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MARK ALLAN GOLDBERG

Conquering Sickness

Race, Health, and Colonization in the Texas Borderlands



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Conquering Sickness

Race, Health, and Colonization in the Texas Borderlands

MARK ALLAN GOLDBERG

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A Note on Racial and Ethnic Terminology

Because Texas was a meeting place for diverse peoples in the eighteenth and nineteenth centuries, I employ a range of racial and ethnic terminology in this study. When possible, I use the terms that subjects of this study used to describe themselves. However, the primary sources on which I rely do not always allow me to do so. This study assumes that race is a historical and social creation in which individuals are positioned and position themselves as belonging to particular groups. This process of racialization is ideologically driven, such that some social categories (white, Spanish) historically have been seen as normative while other categories (black, Indian) have been marked as exceptional and inferior. As a result, racial and ethnic labels are rarely adequate in fully explaining how people experienced the past and conceived of themselves.

For the Spanish era, I use the terms "Spanish" and "Spaniard" to describe subjects of the crown who claimed Spanish descent. Because these labels derive from the ways that individuals related to their contemporaries, "Spanish" also refers to colonial subjects who differentiated themselves from Native peoples. According to colonial officials, missionaries, and ordinary Spanish colonists, Indians who did not practice Catholicism and did not adopt Spanish customs were not Spanish. In New Spain, Spanish men greatly outnumbered Spanish women. These men often had sex with indigenous women, doing so along a continuum that ranged from rape to lasting intimate relationships, including marriage. By the mid-seventeenth century, mestizos, or people of mixed

Spanish Indian parentage, outnumbered Spaniards in New Spain.¹ In addition, slave traders brought some 200,000 Africans into New Spain during the colonial era.² Concerned with race and status, the Spanish developed a *casta* system that delineated racial categories, including the mixed progeny of *españoles* (Spaniards), *indios* (Indians), and *negros* (blacks). In northern New Spain, the most popular label for people of Spanish descent was "Spaniard," even though most people who claimed this term for themselves were probably mixed race. This reflected the demography of the frontier, where the Spanish population was small, where both intercultural relationships and sexual violence were frequent, and, as a result, where racial identities were more fluid.

Following Mexican independence in 1821, the use of the label "Spaniard" declined. In Mexican Texas, individuals sometimes claimed more than one racial-ethnic identifier, such as Mexican, mestizo, Spanish, and Tejano (Mexican Texan), depending on the context.3 I use the term "Spanish Mexican" to describe people in the immediate post-independence period in Mexico, since national identities changed gradually during the transition from Spanish colony to Mexican nationstate. In 1820s Texas, Spanish Mexicans began to assert their ethnicity in relation to the growing English-speaking, U.S.-born population. According to Mexico's colonization law, these newcomers had to become naturalized citizens, so both they and their Spanish Mexican neighbors technically were Mexican nationals. Spanish Mexicans, therefore, began to differentiate themselves ethnically from U.S. immigrants, embracing a Tejana/o identity.4 The words "Tejana" and "Tejano," moreover, denote the local character of Mexican national and ethnic identity; my use of the terms reflects this historical reality. Finally, I use the term "Mexican American" to refer to U.S. legal citizens of Mexican descent and "ethnic Mexican" to refer to all Mexicans regardless of their legal citizenship status. 5 The U.S.-Mexico border was ambiguous and in flux during much of the period under study, and borderland cultures were hybrids that incorporated values and practices from the diverse residents of both the United States and Mexico. Even when the two nations defined a boundary in the mid-nineteenth century, peoples and ideas continued to cross that border. Thus I employ the term "ethnic Mexican" particularly when examining cross-cultural exchanges that transcended national borders.

I also employ a variety of terms to refer to the indigenous peoples of Texas. My use of ethnohistorical methods to recover Native history from European and European American sources shapes the racial and ethnic terminology for this study. With an eye to the limitations of this

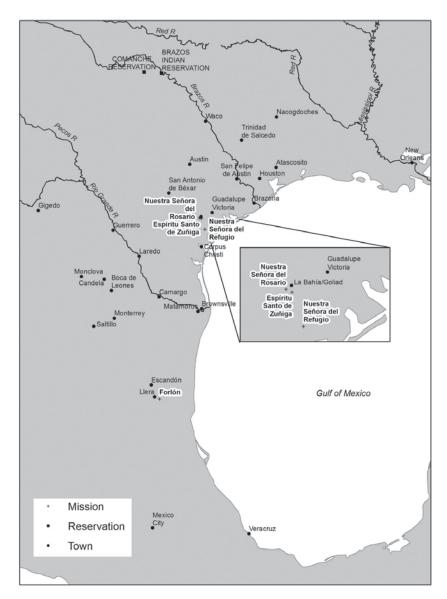
methodology, I refer to Native peoples in the ways that the sources suggest they referred to themselves—for example, as Comanches, Karankawas, Apaches, Caddos, and Xaranames. Such labels are also ethnic constructs, for these were not closed communities. The existence of a substantial mestizo population demonstrates that racial mixing occurred frequently in the region. Moreover, Comanches often incorporated non-Comanche captives into their bands, creating multiethnic communities. Sometimes I examine Native peoples in the aggregate—for example, when I explore Spanish, Mexican, or U.S. Indian policy. In such cases, I use the terms "Native peoples," "indigenous peoples," and "Indians" interchangeably.

