hispanic Mexico,” *Garden History* 29, no. 2 (December 1, 2001): 185–213.

²⁹⁰ “unas rosas encantadas o en hechizadas” AGN, Inquisición vol. 388, exp. 18, fols. 412r-424v (quote from fol. 416v), 1639. Also cited in Kashanipour, “A World of Cures,” 149; Also cited in Bristol and Restall, “Potions and Perils,” 156,163.

²⁹¹ “mal fundados celos.” AGN, Inquisición, vol. 388, exp. 18, fols. 412r-424v (quote from fol. 416r), 1639; “bruja encantadora.” AGN, Inquisición vol. 388, exp. 18, fols. 412r-424v (quote from f. 416r), 1639.

²⁹² “para el efecto le enviase un poco de cacao para que ella hiciese unos panecillos que diese al dicho su marido a beber en chocolate.” AGN, Inquisición vol. 388, exp. 18, fols.412r-424v, 1639. Cacao, chocolate, and *panecitos* appear on fols. 416r-416v.

method she had used, and she [Margarita] put them under the pillows of her husband.”²⁹³

Juana’s enchanted roses, although created and sent with beneficent intention, still led to her denunciation to the Holy Office.

Juana’s enchanted flowers were found in all kinds of love magic treatments, including those intended to inculcate passion or desire. Maria Maldonado, too, taught women to seduce men using flowers “scattered with water at the door” of the object of their affection.²⁹⁴ Examples like these (of Juana Delgado and Maria Maldonado) have led some historians to argue that flowers and other plant materials were women’s medicines, creating healing space out of homes and household gardens.²⁹⁵ This argument posits that because of women’s access to flowers and herbs, women gravitated towards professions that used items like flowers such as healing and love magic. I argue instead that the use of roses, foodstuffs, and other herbs in professional textbooks indicates the ready availability of these materials to people from all status, race, and gender backgrounds. While I agree that flowers may have been easily accessible to colonial women, which could have helped them perform healing work, flowers also featured prominently in many cures compounded by physicians—a fundamentally masculine profession. Roses were not limited to women and women’s gardens, as evidenced by the tendency of professional medical practitioners (who were never women) to use fresh roses in their

²⁹³ “Le envían unas rosas encantadas o enechizadas no diciendo la forma modo o como que en ello tenia y que se las pusiese al dicho su marido debajo de las almohadas.” AGN, Inquisición vol. 388, exp. 18, fol.416v, 1639.

²⁹⁴ “derremase con el agua en la puerta del hombre.”AGN, Inquisición vol. 620, exp. 7, fols. 595r-614v, 1672. Flowers and their placement in the doorways of men are noted on fol. 598v; Ortega, “Sorcery and Eroticism in Love Magic,” 73. Doorways and thresholds often featured in love magic spells in Spain as well.

²⁹⁵ Kashanipour, “A World of Cures,” 14; Roses may be also be associated with Spanish Marian images, although I have not as yet seen incantations invoking the virgin specifically associated with the use of enchanted roses. For a discussion of roses associated with an aspect of the Virgin, see, for example, Judith Hancock de Sandoval, “The Virgin of Tabí.” *The Americas* 32, no. 4 (April 1980): 50–56, 54.

healing preparations as well. Rose water and fresh roses were a typical part of any colonial pharmacy, although whether or not rose water included parts of the actual flower is debatable.²⁹⁶ Enchanted roses specifically, however, seem to have been a specialty of female love magic practitioners.

Written Mayan-language texts known as *Chilam Balam* also included many lay plant-based medical cures.²⁹⁷ Colonially produced Books of *Chilam Balam* were so named for the prophecies that they contained (attributed to the Maya prophet “Balam”) and often included ritual, calendrical, astrological, and medicinal content.²⁹⁸ The *Chilam Balam of Kaua*, for instance, includes a recipe for countering the effects of a love spell, compellingly titled “An antidote for love spells.”²⁹⁹ As with other medicinal recipes that incited love or cured illness, this remedy included locally grown materials and instructions for preparation, as follows: “The easternmost root of the Spanish cedar may be taken. This is the one that oozes, not all of its roots. And the easternmost root of the tree cucumber, it appears moist with sweat. And then two pieces may be taken from each of these roots. Half a pitcher of their juice may be boiled. You may boil it. Thus, then three drams of honey which is reduced and crystallized, it may be given him to drink.”³⁰⁰ This recipe acted as an emetic, allowing the patient to vomit up the love spell, which (in

²⁹⁶ See, for example, Ribera, *El médico y cirujano de balde*, 2.

²⁹⁷ For a more in-depth discussion of *Chilam Balam*, see chapter four.

²⁹⁸ Gabrielle Vail and Christine Hernández, *Re-creating Primordial Time: Foundation Rituals and Mythology in the Postclassic Maya Codices* (Boulder: University Press of Colorado, 2013), 6-7. Vail and Hernández, among others, argue that extant *Chilam Balam* may be copies of earlier works; Munro S. Edmonson, *Heaven Born Merida and its Destiny: The Book of Chilam Balam of Chumayel* (Austin: University of Texas Press, 1986), 1.

²⁹⁹ Victoria R. Bricker and Helga-Maria Miram, eds. *An Encounter of Two Worlds: The Book of Chilam Balam of Kaua* (New Orleans: Middle American Research Institute, Tulane University, 2002), 327.

³⁰⁰ Translation from Bricker and Miram, *An Encounter of Two Worlds*, 327.

the form of purged roots and honey) would then be “burned with bean hulls.”³⁰¹ Such recipes gave love spells physical form, and the treatment implied that love had a physical effect that was localized in the stomach, allowing it to cling to and be vomited with other materials.

Professional medical practitioners, too, sometimes described love as physiological illness. William Buchan, an eighteenth-century professional medical practitioner and author of lay medical texts, described the dangers of excessive or unrequited love in the Spanish edition of his popular *Domestic Medicine*.³⁰² Love, which functioned as an imbalance, could cause considerable problems for one’s health: “It does not happen with any other passion, that one tends to fall so easily, as happens with love, which may well be the most dangerous [of the passions]...when love has reached a certain level of intensity, there is no way to treat it, except with the possession of the object of desire, which in such a case should always be granted, [as] not intervening presents a possibility of the gravest problems.”³⁰³

Other physical aspects of love magic and curandería included the bodies of animals, which were used by both professional medical practitioners and curanderos. The animal bodies used in medicines were often relatively common in the region, such as the

³⁰¹ Translation from Bricker and Miram. Bricker and Miram, *An Encounter of Two Worlds*, 327.

³⁰² Buchan, *Medicina Domestica, ó Tratado completo sobre los medios de conservar la salud, precaver y curar las enfermedades por un régimen y remedios simples* (Madrid: en la imprenta real, 1785).

³⁰³ “No se da pasión alguna, en que se suela caer tan fácilmente, como en la da amor, bien que sea la más peligrosa...cuando ha llegado el amor a cierto grado de intensión, no se puede remediar, sino por la posesión del objeto amado, que en este caso se debe conceder siempre, no interviniendo una posibilidad o gravísimo inconveniente.” Buchan, *Medicina Domestica*, 235-236. Buchan also describes other imbalances of the passions, including religious melancholy and sadness (*tristeza*). This translation of Buchan was in use in Yucatan and the southern Gulf Coast in the eighteenth century; see chapter four for details.

body or blood of roosters, the skins of armadillos, and the teeth of sharks.³⁰⁴ Animal bodies were in no way exclusively the domain of curanderos, either. In the *Florilegio Medicinal*, the Jesuit physician Juan de Esteyneffer recommended a wide variety of medicines gleaned from his work in New Spain, many of them animal-based.³⁰⁵ His animal recipes included such treatments as, for example, the application of parts of a live black rooster to a patient's stomach to aid in the removal of poison.³⁰⁶

Human body parts could also be used in curandería. José Pardo-Tómas cites the case of a curandero in Yucatan in 1648 that purportedly used the skins of saints to heal people.³⁰⁷ Pardo-Tómas argues that a long history of using the human body in healing exists, drawing connections between dissection and vivisection in the Spanish Renaissance and the use of flayed skins in Mesoamerican healing and religious culture. The sacred human body could often be converted to healing relics, a process that was continued in the Americas and included the sacred physical forms of “a good many of the first missionary friars.”³⁰⁸ The profane human body as healing medicine also appears in Bernal Diaz de Castillo’s *Historia Verdadera de la Nueva España*, in which soldiers of

³⁰⁴ AGN, Inquisición vol.1164, exp. 23, fols. 210r-319v, 1724. The shark’s teeth (written as the Mayan *xooc*) appear in Zavala’s case on fol. 214r, and the rooster is on fol. 212r. Sharks’ bodies have also been used in ritual medicine from before the fifteenth century until the modern day, from Africa to Polynesia and Hawaii to the Americas; it remains unclear whether shark’s teeth were common to indigenous medical rituals in Yucatan specifically; Zavala’s case also cited in Kashanipour, “A World of Cures,” 155-159; Also cited in Restall, *The Black Middle*, 270-272.

³⁰⁵ Juan de Esteyneffer, *Florilegio Medicinal; o, breve epitome de las medicinas y cirugía la primera obra sobre esta ciencia impresa en México en 1713* (México: Ireño Paz, 1887), 64. The *Florilegio* is a Spanish-language eighteenth-century medical text that was written for laypersons as well as physicians.

³⁰⁶ Esteyneffer, *Florilegio Medicinal*, 64.

³⁰⁷ José Pardo-Tomás, “Opening Bodies in a New World: Anatomical Practices in Sixteenth-Century New Spain,” in Giuseppe Olmi and Claudia Pancino, eds., *Anatome: Sezione, scomposizione, raffigurazione del corpo fra Medioevo e Età Moderna* (Bologna: Bononia University Press, 2012), 186.

³⁰⁸ Pardo-Tomás, “Opening Bodies in a New World,” 190.

the conquest flayed fallen enemies (*indios*) and rendered the fat from their bodies to use to dress the wounds of the conquistadors.³⁰⁹

Chocolate is another material that commonly appears in the documentary record of curandería. Chocolate was a quintessentially Mesoamerican drink that appears repeatedly in love magic cases, typically as the vehicle used to serve powders or other materials to an unsuspecting target.³¹⁰ Norton has described chocolate as “a metaphor, surrogate, and exchange item for blood” among both Nahua and Maya populations, a quality that gave it powerful healing properties in the pre-contact as well as colonial contexts.³¹¹ Metaphoric blood products crossed between center and periphery in the preparation of love magic *hechizos* as well. In Europe, “wine of the Eucharist” was a common vehicle for love magic potions that also included herbs and “bodily fluids, like menstrual blood.”³¹²

Frothed chocolate was a daily part of the diet of all colonial residents, rich or poor, of every race, status, and ethnic identity. It was taken in the morning by nearly everyone, but it was typically prepared by women.³¹³ As Few has pointed out, chocolate

³⁰⁹ Bernal Díaz del Castillo, *Historia verdadera de la conquista de la Nueva España* (Madrid, Imprenta del Reyno, 1632), 12; See, for further discussion on this topic, Pardo-Tomás, “Opening Bodies in a New World,” 187-188. Pardo-Tomás argues that the story of rendering dead enemies for dressing battle wounds was likely not limited to this instance, citing Bernal Díaz’s casual mention of his methods of selecting the corpse and his lack of inhibition in discussing the matter. He further argues that a surgeon assisted Bernal Díaz in this instance of flaying and rendering corpses, but he also concedes that anyone with hunting or butchering training could have done this as well.

³¹⁰ Labeling and defining chocolate as an aphrodisiac was probably an early colonial invention, dating to the sixteenth century. Manuel Aguilar-Moreno, “The Good and Evil of Chocolate in Colonial Mexico,” in Cameron McNeil, ed., *Chocolate in Mesoamerica: A Cultural History of Cacao* (Gainesville: University Press of Florida, 2006), 273-275.

³¹¹ Spaniards during the fifteenth and sixteenth centuries recognized the specific association of blood with chocolate. Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World* (Ithaca: Cornell University Press, 2008), 35, 59.

³¹² Daniela Hacke, “Love Magic,” in *The Encyclopedia of Witchcraft*, 674.

³¹³ Martha Few, “Chocolate, Sex, and Disorderly Women in Late-Seventeenth- and Early-Eighteenth-Century Guatemala,” *Ethnohistory* vol. 52 no. 4 (2005), 674.

in the colonial household was a thick, dark, strong-tasting drink, and was thus the perfect vehicle for administering medicines or other materials without detection.³¹⁴ Yet, Few has also argued that there was much more to chocolate than an easily obtained, clandestine medium in which to administer medicines.³¹⁵ Her argument is based on the gendered and indigenous association of Maya women with chocolate. Because the preparation of chocolate has been linked with Maya women's cultural identity, it is tempting to cast chocolate in the practice of love magic in the role of an identifying feminine or indigenous ingredient.³¹⁶ However, it should be noted that Europeans, too, were fascinated with chocolate. It was unknown in Europe before contact, and thus became a widely exoticized American material. Spaniards conceptualized chocolate as medicinal, and Europeans in general largely created the idea that chocolate in itself could induce desire or love. According to Cárdenas, one of the first Spanish physicians to write about chocolate as medicine, it was understood to be a cold food that could produce warming effects on the body.³¹⁷ Its use as a socially legitimate medicine was undeniable, and it was domestically ubiquitous.

Chocolate administered as part of a love magic concoction could contain any number of items, including bodily materials (discussed above) and mysterious powders.³¹⁸ In one example from 1632, an enslaved woman named Lucrecia confessed to

³¹⁴ Few, "Chocolate, Sex, and Disorderly Women," 679.

³¹⁵ Few, "Chocolate, Sex, and Disorderly Women," 674.

³¹⁶ Norton, *Sacred Gifts, Profane Pleasures*, 59. Spaniards recognized and wrote about indigenous women as those who "prepare[d] chocolate."

³¹⁷ Cárdenas saw great healing possibilities in the use of chocolate. Cárdenas, *Primera parte de los problemas, y secretos maravillosos de las Indias*, 105, 117-118. While chocolate may have been simply a convenient vessel, or a source of female power, its use, like other American foods and medicines, had been carefully catalogued according to Spanish medicine. See also Norton, *Sacred Gifts, Profane Pleasures*.

³¹⁸ Chocolate was also part of pre-Columbian fertility rituals. Norton, *Sacred Gifts, Profane Pleasures*, 35.

the abbot of the Discalced Carmelite convent in Valladolid that she had been using chocolate as a vehicle for administering love magic spells. She told the abbot that she had recently served certain “black powders” to her enslaver in his morning chocolate so that he would no longer mistreat her.³¹⁹ Another woman named Catalina, in the same diocese, confessed that a *mulato* man whose name she did not know had given her some powders to control a Spaniard named Domingo. She too gave him the powders in chocolate.³²⁰

“Powders” (*polvos*) were often encoded as mysterious, unidentifiable ingredients that marked medical ritual as sorcery and witchcraft. Maleficent curandería and love magic cases tried before the Holy Office were sometimes marked by colonial notaries as accusations of “*polvos*” rather than as more specific transgressions (Table 3-2).³²¹ However, powders could be perfectly innocuous materials. Lay medical practitioners of all race and gender backgrounds as well as professionals and para-professionals in the region employed powders of some kind in their work.

The term “*polvos*” was well-represented in legally legitimate practice as a specific method of medicinal preparation for professional and para-professional medical practitioners. A definition of “*polvos*” appears in the pharmaceutical textbook *Avisos de Recetar*, and its precise description was important for physicians giving instructions to assistants and apothecaries (or taking such instructions themselves).³²² Medical texts like the *Avisos* encouraged physicians to put patients at ease by not always telling them what

³¹⁹ “para haberle de buena condición.” AGN, Templos y Conventos vol. 156, exp. 38, fol. 631r, 1623.

³²⁰ “para granjear la voluntad de un español llamado Domingo.” AGN, Templos y Conventos vol. 156 exp. 38, fol. 631r, 1633.

³²¹ AGN, Templos y Conventos vol. 156, exp. 38, fol. 631r, 1623; AGN, Templos y Conventos vol. 156 exp. 38, fol. 631r, 1633. Lucrecia ‘*Negra*’ and Catalina ‘*Mulata*’ both had the notation of “*polvos*” as label for and evidence of their crimes. It is unlikely that either case was ever pursued by the Holy Office.

³²² *Avisos sobre el método de recetar*, 28-29. This work is one of the few that made it to the region during the eighteenth century. See chapter four for more information.

was in their medications; the powders provided to patients by physicians may have been just as mysterious as those provided by curanderos and love magic practitioners. While the unknown quality of ‘polvos’ was delegitimizing for curanderos, it was also part of the legitimate practice of professional and para-professional medicine.³²³

Fears of lay medical practice were predicated in part on the perception that lay medical practitioners had the power to harm as well as to heal.³²⁴ Such was the case for Bonifacio Bote, a respected curandero who was accused of turning his healing powers to harm in Merida in 1756.³²⁵ Bote purportedly had cast a maleficent spell that caused the daughter of a woman named Isabel Solís to fall ill. The young girl was treated at the convent hospital in Mérida, probably by para-professionals.³²⁶ Medical practitioners were part of the social apparatus policing lay medicine, especially maleficent lay medicine. One of the witnesses who testified against Bote was Fray Juan Miguel de Quiñones, prior of the convent hospital in Merida, who had spoken with Isabel Solís about her daughter’s terrible illness when they met in the convent’s infirmary.³²⁷ Bote’s previous use of various materials and incantations in his healing rituals had caused him no trouble from the Holy Office or the local community. He conducted his work as a curandero freely until the girl fell sick, purportedly from the effects of his harmful incantations. Bote’s

³²³ Descriptions of “black and green powders” as poison appear as far back as the fourteenth century.

³²⁴ Kashanipour, “A World of Cures,” 219-222.

³²⁵ AGN, Inquisición vol. 1241, exp. 24, fols. 234r-254r, 1758; Also cited in Kashanipour, “A World of Cures,” 218-223.

³²⁶ I have not yet found the records of the convent hospital (likely just an infirmary) in Merida, though promising glimpses of its staff and its medical processes appear in documents like this case.

³²⁷ The convent hospital and the convent infirmary were probably exactly the same place; the words were often used interchangeably. AGN, Inquisición vol. 1241, exp. 24 fols. 250r-251r, 1758.

maleficent intent—not any particular healing rituals or materials—led to his denunciation and trial before the Holy Office.³²⁸

Accusations of maleficent intent were often employed in denunciations of curanderos who had personal vendettas with others in the community. In 1789, a woman named María Basan denounced Jacinta Camelo, who she said had a relationship with her [María's] husband, (but that he later left Jacinta and returned to her, his wife).³²⁹ Jacinta reportedly began a malicious campaign against María to regain the affections of María's husband. Her maleficent spells caused serious problems for María, who reported that on one occasion, she had “cast out of [her] belly something like pieces of squash that nearly cut her to pieces, and twisted herbs, with such pains that [she] writhed like a creature giving birth.”³³⁰ Jacinta cast her spells using mysterious powders, rags, and other items. On another occasion, she buried flowers in the doorway of María's house.³³¹ Her intention was to harm María Basan and to cause her husband to leave María and return to her, Jacinta.³³²

Socially illegitimate behavior in curandería and love magic like that displayed by Jacinta could be and sometimes was denounced to the Holy Office, but the outcome of such investigations was capricious at best. In some cases, such as that of Bonifacio Bote, the socially illegitimate behavior was deemed legally illegitimate as well. Bote spent

³²⁸ It did not help his case that Bote had drunkenly bragged about his ability to create maleficent *hechizos*: “después que bebieren el aguardiente, se puso dicho Bote a hablar sobre hechicerías.” AGN, Inquisición vol. 1241, exp. 24 fol.239r, 1758.

³²⁹ AGN, Inquisición vol. 1267, exp. 6, fols. 17r-18v, 1789.

³³⁰ “Que eché salido del vientre como fueron pedazos de calabaza viva como acabada de cortar a pedacitos, y yerbas dobladas, con dolores que me despedazaba como de parir una criatura.” AGN, Inquisición vol. 1267, exp. 6, fols. 17-18, 1789.

³³¹ AGN, Inquisición vol. 1267, exp. 6, fols. 17r-18v, 1789.

³³² AGN Inquisición vol. 1267, exp. 6, fols. 17r-18v. The disposition of this case is unknown: only the denunciation survives.

more than a decade in the Inquisition's prison for his maleficent spells before he was finally exiled from the area by the Holy Office.³³³ Outcomes like Bote's were not a foregone conclusion; many denunciations ended after short investigations, and the denounced were not always imprisoned or tried.³³⁴

Such was the case with Ana de Ortega in 1658 Campeche.³³⁵ A woman named Agustina de la Cerda denounced Ana, saying that when a young man named Pedro sailed out of the port of Campeche aboard the *Caxón*, Ana announced her intention to make him return to her with a spell.³³⁶ Agustina made the denunciation after she had witnessed a disturbing exchange between Ana de Ortega and a woman named Ana López. The two women argued about Pedro before the sailor had even boarded his ship and left Campeche. The scene was described by several witnesses; Ana de Ortega's testimony, summarized by a representative of the Holy Office, reads as follows: "[Ana de Ortega], with a knife in her hand, and furiously angry, said to [Ana López]...that she would take [Pedro's] life with the knife [she held] before he could sail; [Ana López] then told [Ana

³³³ Exile was often framed as exclusion from a town, region, or kingdom rather than an order to go to a specific town, region, or kingdom. Exile was a harsh punishment; not only would one lose fiscal and kinship ties, but also merely leaving the towns of the colonies behind could very well be a death sentence. AGN, Inquisición vol. 1241, exp. 24, fol.254r, 1758.

³³⁴ Quezada, "The Inquisition's Repression of Curanderos," 52. Quezada argues that punishment specifically (not denunciation or accusation) rested on four factors: "1. The belief that they [curanderos] should not infringe upon established religious norms. They were convinced that they should heal the sick through their therapeutic techniques, and with the aid of supernatural beings, whether originating in Catholicism or in other religions. 2. The use of hallucinogens that served not only as medication but also as a means of achieving a magic trance, consciously seeking auditory and visual hallucinations that would allow them to establish contact with supernatural beings. 3. The presence of prayers, images, and sacred and at times consecrated relics in the curative ceremonies. 4. Divination as a means of making both diagnosis and prognosis."

³³⁵ "Superstición con invocación." AGN, Inquisición vol. 443, exp. 6, fols. 491r-503v, 1659; Also cited in Kashanipour, "A World of Cures," 147.

³³⁶ AGN, Inquisición vol. 443, exp. 6, fol. 494r, 1659.

de Ortega] that Pedro was not in her house.”³³⁷ Ana de Ortega also described the spell she would use to get Pedro to return to her: “She took a button from his handkerchief and hairs from under her arms and from other secret parts so that the young man who had [already] left the village would return.”³³⁸ Ana de Ortega’s threats were taken seriously by the community members who witnessed her angry confrontation with Ana López; it appears from the testimony that she did indeed cast such a spell—but Pedro did not return to Campeche.