When I speak of white, English-speaking migrants to Texas from the United States, I most often use the term "Anglo." The word "Anglo" is short for "Anglo-American," a term that since the late eighteenth century has sometimes been used to distinguish U.S.-born whites from American Indians and later (and more commonly now) from ethnic Mexicans. "Anglo-American" is closely associated with a racial term popular among nineteenth-century white Americans of English and Germanic roots: "Anglo-Saxon." Anglo-Saxon racial ideology shaped ideas of U.S. exceptionalism and Manifest Destiny.⁶ But "Anglo-American" and "Anglo-Saxon" are not identical in meaning, nor do they share exactly the same history. I use the terms "Anglo" and "Anglo-American" in a broadly descriptive sense and especially in opposition to terms like "Spanish Mexican" and "Mexican American." I do not use the word "Anglo" narrowly to refer to people of English descent. Though it is a term that rests uneasily when applied to some European immigrants and European Americans, it is nonetheless historically descriptive of a racialized divide that developed in Texas and the rest of the U.S. Southwest as English-speaking whites poured in and worked to establish dominance over ethnic Mexicans. But whiteness was complicated and contested in eighteenth- and nineteenth-century Texas. I occasionally use the term "white" to refer to the position of elite Spaniards in the colonial socioracial hierarchy, and some ethnic Mexicans claimed whiteness but still experienced social, political, and economic marginalization. When Anglos first arrived in Texas in the 1820s and 1830s, moreover, Anglo elites developed a mutually beneficial relationship with Tejana/o elites that blurred racial and ethnic boundaries.7 Whiteness was central to Anglo identity. But when analyzing race relations, I mostly use "Anglo" instead of "white" because of its historical resonance in Texas and the Southwest. Whiteness alone—because some elite and light-skinned Mexicans could claim it,

at least provisionally—did not determine power and prestige in midnineteenth-century Texas.8

People of African descent, by contrast, could virtually never claim the privileges of whiteness. Historians of the African diaspora have shown us that African Americans constituted an ethnically diverse group.9 During the colonial era, the African slave trade in New Spain and British America helped create what Gary Nash calls "mestizo America."10 The black population in Spanish Texas, however, was small. By the nineteenth century, most people of African descent who lived in Texas had come as slaves from the southern United States or through the domestic slave trade, and a small percentage came through the illegal African trade. Southern blacks descended from a variety of African-origin peoples as well as from mixing with Europeans, European Americans, and Native peoples and, of course, among themselves. Despite this diversity, however, the one-drop rule of U.S. southern racial ideology reinforced an idea of monolithic blackness, which is evident in nineteenth-century Anglo-American sources.11 I also reference the Works Progress Administration slave narratives, which were shaped by twentieth-century U.S. racial tropes. Nevertheless, I use the terms "African American" and "black" to refer to people of African descent in Texas.

All racial and ethnic terminology is a product of history and hence by definition is not only unstable but also caught up in systems of hierarchy. The terms I employ, nonetheless, reflect ways that diverse peoples constructed identities in relation to others. And while imagined, the boundaries that Texas residents created to separate themselves from their neighbors produced real consequences.



Eighteenth- and nineteenth-century Texas-Mexico borderlands. Map by Joshua Been.

Conquering Sickness

Introduction

In June 1785 New Spain's best emissaries, Pierre "Pedro" Vial and Francisco Xavier Chaves, set out on a diplomatic mission two decades in the making. Accompanied by a small group of Spanish soldiers and servants and Taovaya, Tawakoni, and Wichita Indian mediators and escorts, Vial and Chaves were sent out to meet with Comanche leaders to discuss a potential peace treaty. The crew trekked for months, from the provincial political center at San Antonio de Béxar, through the eastern woods to Nacogdoches and Taovaya villages, and then westward across the northern Texas flatlands toward Comanchería, or Comanche territory. In August, they finally arrived at their destination just south of the Red River. Waiting and watching the Mermellón tributary trickle through the open plain, they caught sight of 200 men heading toward them from a nearby Comanche ranchería, or encampment. Vial and Chaves wrote, "[Indian] capitanes Guersec and Eschas put on their uniforms and medals, and we unfurled our Spanish flag. Reaching us, the Cumanches fired some shots with the few guns that they had, and we answered them in the same manner. These formalities completed, the Cumanches embraced us and they gave us their hand, one by one." The head of the ranchería showed Vial, Chaves, Guersec, Eschas, and their Spanish and Native servants to their tent made from buffalo hides, and the Spaniards dismounted and planted their flag at the entrance. The Comanches then provided their guests with buffalo and deer meat, fruits, and potatoes and rounded up the group's horses and mules, which they held for the duration of the emissaries' stay. Preparing for the next day's meetings,

the Comanche headman returned to his nearby ranchería to inform his compatriots, and Guersec and Eschas, who were well known among the Comanches, set out to notify other Comanche leaders about the diplomatic assembly. Vial and Chaves readied the tobacco, cloth, knives, vermilion, and beads they brought as gifts for the various Comanche chiefs.¹