Although Ana de Ortega’s behavior won her the disapprobation of the community and led to her denunciation, her actions were deemed legally legitimate by the Holy Office. The denunciations against her “did not contain sufficient cause for imprisonment,” the usual first step in a long trial that could have ended in exile, physical punishment, or at least, many years languishing in the Inquisition’s prisons, whether she were eventually found guilty or not.³³⁹ However, in this case, her maleficent intention was not enough to be prosecuted by the Holy Office. The final statement on the short investigation into Ana’s case was as follows: “The work [of Ana de Ortega] did not contain anything superstitious; because removing this button from the handkerchief did not cause any effect on the youth from whom she took it.”³⁴⁰ Ana’s denunciation was caused by her socially illegitimate behavior in attempting to use a spell to interfere with

³³⁷ “la dicha cierta mujer con un cuchillo en la mano, y muy enojada le dijo a esta otra persona; esta aquí el mancebo a quien sirvo (nombrándole) porque con esta cuchillo, que traigo le he de quitar la vida antes que se embarque; a lo cual respondió la dicha cierta persona, que no estaba en su casa.” AGN, Inquisición vol. 443, exp.6, fol. 503r, 1659.

³³⁸ “le había quitado un botón del pañuelo y los pelos debajo de los brazos y de otros partes secretas a un mancebo que se había ido de esta dicha villa y que le haría volver.” AGN, Inquisición vol. 443, exp.6, fols. 496r-v, 1659.

³³⁹ “no hay bastante causa por a pedir presión.” AGN, Inquisición vol. 443, exp.6, fols.491r, 503r, 1659.

³⁴⁰ “no contiene en la obra cosa superstitiosa; porque el medio de quitar ese botón del pañuelo no causa ningún efecto al mozo a quien se quito.” AGN, Inquisición vol. 443, exp.6, fols.491r, 503r, 1659.

Pedro's departure and, more mundanely, her violent confrontation with Ana López. However, the Holy Office saw no reason to pursue the case. Her superstitious practice had no effect, indicating that she had no power over the forces that could control the will of [dude].³⁴¹ Even in cases in which unlikely effects occurred from rituals, colonial Inquisitors tended to discount them, and they "invoked the category of the preternatural."³⁴² In this instance, the ineffectiveness of her spell was, in a way, legitimizing for Ana.

III. Conclusion

The reasons for the loss of social legitimacy of lay practitioners were complex, but they were nearly always the result of community involvement in the perpetration of fear. Denunciations could result from fear brought on by the Holy Office's reporting systems (e.g. the edict of faith), fear of strange words, letters, or ingestible medicines, fear of illness or injury brought on by maleficent witchcraft or the incompetence of a lay practitioner, and fear, simply put, of becoming the victim of a malevolent spell. Denunciations also resulted from much more mundane losses of social legitimacy, such as petty jealousies and feuds that had nothing to do with lay medical practice and everything to do with exploiting the local colonial infrastructure to settle domestic problems.

³⁴¹ Levack, *The Witch-Hunt*, 102. Those practicing simple superstition, without any maleficent effect, were "not treated with the same severity as maleficent witches."

³⁴² Keitt, "The Devil in the Old World," 25.

There were a number of reasons why, despite the general tolerance of illegally practiced medicine and the broad definition of acceptable healing practices and materials, some healers and love magic practitioners were prosecuted by the authorities. It is possible, for example, that there were also tensions between licensed doctors and folk practitioners, who occasionally competed for patients, lowering the cultural value of curanderos.³⁴³ Additionally, because unlicensed medical practice was legally unacceptable, it may have been that women and non-white practitioners were always particularly prone to persecution.³⁴⁴ Technically, the legal practice of medicine could only be performed by those medical doctors who were educated and enjoyed the legally sanctioned right to practice medicine as they saw fit. According to law, women, Mayas, and Afro-Mexicans could never be educated or licensed to heal. In some cases, then, the Holy Office may have functioned as an arena for colonial residents in which to prosecute cases of illegal medical practice in the absence of a Protomedicato.

The physical materials used in cures probably had little to do with denunciations to the Holy Office, except in those cases in which the objects themselves were encoded with maleficent qualities and marked the user as intending to cause harm. Such objects could include polvos of various descriptions and in certain circumstances as well as the consumption of the human body parts and fluids, typically without the knowledge of the consumer. Bags full of various herbs, powders, and other questionable objects could be

³⁴³ For more on this interpretation, see Sáenz, *Learning to Heal*, 235.

³⁴⁴ See, for a short summary of this position, Newson, "Medical Practice in Early Colonial Spanish America," 373-375.

enough to mark the work of a lay practitioner as maleficent medicine, as could incantations—even (or perhaps, especially) those that invoked the saints.³⁴⁵

However, the materials and rituals used in cures or other spells were rarely as worrisome to community members and colonial authorities as the purposes to which they were put. Lay medical practice could be good or evil, and healing for the benefit of one at the expense of another (as in love magic, where desire is cured in one body even as another loses its free will) was more important to colonial residents and Inquisitors than were the materials used. Lay medical practitioners could practice for years without any interference from the Holy Office, but when their practices crossed into those that were deemed socially illegitimate by patients, friends, or neighbors, all of their past actions could come under scrutiny. Crimes against the Church and the faith held enormous sway in colonial communities, a fact that was undoubtedly complicated by status, gender, and race—but which invariably relied on proof of maleficent intent to prosecute these cases fully.³⁴⁶ Curanderos and love magic practitioners were, first and foremost, accused of crimes against the faith, a collection of transgressions with specific definitions that relied on proving the evil intentions of the practitioner. Maleficence, too, could be quite subjective, as is seen in cases in which the Holy Office was used as a way to seek justice for personal vendettas. In these cases, practical reasons for denunciation prevailed, although denouncers still used the language of maleficent intent to prove that crimes against the faith had been committed.³⁴⁷

³⁴⁵ Chuchiak, *The Inquisition in New Spain*, 50.

³⁴⁶ Quezada, “The Inquisition’s Repression of Curanderos,” 53. It is also relevant that the expropriation of property was not a factor in the prosecution of most curandería cases in Yucatan in the seventeenth and eighteenth centuries.

³⁴⁷ See also Restall, *The Black Middle*, 270.

Chapter 4 Medical Texts

In this chapter, I demonstrate that both lay and professional medical practitioners in Yucatan and the southern Gulf Coast region had access to socially legitimated medical knowledge in the form of written and/or printed medical texts (Figures 4-1, 4-2).³⁴⁸

Written, colonially produced manuscripts as well as printed books imported from Europe were emblematic of processes of knowledge acculturation in the social history of medicine in New Spain. Indigenous and European knowledges and practices appeared in both lay and professional texts, making such works hybridized to various degrees.³⁴⁹

Mayan-language medical manuscripts were written, annotated, and copied in the towns and villages of the region, preserving and making medical knowledge available to lay medical practitioners. Furthermore, as Jorge Cañizares-Esguerra has argued, written manuscripts and visual images were much more common in the Spanish American colonies in general than were printed materials.³⁵⁰ The generation of such works by hand may be understood as part of a broader eighteenth-century process described by historian Roy Porter as the “popularization of medicine,” in which the increasing availability of lay medical works in Europe and the Americas corresponded with an increase in the popular legitimization of lay medical practices.³⁵¹

³⁴⁸ Many of the written manuscripts under discussion were probably in use by the beginning of the seventeenth century, but as most of the extant documents are later copies, it is difficult to date them precisely. Likewise, although it is possible (indeed, probable) that printed texts arrived in the region earlier, the evidence I have cited here is from the eighteenth century. These problems are discussed later in this chapter.

³⁴⁹ Christensen, *Nahua and Maya Catholicisms*, 31. Christensen demonstrates a similar process in religious texts; See also Hanks, *Converting Words*.

³⁵⁰ Jorge Cañizares-Esguerra, “Introduction,” in Daniela Bleichmar, Paula DeVos, and Kristin Huffine, eds. *Science in the Spanish and Portuguese Empires, 1500–1800* (Stanford: Stanford University Press, 2009), 3-4.

³⁵¹ Porter, *The Popularization of Medicine*.

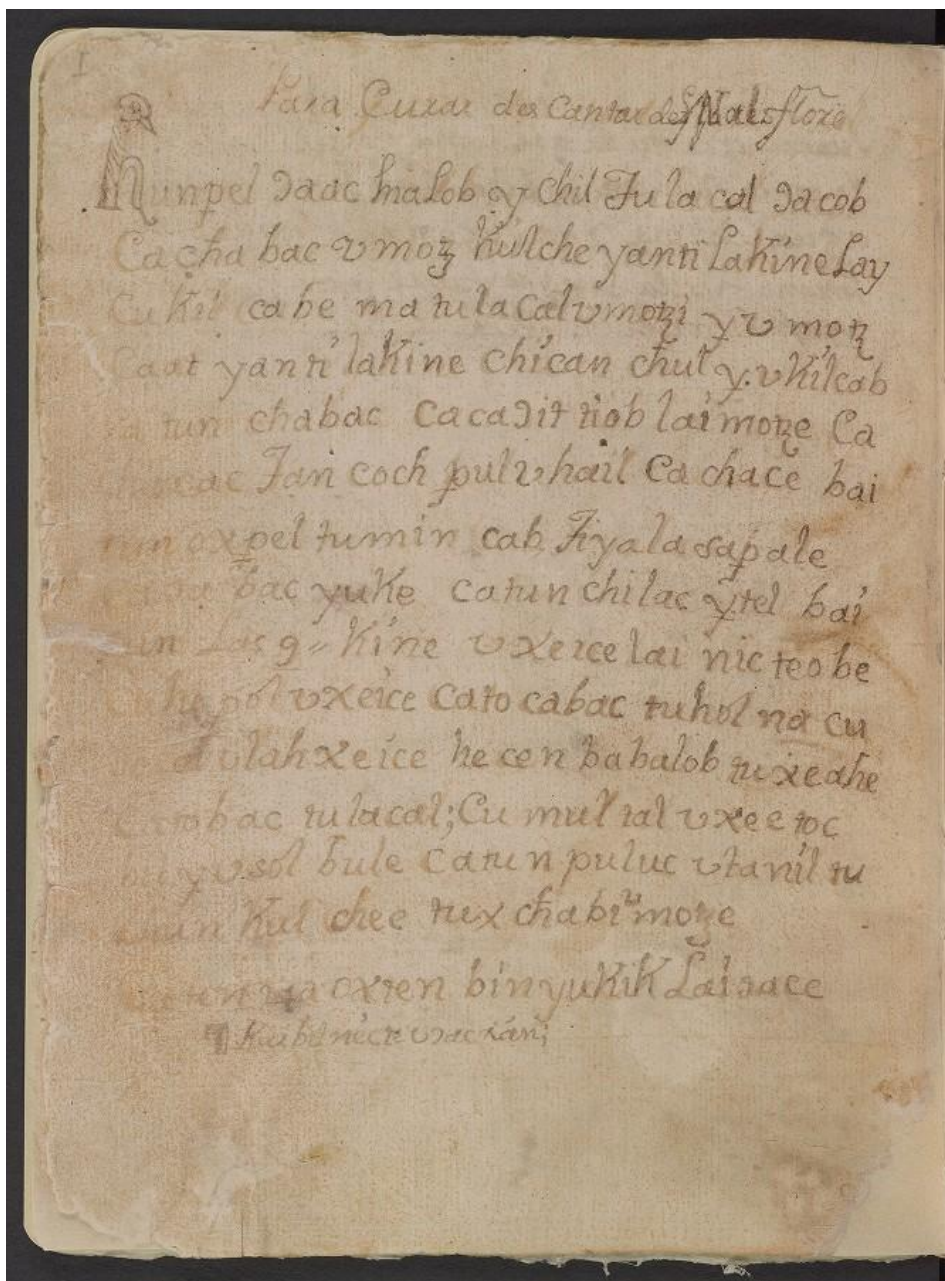


Figure 4-1. A page from a written medical manuscript from Yucatan. Source: Leaf 3r from an 1824 version of the *Chilam Balam of Kaua*, written in Spanish and Yucatec Mayan. Princeton University Library Digital Collection, <http://pucl.princeton.edu/objects/zs25x9219>.

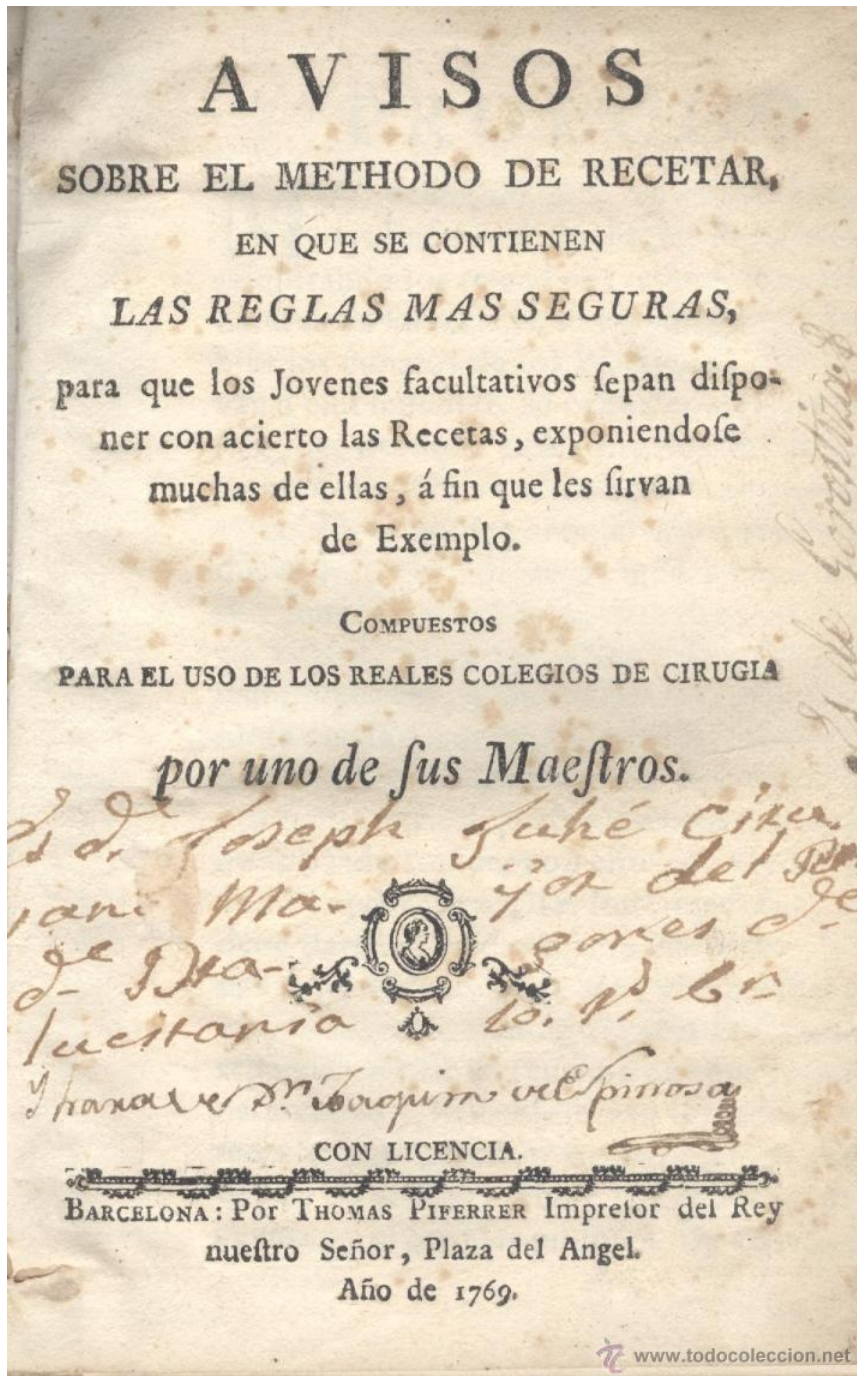


Figure 4-2. A Spanish-language printed text used in Yucatan and the southern Gulf Coast region. *Source:* Frontispiece, *Avisos sobre el método de recetar* (Barcelona: por Thomas Piferrer, 1769).

Printed medical texts imported from Spain and other parts of Europe in Latin, Spanish, and other vernacular languages were in use in Yucatan and the Southern Gulf

Coast region during the eighteenth century (Appendix A, Appendix B).³⁵² All printed texts in the region were imported; no printing press existed in the peninsula or in the nearby towns and villages of the Gulf Coast until 1813.³⁵³ I rely on evidence from Spanish professional medical practitioners employed by the military, who brought a number of printed European medical texts to Yucatan and the Southern Gulf Coast during the eighteenth century. Relatively new, socially legitimate ways of writing about medicine and the use of cures from all over the known world made it to the periphery of empire in a short time by way of military surgeons, demonstrating the connectedness of the region's medical culture to that of Europe.³⁵⁴

Socially legitimated medical knowledge and treatment may be represented by textual medical culture. Mayan- and Spanish- language written and printed medical texts found in the region date primarily from the eighteenth and early nineteenth centuries, coinciding with a similar increase in lay and professional medical works in Europe and in central Mexico.³⁵⁵ Here, I use William Actree's definition of print culture to represent

³⁵² Despite the production of medical texts in central Mexico during this period, the few printed works that I have identified in the region appear to have come from Spain. This is perhaps unsurprising, considering that most surgeons working in the presidios were peninsulares.

³⁵³ Christensen, *Nahua and Maya Catholicisms*, 12; Antonio Rodríguez-Buckingham, "Monastic Libraries and Early Printing in Sixteenth-Century Spanish America," *Libraries and Culture*, vol. 24 no. 1 (1989), 33-56, 34. A printing press was in use (and controlled by the Church, or more precisely, by Bishop Zumárraga) in Central Mexico in the 1530s. However, medical texts and many other non-ecclesiastical works were produced by that press during the colonial period, although few of them can be demonstrated to have reached Yucatan and the southern Gulf Coast region. For texts from central Mexico that may have reached Yucatan, see section II of this chapter.

³⁵⁴ Alexander S. Wilkinson, "Vernacular Translation in Renaissance France, Spain, Portugal, and Britain: A comparative survey," *Renaissance Studies Special Issue: Translation and Print Culture in Early Modern Europe*, 29, no.1, (February 2015): 19-35. Wilkinson notes that before 1601, only 27.6% of Iberian translations were medical texts; AGN, Intestados vol. 260, exp. 29, fols. 271r-305v, 1778; AGN, Intestados vol. 170, exp. 3, fols. 238r-319v, 1795.

³⁵⁵ Victoria Bricker and Helga-Maria Miram, *An Encounter of Two Worlds: The Book of Chilam Balam of K'aua* (New Orleans: Tulane University, 2002), 35. Dating for written texts is imprecise at best, particularly as the extant texts are copies of earlier versions. Bricker and Miram postulate that books of *Chilam Balam*,

both the written and printed textual culture of Yucatan and the southern Gulf Coast: “it is concerned with the relations between the practices of reading and writing, on the one hand, and social behaviors, individual and collective values, economic transactions, political decisions, state institutions, and ideologies, on the other.”³⁵⁶ Written and printed medical texts in the region were used to define beliefs about the body, illness, health, knowledge, and legitimate medical interventions. In this way, medical manuscripts and books function as a lens through which to view the medical culture of legitimated medical knowledge.³⁵⁷

I. Lay and Professional Print Medical Culture

i. Imports: printed European texts

Contemporary printed texts on medical theory and practice brought hybridized European medical knowledge to the region, allowing professional medical practitioners access to a wealth of up-to-date medical ideas far from the metropole.³⁵⁸ The inventories of the belongings of military surgeons who died intestate provide the only known evidence for the presence and type of printed medical texts consulted aboard ships and in the Gulf

at least, were heavily influenced by sixteenth-century European texts. It is also possible that later European texts influenced their production.

³⁵⁶ William Garrett Actree, Jr., *Everyday Reading: Print Culture and Collective Identity in the Río de la Plata, 1780-1910* (Nashville: Vanderbilt University Press, 2011), 3.

³⁵⁷ Christensen, *Nahua and Maya Catholicisms* (Stanford: Stanford University Press, 2013), 3-35. Christensen has demonstrated that “unauthorized” manuscripts in Spanish and indigenous languages often existed alongside printed (Spanish-language) texts on the same or similar topics, frequently (but not always) using identical or hybridized knowledge and language. Such texts could be copies, or they could be texts that were “inspired” by existing printed works.

³⁵⁸ Few, *For all of Humanity*, 13-17. Few also emphasizes the role of indigenous knowledge in professional European medical texts, particularly in the eighteenth century.

Coast region garrisons of the eighteenth century.³⁵⁹ These texts not only signify the medical interests of surgeons trained in Spain, they also represent the socially legitimated knowledge that medical professionals accessed in the presidios, villages, and vessels of the region surrounding the Bay of Campeche.³⁶⁰

The care of soldiers, their families, and the many other residents of local villages and presidios nominally fell to the military physicians and surgeons assigned to a particular garrison.³⁶¹ Professional medical practitioners at these posts typically came directly from Spain, even at the end of the colonial period.³⁶² The Royal Colleges of Surgery based in Cadiz and Barcelona provided the majority of personnel for the understaffed military vessels and presidios of the Spanish Empire in both Europe and the Americas. Graduates of these colleges carried printed medical books—many of which had been assigned in the university—with them to their new posts around the Spanish colonial world. They also brought with them socially constructed ways of thinking about the body, pathology, the treatment of illness, and the maintenance of health.³⁶³

³⁵⁹ Wilkinson, “Vernacular Translation,” 19–35. Wilkinson notes that the vast number of known, printed works extant from this period can lead to the unconscious curation of texts by historians, in which one chooses texts to analyze based on expected outcomes that do not necessarily illustrate broader trends. While it is impossible to control for this entirely, throughout this study I largely concentrate on works found in the intestate inventories of surgeons working in the region (Tables 4-1, 4-2). A thorough analysis of each text listed here is beyond the scope of this project, but I intend to perform such an analysis at a later date; indirect evidence exists for the influence of European and central Mexican medical texts on both Spanish and Mayan language written texts used by lay practitioners.

³⁶⁰ See also Kashanipour, “A World of Cures,” 242.

³⁶¹ During the late eighteenth century, it appears that there were at most two medical professionals (one retired and one active, or one active and one intern) and two or three para-professionals working at the presidio in an official capacity at any given time. Presumably a number of lay medical practitioners also worked in the surrounding villages as well as in the presidio itself. See chapters two and five for more on the medical staffing of the presidios.

³⁶² Non-Spanish, socially legitimated professional medical practitioners from unnamed or unknown colleges sometimes worked in the presidios and in the surrounding areas as well. See chapter two.

³⁶³ Texts used in the surgery colleges are relied on in this work to help understand the self-fashioning and medical culture of Spanish surgeons.