Having grown up among Indians, Pedro Vial and Francisco Chaves knew that despite their fluency in multiple Native languages and familiarity with Native customs, and despite having the proper Indian mediators, they would have to work hard to gain the Comanches' trust. The Comanches maintained their dominant position in the region's political economy, but they were indeed wary of the Spanish contingent. The emissaries had arrived in Comanchería only a few years after smallpox had swept through the area, and the Indians believed that French traders had introduced the epidemic into their communities. Smallpox's devastation made them question the health and intentions of Vial, a Frenchman, and other foreigners who traveled to their community, particularly Texas Spaniards, who the Comanches often saw as enemies. The Native leaders thus asked Vial and Chaves if they, too, brought disease. The two understood the fragility of Native-European relations and the effects of disease on Native communities. They "responded that [the Comanches] could see for themselves that since we had entered that ranchería, the sun had not clouded and that it was always very clear and bright, which proved our coming healthy and well." In their eyes, the Native leaders "remained totally satisfied with such words."2

The clear Texas skies foregrounded what Pedro Vial and Francisco Chaves hoped would be a highly successful encounter leading to imperial health and vitality. Between the smallpox epidemic and Spain's general feeling of insecurity in settlements surrounded by Native territory, the last few years had reminded the Spanish and the Comanches that life in Texas was unpredictable at best and disastrous at worst. To reassure the Comanches, Vial and Chaves made a direct correlation between the climate and health. Europeans believed that the boundary between the body and the environment was a porous one and that the environment had a direct impact on an individual's health. The body's four humors-blood, phlegm, black bile, and yellow bile-governed a person's health, and a healthy environment kept the humors in balance. A sickly environment threw the humors out of balance, causing disease. Spaniards had identified Texas as a salubrious place, explaining Vial and Chaves's response to the concerned Comanches. In this post-smallpox moment, the two emissaries drew attention to the sunny and clear sky,

which to them signified Texas's healthiness. During conquest, Spanish colonists were concerned about the health of Texas lands. Fortunately for the crown and its imperial ambitions, settlers, soldiers, and missionaries found solace in Texas's warm temperatures, nice breezes, flowing rivers, and thermal waters. While Spaniards built solid structures to establish themselves in south and east Texas and project colonial stability, however, their health and presence there were anything but stable. Spaniards continuously dealt with chronic ailments and left their homes and their military and mission posts when their surroundings turned on them and became unhealthy. Epidemics were a constant concern, as smallpox and yellow fever raged throughout the region in the late eighteenth century. Dreams of successful conquest were overcome by realities of disease, death, Indian destruction, and Native territorial control. In 1785 the Spanish and Comanches were both recuperating from a catastrophic epidemic, and Spaniards knew after decades of trying to solidify their tenuous Texas colony that their recovery would not have been possible without clear skies, a bright sun, and an alliance with the powerful Comanches.

Mindful of the health of the environment, Spaniards and other subsequent colonizers also placed cultural practices at the center of their visions of healthy settlements. Multiple waves of colonization swept through Texas between 1780 and 1861, and Spanish, Mexican, and Anglo-American colonists set out to establish new and productive societies. While they hunted for healthy surroundings, each group additionally promoted certain everyday practices in order to achieve their goals for colonization, with health factoring heavily into this cultural and social equation. Cleanliness, hard work, and morality were key to the success of new colonies, in large part because of their perceived positive impact on settler health. Conversations about proper living, then, were also conversations about healthy living. Of course, each set of colonists arrived with ideas about how to be healthy in unfamiliar lands, but they were not entering an uninhabited place. The Vial and Chaves story is a familiar one in the borderlands, in that newcomers regularly interacted with diverse Texas residents, in diplomacy, trade, marriage, and even when facing sick patients.³ Residents had their own way of doing things, their own daily rituals and conceptions of health and disease, and different sets of practices that structured their lives. Newcomers' relationships with locals shaped how they understood their own health and their sense of self as civilized settlers. As colonists in each wave of conquest encountered natives in this multiracial space, they qualified practices

as "proper" and "healthy," which became markers of racial superiority against the perceived unhealthy backwardness of Native and Mexican residents. The story about ideas of "healthy living" in the Texas borderlands is a story about contact, colonization, and race in North America.

Conquering Sickness shows that health concerns influenced nativenewcomer multicultural encounters and colonial negotiations. Because colonists saw the health of their neighbors as a potential threat or as part of a colonization program, health factored into cross-cultural relationships. Between 1780 and 1861, multiple political regimes administered projects to colonize Texas: New Spain (before 1821), Mexico (1821-36), the Texas Republic (1836-45), and the United States (after 1845). Health directed colonists toward particular destinations, a set of characters that included Franciscan missionaries, soldiers, government officials, large and small landowners, settlers, slaves, ranch workers, military families, naturalists, and doctors. Native territorial claims and regional, national, and imperial politics helped dictate where people settled, but colonists always sought to establish themselves in salubrious lands.4 While scholars have shown us that colonists assessed the health of the environment in their search for lands to settle and colonize, we have not fully explored how the presence of resident populations affected settlers' ideas about health and the role of health in colonial projects. For newcomers, the health of resident populations mattered as much as their own health. In this contested space, in which settlers were very aware of how their daily activities affected their health, the health of Texas's inhabitants also influenced colonizers' understandings of their own bodies.