The printed books analyzed in this section are based on the estate inventories of two Spanish surgeons assigned to military ships and presidios in the southern Gulf Coast during the late eighteenth century. Both men died intestate, meaning that military officials found it necessary to inventory and auction their possessions after their deaths in order to settle their outstanding debts. The diversity of their libraries makes some aspects of surgeons' personal histories, linguistic preferences, and medical interests visible through the books they left behind. José Castells, head surgeon at the Presidio del Carmen from 1793 until his death in 1795, owned books in Catalan as well as books in Spanish, while Laureano Leal, a second surgeon who died aboard ship in the Gulf of Mexico in 1778, had a collection that included books published in Italian and Latin.³⁶⁴ Castells had kept many of the textbooks that he had used while training at the College of Surgery in Barcelona and brought them with him to the Presidio del Carmen.³⁶⁵ His library in particular concentrated on modern medical works that were geared towards specific maladies, particularly those affecting military personnel, while Leal's collection leaned more heavily towards older theoretical and classical works. Additionally, several of the works owned by Castells and Leal had recently been translated from French and English, highlighting the cosmopolitanism of and geographically broad influences on Spanish army and navy surgeons working on the periphery (Appendix A).

Medical books were valuable. Although in this chapter I present evidence only from two individuals, all of the European physicians and surgeons who were stationed at

³⁶⁴ AGN, *Intestados* vol. 260 exp. 29, fol. 272r, 1778; AGN *Intestados*, vol. 170, exp. 3, fol. 239r-v, 1795.

³⁶⁵ AGN, *Bandos* vol. 5, exp. 44, 1799. Barcelona produced most of the surgeons working in military garrisons in the eighteenth century. The Surgical College of Cadiz was not formally established as a military college until 1799, although it existed well before that date. Its 1799 charter indicated that Cadiz's "new" college of surgery was to be modeled precisely after the one at Barcelona.

the presidios and aboard naval ships likely owned at least a few texts (Appendix A). Both Castells and Leal were graduates of Spanish medical or surgery schools and presumably understood the value and significance of their own libraries. Nevertheless, the inventories of their possessions were created after their deaths by non-specialists. The lack of knowledgeable specificity about the works listed manifests in the shortened titles and descriptions used by the evaluators and reproduced in the appendices of this work.

Interestingly, printed lay as well as professional medical texts are represented in the inventories (above). In the later eighteenth and into the nineteenth centuries, so-called “domestic” medical texts abounded alongside printed materials intended for professionals. The connection of lay and professional medical practice in the southern Gulf Coast to the broader phenomenon of the “popularization of medicine” is readily seen, for example, in Castells’ ownership of William Buchan’s *Domestic Medicine*, translated into several languages since its 1769 publication and owned by Castells in the recently published Spanish edition.³⁶⁶

The European textual medical culture of the military in Yucatan and the southern Gulf Coast was probably limited to books brought to the region from Europe by professional medical practitioners employed by the military. Imports from Spain did not typically include printed medical texts, and there is little direct evidence that medical texts from central Mexico reached the region.³⁶⁷ In fact, the only records of textual

³⁶⁶ Porter, *The Popularization of Medicine*, 173-178. Porter provides a description of Buchan’s international bestseller. While Buchan’s work is and was considered a lay medical text, it was written in professional terms and it has many similarities to professional works. Professional medical practitioners consulted it, too.

³⁶⁷ AGI, Mapas y Planos, México no. 587. Accessed through PARES. Most of the shipping to and from the presidio was between these ports. Overland commerce was not noted separately and probably was an insignificant part of overall commerce; The influence of central Mexican professional medical books on

imports to Isla del Carmen that I have found occurred in 1790, when thirteen “*libretes*” (over the course of the year) were imported directly from Castile.³⁶⁸ It is unlikely that any of these imports were medical works or even serious academic works, although no titles, authors, publishers, or any other information is included in the commercial summary of this document.³⁶⁹

The medical texts that surgeons brought to the region were personal property and as such, were stored with personal possessions rather than in the infirmary or in other semi-public medical spaces.³⁷⁰ Castells’ books were locked in the three chests in his private home that held his possessions. Leal, too, kept his books locked in two chests with the rest of his personal property.³⁷¹ It is impossible to know whether these books were lent or shared in any way among any of the soldiers and civilians aboard ship or in the presidio at any point, although that seems unlikely, given the air of exclusivity

manuscript lay medical texts (and, by association, their presence in the peninsula) is discussed later in this chapter.

³⁶⁸ AGI, Mapas y Planos, México no. 587. Accessed through PARES. Many imports still came directly from Castile, although more perishable goods came from other parts of New Spain, especially from other parts of the Bay of Campeche (especially from Tabasco). No texts at all came from any of the other local ports listed (Tabasco, Yucatan [Campeche], and Nueva España [overland from Central Mexico or through the port of Veracruz]). The word *librete* is an archaic diminutive, and is used in this context to refer to a small book of little value. Professional medical works would not have fit in this category, although lay pamphlets certainly could have.

³⁶⁹ AGI, Mapas y Planos, México no. 587. The Presidio del Carmen was, at the time, the main point of contact between the Bay of Campeche and the Laguna de Términos. Nearly twice as many Minorcan textiles were imported to the presidio in 1790 than were books or pamphlets, indicating their relative importance to the residents of the region.

³⁷⁰ Surgeons in larger hospitals would have had private rooms within the hospital itself (see, for example, the plans of the San Lázaro hospital in chapter five). It is probable that the military hospital at the Presidio del Carmen did not have living space within the infirmary itself, and that the surgeon (in this case, Castells) lived elsewhere with his possessions. Public medical spaces, outside of a hospital setting that included shared public areas, would include the infirmary itself and the compounding pharmacy.

³⁷¹ Castells: AGN, Intestados vol. 170, exp. 3, fols. 239r-v, 1795; Leal: AGN, Intestados vol. 260, exp. 29, fol. 276r, 1778. Leal’s inventory demonstrates that he also kept his surgical implements with his personal possessions.

inculcated in young surgeons by Spanish professional medical and surgical colleges.³⁷²

What is certain is that some of the medical and surgical lay and professional books left behind by the deceased were auctioned locally and remained, at least for a time, in the region. Leal's books, for example, were all sold in the Port of Veracruz in order to settle his estate.³⁷³

The fate of Castells' professional library is more certain. The order to settle his estate (in this case, to sell his possessions) went out in December of 1795, less than two weeks after his death.³⁷⁴ The executors were to take Castells' library to Campeche for sale along with some of his other possessions, but they instead reported in June of 1796 that: "It is not possible to remove the books pertaining to this estate to Campeche as decreed on the 18th of December of last year [1795]...as the books were kept at the house of the governor, it was not possible to save them from the fire that occurred on the twelfth of April [1796] and that reduced the house to ashes."³⁷⁵ Castells' library, reportedly burned along with the house of the governor he battled with in life, does not reappear in this document.³⁷⁶

³⁷² See chapter two for more on the exclusivity of medical education and practice.

³⁷³ AGN, Intestados vol. 260, exp. 29 fols. 289r-291v, 1795. At this point, there is no way to trace the fate of his books after they were sold. Unfortunately, buyers are not noted, only price. Castells' book inventory, never having been sold through formal channels, did not indicate prices. It is difficult to know the real value of any of these texts, as all of the possessions of those who died intestate were essentially priced for quick sale.

³⁷⁴ AGN, Intestados vol. 260, exp. 29, fols. 289r-291v, 1795. The date of his death and the beginning of the investigation was December 11, 1795. Castells had a goddaughter in Spain who attempted to lay claim to his estate.

³⁷⁵ "no se pudo proporcionar la remisión a Campeche de los libros pertenecientes a estos bienes prevenida en auto de diez y ocho de diciembre del año pasado [cuyo inventario existe de estos autos] y hallando se deposito en la casa de gobierno no fue posible salvarlos del incendio ocurrido en doce de abril que convirtió en cenizas dicha casa." AGN, Intestados vol. 170, exp. 3, fols. 261v-262r.

³⁷⁶ See chapter two for Castells' legal battles with the governor of the Presidio del Carmen. It is probable that his books burned as reported; it is also possible that they were sold or removed clandestinely in the interim. It is unclear why six months passed before anyone followed up on the sale of his library, or why only the books were kept at the governor's house.

ii. Mayan-language manuscripts

Manuscript medical texts intended for lay medical practice were also used in the region during the seventeenth through early nineteenth centuries (Figure 4-3). Printing presses did not exist in Yucatan until after independence.³⁷⁷ Because of this absence, the lay medical texts that were produced in the region were handwritten, typically in a combination of Spanish and Mayan. Such manuscript works included books of *Chilam Balam*, phytopharmaceutical texts, and ritual texts, all of which addressed medical topics, wholly or in part (Figure 4-3).³⁷⁸ In this study, I concentrate on a few of the surviving lay medical manuscripts from the region (Table 4-3). These include *Yerbas y hechicerías de Yucatán* (a phytopharmaceutical text), *Quaderno de los yervas de la Provincia* (a phytopharmaceutical text), and the book of *Chilam Balam of Kaua*, all of which date from roughly the eighteenth century (below).³⁷⁹ All of these texts were hand-written in both Yucatec Mayan and Spanish (Table 4-1).

Ritual of the Bacabs

Chilam Balam de Kaua

Chilam Balam de Chumayel

Chilam Balam of Na

³⁷⁷ Christensen, *Nahua and Maya Catholicisms*, 12.

³⁷⁸ . Munro S. Edmonson, *Heaven Born Merida and its Destiny: The Book of Chilam Balam of Chumayel* (Austin, University of Texas Press, 1986), 1. There has been some historiographical disagreement over the status of books of Chilam Balam as medical texts. Edmonson (for example), identified books of *Chilam Balam* as only those that contained the purported work of “the spokesman of the Jaguar (Chilam Balam)” and thus argued that calendrical and medicinal texts were not *Chilam Balam*. His list of *Chilam Balam* includes only Chumayel, Tizimin, Mani, Chan Cah, and Kaua. This is particularly confusing, because Kaua contains significant medicinal information; Roys, *The Ethno-Botany of the Maya*. Roys, on the opposite end of the spectrum, included all of the known books of *Chilam Balam* as medicinal texts in his phytopharmaceutical compilation. Roys, *The Ethno-Botany of the Maya*.

³⁷⁹ Most of the extant texts are probably copies of much earlier works. Not only were parts of many of these texts influenced by or copied from sixteenth-century printed books, some sections may be copies or interpretations of much earlier indigenous knowledge. Furthermore, it is not known to what degree these later copies are faithful to their earlier models.

Chilam Balam de Ixil
Manuscrito de Sotuta
Yerbas y hechicerías de Yucatán
Quaderno de los yervas de la Provincia
Libro del Judío
Noticias de varias plantas
Libro de medicinas en Maya
*Libro de medicinas muy seguro de Yucatán.*³⁸⁰

| Title | Date | Language |
|---|---|-------------------|
| <i>Chilam Balam de Kaua</i> | Eighteenth/ nineteenth century (after 1746) | Spanish and Mayan |
| <i>Quaderno de los yervas de la Provincia</i> | Eighteenth century | Spanish and Mayan |
| <i>Libro de medicinas muy seguro de Yucatan</i> | 1741 | Spanish and Mayan |

Table 4-1. Manuscript medical texts consulted for this study. Sources: Bricker and Miram, *An Encounter of Two Worlds*, 11; Ruth Gubler, ed., *Fuentes Herbolarias Yucatecas del Siglo XVIII: El Libro de Medicinas Muy Seguro y Quaderno de Medicinas* (Mérida: UNAM, 2010).

Medical manuscripts written primarily in Yucatec Mayan were colonially-produced, hybrid works that exhibited significant evidence of European influences.³⁸¹ Colonial-era Mayas (as well as modern lay and domestic practitioners) used a European-style system of humoral medicine in their medical manuscripts, much of it copied directly

³⁸⁰ Roys, *The Ethno-Botany of the Maya*, 352-359; Bricker and Miram, “An Encounter of Two Worlds,” 11; Kashanipour, “A World of Cures,” 244-253.

³⁸¹ Bricker and Miram, *An Encounter of Two Worlds*. Bricker and Miram argue specifically for the significant structural influence of European medical works on the *Chilam Balam of Kaua*; also see Kashanipour, “A World of Cures,” 227, 238-241.

from European medical books.³⁸² European medical texts profoundly influenced the lay manuscript medical texts found in the Yucatan peninsula. Disease descriptions, medicines, and treatments in lay written works often mirrored those found in Spanish-language religious and medical printed books.³⁸³ For example, Bricker and Miram have demonstrated that printed medical texts by Agustín Farfán (1592) and Gregorio López (1672) in particular probably served as sources for books of *Chilam Balam* (specifically, for the *Chilam Balam of Kaua*.)³⁸⁴ In some cases, the diseases, treatments, and other medical ideas and practices found in manuscript texts have been shown to be direct copies of printed Spanish-language texts or *reportórios*.³⁸⁵ The clear influence of printed

³⁸² Robert Redfield, *The Folk Culture of Yucatan* (Chicago: University of Illinois Press, 1941), 86-110, 303-338, *passim*. Redfield, who conducted long-term ethnographic research in Yucatan, argues that European humoralism as practiced in the region was a colonial product that profoundly affected the practice of lay medicine into the modern (twentieth century) day; See also Robert Redfield, *Chan Kom: A Maya Village* (Washington: Carnegie Institution, 1934); Also see George Foster, “The Validating Role of Humoral Theory in Traditional Spanish-American Therapeutics,” *American Ethnologist* 15, no. 1 (1988): 120-135; George Foster, “On the Origin of Humoral Medicine in Latin America,” *Medical Anthropology Quarterly* 1, no. 4 (1987): 355-393; For Guatemala see, (for example), M.H. Logan and WT Morrill, “Humoral Medicine and Informant Variability: An Analysis of Acculturation and Cognitive Change among Guatemalan Villagers,” *Anthropos* 74 no. 5/6 (1979): 785-802; For a historical perspective see, for example, Bricker and Miram, *An Encounter of Two Worlds*, 63, 133-136; George Foster and Luz Mária Hernández Sáenz, “Curers and their Cures in Colonial New Spain and Guatemala: The Spanish Component” in Brad R. Huber and Alan R. Sandstrom, eds., *Mesoamerican Healers* (Austin: University of Texas Press, 2001); George Foster, *Hippocrates’ Latin American Legacy: Humoral Medicine in the New World* (Amsterdam: OPA, 1994); Barrera-Osorio, *Experiencing Nature*; Antonio Barrera-Osorio, “Knowledge and Empiricism in the Sixteenth-Century Atlantic World,” in Daniela Bleichmar, Paula De Vos, and Kristin Huffine, eds., *Science in the Spanish and Portuguese Empires, 1500–1800* (Stanford: Stanford University Press, 2009), 219-232; Rebecca Earle, *The Body of the Conquistador: Food, Race, and the Colonial Experience in Spanish America, 1492-1700* (Cambridge: Cambridge University Press, 2012); Rebecca Earle, “If you eat their food...”: Diets and Bodies in Early Colonial Spanish America,” *The American Historical Review* 115, no. 3 (2010): 688-713; For a slightly different interpretation of humoral origins see, for example, Alfredo López Austin, *The Human Body and Ideology, vol. 1* (Salt Lake City: University of Utah Press, 1988), 28-48; Gubler, *Herbolarias Yucatecas*, 23.

³⁸³ Kashanipour, “A World of Cures,” 242-244, 254-262.

³⁸⁴ Agustín Farfán, *Tratado breve de medicina y de todas las enfermedades que a cada paso se ofrecen* (México: Pedro Ocharte, 1592); Gregorio López, *Tesoro de medicinas para diversas enfermedades* (México: F. Rodriguez Luperico, 1672). Note that both works were published in Mexico City, and represent (in the case of Farfán) some of the earliest medical texts to come from that press.

³⁸⁵ Gubler, *Fuentes Herbolarias Yucatecas*, 23. Gubler suggests that books of *Chilam Balam* were both structurally and conceptually copies of Spanish *reportórios* (small books that contained collected knowledge, calendars, religious dates: commonplace books).

Spanish works on written medical texts indicate that those Spanish-language printed works were, at some point during the seventeenth and/or eighteenth centuries, in circulation in the region, either as copies or in their original print format.³⁸⁶

iii. Comparing Spanish- and Mayan-language textual culture

Indigenous cures, appropriated and adapted by Spanish physicians beginning in the sixteenth century and quickly integrated into the European corpus of medical knowledge, made their way back to the region in the form of European medical texts. The “new” medical science of the late seventeenth through early nineteenth centuries allowed for the expansion and inclusion of medical practices into an existing classical medical framework, a process that encouraged the booming business of New World pharmaceuticals.³⁸⁷ The integration of indigenous cures into legitimate professional medical knowledge was deliberate. De Vos has ably explored the concept of adoptive empiricism in pharmino-botanical development (for example), noting the focus on integrating new cures into the oeuvre of Spanish medical knowledge for economic gain.³⁸⁸

The ways that medical culture was written about in colonial-era printed texts varied significantly and exemplifies the multivalent and increasingly hybrid nature of lay and professional medicine in the late eighteenth and early nineteenth centuries. For

³⁸⁶ Bricker and Miram, *An Encounter of Two Worlds*, 35.

³⁸⁷ See, for example, Paula De Vos, “Research, Development, and Empire: State Support of Science in the Later Spanish Empire,” *Colonial Latin America Review* 15, no. 1, (2006): 55-79; Engstrand, *Spanish Scientists in the New World*.

³⁸⁸ Paula De Vos, “The Science of Spices: Empiricism and Economic Botany in the Early Spanish Empire” *Journal of World History* 17, no. 4 (2006): 399-427; Paula De Vos, “Research, Development, and Empire,” 55-79.

example, Hieronymus Fracastoro was the first to describe guaiacum as a viable treatment for syphilis in the fifteenth century, arguing that an American cure was ideal for an American disease.³⁸⁹ Later, in the introduction to the eighteenth-century work *Enfermedades venereas*, one of the treatments listed for syphilis is the use of guaiacum: “Guaiacum or palo santo would be valuable to combat the venereal virus [syphilis], [it is] a tree that comes from America, and principally from the Antilles ... but it is observed to only be effective in combating the mildest infections.”³⁹⁰ Guaiacum was later presented in the eighteenth century as a cure from “America,” stripped of its indigeneity and presented as a legitimate treatment option for syphilis.

Both Mayan- and Spanish-language printed and written texts were hybrid products, consisting of mutually intelligible diseases and cures that may be understood as a single colonial system of socially legitimated medical knowledge. Specific medical descriptions differ in the texts themselves, although the subject matter in them is similar, as is the structure of the texts: remedies, interspersed with basic, simply explained instructions for procedures such as cupping and bleeding.³⁹¹ There are some interesting moments of both agreement and contention in the presentation of socially legitimated medical practices in written and printed texts, particularly in the case of bloodletting

³⁸⁹ Hieronymus Fracastoro's *Syphilis, from the Original Latin, A Translation in Prose of this Immortal Poem* (St. Louis: The Philmar Company, 1911); Girolamo Fracastoro, *Syphilis, sive Morbus Gallicus*, 1530.

³⁹⁰ “para combatir al virus venéreo se valieron del guayaco o palo santo, árbol que viene de la América, y principalmente de las islas Antillas: pero observando que solamente era eficaz para combatir la infección más ligera.” *Curso de enfermedades venéreas / dictado en la Real Escuela de Cirugía de Barcelona por Uno de sus maestros; con un suplemento del tratamiento venéreo de la tropa, à fin de evitar ciertos abusos muy perjudiciales à estos individuos* (Barcelona: en la Imprenta de Eulalia Piferrer, 1782), Prologo. The prologue is not paginated. This section is found on the 8th and 9th pages of the prologue in this edition. Accessed through HATHI trust.

³⁹¹ López Austin, *The Human Body and Ideology, Vol. 1*, 28-48. López Austin argued that separating medical concepts is nearly impossible in the first hundred years of conquest, much less in later centuries.

instructions. Bloodletting, a medical practice closely associated with humoral theory, may also have been practiced by pre-Columbian Mayas in a medical context, although very little is known about this topic.³⁹²

Galenic humoralism and associated concepts of bloodletting were integrated into many lay manuscripts. For example, in the opening passage of *Quaderno de Medicinas*:

To know the pulses: the signs of the pulses, to understand and know how to cure the following, the illnesses are these: the thumps or beats of the pulse strong and clear indicate strength of blood. Those that are close, and light, strength of cholera [yellow bile]. Slight and uneven, black bile. Slight, and fast, melancholia.³⁹³

Gubler notes that the same passage appears in the *Chilam Balam of Kaua*:³⁹⁴

The Pulses:

Pulses, The beats or pulsations of the pulse

When they are strong and regular, they indicate there is much blood in them.

The close and rapid ones indicate yellow bile.

The weak and close ones indicate black bile.

The weak and regular ones indicate phlegm.

The weak and irregular ones indicate black bile.³⁹⁵

Bricker and Miram point out that the above text from the *Chilam Balam of Kaua* is strikingly similar to that of López's *Tesoro de medicina para todas enfermedades*.³⁹⁶

³⁹² Bricker and Miram, *An Encounter of Two Worlds*, 63.

³⁹³ "Para conocer los pulsos: Las señales de los pulsos, para entender y saber curar a los próximos, las enfermedades son estas: los Golpes, o latidos de los pulsos grandes y claros significan pujanza de sangre. Los espesos, y ligeros, pujanza de cólera. Los pequeños y ásperos, cólera negra. Los pequeños, y esposos, melancholia." Translation mine. Transcription by Gubler, *Herbolarias Yucatecas*, 105; I have modernized the spelling from her transcription. It is unclear what became of phlegm in this description, or why black bile is described twice. Bricker and Miram indicate that the text appears exactly the same in López's *Tesoro de Medicinas para todas enfermedades*.

³⁹⁴ Gubler, *Herbolarias Yucatecas*, 105, n. 327. The note appears on the entry on *calenturas*, but apparently refers to the text on pulses.

³⁹⁵ Bricker and Miram, *An Encounter of Two Worlds*, 99-100; translation from Bricker and Miram. Their transcription is as follows: "pulsos/los golpes o latidos de el pulso/ó grandes y claros anotan en el mucha sangre/ Los pesos y ligeros anotan cólera o rabia/los pequeños y espesos anotan melancolía/los pequeños y claros anotan flema/los pequeños y ásperos anotan cólera negra."

³⁹⁶ Bricker and Miram, *An Encounter of Two Worlds*, 99, n. 38. Reproduced here: "Señales del Pulso: Los latidos grandes y claros significan mucha sangre. Los espesos rubia cólera. Pequeñas y claros flema. Pequeños y espesos cólera negra. Pequeños y tardios melancholia."

These repetitions, in texts both written and printed, indicate broadly understood and applied medical knowledge across status and race lines. Whether or not the *Quaderno* was used exclusively by Mayas, or whether or not pre-Columbian Mayas used something akin to humoral theory in their medical culture, eighteenth-century lay medical practitioners absolutely used Galenic humoralism to classify illnesses, diagnoses, and cures.

The *Chilam Balam of Kaua* includes further instructions on bloodletting and cupping as well.³⁹⁷ Bloodletting from specific veins for particular maladies is typical of the work. For example:

One vein is in a man's index finger. It is to be bled for stopping nagging headaches. Or if the nagging headache recurs, the center of the forehead is to be bled again, it is very good. And on his neck.³⁹⁸

Although such specificity in bloodletting was a feature of sixteenth- and seventeenth-century professional texts, it was less common in the lay medical texts that were printed in the eighteenth and early nineteenth centuries. For example, a passage from Buchan's domestic medicine (in English original) reads as follows: "Certain hurtful prejudices with regard to bleeding still prevail among country people. They talk, for instance, of head-veins, and heart-veins, breast-veins, &c. and believe that bleeding in these will certainly cure all diseases ... bleeding at certain periods or seasons likewise has poor effects."³⁹⁹ Buchan's statements on bleeding directly opposed the *Chilam Balam of Kaua*, in which astrological events, hours and months were directly correlated with the best and worst

³⁹⁷ Bricker and Miram, *An Encounter of Two Worlds*, 154-158.

³⁹⁸ Translation by Bricker and Miram, *An Encounter of Two Worlds*, 157.

³⁹⁹ This passage does not appear in the Spanish translation, which is much shorter.

times for bleeding patients.⁴⁰⁰ This is consistent with, as Bricker and Miram point out, sixteenth-century medical works printed in Mexico City such as those of Farfán and López. However, it is important to note that lay medical texts that were printed in Mexico City in a mixture of Spanish and Nahuatl during the eighteenth century also recommended drawing blood from specific parts of the body for certain ailments.⁴⁰¹ Written, lay medical works produced in the absence of available printing therefore reflected socially legitimate methods of medical practice, even when they did not necessarily agree, precisely, with printed text culture.

II. Conclusion

Medical practices from all over Europe as well as medical ideas that had been acquired and adapted from indigenous and Afro-Mexican peoples over two centuries of colonialism were thus drawn into a mutually intelligible, socially legitimated framework of hybrid written and printed medical knowledge as experienced on the periphery of empire. Indigenous cures had been and were continually being absorbed into Spanish medical print and practice, and indigenous medical texts adopted Spanish-style formats for Mayan-language medical works. In this way, the multiplicity of lay medical knowledge that flourished in eighteenth-century Europe found its way to the garrisons and towns of Yucatan and the southern Gulf Coast region.

⁴⁰⁰ Bricker and Miram, *An Encounter of Two Worlds*, 159-160. Many more instructions on bloodletting are scattered throughout the *Chilam Balam of K'aua*: this is just one example.

⁴⁰¹ Juan Manuel Venegas, *Continuación, o suplemento a la materia medica del libro intitulado Compendio de la medicina, o Medicina práctica* (México: Imprenta de Galvan a cargo de Mariano Arevalo, Calle de Cadena, 1788). Venegas' work included Nahuatl names for some remedies and Latin names for others in a thoroughly hybrid example of a lay medical text.

Written lay medical texts were part of a broader lay textual medical culture that directly connected Yucatan to changes in the medical culture of the Spanish Atlantic world. Written texts in Mayan and Spanish in Yucatan were part of, not parallel to, a textual medical culture in the colonial period that attempted to broaden the audience for medical knowledge and to integrate medical knowledge into a larger whole. Copying printed texts for lay use indicates the permeation of popular medical knowledge in a socially legitimated process that stretched between Yucatan, central Mexico, and Europe.⁴⁰²

⁴⁰² Spanish medical authors were not operating in isolation either, and they frequently copied, consulted, translated, and referenced texts from all over Europe.

Chapter 5 Professional Medicine and Public Policy

The social legitimacy of professional medical practitioners during the late colonial period rested, in part, on their participation in public policy projects. Professional medical practitioners collaborated with colonial administrators in the investigation of violent crimes, construction and funding of hospitals, mitigation of dangerous environmental hazards, and, perhaps most importantly, on provision of succor to the sick poor. Public policy reforms were typically mandated by colonial officials and carried out by professional medical practitioners, who acted as fundraisers, advisers, and sometimes, enforcers in their participation in public programs. Collaboration with colonial authorities and administrators generally supported the legitimacy of professional medical practitioners, but it also caused conflicts as public health and public policy increasingly fell under the purview of the state during the late colonial period.⁴⁰³

Eighteenth- and early nineteenth-century health initiatives, such as hospital construction and the widespread support of vaccination protocols, indicate that public health was a priority for colonial administrators well before the “state-building” public health initiatives in independent Mexico.⁴⁰⁴ Positivist developments in the conceptualization and administration of public health projects would change the meaning

⁴⁰³ For a concise description of eighteenth-century hospital reform, see (for example) Roy Porter, *Blood and Guts: A Short History of Medicine* (New York: W.W. Norton & Company, 2002), 142-146; For a description of hospitals as places of spiritual and physical succor, see Guenter B. Risse, *Mending Bodies, Saving Souls: A History of Hospitals* (Oxford: Oxford University Press, 1999), 232-288; For a description of sixteenth-century hospitals and succor for the sick poor, see (for example) John Henderson, *The Renaissance Hospital: Healing the Body and Healing the Soul* (New Haven: Yale University Press, 2006); For a discussion of medicine and the environment, see (for example) Lindemann, *Medicine and Society*, 180.

⁴⁰⁴ Heather McCrea, *Diseased Relations: Epidemics, Public Health, and State-Building in Yucatan, Mexico, 1847-1924* (Albuquerque: University of New Mexico Press, 2010), 2. McCrea’s excellent work begins in 1847, but she includes a few vignettes from earlier in the national period.

of the term in the late nineteenth and early twentieth centuries, but similar goals—particularly succor for the sick poor under the auspices of state power—characterized these earlier projects.⁴⁰⁵

The Protomedicato frequently aligned with the public health and policy goals of the colonial administrations, although it rarely actually sponsored or enforced them: such tasks typically fell to the combined efforts of medical practitioners and local (or regional) colonial authorities. Such state-sponsored public health initiatives were not limited to Yucatan and the southern Gulf Coast region, part of the dominant medical culture in Western Europe by the sixteenth century. It is therefore unsurprising that Spanish colonial officials and physicians used the language of public health to pursue similar aims in the Spanish colony of Yucatan.⁴⁰⁶

Professional medical practitioners were instrumental in public health reforms of all kinds and frequently allied themselves in print as well as in practice with the colonial authorities. The rhetoric of protecting “public health” was employed by professionals and by administrators to frame the laws of the Protomedicato, violent crimes committed

⁴⁰⁵ Gilbert M. Joseph, “Preface” in Ricardo D. Salvatore, Carlos Aguirre, and Gilbert M. Joseph, eds., *Crime and Punishment in Latin America: Law and Society since Late Colonial Times* (Durham: Duke University Press, 2001), xiii. Public health was a state concern in the late colonial period, but it is typically not discussed by historians except as positivist nationalism in the emerging nation of Mexico. Gilbert Joseph has argued that many legal, social, and cultural aspects of the colonial apparatus remained unchanged in the new nation.

⁴⁰⁶ A seminal work on public health as state-building in the sixteenth-century is Carlo M. Cipolla’s *Public Health and the Medical Profession in the Renaissance* (Cambridge: Cambridge University press, 1976). Cipolla’s thesis does not map onto sixteenth- through eighteenth-century Yucatan in any way (particularly as he argues that state-sponsored public health policies represented an emergence from the “Dark Ages” in Europe), but works like his show that in the European historiography, unlike the Latin American case, public health has long been generally understood to predate the nineteenth century. Actually, it is relevant that the Italian Protomedicato is at the heart of Cipolla’s work, and that much of the work on public health and state-building in both Europe and the Americas rely on this sort of institution as a necessary center for public health processes. Instead, in colonial Yucatan and the southern Gulf Coast region, nascent public health initiatives, as they understood it, may be seen as a central tenet of professional medicine and of state building independent of ephemeral (in the long term) and often irrelevant institutions as the Protomedicato.

within the community, and the ill effects that they believed lay medical practice had on their patients and communities. Medical crimes committed within the hospital and the communities were framed as threats to the public health by both hospital administrators and surgeons.

Public health was sometimes defined in writing by professional medical practitioners as a concept that was upheld by state institutions and laws. Rubio explicitly argued that the Protomedicato created and enforced laws regulating medical practice for the protection of “public health.” He wrote: “it falls to the jurisdiction of the Protomedicato, as exclusive judges [of medical transgressions] so that they can impose appropriate punishments, according to them: it [the Protomedicato] was established by their monarchs to be faithful defenders of the public health.”⁴⁰⁷ Rubio’s portrayal of the office of the Protomedicato, however, presupposed a great deal of power and authority from that office that, if it ever existed anywhere outside of Spain, certainly did not exist on the periphery of empire during the eighteenth and nineteenth centuries. Instead, local and regional governors, local bureaucrats, viceregal authority, physicians, surgeons, para-professionals, and the public negotiated and executed public health and policy reforms.

I: Hospitals

Hospitals in Europe and the Americas became, specifically, places of healing associated with professional physicians and surgeons by the beginning in the seventeenth century.

⁴⁰⁷ “se halla sujeto, en las leyes de España, a la jurisdicción del tribunal de el real protomedicato, como juez privativo, y que puede imponerle castigo merecido, según ellas; pues fue establecido por sus monarcas para que fuese un fiel zelador de la salud pública.” Rubio, *Medicina hipocrática*: Prologo, 6.

Although permanent hospitals (distinguished from simple infirmaries) had existed in Europe in the Middle Ages, they rarely employed professional medical practitioners before the fifteenth century. As a result, the first hospitals in New Spain, designed and constructed in central Mexico in the sixteenth century, were built as designated places of healing for the sick poor and were usually staffed and supervised by medical professionals.⁴⁰⁸

The first European-style hospitals in New Spain were constructed in Mexico City beginning in the sixteenth-century.⁴⁰⁹ European-style hospitals to serve the sick poor began to be constructed in the southern Gulf Coast region in the early seventeenth century.⁴¹⁰ Most of these hospitals were established and run by religious orders, even those established under the auspices of the colonial state (such as the Hospital Real de Indios in Mexico City).⁴¹¹ The Hospital de Santo Nombre de Jesús (Valladolid), Hospital de San Juan de Dios (Merida), and Hospital Nuestra Señora de Los Remedios (Campeche) were all in use by 1625.⁴¹² The Hospital de San Lázaro was under

⁴⁰⁸ David A. Howard, *The Royal Indian Hospital of Mexico City* (Tempe: Arizona State University Center for Latin American Studies, 1980). Hospitals in central Mexico typically employed professionals, para-professionals, and lay nurses and orderlies. Indigenous nurses and midwives could and did find employment at some Mexico City hospitals throughout the colonial period.

⁴⁰⁹ Howard cites 120 hospitals established in Mexico City before the mid-seventeenth century. Howard, *The Royal Indian Hospital of Mexico City*, 1.

⁴¹⁰ Adela Pinet Plasencia, *La Península de Yucatán en el Archivo General de la Nación* (UNAM: Centro de Investigaciones Humanísticas de Mesoamérica y el Estado de Chiapas, San Cristóbal de las Casas, Chiapas, 1998), 78. Some hospitals—military and convent hospitals in particular—may predate these, although they probably were simply infirmaries set aside for the sick in garrisons and in monasteries. These were not always distinguished from larger facilities. For example, a pharmacy and infirmary was established in el Convento de la Mejorada in the mid-eighteenth century, and it may have been referred to by locals as a “hospital.”

⁴¹¹ Howard, *The Royal Indian Hospital*, 1.

⁴¹² Nuestra Señora de Los Remedios in Campeche became Hospital de San Juan de Dios later in the colonial period. While I have not been able to determine the exact date, it is possible that the shift occurred around 1767 with the Jesuit expulsion, necessitating a break with the previous (Jesuit) administration. The Hospital de Santo Nombre de Jesus probably also changed its name to San Juan de Dios at the same time (I

construction in the port of Campeche by the end of the eighteenth century, as well.⁴¹³ By the end of the eighteenth century, military hospitals had also been established in Yucatan's Presidios of San Felipe de Bacalar and the Presidio del Carmen. The military hospital of San Carlos was added in the early nineteenth century.⁴¹⁴ Although religious (civilian) hospitals were constructed and run separately from those serving the military, military personnel often received treatment at religious facilities.⁴¹⁵ Military hospitals carried an association with care of the troops (and thus, support of the crown), while civilian (religious) hospitals were strongly associated with care for the sick poor, although both types of facilities could and did perform other roles. Fulfilling these functions legitimated the cost and staffing of such facilities.

Religious orders established and ran the civilian hospitals during the colonial period, but they typically also employed nonreligious professionals and paraprofessionals.⁴¹⁶ In Merida's Hospital de San Juan de Dios in 1775, the hospital's list of "salaried and secular employees" included a barber, two nurses, and a professional medical practitioner named don Francisco de León, who served (and was salaried as)

have found neither records nor references to the establishment of that hospital, and it seems likely that it is the same facility); See also Plasencia, *La Península de Yucatán*, 78.

⁴¹³ AGI, Mapas y Planos, México, No. 672, 1785; AGI, Mapas y Planos, México No. 767, 1791. Accessed through PARES. Work on the hospital was still incomplete as of 1791, when plans were drawn up for the completion of the project.

⁴¹⁴ AGN, Hospitales vol. 6, exp. 1, fols. 2r-14v, 1803. Other religious and military hospitals may have (in fact, certainly did) existed in the region, but these are the only ones I have confirmed. To date, no comprehensive historical or archaeological study has been conducted on the hospitals of Yucatan and/or the southern Gulf Coast, although such studies have been conducted on central Mexican hospitals, both collectively and individually.

⁴¹⁵ Military rents were received (for example) by the Hospital de San Juan de Dios, and military personnel received treatment in civilian hospitals. For rents, see (for example) AGN, Hospitales vol. 64, exp. 17.

⁴¹⁶ John Huxtable Elliot, *Imperial Spain: 1469-1716* (London: Penguin, 1963), 243. That is, professional (not clerical) surgeons and physicians. Religious orders typically established and ran hospitals in Spain and the Spanish colonies during the colonial period. The exception was, of course, military hospitals (discussed later in this chapter).

both surgeon and pharmacist.⁴¹⁷ Presumably, either the brothers performed all of the hospital's other functions, or they employed other medical professionals and para-professionals who were not paid (or who were not noted on the hospital's payroll).⁴¹⁸

Eighteenth-century medical philosophers believed that hospitals were bastions of public health, places to take the sick and poor to be both treated for their illnesses and uplifted from their poverty.⁴¹⁹ Legitimate public health in the late eighteenth century, as envisioned by colonial administrators, continued to focus on improving the plight and perceived worth of the impoverished through health care and the use of the most up-to-date techniques.⁴²⁰ By the end of the eighteenth century, an increased focus on clinical medicine in a hospital setting, irrelevant of status, began to shift the purpose of hospitals from one that provided a place for simply housing the sick poor to one that provided a

⁴¹⁷ "seculares y salariados." AGN, Hospitales vol. 64, exp. 17, 1775. Other secular, non-medical employees included the sacristan, the organist, the cook, and three laborers ("semaneros").

⁴¹⁸ AGN, Hospitales vol. 64, exp. 17, fols. 145r-163v, 155v-156 r, 1775. Don Francisco León, the surgeon/pharmacist, was the only secular employee named on the payroll. The other three were noted only by profession. In Europe, surgeons and physicians were paid by religious hospitals beginning in about the thirteenth century, but this was not typical before roughly the fifteenth century; the practice was firmly established by the time of the foundation of Yucatan's hospitals.

⁴¹⁹ Hospitals in New Spain date from the sixteenth century and proliferated throughout the colonial period, in stark contrast to the British American colonies, which had only two hospitals before 1800. Hospitals for the sick poor—the lepers—in Europe date from roughly the twelfth century through the seventeenth century; worldwide, the late seventeenth, eighteenth, and early nineteenth centuries saw the rise of "general hospitals" as places of clinical treatment (and still, as places of incarceration) for the public, not just the poor/leprous. As noted in the discussion of leprosy in chapter four, the rhetoric of poverty and disfiguring disease remained well into the nineteenth century. The rhetorical shift from simply isolating the sick poor in hospitals to attempting to cure them is European: here, it is reflected in hospital design, but more work needs to be done to analyze the day-to-day function of Yucatecan hospitals to understand the nature of the clinical environment. For a much more detailed discussion of the history of hospital care and the concomitant effects on the human experience of sickness and health, see Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans. A.M. Sheridan Smith (New York: Pantheon Books, 1973); For shifts in the purpose and staffing of hospitals, see Porter, *Blood and Guts*, 135-142; and Risse, *Mending Bodies, Saving Souls*.

⁴²⁰ Medical positivism is generally not discussed in the historiography of New Spain / Mexico until the nineteenth-century presidency of Porfirio Díaz, but signs of its earlier influence are obvious in the shift in ideas of hospital administration in Yucatan.

place for medical treatment. Yucatan and the southern Gulf Coast region were in no way isolated from such changes in medical culture.

The plans for and construction of Hospital de San Lázaro in the port of Campeche between 1784 and 1791 reflected contemporary medical philosophies about the clinical hospital and its purpose (Figures 5-1, 5-2, 5-3). Hospitals built in the region during the eighteenth and early nineteenth centuries were purposive, planned structures, designed to be places of both healing and succor for the sick poor in which space was divided according to the hospital's purpose.

The change over time in the purposes of hospitals in New Spain may be seen in the design and establishment of hospitals in Mexico City in the sixteenth century and in Yucatan in the late eighteenth century. In 1791, plans were proposed for the new San Lázaro hospital in Campeche. The administrators and physicians of the new hospital hoped to model the ordinances of the new facility on those of the San Lázaro hospital in Mexico City.⁴²¹ As he made plans for the new and modern facility, the *intendente* of Yucatan wrote to the director of the San Lázaro Hospital in Mexico City, "asking for the statutes of the Hospital de San Lázaro in the capital in order to adapt them as much as possible to the hospital that is to be established there [in Campeche]."⁴²² The response from the San Lázaro Hospital in Mexico City simply stated: "The San Lázaro Hospital of [Mexico City] does not have any ordinances."⁴²³ Possibly due to their much later construction, new ideas about hospital reform heavily influenced the construction plans

⁴²¹ AGN, Hospitales vol. 54, exp. 4 fols. 65r-71r, 1791. The San Lázaro hospital in Mexico City was one of many established in the early seventeenth century.

⁴²² "pidiendo un tanto de los estatutos del Hospital de San Lázaro en esta capital para adaptarlos en lo posible en los de otra igual casa que va allí a establecer." AGN, Hospitales vol. 54, exp. 4, fol. 64r, 1791.

⁴²³ "el hospital de san lázaro de esta capital no tiene ordenanzas algunas." AGN, Hospitales vol. 54, exp. 4 fol. 64r, 1791.

for facilities in the Bay of Campeche region before such reforms had affected existing hospitals in Mexico City.⁴²⁴ The attention to drawn plans and written ordinances in the funding and construction of Yucatan's hospitals reflected broader changes in the international medical community as to the function of hospitals and their place in public health.

Religious hospitals continued to constitute the majority of such institutions well into the nineteenth century. In accordance with European philosophies of the hospital's purpose, the primary mission of the Merida and Campeche San Juan de Dios Hospitals was to care for the "sick poor."⁴²⁵ The plans for the construction of the San Lázaro Hospital (Figures 5-1, 5-2, 5-3) exemplify the structure and socially legitimated purpose of hospitals in the region in the late eighteenth and early nineteenth centuries. Much like European hospitals during the same period, the San Lázaro hospital identified a significant amount of space to set aside for the care of the sick poor.⁴²⁶ In the original plans for the hospitals' construction, the spaces labeled 'K' were set aside for the care of the sick poor (Figure 5-1).⁴²⁷ The hospital took longer to both fund and construct than originally anticipated. For this reason, a second set of plans was drafted in 1791 that

⁴²⁴ The earliest hospital constructions in central Mexico during the sixteenth century under Charles V were, in fact, supposed to have written ordinances and plans. However, the San Lázaro Hospital was not the only one missing such a constitution or written ordinances: Howard found that the Hospital Real de Indios, when asked to produce their founding ordinances (in order to implement reforms) in the late eighteenth century, could not find any such founding text, either. Howard, *The Royal Indian Hospital of Mexico City*, 30.

⁴²⁵ "los pobres enfermos." AGN, Hospitales vol. 64, exp. 17, fols. 149v (145r-163v), 1775.

⁴²⁶ Spaces labeled 'K' in fig. 5-1 (*pobres dolientes*) and 'C' in Fig. 5-2 (*lazarinos*). AGI Mapas y Planos México, no. 672; AGI, Mapas y Planos, México no, 767. Accessed through PARES.

⁴²⁷ "Pobres dolientes." AGI, Mapas y Planos, México no, 767. Accessed through PARES.

updated and enlarged the partially constricted facility. In the updated plans, the spaces labeled 'C' were to set aside for the sick poor (Figure 5-2).⁴²⁸

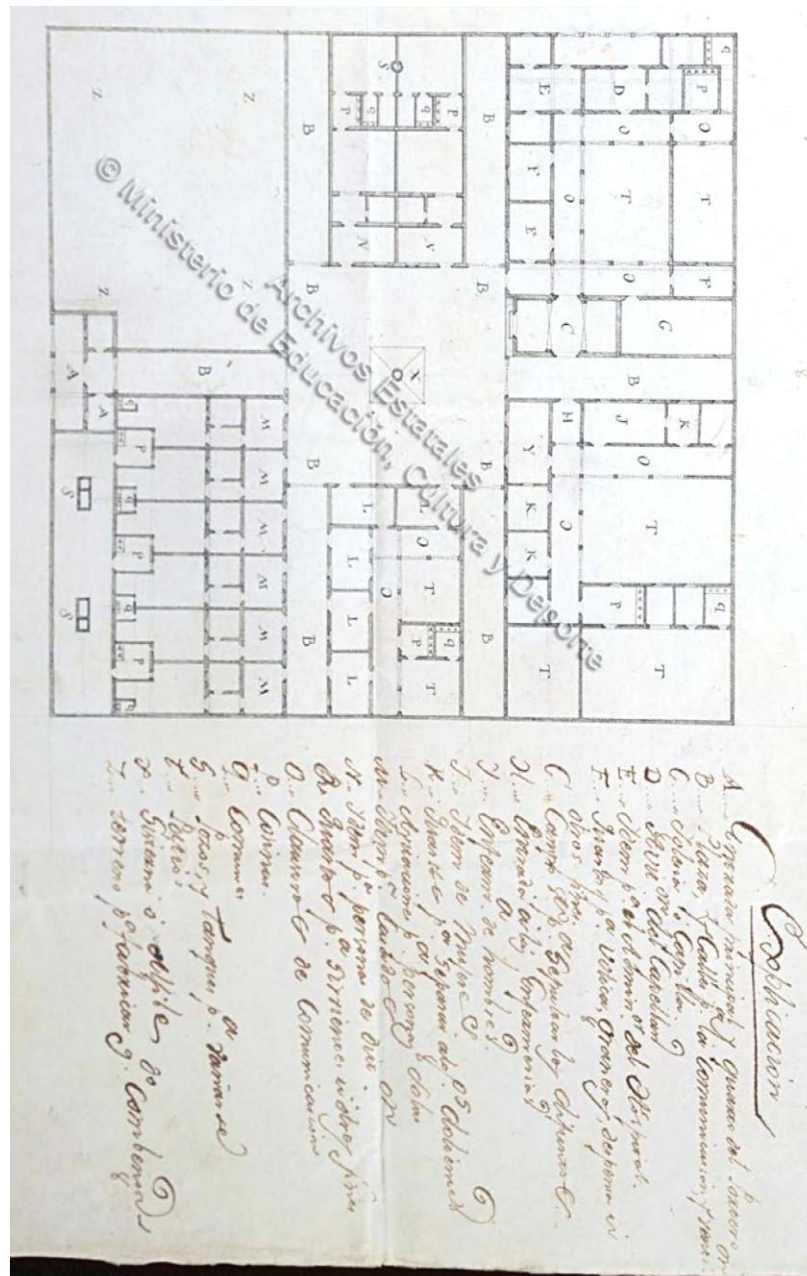


Figure 5-1. Portion of plan for the construction of the San Lázaro Hospital in Campeche, 1785. Bottom right, 'K' indicates space set aside for the sick poor. Source: AGI, Mapas y Planos, México, No. 672. Accessed through PARES.