Imperial and national desires brought colonists into contact with diverse populations, and colonizers closely observed residents and asked certain health-related questions: What is their living situation like? Do they live healthy lives? Why do they get sick? What medicines do they use? In the eighteenth century, for example, Spaniards argued that a bad diet made coastal Karankawa Indians odorous. And in the nineteenth century, Anglos viewed impoverished ethnic Mexican neighborhoods as products of ethnic Mexican dirtiness. At the time, smelliness and uncleanliness were signs of unhealthiness. In these contexts of intercultural closeness, moreover, colonizers worried that Indians' bad odors and Mexicans' filth could contaminate their healthy spaces, since they believed that health depended on the environment as well as the behaviors that people embraced and practices that they performed. Abiding by the rules of "healthy living" helped make Spaniards, Mexicans, and Anglos racially white in opposition to the "insalubrious" Native

and, after 1836, Mexican racial others. Spanish, Mexican, and Anglo colonization projects all involved efforts to protect colonists from the threats posed by residents' so-called unhealthiness. The groups deemed unhealthy changed over time, as did settler strategies for dealing with the health of their counterparts. Nevertheless, the relationship colonists drew between health, culture, and race animated conquest throughout the period under study.

Spaniards, Mexicans, and Anglos all saw themselves as civilizing powers who practiced healthy living; health constituted an important part of each group's colonization efforts in Texas. In the eighteenth and nineteenth century, racial ideologies grew out of ordinary health concerns and cross-cultural relations, showing us another way in which ideas about race are historically contingent. This study embraces the notion that race is not a biological fact but is socially constructed and historically produced. It treats race as a set of ideas, traits, qualities, and behaviors that people have ascribed to human bodies, a process that scholars refer to as racialization.⁵ Race was never only about skin color; it was also about how people lived and about the societies that individuals envisioned, about the markers that people used to create racial groups and differentiate "us" from "them." In addition to inhabiting healthy lands and using the right therapies, colonists would preserve their well-being by practicing a culture of healthiness in multicultural and multiracial Texas, and so related concepts of racial superiority and proper living merged with the concept of healthy living. Because race was just one of a number of variables that shaped identity and structured everyday life, we cannot fully understand racial formation without exploring class, gender, and sexual markers that intersected with and informed ideas about health and race.

Throughout American history, the issue of health lay at the center of the race-making process. In the borderlands, public health institutions marked nonwhite populations as medical threats, particularly in the late nineteenth century when immigration rates were increasing, cities were growing at a rapid pace, and the U.S. government was developing its public health infrastructure.⁶ By exploring prior moments of contact and colonization and earlier interactions between state officials and residents, we see the antecedents to medically racialized immigration restrictions and public health policies in the North American borderlands. *Conquering Sickness* offers an earlier story about race and health, one centered on colonial encounters with residents' everyday practices. Colonists generally kept a close eye on people's habits and behaviors in

the name of health. This book examines a variety of everyday practices—healing, work, prayer, dress, and sex—in multiple periods to understand how the linked notions of health and race shaped colonists' sense of how they fit into the complex Texas worlds.

Colonists assessed the health of their neighbors by observing their activities and how they lived. Aimed at subduing and transforming Native peoples, for example, Catholic conversion in the eighteenth century was, in part, an effort to make Indians healthy. Cleanliness was central to the late-colonial Spanish missionary project. Environmental health merged with Spanish concepts of healthy living, as missionaries instructed mission Indians in proper hygiene, dressed them in European-styled clothing to cover up the Indians' sickly odor, and organized domesticwork schedules for Native women to maintain clean missions. Indian neophytes could also become healthy by observing Catholicism, which protected them from God's medical wrath. Trying to get a sense of their new surroundings, Anglo settlers and physicians in the mid-nineteenth century were also very attuned to the health of their and their neighbors' activities. U.S. military doctors determined that the Comanches' constant movement, exposed dwellings, and ceremonial tobacco smoking caused health problems. In contexts of Anglo-Comanche contact, they argued that U.S. sedentary agrarian culture was the healthiest form of living, a medical opinion that emerged in policy discussions about Indian reservations in Texas.

Colonizing Anglos also saw morality as a recipe for individual well-being and for a productive and successful society and economy. A healthy U.S. American was hardworking, clean, temperate, and sexually virtuous. In the predominantly Mexican towns of south Texas, this Anglo link between moral and physical health implied that ethnic Mexicans—whom Anglos deemed dirty, lazy, and lascivious—were inherently unhealthy.

Conquering Sickness offers a new periodization and compares different forms of state formation and race thinking to understand the impact of health on the colonization of the North American borderlands. Geopolitical, demographic, and medical changes transformed definitions of healthy living and race between 1780 and 1861. In periodizing their studies, borderlands scholars have tended to separate the Spanish colonial and Mexican early national eras from the U.S. national era; however, questions about health and conquest can best be answered by bridging the different periods.⁷ Multiple systems of racial categorization shaped empire and nation building and cross-cultural relations in Texas. Diverse

waves of migrants brought their own racial preconceptions and rewrote them upon encountering residents. Colonists from each political regime under study worked to institutionalize their racial ideologies, with varying degrees of success, and racial categories and identities formed and re-formed in eighteenth- and nineteenth-century North America. Mexican peoples shifted from colonizers to victims of medicalized racialization, for example, and diverse newcomers worked to mold Native peoples into healthy subjects in both the Spanish and U.S. periods. By weaving together multiple histories of conquest, race, and medical change over an eighty-year period, we can better understand how notions of health and race informed one another and shaped power and colonialism in the multiracial North American West. And by tracking parallels across political regimes, we can also see colonialism unfold as a multifaceted and continuous process that deeply affected the everyday lives of Texas residents in the eighteenth and nineteenth century.