⁴²⁸ "lazarinos." AGI, Mapas y Planos, México no, 767. Accessed through PARES.

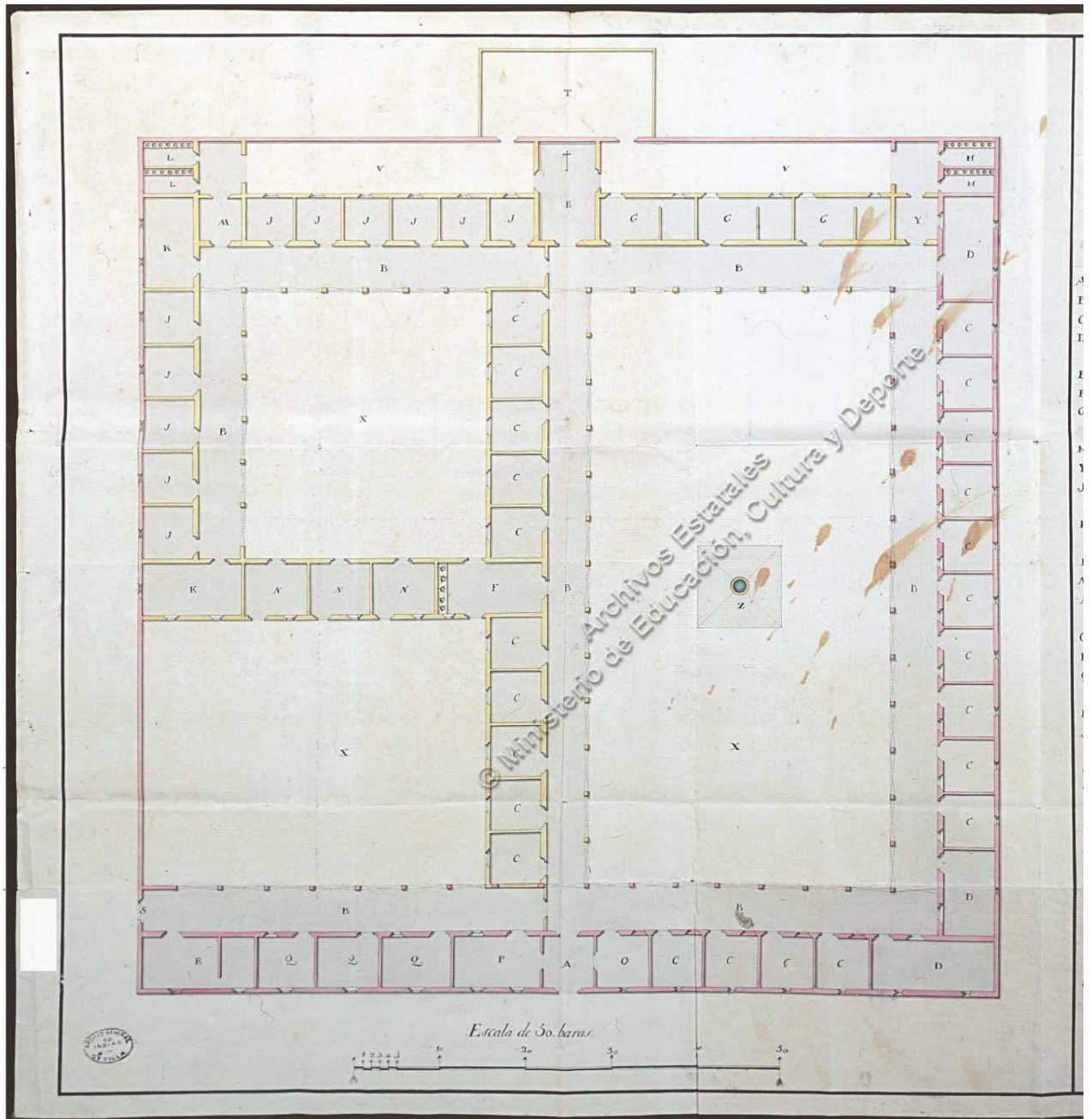


Figure 5-2. Second plan for the San Lázaro hospital, 1791. Center, bottom right, and right: 'C' indicates spaces for the sick poor; Top right: 'G' indicates spaces for "refined persons; The pink portions were already completed, and the yellow portions (center) were meant as revisions to the original plan. Top left: spaces labeled 'J' were set aside for women. Source: AGI, Mapas y Planos, México no, 767. Accessed through PARES.

In the San Lázaro Hospital of Campeche, the hospital accommodated those sick with any number of ailments as well as those suffering from “leprosy.” The hospital sometimes described lepers as suffering from elephantiasis, which has a long history of association, indeed, of conflation with leprosy: the terms may be considered to be interchangeable from the ancient world up to the twentieth-century description of Hansen’s Disease.⁴²⁹ This is unsurprising in light of the fact that few, if any, of the lepers in the San Lázaro hospital actually suffered from leprosy. The “*lazarinos*,” in this case, were the same as the “*pobres dolientes*,” the sick poor. Saint Lazarus was strongly associated with poverty and filth as well as with visible sores and contagion, and the socially constructed category of leper remained one of the poor, filthy, physically debilitated and thus, deserving of isolation in hospitals as well as charity. Incidences of leprosy fell precipitously after the fourteenth century, but as Porter notes, the category of “leper” became “a paradigm for later diseases of exclusion, and for persecution generally.”⁴³⁰ Lepers were described as needing and deserving charity, and they now shared wards with those suffering from other ailments, but they continued to retain the stigma of embodied poverty. In the hospitals of Yucatan and the southern Gulf Coast region, exclusion was expressed as a separation of physical space, while the hospitals’ primary purpose remained one of providing succor to the sick poor.

⁴²⁹ Luke Demaitre, *Leprosy in Premodern Medicine*, Johns Hopkins University Press, 2007, 86-94; See also Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W.W. Norton & Company, 1997), 11-122. The disambiguation between leprosy (in modern parlance, Hansen’s disease) and elephantiasis (in modern parlance, lymphatic filariasis) was not always or even typically apparent in sources in any language from Galen forward. Leprosy as a discrete infectious disease became much less common after the fourteenth century, but existing European lazarettos were often repurposed for syphilitics and smallpox victims. In New Spain, lazarettos were constructed—and labeled as such—but their purpose was often for outbreaks of diseases like smallpox. See, for example, the discussion of the Veracruz smallpox outbreak in chapter five.

⁴³⁰ Porter, *The Greatest Benefit to Mankind*, 122.

Hospitals in the region during the eighteenth century modeled their spaces on European ideals of medical space. Because of this focus, administrators increasingly expressed their need for funds in terms of progressive hospital reforms. For example, in a 1775 letter asking for increased funding for the San Juan de Dios Hospitals in Merida and Campeche, the ability of the hospitals to separate patients by sex, according to contemporary clinical theory, is described as a problem of staffing that could be alleviated through additional funds.⁴³¹ This was typical; wards were separated by sex as well as status in the updated plans for the San Lazaro hospital, for example. Wards labeled ‘J’ were set aside entirely for single women (Figure 5-2).⁴³² The Hospital de San Juan de Dios’ administrators noted too that, in order to properly separate male from female patients, they would need many more religious to care for the men and women separately (presumably in a nursing capacity).⁴³³ References to such reforms in the region’s hospitals demonstrate their connectivity to broader international hospital reforms and to an understanding that funding was more forthcoming for hospitals adhering to such progressive reforms.

Funding for the Hospitales de San Juan de Dios, despite their autonomous administration, came, in part, from the colonial government.⁴³⁴ However, most hospitals during this period depended primarily on charity, a fact that was strongly iterated by the hospital director when hospital funding began to be redirected to the military during the

⁴³¹ AGN, Hospitales vol. 64, exp. 17 fols. 155v-156r, 1775. The Hospital San Juan de Dios in Merida had three infirmaries for the sick, although it is not clear how those wards were divided.

⁴³² AGI, Mapas y Planos, México no, 767. Accessed through PARES.

⁴³³ AGN, Hospitales vol. 64, exp. 17, fols. 145r-163v, 1775.

⁴³⁴ AGN, Hospitales vol. 64 exp. 17; fols. 145v-146r (145r-163v), 1775. This is not to mention plenty of money from rents (much of that from the military in some capacity) and quite a lot from alms; Cervantes, *The Devil in the New World*, 3. The Jesuits were expelled from New Spain in 1767, indicating that changes in administration occurred at that time.

financial crisis of the empire of the early nineteenth century. In an 1814 letter requesting funds for the failing hospital, the director emphasized the starvation and the physical condition of the sick, describing the patients as raising their “ulcerated hands” for aid.⁴³⁵

Hospital designations of the lepers or “sick poor” often marked race as well as status classifications. Hospitals were described by policy makers and administrators as the best places for Yucatan’s sick and poor population, because they believed that: “it would be dangerous to the many sick abandoned to the miseries of their homes, as they cannot afford the price of food, help, and medicines that the pious charity of the hospitals gives them with the fervent zeal undertaken by that institution.”⁴³⁶ In the towns, villages, and military garrisons of Yucatan, unlike in Mexico City, there was no separate Hospital de Indios.⁴³⁷ In Mexico City, a separate hospital for *indios* had been founded in 1553, and several other hospitals, largely funded and run by religious orders, followed in the seventeenth century.⁴³⁸ The Hospitales de San Juan de Dios in the city of Merida and the port of Campeche were thus expected to care for indigenous peoples, as they comprised the greatest proportion of the sick poor. The indigenous population of Yucatan was described as “the weakest,” due to their poverty, and thus they were considered the neediest of the services of public hospitals.⁴³⁹ In fact, correspondence regarding the hospitals repeatedly notes that the majority of the population in Yucatan were ‘*indios*’

⁴³⁵ “levantaron al cielos sus ulcerados manos.”AGN, Hospitales exp. 48, fols. 581-587, 1814.

⁴³⁶ “Peligrarían muchos enfermos abandonados en la miserias de sus casas, por no poder costear el precio alimento, asistencia, y medicinas que la piedad de los hospitales les aplica con fervero celo en observación de su instituto.”AGN, Hospitales vol. 64, exp. 17, fol.161r (f ols.145r-163v), 1775.

⁴³⁷ The “Royal Indian Hospital” was one of the first hospitals established in New Spain. For a thorough history from foundation to closure, see Howard, *The Royal Indian Hospital of Mexico City*.

⁴³⁸ Howard, *The Royal Indian Hospital of Mexico City*, 1-11.

⁴³⁹ “los indios, por su miseria, son los más debilitados.”AGN, Hospitales vol. 64, exp. 17, fols. 145r-163v; f 150v, 1775.

and that they must be a priority for hospital admissions due to their poverty and their health status.⁴⁴⁰ For professional medical practitioners in the southern Gulf Coast region, the greatest proportion of *pobres dolientes* were, in fact, Mayas (Tables 1-1, 1-2, 1-3, 1-4).

Despite the legitimizing mission of piety that characterized colonial hospitals, however, they were often not the progressive and healthful institutions envisioned by the administrators and physicians who planned and funded them. Military hospitals in particular struggled to attract qualified professional medical personnel. In 1793, the men stationed at the Presidio de San Felipe de Bacalar sent a letter to the *intendente* begging for surgeons and for a qualified pharmacist. They wrote that they had no one at all to serve the many sick men stationed at the Presidio, despite the previous administrative approval of salaries for both professional and para-professional positions in 1790.⁴⁴¹ The money had been quickly and easily approved for both positions, but the posts, it seems, remained empty.⁴⁴² The lack of medical practitioners in the late colonial period contrasted sharply with an increased interest in the modern day-to-day running of a hospital by the colonial government, which began to demand progressive standards in the administration of military hospitals. For example, while Bacalar could not attract a qualified pharmacist, much less a surgeon, a list of mandated medicines to be kept in the pharmacy accompanied the approval for the hospital pharmacist's salary at Bacalar.⁴⁴³

⁴⁴⁰ “La clase de indios, que compone la mayor parte de sus habitantes, destituyo de todo auxilio.”AGN, Hospitales vol. 64, exp. 17, fol. 145r-163v, 1775.

⁴⁴¹ AGN, Cárceles y Presidios vol. 19, exp. 2, fols.16r-73v, 1793.

⁴⁴² The dearth of qualified, socially legitimate medical practitioners to care for soldiers and sailors is discussed in chapter two.

⁴⁴³ AGN, Cárceles y Presidios vol. 19, exp. 2, fols.50r-51v, 1793.

Administrative ideals of a legitimate, well-run hospital did not always align with the realities of the medical landscape on the ground in the garrisons.

The gap between the expectations of the colonial administrators who were intent on maintaining modern standards of medical care and the very real lack of supplies and personnel was profound. The actual administration of the military medical facilities at Bacalar in 1793, which utterly lacked the basic personnel needed to care for the sick, was nothing like the detailed plans that had been drawn up for the facility in 1790. The detailed plans for hospital facilities at Presidio San Felipe de Bacalar were explicitly written “for the assistance of the troops, or any others that augment the garrison.”⁴⁴⁴ In those written ordinances, provision was made for a surgeon (in this case, the surgeon who was already in residence at the time the ordinances were drawn up, don Antonio Poveda) and a para-professional phlebotomist to assist both with the surgeon’s work and with the management of the pharmacy.⁴⁴⁵ A variety of laypersons were also named to help with the running of the military hospital, including several laborers to serve in the hospital and of course, provision and salary was made for a dedicated cook.⁴⁴⁶

Poveda, the head surgeon, appeared to have an excellence service record, having previously served in Campeche working with soldiers and “the poor families of the

⁴⁴⁴ “para la asistencia de esta tropa ó de cualquiera otra que se aumenta la guarnición.”AGN, Hospitales vol. 54, exp. 1, fols. 3r-15r, 1790.

⁴⁴⁵ AGN, Hospitales vol. 54, exp. 1, fol. 5r, 1790; AGS, Leg. 7207, exp. 39, 1805. Accessed through PARES. Poveda’s starting salary was forty pesos a month plus travel expenses, commensurate with the salaries at Presidio del Carmen. Unfortunately, I do not know how long Poveda actually stayed at Bacalar; AGI, Arribadas vol. 440, exp. 6, fols.17r-22v, 1805. Accessed through PARES. In 1805, a different surgeon, Juan Antonio Frutos, also left Bacalar for Veracruz. The records of rapid departure suggest that it was an even more miserable place than Del Carmen.

⁴⁴⁶ AGN, Hospitales vol. 54, exp. 1, fols.5v, 12r, 1790.

soldiers.”⁴⁴⁷ His work with the sick poor, as discussed previously, marked him as a socially legitimate professional. Unfortunately, Poveda, it turned out, had no interest in remaining at Bacalar, and he begged for leave to return to Campeche for his own health reasons, quickly leaving the new hospital without a surgeon.

Problems in staffing and running military hospitals in the late colonial period were in no way limited to Bacalar. The reality of military hospitals constructed in the eighteenth and early nineteenth centuries in general fell far short of the ideal, despite hospital ordinances that reflected broader eighteenth and nineteenth century reforms. José Castells, the disaffected surgeon who worked at the Presidio del Carmen in the 1790s, argued in his own court case in 1795 that he “had observed” several instances of “excess and disarray” at the military hospital at the Presidio.⁴⁴⁸ Castells elaborated: “the hospital consists of a house of boards with a palm roof, and it has the inconvenience of air entering day and night, and water when it rains pools under the beds of the sick. [The facility] is without a guard and the administrator also works as pharmacist.”⁴⁴⁹ In other words, the Barcelona graduate deplored the quality of the building, the provisions, and the medical staff. The facility he described was hardly in keeping with the clinical hospital environment, touted by European medical reformers, that was meant to uplift soldiers and civilians from their impoverished condition.

⁴⁴⁷ “las pobres familias de los soldados.” AGS, leg. 7207, exp. 39, fols. 211r-212v, 1805. Accessed through PARES.

⁴⁴⁸ “habiendo observando” “excesos y desórdenes” AGN, Cárceles y Presidios vol. 8, exp. 3, fol. 62r, 1795.

⁴⁴⁹ “El hospital consiste en una casa de tablas que le sirve de tejado lo que llaman guano, y tiene el inconveniente de entrar el aire día y noche, y el agua cuando llueve deteniéndose por debajo las camas de los enfermos. Esta sin guardia y el administrador tiene el empleo de practicante boticario.” AGN, Cárceles y Presidios vol. 8, exp. 3, fol. 62r, 1795. The lack of a guard seems like a strange thing to be concerned with, but guards were a typical feature of hospitals (See figure 5-2, letter ‘O’); AGN, Hospitales vol. 54, exp. 4, fols. 69r-71r, 1796. Hospitals could also be dangerous places for patients. In 1796, for example, the relatively new San Lázaro Hospital in Merida reported that a patient, José Miguel Alvarado, grievously wounded another named Cecilio Palacios.

Castells' testimony was undoubtedly biased, considering that he was in prison for neglect of his patients as well as for stirring up trouble at the Presidio from the time of his arrival in 1793. However, Castells' grim description of the hospital facilities at the Presidio del Carmen probably reflected, at least to a degree, the reality of the military hospitals. Colony-wide attempts to rectify the apparently widely recognized dilapidated state of military hospitals were still in circulation in 1815. All of the military hospitals in New Spain, including those of San Felipe de Bacalar and Nuestra Señora del Carmen, were sent instructions for improving their facilities. Among the list of required improvements were having a minimum of thirty (presumably dry) beds available for soldiers and locals and specific dietary guidelines to follow for patients, which consisted of (at minimum), half a chicken and twelve ounces of bread.⁴⁵⁰

Finding and retaining legitimate, qualified medical personnel continued to be a problem on the periphery in the last few years of colonial rule. In 1816, the San Juan de Dios hospital in Valladolid requested a *médico* to help the sick soldiers recuperating there.⁴⁵¹ The many sick soldiers at Valladolid had no surgeon or physician to assist them at the time, as the *intendente* reported that they were making do with “only a religious practitioner [a cleric] and a bandager, [both of whom] fulfill all of the [hospital's] functions.”⁴⁵² A long list of the number of sick soldiers and their home regiments

⁴⁵⁰ AGN, Hospitales vol. 64, exp. 2, fols.54r-77v, 62r-63v, 1815. Bread and chicken were baselines. substitutes are noted in the instructions.

⁴⁵¹ AGN, Hospitales vol. 69, exp. 12, fols. 260r-277v, 1816.

⁴⁵² “Solo un practicante religioso y un topiquero son los que ejercen todas funciones.” AGN, Hospitales vol. 69, exp.12, fol. 269r, 1816. I have translated “topiquero” as bandager, although ‘nurse’ may be more accurate in this situation. A surgeon, don Diego Valero, was dispatched to Valladolid from Mexico City.

followed, totaling seventy-three men billeted in the hospital and being cared for by the sparse garrison staff.⁴⁵³

II: The Dangerous Environment

i. Quotidian illness

The general health of the poor was often conflated with the category of leprous diseases, and military men in particular were perceived of as being vulnerable to particular ailments and injuries such as scurvy and venereal diseases. Venereal disease was so closely linked with the soldiers of the Spanish empire as to require special instructions for the treatment of venereal disease among the troops. Other illnesses of interest to the surgeons responsible for the health of those stationed at the army garrisons and on Spanish ships specifically related to the treatment of wounds resulting from firearms, Hippocratic medical theory, and works dedicated to parturition problems, among many others.⁴⁵⁴

Scurvy, for example, continued to affect sailors of the Spanish military well into the nineteenth century, even aboard those coastal ships and small crafts that guarded the Gulf of Mexico. Although scurvy has typically been associated with long sea voyages, it was the poor diet of soldiers and sailors on coastal duties and, in some cases, of those who were billeted in isolated garrisons on shore that made scurvy a widespread problem. An effective cure for scurvy had been posited by a British surgeon in the sixteenth

⁴⁵³ AGN, Hospitales vol. 69, exp. 12, fol. 270r, 1816.

⁴⁵⁴ I discuss these works in more detail in chapter four.

century, but the cure was not well-received and was not widely adopted.⁴⁵⁵ The social construction of scurvy changed over the course of the eighteenth century from a disease that was associated with malingering sailors (probably due to the several weeks of lethargy that preceded scurvy's more obvious symptoms) to one that arose from the physical condition of being at sea or, as Kenneth Kiple points out, "during military operations" and in other circumstances in which access to a varied diet is severely limited. In other words, scurvy was constructed as a disease of sailors and military men, and particularly of those accustomed to long campaigns.

In the late eighteenth century, soldiers and sailors who had been diagnosed as suffering from scurvy were billeted together in the Castillo de San Miguel in Campeche. In the early nineteenth century, those in charge of the fortifications in Campeche and the navy and army personnel garrisoned in Veracruz focused on curing rather than preventing scurvy. Because of this, the many sufferers billeted in Fort San Miguel received large shipments of antiscorbutics, but only after they had been recused from duties because of advanced cases of scurvy. Specifically, the sick soldiers and sailors, lying crowded together in the (presumably empty) embrasures of the fort, were shipped large amounts of extra antiscorbutics from nearby fortifications along with saltpeter and sulfuric acid to fumigate the embrasures. These materials were often used to dispel strong odors in filthy, overcrowded hospital spaces crowded by diseased bodies.

⁴⁵⁵ Stephen R. Brown, *Scurvy: How a Surgeon, Mariner, and a Gentleman Solved the Greatest Medical Mystery of the Age of Sail* (New York: St. Martin's Press, 2003). The British were the first to adopt prophylaxis for scurvy, and it took them nearly a half century to do that. Other maritime nations would not follow their lead until the twentieth century. English marine surgeon James Lind published "a treatise on the scurvy" in 1753, and it was translated into French in 1771. I have not found a Spanish edition, although that does not mean one did not exist. No one followed its recommendations for citrus antiscorbutics anyway. For a [much] more scholarly discussion of the history of scurvy, see Roger French, "Scurvy," in *The Cambridge World History of Human Disease*, edited by Kenneth Kiple, chapter 8. 126, pp. 1000-1005.

It is unlikely that the antiscorbutics sent to treat the sick men in Campeche contained any citrus in 1808. Juan Antonio Fors y Cornet's *Prontuario Medico*, printed in Barcelona in 1834, included cures such as Agua del Carmen alongside citrus treatments.⁴⁵⁶ There were a variety of available treatments, and they thus depended on the physician, surgeon, curandero, or the textbook being consulted: the eighteenth-century textbook *Curso de enfermedades vénereas*, for example, prescribed acidulous waters as well as "some fruits or vegetables" as treatments.⁴⁵⁷ Scurvy was diagnosed by its end stages of symptoms, including bloody gums and loss of teeth and hair; because of this, mercury poisoning symptoms were also labeled as "scurvy."⁴⁵⁸

Scurvy was only one ailment that was believed to frequently afflict military personnel. The prevention and treatment of venereal disease, for example, was also of paramount concern to military surgeons. A popular text on the treatment of venereal diseases, *Curso de enfermedades venéreas*, included a special supplement on the treatment of venereal diseases that affected soldiers, indicating that such ailments were perceived to be common among the soldiers and sailors of the royal army and navy. This association is explained in the text: "it would be reprehensible not to give [medical]

⁴⁵⁶ Juan Antonio Fors y Cornet, *Prontuario Medico*, (Barcelona 1834), 47. This particular work shows the increase in the late eighteenth and early nineteenth century of works directed specifically to lay people; in this text, the work is directed towards military personnel who may not have access to a surgeon or doctor; "Agua del Carmen," also known as Agua de Melisa, was a sort of cure-all, a medicinal water that could cure any number of ailments ranging from apoplexy to colic. It was frequently mixed with other medicines. Joseph de Jáuregui published tracts on the healing properties of Agua del Carmen that originated [he said] from the Discalced Carmelite Convent in Marseille, arguing that it was superior to that obtained from any other source. Joseph de Jáuregui, *Virtudes del agua de Melisa compuesta: vulgarmente dicha agua del Carmen* (Mexico: Reimpresas en Mexico en la Imprenta de los herederos del Lic. D. Joseph de Jáuregui, 1787).

⁴⁵⁷ "algunos frutos o vegetales." *Curso de enfermedades venéreas / dictado en la Real Escuela de Cirugia de Barcelona por Uno de sus maestros; con un suplemento del tratamiento venéreo de la tropa, à fin de evitar ciertos abusos muy perjudiciales à estos individuos*. (Barcelona: en la Imprenta de Eulalia Piferrer, 1782), 169.

⁴⁵⁸ "escorbuto." *Curso de enfermedades venéreas*, 165.

students some precepts and advice with respect to the treatment to be given to soldiers attacked by venereal diseases, being today the most frequent [ailments] from which they suffer, and they [venereal diseases] cause great harm to the armies.”⁴⁵⁹

The social construction of venereal disease considered both status and sex as factors in the transmission of venereal disease. The soldiers were believed to be most affected by venereal diseases like gonorrhoea because they lived like “libertines” and were frequently exposed to a class of women who were believed to carry such diseases.⁴⁶⁰

Venereal ulcers, it was believed, were contracted by the tendency towards impure acts, while venereal warts were contracted by the worst sort of women, those who distracted and seduced soldiers when they should be on duty.⁴⁶¹

Soldiers and sailors were perceived by medical professionals as being prone to specific ailments related to their status and profession. Because of this, medical texts that addressed the needs of military men included advice for treating illnesses such as venereal disease and scurvy as well as the repair of wounds from blades and firearms. Although they used lay texts intended to bring medical knowledge to a wider audience, medical professionals did not value lay medical practice. The social legitimacy of knowledge varied between practitioners and texts. Medical textbooks used at the College of Surgery at Barcelona and later, at Cadiz (for example) continued to systematically

⁴⁵⁹ “sería en algún modo reprehensible sino diese á los alumnos algunos preceptos, y avisos respetivos al tratamiento que debe darse á los soldados atacados de algunas enfermedades venéreas, siendo en el día las más frecuentes que ellos padecen, y las que hacen grande desolación en los ejércitos.” *Curso de enfermedades venéreas / dictado en la Real Escuela de Cirugía de Barcelona por Uno de sus maestros; con un suplemento del tratamiento venéreo de la tropa, á fin de evitar ciertos abusos muy perjudiciales á estos individuos* (Barcelona: en la Imprenta de Eulalia Piferrer, 1782) 184.

⁴⁶⁰ *Curso de enfermedades venéreas*, 44.

⁴⁶¹ “llagas de que se trata son las que contraen los soldados inmediatamente de un acto impuro.” *Curso de enfermedades venéreas*, 187-195; “llagas” on 195.

deride lay medical knowledge and practice, despite the popularity of lay medical texts.⁴⁶² For example, from the 1782 medical textbook *Curso de enfermedades venereas* (owned by Castells, Appendix A): “It seems that charlatanism has exhausted all of its labors against these ailments [venereal diseases], every day contriving some new antidote or mercury preparation published as an effective secret due to the work of the author...with which they cheat the public...”⁴⁶³ The same work goes on to describe the ways that inadequate training could take an effective and legitimate cure (mercury, in this case) and corrupt it through lack of knowledge, making it a deadly poison. The popularization of medicine manifested in the widespread use of lay works like Buchan’s and in the increasing publication of vernacular texts.

Venereal disease was considered rampant among the troops, and in part the debilitating infections were attributed to the tendency of soldiers to ignore treatment or to seek the help of *curanderos* to help them cure their afflictions.⁴⁶⁴ Dire warnings about the tendency of soldiers to ignore disease like venereal warts because they did not find them to be particularly painful or debilitating abound in the medical texts, admonishing surgeons to demand frequent checkups, especially of those soldiers who were susceptible to being seduced and distracted by women.⁴⁶⁵ Furthermore, surgeons were warned of the tendency of soldiers to consult *curanderos*—or worse, their fellow soldiers—when they

⁴⁶² See chapter two for more on the self-identification of Spanish physicians.

⁴⁶³ “Parece que el Charlatanismo ha agotado toda su industria contra estos males [venéreos], discurriendo todos los días un nuevo antídoto y preparación mercurial, que publica como un eficaz secreto debido al trabajo de su autor, armándose de certificaciones que atestiguan curaciones prodigiosas, con que engañan al público...” *Curso de enfermedades venereas / dictado en la Real Escuela de Cirugia de Barcelona por Uno de sus maestros; con un suplemento del tratamiento venereo de la tropa, à fin de evitar ciertos abusos muy perjudiciales à estos individuos*. Barcelona: en la Imprenta de Eulalia Piferrer, 1782, 12. Accessed through HATHI trust. The use of mercury was contentious for eighteenth- and nineteenth-century Spanish-language medical authors, who believed it was an effective treatment—but only in the right hands.

⁴⁶⁴ “charlatanes ó empíricos.” *Curso de enfermedades venéreas*, 187.

⁴⁶⁵ *Ibid.*, 196.

showed symptoms of venereal disease, often resulting in medical horrors such as urinary blockage. Venereal disease is never limited to one population, and so it also appears in books of *Chilam Balam* as well as in phytopharmaceutical texts. Gonorrhea, for example, is described in the *Book of Chilam Balam of Kaua*.⁴⁶⁶ Venereal ulcers are referenced in *Libro de Medicinas Muy Seguro*, as well, with an entry titled “cure for secret ulcers: an unguent.”⁴⁶⁷

Women represented nearly half of the residents in and around the presidio del Carmen (Table 1-1, 1-3). Women’s health issues, while not the main subject of most of the texts owned by the head surgeon at the presidio, are well-represented in the records of his medical books. Women’s health was conceived of as separate from men’s health. For example, gonorrhea in women is written about in a separate section of *curso de enfermedades venereas*; causes and treatments are similar (although described for different anatomy) but are of course complicated by the “*vapores hystericos*” so common to eighteenth-century women.⁴⁶⁸ Mayan-language medical texts addressed women’s health issues as well, with cures for ailments such as amenorrhea, premature labor, and of course, the signs and symptoms of pregnancy.⁴⁶⁹

Although presidio surgeons owned and presumably consulted books on parturition, and many medical texts included sections on women’s health, it is unlikely that the presidio surgeons were entirely responsible for the health of the women at the

⁴⁶⁶ Bricker and Miram, *Encounter of Two Worlds*, 118, 416, 420-421. The word for gonorrhea (*kasay*) does not appear outside of a list of diseases in the text (118), but a few entries referring to genital sores are labeled as “gonorrhea” by Bricker and Miram.

⁴⁶⁷ “Para curar Llagas Secretas, unguento.” Gubler, *Fuentes Herbolarias*, 78.

⁴⁶⁸ *Curso de enfermedades venéreas*, 56-59.

⁴⁶⁹ “para curar la retención de regal o menstruó a las mujeres; para curar a la mujer que no puede parir al tiempo de su parto; para conocer en mujer la preñez: señales.” Gubler, *Fuentes Herbolarias*, 55-58.

presidio. Some of the women living at or near the presidio may have consulted with army surgeons, but it is likely that midwives or *comadres* with varying levels of knowledge and experience delivered many of the twenty children recorded at the Presidio del Carmen in the 1790 census (for example). Unfortunately, the nature of the extant documentation is such that any midwives or *curanderos* stationed at the presidio remain invisible in the garrison's records.

ii. Smallpox

Epidemic disease was also of significant concern to both professional medical practitioners and to colonial officials. Perhaps the best known physician-coordinated public health operation in the early modern Spanish Empire was the expedition to vaccinate colonists against smallpox that was carried out in the early nineteenth century.⁴⁷⁰ This expedition, on the recommendation of several prominent Spanish physicians, traveled from Spain to the American and Philippine colonies. Physicians planned and carried out the expedition. When they arrived in Yucatan, the expedition nearly ground to a halt, because the vials of serum carried from nearby Cuba had become dormant. The physicians were able to make use of the 'arm-to-arm' method described in their vaccination manuals, inoculating one individual and using the resulting lesion to inoculate many others. Smallpox was of paramount concern to the empire, and physicians

⁴⁷⁰ Few, *For all of Humanity*, 3-5.

were on the front lines of finding new ways to get the word out on vaccination protocols.⁴⁷¹

In the wake of the smallpox vaccination expedition discussed earlier, physicians looked into the needs of families in the communities that they treated and recommended stipends for the families of smallpox victims as well as recompense for those individuals who allowed their bodies to be used as a vehicle for the vaccine. This kind of attention to individual families in the community was part of protecting the public health; not just inoculating people against a terrible disease, but also recognizing the threat that poverty posed to the community.

Smallpox broke out in Veracruz in 1808.⁴⁷² Inoculation continued to be a useful tool in combating smallpox outbreaks, as was quarantine. When the outbreak began, steps were taken by the local authorities in Veracruz to isolate those who had already been infected. The town council wrote to Viceroy de Iturrigaray asking for aid: “[we ask] that you deign to give us permission to establish a house that may serve as a lazaretto to the wretched poor and to all persons affected by this ailment.”⁴⁷³ The language of public health appears in this document as it would appear in later sanitation campaigns, and it

⁴⁷¹ A great deal of scholarship has focused on the vaccination expedition and its results. See, for example, Michael M. Smith, “The “Real Expedición Marítima de la Vacuna” in New Spain and Guatemala,” *Transactions of the American Philosophical Society, New Series*, Vol. 64 no. 1, 1974, pp. 1-74 (esp. 17-25). Martha Few, “Circulating Smallpox knowledge: Guatemalan Doctors, Maya Indians, and designing Spain’s Smallpox Vaccination Expedition, 1780-1803” *The British Journal for the History of Science*, vol. 43, no. 4 (December 2010), 519-537. Martha Few, “Medical Humanitarianism and Smallpox Vaccination in Eighteenth-Century Guatemala,” *Historical Social Research / Historische Sozialforschung*, Vol. 37, No. 3 (141), *Controversies around the Digital Humanities* (2012), 303-317. *JCB Instrucción formada para administrar la vacuna* (México: en la oficina de D. Mariano Ontiveros, 1814).

⁴⁷² AGN, Epidemias vol. 10, exp. 8, fols. 369r-388r, 1804.

⁴⁷³ “A fin que se digne permitirle su permiso de establecer una casa que sirva de lazaretto a los pobres miserables y toda clase de personas a quienes [obscured] dicho mal.”AGN Colonial epidemias vol. 10 exp. 8, fol. 369r, 1804.

appears that quarantine was incredibly effective, particularly when combined with vaccination campaigns.

Local colonial authorities were the legitimated decision-makers in these situations, reaching out to regional authorities for aid rather than enlisting professional medical practitioners to their cause (although undoubtedly, they worked tirelessly behind the scenes). The outbreak lasted only a few weeks; the letter reporting the epidemic was sent on the 3rd of May, 1804, and a letter reporting that no new cases had appeared was sent on the 19th of May, 1804. In that letter, the local administrators wrote: “we have the satisfaction of reporting to your Excellency that it has been two days with no illness in the provisional lazaretto, and it is purified and cleaned in order to eradicate [the disease] and, on the last day of the month, if, as we expect, no other case of smallpox arises at this time, we flatter ourselves with the greatest satisfaction that the disease is eliminated for now.”⁴⁷⁴

Later, the town council was forced to amend its earlier contention that the disease had been eradicated. On the 23rd of May 1804, they wrote: “We are disappointed to tell your Excellency that on the night of the 19th it was necessary to transfer a sick *indio* to the provisional lazaretto from the Hospital de San Juan de Montes Claros because he was infected with smallpox. On the 21st a boy was transferred who the doctors also found to have this sickness, and we remain suspicious that it is not eradicated as we congratulated

⁴⁷⁴ “Tenemos la satisfacción de avisar a V.E. que hace dos días que no existe ya enfermo alguno en el lazareto provisional, que se está purificando y limpiando para desalojarlo el día ultimo de esta mes, si como esperamos no resulta en este tiempo ningún otro enfermo de viruelas naturales que nos lisonjemos con la mayor complacencia están extinguidas por ahora.” AGN, Epidemias vol. 10, exp. 8, fols.372r, 1804.

ourselves it was ... with the utmost vigilance we will avoid the extension [of the epidemic].”⁴⁷⁵

Vaccination and inoculation efforts intensified alongside outbreaks such as the one described above. While the sick were isolated in the lazaretto, local medical practitioners, undoubtedly working in cooperation with the colonial authorities, managed to vaccinate nine people within the first few days of the outbreak.⁴⁷⁶ The campaign to vaccinate as many people as possible continued through the following weeks. Local medical practitioners vaccinated twenty-one individuals by the 30th of May following the initial outbreak, and vaccinated six more in Tampico itself by the sixth of June. More than a hundred people in nearby Cordoba and Orizaba had also been vaccinated by that date.⁴⁷⁷ Because of the significant cooperation in this case between the authorities, the public, and local medical practitioners, the outbreak was able to be relatively quickly contained. The concerted efforts of the community meant, in the end, that the local authorities were able to shut down the temporary lazaretto entirely by the fifteenth of December, 1804.⁴⁷⁸

⁴⁷⁵ “Tenemos el disgusto de comunicar a V.E. que en la noche del 19 fue necesario conducir al lazareto provisional un indio enfermo del Hospital de San Juan de Montes Claros que resultó con viruelas naturales. El día 21 fue conducida otro muchacho de 6 años que también se encontró por uno de los facultivos con este contagio, y quedamos con tanto recelo de no estar extinguido como nos lisonjeábamos, como con la mayor vigilancia para evitar su extensión.” AGN, Epidemias vol 10, exp 8, fol 374r.

⁴⁷⁶ AGN, Epidemias vol. 10, exp. 8, fol. 372r-373v, 1804.

⁴⁷⁷ AGN, Epidemias vol. 10 exp. 8, fol. 376r-377v, 1804.

⁴⁷⁸ AGN, Epidemias vol. 10, exp. 8, fol. 381r, 1804.

iii. Sick leave and medical retirement

The health and wellness of soldiers and sailors was of paramount concern to military professional medical practitioners stationed in Yucatan and the Southern Gulf Coast. Medical professionals, as legally and socially legitimate medical authorities, were the gatekeepers of applications for sick leave, medical retirement, and changes of duty station for health reasons. Sick leave, especially for illnesses caused by the local environment or necessitating a change of environment for the cure, was frequently granted when accompanied by a letter from a physician or surgeon.⁴⁷⁹ In fact, the terms of sick leave, transfer, or early retirement generally allowed for not simply the relief of the illness, but for a return to general health and wellbeing. It appears that even the harsh world of the military-run presidios held a physiological ideal of health and wellness as more than the absence of pathology, even in the first half of the nineteenth century.⁴⁸⁰

Professional medical practitioners were applied to for sick leave and for medical discharges, but fears of malingering sometimes overshadowed the granting of recusal from duties in the military context. In 1815, Flores, one of the surgeons at the Presidio del Carmen, was accused by the presidio's administration of writing too many medical discharge vouchers, a total of thirty-one between 1805 and 1806.⁴⁸¹ Flores had been

⁴⁷⁹ Lindemann, *Medicine and Society in Early Modern Europe*, 18. The pathological environment was a widespread medical tenet in eighteenth-century European medical culture; Porter, *Blood and Guts: A Short History of Medicine* (New York: W.W. Norton & Company, 2002), 142-148. Hospital reform also echoed through the global medical community in the eighteenth century.

⁴⁸⁰ AGEY, Reales Cédulas vol. 4, exp. 32 (there are no folio numbers in this expediente, but it is only two folios, r-v).

⁴⁸¹ "Certificaciones de inutilidad." . AGN, Hospitales vol. 69, exp. 13, fol. 280, 1815. There were many, many medical reasons for such discharges, ranging from umbilical hernias to a surprising number of debilitating lizard bites.

relieving men from duty for a number of purportedly fictional illnesses and injuries, presumably for pay or favors.⁴⁸²

The tropical environment of Yucatan and the Southern Gulf Coast was sometimes implicit in applications for sick leave. In some cases, military personnel asked for leave to return to Spain due to illnesses acquired in the tropical environment of Yucatan and the southern Gulf. In one such case from 1818, long leave was granted to military attaché Josef Remigio Pacheco to return to Spain due to his failing health: “License has been granted for the term of two years in order to return to Spain and restore health to don Josef Remigio Pacheco, military attaché of the battalion of this capital, and his majesty has given to him his sovereign approval.”⁴⁸³

Pacheco’s return to Spain to recuperate his health was not unusual. Years earlier, in 1784, a pilot named Don Juan Valero, who guarded the gulf coast aboard the frigate *Heroe*, requested transfer back to Spain because of chronic health problems. Often, professional medical practitioners wrote on behalf of their patients to ensure that they received rest, treatment, or travel—whatever they needed to regain their health. In Valero’s case, the ship’s surgeon, Juan de Dios Ximinez, argued in a letter to the commander-general of the regiment in Veracruz on his behalf: “I certify, that having attended the first pilot of the ship Juan Valero for a nephritic problem on various occasions, [until now] some calculi were produced from his urinary tract and now he

⁴⁸² AGN, Hospitales vol. 69, exp. 13, 1815. See chapter two for more on Flores’ conflicts with colonial administrators. It is possible that Flores was innocent of the many crimes he was accused of committing, but he was eventually found guilty.

⁴⁸³ “Haber concedido licencia por el término de dos años para venir a España a restablecer su salud a don Josef Remigio Pacheco capitan de militar agregado de batallon de esa capital y s.m. ha tenido abien dar a ello su soberana aprobacion.” AGEY, Reales Cédulas vol. 4, exp. 32, fols. 813r-814v, 1784. I do not have the original application or the physician’s letter, only this approval.

suffers from this terrible illness so much...it is necessary to look for relief [for the patient] in the curative air and acidulous waters that are particular to Spain, especially Jaén.”⁴⁸⁴ Like Ximinez, Valero’s request was granted without much, if any, opposition: “Having suffered previously [from] some painful calculi the effect of which [was that] he produced at times some little calculi with some blood, for which reason they gave him his retirement from the navy.”⁴⁸⁵ Ximinez emphasized the need for Valero to seek the environment of Spain as soon as possible in order to relieve him of this “cruel sickness.”⁴⁸⁶ Valero’s immediate transfer was granted by the commander-general, which appears to have been a typical outcome for these sorts of petitions. Flores, too, recommended that one of his patients should leave military service and return to Spain because Flores was unable to “restore his health” through medical intervention.⁴⁸⁷ Typically, when illness arose from environmental causes, administrators were quick to follow the recommendations of physicians and surgeons for the emigration of the patient to more healthful locations.

iv. Environmental health

It was not only tropical Yucatan, however, that caused sickness. The environment of other parts of New Spain could also be blamed, in part, for diseases originating on the

⁴⁸⁴ “Certifico, haber asistido a el primer piloto de dicho buque don Juan Valero de un efecto nefrítico en varios ocasiones hasta arrojan por el canal de la uretra algunos cálculos y actualmente padece de esta terrible enfermedad por tanto... necesita buscar el alivio de los aires curativos y aguas acidulas que hay en España particularmente... de Jaén.” AGN, Marinas vol. 29, exp. 8 F. 69v, 1784.

⁴⁸⁵ “Haber padecido anteriormente unos dolores nefriticos de cuyo efecto arrojé varios veces algunos calculitos con alguna sangre por cuya causa le dieron su retiro en la marina.” AGN, Marinas vol. 29, exp. 8, fols. 70r-74v, 1784.

⁴⁸⁶ “cruel enfermedad.” AGN, Marinas vol. 29, exp.8, fols. 68r-74r, 1784.

⁴⁸⁷ “No he podido restablecer de mi salud.” AGN, Hospitales vol. 69, exp. 13, fol. 309, 1815.

Gulf Coast. In 1801, eleven militiamen stationed in Valladolid (Michoacán) appeared to become infected with the putrid fevers of several men who died serving in the port of Veracruz.⁴⁸⁸ The soldiers in Valladolid had apparently received the secondhand uniforms of the Veracruz fever victims, still heavily stained with their blood, and rapidly fell ill themselves.⁴⁸⁹ Two of the men died before even reaching the hospital, and a panel of physicians was quickly convened to address the causes of the outbreak and to determine the extent of the threat to the public health.⁴⁹⁰ After an examination of the evidence and of the sick soldiers, the experts assigned to the case came to the conclusion that the problem was only in part due to the infected uniforms from Veracruz. The contagious illness had been exacerbated by the proximity of the regiment to a putrid and atherogenic river, as well as by the soldiers' lack of access to properly prepared food and clean air.⁴⁹¹ They recognized that the uniforms could have made the men ill, but they followed the eighteenth and early nineteenth century new Hippocratic theory that the illness was exacerbated at least in part by the environment. The doctors recommended that the uniforms of the dead Veracruz soldiers be cleaned before further use and that the regiment be moved to a better water source. Essentially, disease from the gulf coast could be brought to central Mexico in the fabric of infected uniforms, but it required a pathogenic environment to actually induce an outbreak of the illness.

⁴⁸⁸ Sáenz writes that the men were stationed in Valladolid, Yucatan. The case is not clear, but the rapid assembly of a board of physicians to investigate does make Valladolid, Michoacán appear possible, as does the presence of a river as a water source. At the same time, Valladolid would have been a geographically logical destination for Veracruz's uniforms.