While colonizers were determined to make Texas settlements healthy, they simultaneously battered, abused, raped, and murdered many residents of Texas. Eighteenth- and nineteenth-century colonial expansion, moreover, left many people vulnerable to the spread of disease. 10 Spanish missionaries on the southern Gulf Coast, for example, worked hard to mold Karankawas into healthy Spanish subjects. Violence off the missions continued unabated, however, and the missions themselves remained a place of disease, death, and malnutrition. In the first half of the nineteenth century, moreover, coastal Indians and Comanches grappled with newly arrived settlers who infringed on their ability to subsist, leading to hunger in various Native communities. Malnourishment helped create an environment ripe for the spread of disease. In addition, Anglo military officials grew concerned about interracial sex between U.S. soldiers and ethnic Mexican and Comanche women. Their anxieties about sexually transmitted disease among their men masked instances of sexual abuse, as Anglo men violated women of color throughout the North American West and borderlands. 11 These instances of violent conquest reveal a contradiction in light of colonists' obsessions with instituting a culture of healthiness. Yet the colonizers had the power to decide what forms of violence were sanctioned or prohibited.¹² Sexual violence was illegal, but in Anglo men's eyes, rape was not rape because they were having sex with "loose" Mexican women who found white men "irresistible."13 And state-sanctioned anti-Indian violence protected settlers, whereas Indian violence was a marker of Native savagery.¹⁴ The health reformers and violent conquerors were, in a sense then, functioning in

the same capacity—they were all fashioning and policing the boundary between civilization and barbarism.

Each colonial power saw itself as the bearer of civilization, but the specific ways that medicine and medical practice fit into Spain, Mexico, and the United States' political programs changed between 1780 and 1861. Histories of healing in Texas inform this story about how colonial subjects differentiated themselves from cultural and racial "others," but they also show that medicine was a site of exchange in addition to a site of control. Since before this study's late eighteenth-century starting point, Spaniards had placed medicine and science at the center of imperial expansion. Many of Spain's early explorers into the New World were naturalists, who recorded information on America's environments and inhabitants and brought back medicinal plants and information they learned from Native peoples, which became useful not only for settlement but also for physicians and merchants, who sought to tap into New World resources.¹⁵

Spanish physicians saw their work as civilized and their medical therapies as proper. The crown and the Catholic Church tried to clamp down on medical practices that appeared "heathen" and countered Catholic religion, even though many Catholic colonists also looked to the spiritual world to understand health in the physical world.¹⁶ Indians' so-called barbarity rendered them unhealthy in the eyes of the Spanish, moreover, which made them objects of missionary reform. The Spanish transplanted the protomedicato, or medical board, to New Spain, where it continued to take charge of medical licensing and to police the boundaries of the medical profession. Spanish law made it illegal for unlicensed practitioners to practice medicine, and only physicians with a medical degree could obtain licenses. In order to obtain a medical degree, one had to graduate from a medical school, but admission was limited to men who could claim limpieza de sangre, or pure "Spanish" blood, which was a very select group of elites. Even though the colonial state privileged orthodox doctors and their therapies, few patients sought their care, because the sick preferred other healers who were more readily available. Essentially closing Spain and its colonies off from outside influences, moreover, protomedicos, or licensed physicians, were slow to adopt medical innovation. While many patients and European doctors questioned heroic medicine, Spanish doctors continued to employ aggressive therapies, such as bloodletting and purging.¹⁷ Spanish-Indian relations influenced the therapeutic changes that did occur in colonial New Spain, as Spanish doctors borrowed from indigenous practitioners

despite popular characterizations of Native peoples as unhealthy and their practices as barbarous.

Mexican independence in 1821 ushered in a new relationship between the medical profession and the nation-state. Mexicans imagined an advanced and healthy Texas in a way that differed from their Spanish predecessors, and national officials reversed many of Spain's colonial policies, reshaping conversations about health and medicine in Mexico. The federal government stripped authority from the Church and worked to incorporate the Mexican nation into the modern global economy. In the northern state of Coahuila y Texas, this economic opening resulted in the distribution of land to Anglos and Europeans for settlement and the closure of missions to sell off former mission lands. In efforts to keep the south Texas missions open, missionaries argued that Indian neophytes were not ready to enter Mexican society, not because they had not yet become good healthy Catholics but because they had not become agriculturally productive Mexicans. As the Spanish colony became the Mexican nation-state, commercial production overshadowed individual healthiness in the image of the ideal Native convert, ending the era of health reform as a centerpiece of missionary work. Physicians also reimagined their role in state building after Mexican independence. In the 1820s and 1830s, Mexican doctors argued that they had a role to play in nation-state formation, by showing the medical world that Mexico was a forward-looking nation that could contribute to medical innovation. Doctors thus initiated another break from the Spanish era and transitioned from heroic to stimulative therapies. They also began to research, publish, and incorporate cutting-edge medicine from other parts of the world. These post-independence medical changes continued to push Mexican doctors to appropriate Native healing practices and repackage them as "scientific" and "Mexican," now for the global medical profession instead of just for Spanish use.

During the Mexican period, the future of medicine in Texas became tied to Anglo immigration into northern Mexico. The movement of medicines from the United States for consumption in northern Mexico highlighted the deep economic connections that Mexican Texans (tejana/os) and Anglos built linking Texas with the United States. Northern Mexico's close commercial ties with the United States lent weight to a federalist, decentralized political vision for the nation in Texas. In 1835, Mexican centralists rose to power at the federal and regional levels, and northern Mexico erupted in civil struggle. After months of political conflict, Anglos and Tejano leaders called for independence from Mexico

and seceded in 1836, giving birth to a new political, cultural, and medical era in Texas.