⁴⁸⁹ The physicians and surgeons assigned to this case cite Hermann Boerhaave in their recommendations. AGN, Hospitales vol. 54, exp. 14, fols.285r-354v, 1801. They cite Boerhaave on fol. 266r.

⁴⁹⁰ AGN, Hospitales vol. 54, exp. 14, fols. 285r-265v, 1801.

⁴⁹¹ AGN, Hospitales vol. 54, exp 14, fols. 285r-354v, 1801.

Concepts of environmental health in the eighteenth century in Yucatan often overlapped significantly with public policy. Unlike the social legitimization of lay medicine, however, colonial authorities, teamed with professional medical practitioners, sometimes clashed with the public over health policies. Attempts to move grave sites outside of villages and homes, for example, became a matter of concern to colonial administrators in the late eighteenth and early nineteenth centuries. Actually, the process may have been going on for some time, but in the late eighteenth century, the language of public health was employed by professional medical practitioners and by colonial administrators in the separation of the living from the dead. Spanish priests worked from the early contact period well into the seventeenth century at least to force burials out of the home and into the consecrated ground of the churchyard (or within the walls of the church itself).⁴⁹²

The same sort of reforms may be seen in hospitals: the 1791 plan for the Hospital de San Lázaro, for example, specifically moved the care of the dead to a walled area outside of the facility's chapel (labeled "C" in Figure 5-1 and "T" in Figure 5-2). Controlling the spread of disease by changing longstanding cultural burial practices, then, was part of public health policies in the region even before the expansion of the Mexican state and the consolidation of power over the periphery beginning in the mid-nineteenth century. Paul Ramirez notes that in Oaxaca, the colonial government's 1796-1797 attempts to have smallpox victims buried outside of town was met with significant

⁴⁹²John F. Chuchiak III, "Yaab Uih Yetel Maya Cimil: Colonial Plagues, Famines, Catastrophes and their impact on Changing Yucatec Maya Concepts of Death and Dying, 1570-1794," *Jaws of the Underworld: Life, Death, and Rebirth among the Ancient Maya*; 7th European Conference, (London: The British Museum, 2002), 7.

resistance and even outright defiance in which victims continued to be secretly or openly buried within churches and other intramuros structures.⁴⁹³ Burials within houses and other village structures were typical in the pre-Columbian context, a practice that was carried on in many parts of the peninsula until the mid-seventeenth century, at least.⁴⁹⁴

In many cases, local colonial authorities clashed with indigenous groups in compliance with regional authorities. McCrea notes that Mayas in the later nineteenth century believed that “burial places should be in close proximity to their homes,” a belief that continued to be held into independence.⁴⁹⁵ She further argues that these conflicts over burial caused trouble between the “Mayas, local politicians, and national leaders,” during the cholera epidemics of the 1850s. In many ways, this indicates that these conflicts had their roots in late colonial policies.⁴⁹⁶ In fact, it seems that the processes of burial negotiation lasted well into the national period; McCrea writes a great deal about burial practices of Mayas and of Catholic burial rituals, such as processions and services, being interrupted by public health efforts by Mexican officials in the mid-nineteenth century.⁴⁹⁷

In 1813, a letter was sent to the unnamed “captain general [and] political leader of Merida, Yucatan” demanding that burials within villages cease immediately.⁴⁹⁸ The order, sent to the “*jefes politicos*” in Yucatan stated that: “our law code prohibits burials

⁴⁹³ Paul Ramírez, “Like Herod’s Massacre: Quarantines, Bourbon Reform, and Popular Protest in Oaxaca’s Smallpox Epidemic, 1796-1797,” *The Americas* vol. 69 no.2 (October 2012), 215-216; As Ojeda noted in the case of Jaina’s nonexistent presidio, drawn and approved plans do not always correspond to physical structures. Ojeda, “Arquitectura Militar,” 253-271.

⁴⁹⁴ Chuchiak, “Yaab Uih Yetel Maya Cimil, 4-5, 17. Burials could also occur within caves, cenotes, temples, and other “sacred spaces.”

⁴⁹⁵ McCrea, *Diseased Relation*, 82.

⁴⁹⁶ *Ibid.*, 83.

⁴⁹⁷ *Ibid.*, 61, 76, 78-93.

⁴⁹⁸ “Capitan gral jefe politico de Merida de Yucatan” AGEY, Reales Cédulas vol. 3, exp. 49, 1813.

inside the village, without exception; I warn them [local leaders] that any authority, without class distinction, who will try to impede the execution of urgent and healthy disposal, will be held personally responsible”⁴⁹⁹ The initial law was put in place in 1804, with further legislation in 1811; this was a reminder and, as such, an indication that the law was not being followed. According to Chuchiak, earlier unlegislated attempts had been made to move victims of epidemic disease outside of villages for burials, but many individuals continued to defy these new guidelines and buried the dead within the church, as they had done since the early seventeenth century.⁵⁰⁰

In the event that no cemetery existed outside of a particular town (a problem that likely existed throughout the peninsula), temporary, well-ventilated cemeteries must be set up until permanent cemeteries could be constructed:⁵⁰¹ “And it will be your responsibility to conform with the constitution of November 16, 1811; the courts have indicated the term of exactly one month in which you can undertake the preparations necessary to prepare provisional cemeteries away from the town, and in ventilated settings, while permanent [cemeteries] are constructed that comply with the current law.”⁵⁰² Local colonial authorities, in this situation, were placed directly between those

⁴⁹⁹ “las leyes de nuestros códigos que prohíben los enterramientos dentro de poblado, bajo ningún pretexto; previniéndoles de que cualquier autoridad; sin distinción de clase, que intentará entorpecer la ejecución de esta tan urgente y saludable disposición, será personalmente responsable.” AGEY, Reales Cédulas vol. 3, exp. 49, fols. 1r-v (unnumbered), 1813.

⁵⁰⁰ Chuchiak, “Yaab Uih Yetel Maya Cimil, 11. Chuchiak notes that this practice was a colonial introduction as well, and one that was compatible with Maya burial practices.

⁵⁰¹ AGEY, Reales Cédulas vol. 3, exp. 49, (no folio numbers), 1813; Chuchiak, “Yaab Uih Yetel Maya Cimil, 11. Chuchiak cites 1804 as the first legislated date for the creation of cemeteries outside of village limits in Yucatan.

⁵⁰² “Y se hará efectiva su responsabilidad conforme a la constitución y a la ley de 16 de noviembre 1811; en el concepto de que las cortes han señalado el preciso termino de un mes para que puedan tomarse las disposiciones necesarias a preparar los cementerios provisionales fuera de poblado, y en parajes ventilados, mientras se construyen los permanentes con arreglo a las leyes recopiladas.” AGEY, Reales Cédulas vol. 3, exp. 49, fols. 1r-v (unnumbered folios), 1813.

colonial residents who wished to follow traditional methods of burial and the regional authorities, who mandated new techniques for the separation of the living from the dead. In this case, physicians were not expected to act as arms of the state in enacting public health measures; it fell to local leaders who, if the legal reminder found here is any indication, continued to make exceptions for intramuros burials at their discretion.

III: Bodies of Evidence: Crime and Medical Professionals⁵⁰³

The negotiation of legitimacy between professional medical practitioners and the colonial state rested, in part, on professionals acting as agents of the state in the investigation and prosecution of criminal injury cases. The authority of colonial administrators and judges was entwined with the work of legitimated physicians and surgeons as investigators of violent crimes. This was particularly true of cases involving military personnel, in which surgeons were required by law to testify as to the nature and morbidity of the injury, making the victim's body and the surgeon's opinion of its condition the center of the case. "One must follow the practice, before beginning a trial, of getting certification from surgeons of the opinions they have formed of the [inflicted] wounds so that the military leaders can determine whether there is reason to form a lawsuit; and in the second case [that there is cause for a suit] they must declare under oath before the judge what they know of the crime, the quality and essence of the wound, the instrument with which it

⁵⁰³ Andrew Keitt, "The Miraculous Body of Evidence: Visionary Experience, Medical Discourse, and the Inquisition in Seventeenth-Century Spain" *Sixteenth-Century Journal*, vol. 36 no 1 (2005), 77-96. The term "bodies of evidence" is widely used.

was inflicted, and if they [the wounds] are mortal or dangerous...” [1790].⁵⁰⁴ Their active involvement in these cases was part of their work as military surgeons and indicates that medicalized liability in criminal injury cases was of paramount importance to colonial administrators.

Professional medical practitioners saw caring for the sick, especially the sick poor, as a social and legal responsibility, part of the legitimate practice of their profession. This included providing emergency care for those who were wounded in late night quarrels, the victims of violent and casual crime. However, until the mid-eighteenth century, professionals would not typically provide emergency care for those suffering from violently inflicted wounds without first informing a judge of the crime and the nature of the wound he was treating.⁵⁰⁵ In 1777, under Viceroy Bucareli y Ursúa this statute was clarified and changed so as to provide some flexibility for the provision emergency care of violently inflicted wounds without fear of sanction by the colonial authorities. The preponderance of violent crimes in New Spain and their frequently grim outcomes were cited first. Bucareli y Ursúa wrote of such crimes: “arguments and disputes in numerous neighborhoods of the city that often result in many people wounded, and necessitating [that] this damage be remedied quickly by first intention such

⁵⁰⁴ “En este supuesto, debe seguirse la práctica de que antes de pasar á formar proceso den certificación los cirujanos del juicio que forman de las heridas á fin de que por medio de ella puedan los respetivos gefes militares discernir y resolver si dan o no motivo a la formación de la causa; y en el segundo caso, declaren baxo de juramento ante el juez que conociere del delito, la calidad y esencia de la herida o heridas, el instrumento con que fueron ejecutadas, y si son mortales o de peligro.” AGN, Bandos vol. 15, exp. 73, fol. 193r.

⁵⁰⁵ Typically the city doctor was in charge of the health care of prisoners, but it appears that in some cases other physicians and surgeons contracted or volunteered with the local authorities to provide treatment for prisoners. City doctors were paid, as were professionals and para-professionals working in the Inquisition’s prison, but I am still uncertain whether healers who contracted to care for prisoners on a more informal basis volunteered their services. It is unclear whether the treatment of these types of wounds resulted in payment for the surgeon or physician, whether from the colonial authorities or from the patient. The language seems to indicate that this kind of care is simply their responsibility.

as stopping the blood, not only is the result of delay the danger of [the wounds] becoming incurable, but it also often accelerates instances of death, that could have been avoided if it [treatment] happened in time.”⁵⁰⁶ Surgeons were reluctant to leave the safety of their homes at night to provide lifesaving treatment to victims of violent crime, some of whom presumably, were seen as criminals themselves. Surgeons fearing for their safety would often only venture out on the order of a judge. This custom was decried by Viceroy Bucareli y Ursúa, who declared that it was “the offense of vigilante justice, that occurs in such brawls in dark places and irregular hours, that they die wounded, and it is very difficult to find the criminal responsible; from which originates the custom observed by surgeons not to treat such patients without a prior order from the judge”⁵⁰⁷

The new decree was intended to provide specific instructions for professional medical practitioners called to the scenes of crimes while reminding them that the colonial state had authority over their actions. The law allowed surgeons to start treatment on people who had been victims of violent crime prior to obtaining permission from a judge, but it bound them to report their findings to the *justicia real* quickly: “I mandate, that all surgeons of this capital, and the rest of the cities, villages, places, and towns, of the kingdom attend quickly, and without needing first an order or mandate from a judge, to treat any violently inflicted wound, if they happen to be called, in any hour,

⁵⁰⁶ “Que siendo en el numeroso vecindario de ella [ciudad de México] frecuentes las contiendas y riñas de que suelen resultar muchas personas heridas, y necesitando este daño de remedio pronto de primera intención como lo es el detener la sangre, no solo se sigue con la demora el peligro de hacerse incurables, sino es que se acelera muchas ocasiones la muerte, que se evitaría si se ocurriese en tiempo.” AGN, Bandos vol. 10, exp. 16, fols. 39r-40v, 1777.

⁵⁰⁷ “grave perjuicio con ofensa de la vindicta publica, pues accediendo las tales pendencies en lugares ocultos ú horas irregulares, muere el herido, y se hace muy difícil el descubrimiento del reo; lo cual se origina de a costumbre que observan los cirujanos de no curar a los pacientes sin que preceda orden de la justicia.”AGN, Bandos vol. 10, exp. 16, fols. 39v, 1777.

and circumstance, and [after] completing the initial treatment, they will give notice to a royal judge who can hear the case immediately or within eight hours.”⁵⁰⁸ This sort of legislation worked to both legitimate the work of surgeons as implicitly supported by the colonial authorities while subjecting their work explicitly to the will of the colonial state. They could and indeed, must treat those violently wounded; but they must also report those wounds and their findings to the courts.

The late eighteenth century brought new legislation, independent of the Protomedicato, which brought professional medical practitioners under the shadow of the state. The new law was designed to force professional medical practitioners to report crimes and was accompanied by harsh penalties: “Under penalty of twenty-five pesos the first time they fail to provide treatment or to give notice [of that treatment] within the time forewarned; of fifty [pesos] the second time, and two years exile, twenty leagues from their place of residence; and one hundred [pesos] the third time, and four years in prison.”⁵⁰⁹ This law was undertaken, the author notes, for the “benefit of the public.”⁵¹⁰ Criminal punishment awaited those who failed to intervene in criminal assaults without informing the colonial authorities, forcing professional medical practitioners into service as agents of the state. The Protomedicato could not or did not intervene in this or any following similar legislation.

⁵⁰⁸ “Mando, que todos los cirujanos de esta capital, y demás de las ciudades, villas, lugares, y pueblos del Reino acudan prontamente, y sin que sea necesario que preceda orden ó mandato de Juez, á curar cualquiera herido de mano violenta, o por casualidad a que sean llamados, en cualesquiera hora, y circunstancias, y concluida esta primera curación, darán aviso a alguno de los jueces reales que pueda conocer de la causa, inmediatamente, ó dentro del preciso termino de ocho horas.” AGN, Bandos vol. 10, exp. 16, fols. 39v, 1777.

⁵⁰⁹ “Bajo la pena de veinte y cinco pesos por la primera vez de que faltaren a hacer la dicha curación ó a dar el aviso dentro del término prevenido; de cincuenta en la segunda, y dos años de destierro de veinte leguas del lugar de su residencia; y de ciento en la tercera, y cuatro años de presidio.” AGN Bandos vol. 10, exp. 16 fols. 39v, 1777.

⁵¹⁰ “El beneficio del publico.” AGN, Bandos vol. 10, exp. 16, fol. 39v, 1777.

Bucareli y Ursua's legislation about surgeons attending criminal injury cases in 1777 was only one in a series of decrees from the central colonial authorities regarding the role of medical professionals in criminal injury cases. Military law mirrored civil law in criminal injury cases, requiring both military and civilian medical practitioners to report immediately on violent crimes. Late eighteenth- and early nineteenth-century surgeons who worked with soldiers were also required by law to protect the health of the Spanish colonial army by investigating and reporting on criminal injury cases. Physicians and surgeons could act as agents of the Spanish colonial (or later, the Mexican state) in the investigation of criminal injury cases, bringing public health and military policy to the forefront as they attested evidence of the injured body as the site of crime.⁵¹¹

Crimes against individual bodies were of paramount concern to late eighteenth- and early nineteenth-century medical practitioners and colonial administrators. Bodies as the sites of crimes could be explicitly or implicitly understood as threatening to public health. Most commonly, bodies as sites of crimes appear as criminal cases in which an individual inflicted morbid or mortal injuries on the body of another. Physical evidence from expert medical witnesses were a vital part of these cases, and medical evidence was paramount in decisions about legal responsibility. The condition of the victim—dead or alive—was discussed at length in the courtroom and weighed heavily in the disposition of such cases. In this way, physicians and administrators protected the health of the community by prosecuting criminal injuries. This kind of testimony could arise in

⁵¹¹ McCrea, *Diseased Relations*, 1-7.

divorce cases and in other types of legal suits, although here, I concentrate on physical assault cases that occurred between male military personnel.⁵¹²

In these cases, bodies became sites of crime as well as evidence of criminal activity. Surgeons or physicians testifying in criminal injury cases needed to attest to the type and appearance of the wound, the weapon used to inflict it, and the danger of the wound to the victim.⁵¹³ When violent crimes were reported to military administrators, the morbidity or mortality of the wound was assessed immediately by a physician, who took on the role of criminal investigator in asking the victim and the perpetrator a series of specific questions. Much as physicians played a role in the investigation of holy bodies, so too did they have a role in investigating the body as a site of crime.⁵¹⁴

Physicians and surgeons had legal responsibilities when it came to physical assault cases. Military bodies sometimes became the center of cases over which the physician or surgeon's testimony determined the extent of the crime. The role of surgeons and physicians became increasingly important in the later eighteenth century. In 1790, army officials were reminded of existing statutes that required surgeons to examine criminally inflicted wounds immediately and to report their findings to the judge. Surgeons were required to report on the type of wound, the weapon that caused it, and

⁵¹² AGN, Judicial vol. 11, exp. 9, f.225r. In this particularly chilling example from central Mexico, a surgeon testified that severe physical assaults had caused a miscarriage. Despite the subject matter, the physician concentrated on the specific wounds that had led to the miscarriage, just as he would have done in any other violent injury case.

⁵¹³ AGN, Bandos vol. 15, exp. 73, fol.193r, 1790.

⁵¹⁴ See (for example) Katherine Park, "The Saintly and the Criminal Body: Autopsy and Dissection in Renaissance Italy" *Renaissance Quarterly* 47, no. 1 (Spring 1994): 1-33; Nicholas Terpstra, "Body Politics: The Criminal Body between Public and Private" *Journal of Medieval and Early Modern Studies* 45, no. 1 (2015): 7-52. Medical investigation of religious bodies and of the bodies of criminals has a broad historiographical tradition. Bodies as the *sites* of crimes in the early modern period have been less well studied, especially outside of Europe.

whether the wounds were determined to be mortal or dangerous.⁵¹⁵ Since 1777, surgeons throughout the Spanish Empire generally (as was already the case in Spain itself) had been required to report any wounds that had been inflicted by violence (civilian as well as military) to the *Juez Real*.⁵¹⁶

Cases in which the victim died required that the physician examine and sometimes perform a full autopsy on the body of the victim. In an 1824 example from Campeche, a man named Clemente Trujillo got into an altercation with a fellow soldier, Ventura Escobal.⁵¹⁷ Trujillo panicked after the fight took a deadly turn, and he left the body of Escobal lying in the San Roman barrio in the presence of several witnesses. The witnesses to his crime were not questioned immediately, despite the apparently clear-cut case. Trujillo's trial did not begin until the regiment's surgeon, José Maria Gallegos, had examined the body and had determined that the fight had been the cause of death. Gallegos' testimony, true to the legal requirements, noted the wounds that had been inflicted on the body of Escobal, identified the weapon used, and identified the mortal blow as having been delivered by Trujillo.⁵¹⁸

Sometimes the victim died during the period between the delivery of the blow and the arrival of the surgeon. Near Valladolid in 1820, sub-lieutenant don Francisco Xavier Gamboa of the tenth infantry regiment attacked and killed his superior officer, Lieutenant Don Rafael Silba.⁵¹⁹ Upon observing the condition of the victim, the first man on the

⁵¹⁵ The existing statutes are in the general ordinances of the army. Artículo 6, title 22, tratamiento 2 and article 14, title 5, tratamiento 8. The recopilación (that I'm working from here) may be found in AGN, Bandos vol. 15, exp. 73, fol. 193r.

⁵¹⁶ "herida de mano violenta." AGN, Criminal vol. 727, exp. 3, fols. 76r-103v.

⁵¹⁷ AGN, Criminal vol. 639, fol. 244r-286v.

⁵¹⁸ "esta harido, la mortal." AGN, Criminal vol. 639, fols. 254r-254v.

⁵¹⁹ AGN Colonial Criminal vol. 497 exp. 6 ff. 215-298, f. 215r.

scene, Colonel José de Castro, chose to call for a priest rather than a surgeon.⁵²⁰ The body was then brought to the Hospital San Juan de Dios and examined by a surgeon, Francisco Torres, who reported to the witnesses (don Jose de Castro, his notary, and several others) the time of death and its cause: stab wounds to the belly, and other incidental wounds to the face. The sub-lieutenant, Don Francisco Xavier Gamboa, was arrested for the death of Silba—but only after the testimony of Torres authorized his arrest. Protocol was still followed precisely as it had been laid out in the law of 1775; the physician determined that the man was dead, that the weapon used was Gamboa's, and that the wounds inflicted by Gamboa had caused the death of Silba.⁵²¹

In other cases, although the wounds were determined to have been criminally inflicted, the victims were still alive and able to testify. Sometimes, the course of events involved community members as well as soldiers. On the night of November 30th, 1819, Captain Buenaventura Guerra attacked retired captain Pedro Gutierrez with his broadsword, cutting the left side of his face open “from his eyebrow to his mouth.”⁵²² The men had fought over the affections of a local woman named Agustina Flores after an evening of drinking *aguardiente* together. The surgeon, Francisco Cordova, both examined the victim and took his verbal testimony. As previously noted, both criminal intent and the severity of the crime depended entirely on the severity of the wound, and the surgeon's testimony was required prior to the arrest of Guerra. Although Gutierrez was able to sit up in bed and denounce Guerra for the brutal attack, Cordova declared the

⁵²⁰ AGN Colonial Criminal vol. 497 exp. 6 ff.221r-221v.

⁵²¹ AGN Colonial Criminal vol. 497 exp. 6 ff. 22r-24v.

⁵²² “desde la ceja hasta la boca.”AGN Colonial Criminal vol. 497 exp. 5 f.144v (f. 141r-214r).

wound to be dangerous to his health, having cut through both the muscles and ligaments of the face.⁵²³ The suit against Guerra was opened immediately thereafter.⁵²⁴

Examination and dissection of bodies to assess criminal actions inflicted upon the body itself were part of the legal structures of late colonial and early national Yucatan, with physicians and surgeons acting as agents of the state. The criminality of physical violence and the medico-legal definitions thereof did not change significantly after independence; in fact, the cases of criminal violence investigated by surgeons maintained the same process and character into the 1830s, highlighting the continuity in law and medical culture through the end of the colonial period.

IV: Conclusion

At times, professional medical practitioners worked closely with colonial administrators to protect what they perceived as the “public health,” particularly during the late eighteenth and early nineteenth centuries. Typically, laws and proclamations that regulated the cooperation of physicians and surgeons with colonial authorities were beneficial to professionals, in that they legitimated the legally exclusive professional status of medical practitioners. However, this was not always the case, because professional medical practitioners and colonial administrators sometimes disagreed violently over the best ways to enact and police medical policies. Although professional medical practitioners played key roles in colonial projects concerning crime and public

⁵²³ AGN Colonial Criminal vol. 497 exp. 5 ff.150r-152v.

⁵²⁴ AGN Colonial Criminal vol. 639 ff.294r-336v. The same protocol and questions were used at least into the 1830s. The latest case in this sample is from 1831, and follows the same protocols as the others.

health, professional medical practitioners and administrators did not always share ideas about what, precisely, protected the health of the community.

Medical crimes committed within the hospital and the surrounding communities were framed as threats to the public health by both hospital administrators and surgeons. Accusations of failing to protect the health of the public appear repeatedly in legal cases in the late colonial Presidio, in which surgeons and administrators took opposing sides on issues of practice and of legal qualifications to practice. Surgeons assigned to the Presidio in the late eighteenth and early nineteenth centuries continued to place much more value on protecting the public health through the proper qualification of professionals and para-professionals, while colonial administrators reacted by accusing surgeons of socially illegitimate medical practices that also, they said, threatened the health of the community.

I argue that physicians and surgeons were legitimated by the colonial authorities through their participation in criminal injury cases as well as their actions in more traditional public health concerns, such as the construction of hospitals and the medical care of soldiers and sailors. Physicians and surgeons as well as civil government officials also understood public health to be in their area of responsibility, although the late-colonial public health efforts discussed here were perhaps underdeveloped in comparison with the state-sponsored and bureaucratically coordinated public health campaigns of the later nineteenth century.⁵²⁵ Public health concerns characterized the medical community of Yucatan's hospitals and military garrisons. Positivist reforms based on specific

⁵²⁵ For post-independence state-sponsored public health reforms in Yucatan, see McCrea, *Diseased Relations*; Paul Ramírez, "Like Herod's Massacre: Quarantines, Bourbon Reform, and Popular Protest in Oaxaca's Smallpox Epidemic, 1796-1797" *The Americas* vol. 69 no. 2 (October 2012), 203-235. Paul Ramírez has noted that "epidemic management" at the governmental level was a late Bourbon reform.

medical and legal guidelines appeared in hospital administration as well as in court procedures, all designed to protect the health of the community. Military administrators and surgeons sometimes clashed over legal guidelines as to medical qualifications and practice, causing surgeons working in the late eighteenth and early nineteenth century presidios to argue that unqualified personnel constituted a threat to the health of the community. As the later nineteenth and twentieth centuries ushered in new medical praxes in Latin America, it is important to note that state-sponsored and supported public health concerns and reforms were already part of the medical landscape, even on the periphery of New Spain. Many of the late colonial structures, particularly medical and legal praxes concerning medical criminality and public welfare, did not change significantly until much later in the national period.

Chapter 6 Conclusion

Jurisdictional conflicts over the legitimate practice of medicine were present from the beginning of the colony through the end of the Protomedicato in 1830. The ways that these problems unfolded in the region were based on a number of factors, including the unique demography of the area, its links to other parts of the Spanish colonial empire, its position on the periphery, and the medical culture that flourished in text and in practice in the region.

In Spain, as Michael Clouse argues, medical legitimacy was negotiated between local, royal, and regional administrators, the Protomedicato, and professional medical practitioners. In central Mexico, as Lanning demonstrated, negotiated legitimacy was largely determined by a series of conflicts and alliances between local administrators and the Protomedicato. Here, I have argued that in Yucatan and the southern Gulf Coast, the negotiation of socially and legally legitimate medical culture in this diverse region was largely accomplished between local colonial authorities, professional medical practitioners, and colonial residents. Negotiated medical legitimacy, as experienced in this place and time, was due to the local autonomy of civil, ecclesiastical, and military administrators tasked with maintaining order on the periphery of the Spanish colonial empire.

The legality of medical practice mattered under particular circumstances, but even legal legitimacy could not protect professional medical practitioners from the repercussions of socially illegitimate behaviors. Social legitimacy was created by effective treatments for the sick poor, cooperation with local and regional authorities, and

the approval of one's community. Social legitimacy could and did supersede legal legitimacy, despite the efforts of professional medical practitioners to make their occupation exclusive.

Hybridity characterized the practice of medicine on the periphery. The towns and presidios of Yucatan and the southern Gulf Coast were connected to the medical culture of the Spanish Atlantic world through local and regional interactions between texts, medical practitioners, patients, and colonial authorities. The actual work of caring for the sick did not always differ significantly between lay, para-professional, and professional medical practitioners. Medical practices from all over Europe, as well as medical ideas acquired and adapted from indigenous peoples in the Americas over two centuries of colonialism, comprised a mutually intelligible medical culture of hybrid medical knowledge. Indigenous cures were continually absorbed into Spanish medical print and practice, while indigenous medical texts adopted Spanish knowledge for Mayan-language medical works, rituals, and other practices. The absence of printing in the region did not, in practice, isolate the medical culture of the region from broader Atlantic understandings of medical theories and practices. The multiplicity of medical knowledge that flourished in early modern Europe, described by Porter as the popularization of medicine, thus found its way to the towns and garrisons on the Gulf Coast periphery.

Legitimate medical practice in Yucatan and the southern Gulf Coast was inarguably complex. Professional physicians and surgeons, lay medical practitioners, and para-professionals of every description practiced medicine in the Bay of Campeche and points inland. What is perhaps unexpected in this history are the alliances and antagonisms that arose between colonial administrators, patients, and practitioners of

every description and the ways in which social ties and actions constructed legitimacy outside of legal boundaries. Legal legitimacy, provided by the *limpieza de sangre*, education, and licensing by agents of the crown, did not always guarantee a successful medical career in the Spanish colonies. At the same time, *medicos falsos*, foreign European physicians, para-professionals exceeding the bounds of their licensures, and even *curanderos* could receive the approbation of the colonial authorities and achieve great success as medical practitioners in the region. Such socially legitimated practices allowed for flexible interpretations of or even disregard for Spanish law, custom, and qualifications for medical practice. Curanderos operating in the region, though always lacking in legal legitimacy, could provide services without intervention, so long as they maintained good relationships with friends, neighbors, and local authorities. Accusations of maleficence and of incompetence, both methods of intervening in or limiting lay practice, were rooted in social illegitimacy.

The position of the colonial authorities in the region—civil, military, and ecclesiastical—as colonial agents of the crown in Spain and, indeed, as agents of the Viceroy in Mexico—was one of autonomy. As Bushnell argues, the Spanish empire displayed “what to our modern sensibilities appear to be unseemly levels of bureaucratic flexibility, unlikely pockets of moral tolerance, and untenable disparities between law and practice.”⁵²⁶ Local and regional authorities often acted outside of the law or outside of socio-cultural custom in their negotiated interactions with lay and professional practitioners, particularly when it suited their own ends. Separation from centers of colonial power allowed for the negotiation of social and legal legitimacy.

⁵²⁶ Bushnell, “Gates, Patterns, and Peripheries,” 17.

Finally, the end of this project lies at the beginning of the historiography of positivist, state-sponsored public health interventions in the daily lives of people in the region.⁵²⁷ The multiple perspectives that I elucidate provide a background for the ways in which the blurring of legitimate and illegitimate medical categories came into focus in the later nineteenth and early twentieth centuries. Medical roles and identities for all practitioners shifted in this later period, as professional and public health reforms began to reshape the medical landscape of the new nation of Mexico. In this way, I demonstrate that eighteenth-century public health policy reforms presaged the positivist public health reforms of nineteenth-century Mexico.⁵²⁸

The interactions between professional medical practitioners and colonial authorities highlight the ways in which professionals acted as agents of the state during the colonial period and into the nineteenth century. As I have demonstrated in this work, by the beginning of the nineteenth century, colonial physicians and administrators in the region were often united in their interest in public health projects that included succor for the sick poor, the construction of hospitals, vaccination protocols, and the physical separation of the living from the dead. Physicians and surgeons were also relied upon to provide medical care to criminals, prisoners, and the victims of violent crime, sometimes

⁵²⁷ Sáenz, *Learning to Heal*, 1-9. Hernández Sáenz argues that European medical knowledge and its implementation in central Mexico was the beginning of modern medicine in the region. She also argues for increasingly professional categories of medicine during the late colonial period, a process that had a very different trajectory in Yucatan. The development of national public health programs in Yucatan is explored thoroughly in McCrea's *Diseased Relations*.

⁵²⁸ Sáenz, *Learning to Heal*, 1-9. Sáenz makes a similar argument for central Mexico; see also McCrea, *Diseased Relations*; and Lanning, *The Royal Protomedicato*, 351-386. Lanning, much as Carlo Cipolla for Italy, attributes public health ideals and operations to the administrative body of the Protomedico (Cipolla, to the health board in Italy). He does note that some aspects, such as sanitation, was better accomplished by colonial authorities and that these measures could not be enacted by Protomedicato officials. Early public health policies and actions occurred in Yucatan and the southern Gulf Coast without the presence or support of the *Protomedicato*, indicating a broader change in policy and medical culture.

acting as investigators in criminal cases and reporting to the colonial or military authorities. Many of the laws and regulations that were negotiated between colonial authorities and professional medical practitioners in the late eighteenth century remained in place into the early national period.

The social history of medicine under discussion has provided some insight into the ways that Spanish colonialism and medicine worked in this small region, but further work is necessary to understand the ways that the negotiation of legitimate medical practice in this peripheral region of the Spanish colonies fit into the larger medical cultures of the circum-Caribbean basin and ultimately, that of the early modern world. A few possibilities for further research have already been revealed: many of the lay actors discussed above enter from or exit to other Spanish colonies in the circum-Caribbean basin, and the stories of the several foreign nationals serving the Spanish crown—just in this small region—invite investigation. Similarly, the role of the colonial state in defining and eliding boundaries in the medical profession, too, deserves further study. This project, then, constitutes a first step in a broader planned study of the history of medicine throughout the early modern circum-Caribbean region.

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Appendix: Medical Texts from the Southern Gulf Coast

I have transcribed the descriptions used in the *intestado* files on the left, with the full citation information of the probable work it represents on the right, along with the language of the text (known or presumed) and additional commentary, when relevant. In some cases, the title or author listed provides enough information to firmly identify the medical work to which the evaluators are referring; in other cases, the listing used is so vague (e.g. “*varios tratados de cirujia*”) as to make identification impossible.

| Inventory Listing | Referenced Text | Language | Comment |
|------------------------------|--|----------|--|
| Pharmacopia de Palacios | Palacios, Félix Palestra <i>pharmaceutica, chymico-galenica: en la cual se trata de la elección de los simples, sus preparaciones chymicas, y galénicas, y de las más selectas composiciones antiguas, y modernas.</i> Madrid: por Joachin Ibarra, 1763. | Spanish | |
| Gaspar Bravo de resoluciones | Bravo de Sobramonte y Ramírez, Gáspar. <i>Resoluciones ac Consultationes Medicae: sumptibus Philippi Borde et Laurentii Arnaud, 1662.</i> | Latin | Citation information is from the third edition. The first book of Bravo’s <i>Resoluciones</i> was published in 1649. |
| Curso de zirujia | Unknown. | Spanish | Insufficient information to identify. |
| Varios tratados de zirujia | Unknown | Unknown | Unclear if this is the title or a descriptor for loose pages or sections. |

| | | | |
|-----------------------------|--|---------|---|
| Materia medico cirurgico | Unknown | Unknown | Insufficient information to identify. |
| Elementos de zirujia | Unknown | Spanish | Insufficient information to identify. |
| Arte de recetar | Unknown | Spanish | Insufficient information to identify |
| Caroli Musitani | Caroli Musitani. <i>Chirurgia theoretico- practica, seu, Trutina chirurgico-physica in IV. tomos divisa : in quibus omnium morborum ad chirurgiam spectantium causae, signa, prognoses, & sanationes nuperis experimentis, novisque observationibus, & medicamentis longo usu & sedulitate probatis proferuntur.</i> Coloniae Allobrogum, Geneva: Sumptibus Cramer & Perachon, 1698. | Latin | |
| Formularium Medico | Unknown | Latin | Insufficient information to identify. |
| Aforismorum | <i>Aforismorum.</i> Leyden, 1715. | Latin. | This is probably Hermann Boerhaave's <i>Aphorisms</i> , Published in Latin in 1715. |
| Aller medicinis | Unknown | Unknown | Insufficient information to identify. |
| Compendio anotomico | Lorenz Heister. <i>Compendio anatómico di Lorenzo Heistero pub. prof d'Helmstat ... nel</i> | Italian | Original (English) edition, 1721. |

| | | | |
|--|--|---------|---|
| | <p><i>quale si contiene tutta la dottrina anatomica. Tradotto in italiano dalla quarta edizione latina d'Altorf, molto più corretta ed accresciuta delle precedenti. Vi si aggiunge 1. Il compendio dell'istituzioni di medicina. 2. La dissertazione intorno alla membrana corioidea dell'occhio dello stesso autore. 1773.</i></p> | | |
| Juan de Dios anatomica | <p>López, Juan de Dios. <i>Compendio anatómica: dividido en cuatro partes: primera, De la naturaleza y circunstancias de los huesos, llamada comúnmente la osteología.</i> Madrid: en la Imprenta del Consejo de Indias, 1785.</p> | Spanish | |
| Palestra farmaceutica quimica galenica | <p>Palastros, Félix. <i>Palestra farmacéutica, químico-galénica</i>, 1706.</p> | Spanish | Multiple editions were printed between 1706 and 1792; here, I list the first edition. |
| En parte: resoluciones ad correlaciones medicine | Unknown | Latin | Insufficient information to identify. This text was not listed in the inventory of medical and surgical works; it was listed with clothes and other |

| | | | |
|--------------------|---------|---------|---|
| | | | belongings. |
| Molina Sumulas | Unknown | Unknown | Probably refers to Juan Jimenez de Molina, but the text is unknown. |
| Tratado theologico | Unknown | Unknown | Insufficient information to identify |
| Molina metafísica | Unknown | Unknown | Insufficient information to identify. |

Texts from the intestate inventory of Laureano Leal, Veracruz, 1778. *Source: AGN, Intestados vol. 260 exp. 29 fols. 271r-305v, 1778.*

| Inventory Listing | Citation | Language | Comment |
|------------------------------------|--|----------|--|
| enfermedades venerias | <i>Curso de enfermedades venéreas / dictado en la Real Escuela de Cirugía de Barcelona por Uno de sus maestros; con un suplemento del tratamiento venéreo de la tropa, à fin de evitar ciertos abusos muy perjudiciales à estos individuos.</i> Barcelona: en la Imprenta de Eulalia Piferrer, 1782. | Spanish | Later editions (after the turn of the 19th century) list an author. A textbook of the College of Surgery at Barcelona. |
| Tratado de las enfermedades de los | Petit, Jean-Louis. Galisteo y Xiorro, Felix, | Spanish | Translated from English by way |

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| huesos | translator. <i>Tratado de las enfermedades de los huesos: en el que se trata de los aparatos y máquinas más útiles para curarlas.</i> En Madrid: en la oficina de Benito Cano, 1789. | | of French; originally published in English in 1726 and in French in 1783. Felix Galisteo y Xiorro translated several medical texts during this period. |
| Dos tomos en parte Operaciones de cirugía | Villaverde, Francisco. <i>Tratado de las operaciones de cirugía: dispuesto para el uso de los Reales Colegios.</i> Cádiz: Imprenta de la Casa de Misericordia, 1700. | Spanish | It is unclear whether this constituted a few pages or substantial sections of text. |
| Tratado de operaciones de cirugía y celebres descubrimientos | Diego Velasco, <i>Curso teórico-práctico de operaciones de cirugía: en que se contienen los más célebres descubrimientos modernos.</i> Por Joachin Ibarra, 1763. | Spanish. | The 1780 edition was published in Barcelona. |
| Medicina domestica | Buchan, William. Translated by Pedro Sinnot. <i>Medicina Domestica.</i> Madrid: en la imprenta real, 1785. | Spanish | Published in English in 1769. Several editions followed. The 1785 Spanish edition is considerably shorter (by nearly 200 pages) than the 1769 English edition. |
| Instrucciones cirujicas | Blas Beaumont, <i>Instrucciones quirúrgicas.</i> Madrid, 1753. | Spanish | Beaumont was a famous and influential instructor of |

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| | | | surgery and phlebotomy. |
| Observaciones sobre el pulso de luque | Francisco Solano de Luque, <i>Observaciones sobre el pulso</i> . Madrid: en la imprenta real, 1787. | Spanish | |
| Observaciones acerca de las enfermedades del ejercito en guarniciones | Pringle, Sir John. Juan Galisteo, translator. <i>Observaciones acerca de las enfermedades del ejército en los campos y las guarniciones: con las memorias sobre las sustancias sépticas y anti-sépticas leídas á la Sociedad Real</i> . Madrid: en la imprenta de Pedro Marin, 1775. | | Translated from English. English Edition, 1765 |
| Tratado de remedian el abuso en las amputaciones | Unknown | Spanish | Possibly a section or part of a larger work. |
| El método de recetar | <i>Avisos sobre el método de recetar en que se contienen las reglas más seguras para que los jóvenes facultativos sepan disponer con acierto las recetas, exponiéndose muchas de ellas, á fin que les sirvan de ejemplo</i> . Tomas Piferrer, 1769. | Spanish | Textbook used in the surgical colleges |
| disertación histórica sobre la inflamación | Bell, Benjamin. Piñera y Siles, Bartolome, translator. <i>Tratado teórico y práctico de las úlceras ó llagas:</i> | Spanish | Translated from the English (1784) by way of the French (unknown edition) |

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| | <i>precedido de un ensayo sobre la dirección y curación chîrúrgica de la inflamación, supuración y gangrena; y terminado con una disertación acerca de los tumores blancos de las articulaciones.</i> Madrid: por la imprenta de Benito Caño, 1790. | | date, but between 1784 and 1790) |
| Compendio anatomico | López, Juan de Dios. <i>Compendio anatómico: segunda parte: myotomologia, o discurso teórico-práctico de la naturaleza, i circunstancias de los músculos, llamado por otro nombre la miología.</i> Madrid, 1750 | Spanish | |
| Principios de cirujia | Unknown | Unknown | Insufficient information to identify |
| Tratado patológico | Vidal, Domingo. <i>Tratado patológico teórico-práctico de las heridas.</i> Barcelona: por Carlos Gibert y Tutó, 1783. Or Vidal, Domingo. <i>Tratado patológico teórico-práctico de los tumores.</i> Barcelona: Carlos Gibert y Tutó, 1783. | Spanish | Vidal's texts were used in the college of surgery and his work is well-represented in Castells' library. It is possible that a combined edition of the two works mentioned existed in a special edition. |
| Tratado de los enfermedades de los ojos | Vidal, Domingo. <i>Tratado de las enfermedades de ojos</i> | Spanish | |

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| | <i>para instrucción de los alumnos del Real Colegio de Cirugía de Barcelona.</i> Barcelona: Carlos Gibert y Tutó, 1783. | | |
| Tratado de flatos | Unknown | Unknown | Insufficient information to identify. Could be a section of a larger work. |
| [Química elementa?] | Unknown | Unknown | Insufficient information to identify. |
| [Uno uzado en latin] synopsis formularium medicarum | Unknown | Latin | Insufficient information to identify. |
| Tratado de vendages | Canivell, Francisco. <i>Tratado de vendajes y apósitos para el uso de los reales colegios de cirugía.</i> Barcelona, En la imprenta de Teresa Piferrer, 1763. | Spanish | |
| Cartilla de cirujano | Ferrer Gorraiz Beumont y Montesa, Vicente. <i>Cartilla de cirujanos, y manual para todos. Deducida de las observaciones de Mr. Goulard, cirujano de la academia de Montpellier.</i> Barcelona: en la imprenta de los | Spanish | |

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| | herederos de María Ángela, 1780. | | |
| Tratado de las heridas con armas de fuego | Ledran, Henri-François. Felix Galisteo y Xiorro, translator. <i>Tratado de las heridas con armas de fuego</i> . Madrid: en la imprenta de Benito Caño, 1789. | Spanish | Translated from the French (1759). |
| Cirujia forense | Vidal, Domingo. <i>Cirugía forense ó Arte de hacer las relaciones Chirurgico-Legales</i> . Barcelona: Carlos Gibert y Tutó, 1783. | Spanish | Other works with the same title existed, but it is reasonable to assume that Castells owned Vidal's recent edition. |
| Tratado teórico práctico de la heridas de fuego | Puig, Francisco. <i>Tratado teórico-práctico de las heridas de armas de fuego</i> . Barcelona, Carlos Gibert y Tutó, 1782. | Spanish | |
| Estatutos de ordenanzas de los colegios de Barcelona y Cádiz | N/A | Spanish | An interesting possession, and one that indicates how deeply entrenched Castells was in the academic affiliation of his education and profession. |
| reglas de buena crianza | <i>Reglas de la buena crianza civil y cristiana: Utilísimas para todos y singularmente para los que cuidan de la educación de los niños, á quienes las deberán</i> | Spanish | Author, publisher, and place of publication unknown. There may have been earlier editions; |

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| | <i>explicar, inspirándoles insensiblemente su práctica en todas ocurrencias. 1772</i> | | 1772 is the earliest Spanish edition I was able to find. |
| Vida de san José | Unknown | Spanish | Insufficient information to identify |
| Costumbres de los cristianos | Unknown | Spanish | Insufficient information to identify |
| [illegible] en castellano | Unknown | Spanish | Insufficient information to identify |
| Estilo de cantos | Unknown | Spanish | Insufficient information to identify |
| Gramática de la lengua francesa | Unknown | Spanish / French | Insufficient information to identify |
| Pensamiento cristiano | Unknown | Spanish | Insufficient information to identify |
| En catalán[:]fomento de la piedad devoción cristiana con la oración [illegible] | Unknown | Catalan | Insufficient information to identify |
| Soliloquios del alma con dios | Unknown | Spanish | Insufficient information to identify |

Texts from the intestate inventory of José Castells, Presidio del Carmen, 1795. Source: AGN, Intestados vol. 170, exp. 3, fols. 238r-319v, 1795.

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University Park, PA 16802

EDUCATION

| | | |
|------|---|-----------------------------------|
| 2016 | PhD., History | The Pennsylvania State University |
| 2012 | MA, History (with honors) | The Pennsylvania State University |
| 2010 | BA, History and Anthropology (minor) <i>summa cum laude</i> | Augusta State University |

PUBLICATIONS

2013 “The New Conquest History and the New Philology in Colonial Mesoamerica.” Coauthored with Matthew Restall. In *Oxford Bibliographies Online: Latin American Studies*, <http://oxfordbibliographies.com>.

SELECT EXTERNAL FELLOWSHIPS AND AWARDS

| | |
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| 2014 | Molina Fellowship in the History of Medicine and Allied Sciences, The Huntington Library |
| 2013 | James R. Scobie Award, The Conference on Latin American History |

SELECT CONFERENCE PRESENTATIONS

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| 2016 | “Colonial Physicians and the Insalubrious Environment of Yucatán.” American Society for Environmental History Annual Meeting, Seattle, WA. |
| 2013 | “Tropical Diseases and Enslaved Bodies: Medical Perceptions of Slavery in the circum-Caribbean, 1700-1811.” Rocky Mountain Council for Latin American Studies Annual Meeting, Santa Fe, NM. |
| 2012 | “From a <i>xooc</i> ’s Tooth to the <i>chooch</i> Tree: The Material Culture of Medicine in Seventeenth and Eighteenth Century Yucatán.” American Society for Ethnohistory Annual Meeting, Springfield, MO. |