As Anglo-Americans took political control of Texas, the role of health in colonization changed with the new regime. After Anglos had established themselves in east Texas during the Mexican period, migrants moved west with their African American slaves in search of the American agrarian dream in central Texas. Anglos and black slaves built cotton and wheat farms and plantations on the border of Comanchería. The Anglo newcomers initially linked with Comanche trade networks, but like the Spaniards and Mexicans before them, they built their own societies physically separate from the Indians. Backed by the army, they pushed the Comanches westward at midcentury, and the federal government ordered U.S. military physicians to assess the health of west-central Texas lands for settlement. Arguing that success and well-being depended on hard work, cleanliness, and temperance, the doctors worked to control alcohol consumption among soldiers and maintained that Comanches' nomadic and labor practices had rendered the Indians weak and unhealthy. In the mid-1850s, Texas politicians successfully pushed for the creation of Indian reservations in west Texas. The Comanches had transitioned from a regional force to a displaced and confined population. In south Texas, the United States entered into a war with Mexico, and a U.S. victory in what has become known as the U.S.-Mexico War (1846-48) resulted in the United States' acquisition of much of northern Mexico. As the fighting began, Anglos established themselves in the Rio Grande Valley, and physicians and settlers depicted ethnic Mexicans as a medical threat to newly arrived Anglo Texans. Their so-called indolence, dirtiness, and "loose morals" facilitated the spread of epidemics and sexually transmitted disease.¹⁹ Anglo physicians nevertheless recognized the efficacy of Mexican medicine and borrowed an agave remedy from an ethnic Mexican priest to cure soldiers who were suffering from scurvy, a medical exchange that helped the United States maintain a healthy military. The line that doctors drew between themselves and nonphysicians, moreover, inadvertently obscured Mexican medical contributions, as the United States incorporated south Texas into the nation.

Conquering Sickness is divided into two parts. The first part covers the late Spanish colonial period, and the second covers Mexican, Texan, and U.S. nation building. During conquest and colonization, Spaniards, Mexicans, and Anglos made sense of the lands and peoples they were encountering through the lens of health. This study shows the evolving

conceptualizations of health and race, as the region shifted from Spanish and Native territories to a U.S. state. To illuminate the impact of health on conquest, each of the five chapters focuses on a single cross-cultural contact zone in Texas, roughly between 1780 and 1861.

Chapter 1, "Medicine and Spanish Conquest: Health and Healing in Late Colonial Texas," begins in the 1780s, when the Spanish crown's renewed attempts at developing relations with Native peoples in Texas coincided with a brutal smallpox epidemic. Bringing together political correspondence and physician and naturalist narratives, this chapter explores Spanish efforts to build healthy settlements and to preserve their well-being. Colonists generally found the Texas climate and environments healthful, but they were always on the move, relocating away from newly threatening environs to healthier areas. Spaniards quickly learned that Native peoples found health in their surroundings, and the colonists appropriated Native medicinal knowledge to address their own health in unfamiliar terrains. Borderlands realities reflected far more cultural medicinal convergence than colonial officials liked to acknowledge. While botanicals tied Spanish health to Native health and to the environment, Spanish encounters with other forms of healing fell in line with the colonists' racial and religious preconceptions. The medical profession, the Catholic Church, and colonial officials all had overlapping interests in trying to control medical practice, and together they marked therapeutics as legitimate and illegitimate. In its medical policies and public health initiatives, the crown privileged scientific medicine, central as science was to Spanish exploration and commercial growth in the New World. The result in this cultural contact zone was that Spanish physicians legitimized borrowed Native cures—such as cacao healing—to their fellow Spaniards by explaining the remedies in scientific terms. By the time patients at the San Antonio de Béxar hospital were consuming a chocolate remedy, orthodox physicians had reinscribed it with a Spanish scientific identity. People from all sectors of society continued to engage with unlicensed medicine. Medical boundary crossings in the Texas borderlands reflected the Spanish colonial reality there: despite Spanish imperial desires of territorial and cultural domination in the North, they had to rely on Native peoples who wielded power and to respect their customs in order to survive.

Continuing coverage of health and Spanish colonialism, chapter 2, "The Health of the Missions: Spanish Friars, Coastal Indians, and Missionization in the Gulf Coast," narrows its focus to show the impact of health on a particular site of Spanish conquest, the Texas missions. While

chapter 1 shows how Spaniards assessed Spanish and Native health and medicine in efforts to conquer Texas territory, this chapter shifts gears and demonstrates how missionaries honed in on Native health in order to improve it. It links missionary narratives, archaeological records, and Spanish and Mexican land documents to show that the priests participated in colonization by converting Indians into healthy Spanish subjects. Overseeing three Franciscan missions constructed in the "healthful and mild" southern Gulf Coast, the missionary College of Nuestra Señora de Guadalupe de Zacatecas developed a rigorous conversion program that targeted Native health.20 Texas missionaries worked to mold so-called barbarous coastal Indians into healthy Spanish subjects by transforming the aspects of their daily lives that made them unhealthy. In addition to religious worship, then, Catholic conversion also involved new clothes, a new diet, and a new work schedule, all geared toward instituting healthy mission living. Missionaries also administered medical care in the missions as part of the Church's conversion efforts. While the College of Zacatecas crafted detailed mission guidelines to reform Native peoples' everyday lives, the reality inside the missions clashed with the college's vision. Over the course of the eighteenth century, Karankawa-speaking peoples incorporated the missions into their subsistence practices, and some Indians lived in the missions seasonally. Mission Indians navigated the college's program by adopting some of the guidelines and observing Catholicism; however, they continued to practice their own rituals, and they came and went as they pleased. Missionary college officials criticized Texas missionaries for their supposed lack of authority. The missionaries instituted the procedures that targeted health, but food shortages, disease, and high mortality rates clashed with the priests' visions of healthy missions. The coastal missions stayed open for the rest of Spain's rule over Mexico, even after the crown had secularized other Texas missions. Eight years following Mexican independence, however, the federal government ordered the secularization of the coastal missions and the subsequent sale of former mission lands. Mission and off-mission Indians found themselves at the center of Mexican and Irish land disputes in the early 1830s. Missionaries tried to stave off secularization by rewriting the mission project from one that created healthy Spanish subjects to one that developed agriculturally productive Mexican citizens.

The second part of the book centers on the intersections of health, race, and nation, beginning with the Mexican period in the Texas borderlands. In many ways, the early national Mexican period was a continuation from the Spanish era, but with new characters and modified

goals. Chapter 3, "Cholera and Nation: Epidemic Disease, Healing, and State Formation in Northern Mexico," examines Mexico's battles with the 1833 cholera epidemic in the state of Coahuila y Texas to understand the role that health and medicine played in early nation building. Colonizing the North meant conquering disease and modernizing medical practice. It also meant integrating northern Mexican medicine into the national medical profession. Thus the chapter connects public health documents from archives on both sides of the U.S.-Mexico border with articles from Mexican medical journals to show that state officials and Mexican physicians saw medicine and public health as an integral part of nation building. Health lay at the center of state and federal policy, and the bonds that existed between Mexicans and Native peoples, bonds that were created during the Spanish era, produced medical exchanges that served the Mexican medical profession and public health. As doctors and political officials encountered the North's medical diversity, they transformed scientific medicine into a symbol of national progress. Even though many Mexicans practiced religious healing and visited different kinds of practitioners, physicians framed many "unorthodox" therapies, such as peyote healing, as obstacles to national modernity and examples of backwards living. The 1833 cholera epidemic, however, forced northern Mexican doctors and state officials, once again, to cross the constructed medical boundaries. They would not have been able to preserve northern citizens' health without doing so. Mexican physician Ignacio Sendejas learned from mission Indians that peyote had medicinal value, and Sendejas's remedy became the government's preferred prescription during the epidemic. The episode shows that "unorthodox" medicine could gain medical legitimacy, but only after Mexican doctors stripped it of its Indianness and folksy and feminine character and remade it as medical and Mexican. Physicians appropriated Native medicine to serve the nation by contributing to public health and innovative medical research, both of which demonstrated Mexico's new status as a modern nation.

Three years after the 1833 cholera epidemic, Texas seceded from Mexico, and health drove Anglo expansion into central Texas. Chapter 4, "Making Healthy American Settlements: U.S. Expansion and Anglo-American, Comanche, and Black Slave Health," focuses on settler-driven U.S. expansion and examines the meeting place of westering Anglo-Americans and Comanchería. The political backdrop of this chapter moves through the era of the Texas Republic (1836–45), the U.S. annexation of Texas (1845), and the U.S.-Mexico War (1846–48), but these

political moments affected the Anglo-Comanche frontier in different ways than Texas's political and economic centers. Texas secession from Mexico in 1836 opened the door to floods of Anglo migrants, and the new arrivals praised the healthiness of central Texas lands and promoted healthy behaviors to ensure imperial success. On farms and plantations, white slaveholders defined black slave health as healthy enough to work. Enslaved African Americans in central Texas thought otherwise and often took charge of health care and health prevention efforts in their communities. In the 1840s, Anglos received protection from the U.S. Army and initially relied on Comanche trade goods to develop their farms and plantations in central Texas. At the same time, however, military physicians sent to measure the health of the region argued that Comanche living made the Indians unhealthy, confirming that middle-class Anglo life was the pinnacle of a healthy lifestyle. In the 1850s, the government of Texas, now a U.S. state, decided to construct Indian reservations in west Texas, and reminiscent of the Spanish missions, Native peoples would learn about healthy agrarian living in confinement. The expansion of Anglo settlements and black chattel slavery pushed the once-dominant Comanches onto reserves in the moment when the bison population and Plains grasslands were dwindling. I examine a range of documentary evidence—U.S. military medical reports, Anglo-American emigrant guides, Texas Republican and U.S. government documents, and African American slave narratives—to explore how Anglo understandings of disease causation influenced Anglo settlement, black chattel slavery, Anglo-Comanche relations, and Indian confinement. On the reserves, nomadic Indians were instructed about the healthiness of sedentary life. This lesson proved more fictive than real.

Chapter 5, "Healthy Anglos, Unhealthy Mexicans: Health, Race, and Medicine in South Texas," places U.S. military medical reports, English- and Spanish-language newspapers, and Anglo memoirs alongside Mexican medical publications to explore how health influenced U.S. colonization and settlement in the Rio Grande valley during and after the U.S.-Mexico War. Unlike central Texas, war drew Anglo migrants into the valley, and they initially settled near U.S. military posts. After the conflict ended, settlers moved into predominantly Mexican towns on the U.S. side of the Río Grande. Newcomers were mindful of "healthy" and "unhealthy" behaviors, hoping to create a productive, successful, and moral American society among a population they saw as lazy and immoral. Assessing the health of south Texas, military physicians and settlers depicted their ethnic Mexican neighbors as medical

hazards—their inherent unhealthiness and uncleanliness threatened Anglo health. Moreover, Mexican women's so-called licentiousness threatened to spread sexually transmitted diseases among Anglo men who saw indigenous women as a prize of conquest.²¹ At the same time that they described ethnic Mexicans as unhealthy, however, Anglo elites employed Mexican women to keep their homes clean and healthy, and Anglo doctors relied on Mexican maguey remedies to treat soldiers with scurvy. This transfer of healthful botanicals from Mexicans to Anglo physicians allowed the U.S. military program to continue protecting Anglos' newfound hegemony in the region. They used the tools of the so-called dirty, diseased Mexicans to build the healthy U.S. nation.

At its heart, Conquering Sickness is a story about people, how they lived, and how they navigated their rapidly changing world. In 1785 the Comanches must have trusted Pedro Vial and Francisco Chaves's appeals about the health of their contingent, because in the following year, Spanish and Comanche leaders arrived at a peace agreement. Vial and Chaves's own pasts were products of the economic and cultural networks that crisscrossed the borderlands and bound allied and rival communities like the Spaniards and Comanches together. Vial, a Frenchman, had lived among Taovaya Indians; spoke multiple Native languages, French, and Spanish; and was recruited by the Spanish government to negotiate an alliance with the Taovayas. Chaves, a Spanish colonist, was originally from New Mexico and had been captured by Comanches when he was eight years old. He grew up among the Indians before he found himself with the Taovayas, probably as part of the captive exchange that regularly brought borderlanders together and also ripped them apart. At twenty-two, Chaves escaped captivity and fled to Béxar, where the Spanish government hired him as an interpreter and a mediator.²² Journeying under clear skies and the bright sun, the two emissaries were familiar with the multicultural, interconnected complexity of Texas societies and the healthiness of its landscapes. It is to their world that we now turn.

1 / Medicine and Spanish Conquest: Health and Healing in Late Colonial Texas

In the sixteenth and early seventeenth centuries, Spanish conquistadors invaded North America and envisioned a transcontinental empire that connected Iberia to the Americas. At the local level, the plan for Spanish America was to tame the "wild" landscape with pockets of well-arranged towns, structured in a gridlike fashion and organized around a central plaza. Working to make order out of chaos, Spaniards sought out "healthful" places to build small settlements, missions, and presidios. In the late seventeenth and early eighteenth centuries, they established themselves in east, central, and south Texas, "healthy" areas that were geographically and economically strategic. It was not long before they created maps of their North American claims that reflected their desires for order and domination, which often meant erasing local claims on land.² However, the newcomers were never alone in these so-called Spanish lands. Native peoples did not submit quietly, and the Spanish enterprises produced little profit. Because of their limited success, the colonists decided to reinforce their colonies with missionaries and more soldiers. These early efforts set the stage for Spain's colonization program, in which Spaniards arrived on lands, built and settled towns, and used force to protect their claims.3 They carved imperial territory through physical force, but also through trade and diplomacy with Native peoples. Responding to a social, economic, and diplomatic world that Indians largely created, colonists quickly realized that Native peoples had a part to play in Spanish society as subjects and allies.

Concern for well-being influenced where colonists settled, how they interacted with the land, how they related to Native peoples, and how they defined their place in this multiracial world. Centered on the late eighteenth century but with an eye to earlier moments of Spanish-Indian contact, this chapter introduces Spanish medical therapies in Texas and looks at multiple ways that medicine shaped Spanish colonization in the late colonial period. Similar to Spanish notions of healthy living, which will be the focus of chapter 2, Spaniards in the Americas saw their forms of medicine as markers of civilization, as the right and proper way to treat patients and tackle disease. They worried constantly about sickness, and physicians and patients addressed disease in a variety of ways. For example, they relied on the lands' healthful properties. Colonists consumed botanical remedies for a variety of ailments, and they regularly moved to "healthier" locales to recuperate and to bathe in medicinal sulfur-rich waters or thermal springs. Many Spaniards also traveled from various parts of the countryside to the military hospital at San Antonio de Béxar to see orthodox physicians. In the early nineteenth century, the crown sought to vaccinate colonial subjects throughout Spanish America, transporting cowpox vaccine around New Spain and all the way north to Texas.

Spaniards certainly focused their energies on their settlements, but their health was never divorced from Native health. The second half of the chapter focuses on cross-cultural medical encounters to show how medicine became a site of exchange and Spanish racial differentiation. While Spaniards sought healthful terrains to settle or recuperate, Spanish-Indian encounters shaped colonists' efforts at returning sick bodies to their healthy state. Medical exchanges and Spanish cultural appropriations dated back to the first years of conquest, and they helped tie Spanish well-being to the New Spain lands. Between the sixteenth and eighteenth centuries, Spanish naturalists and physicians observed Native healing, recorded information on medicinal plants, and took botanicals back to Spain. Over time, Spaniards learned how to scour the unfamiliar New World environment for its medical properties from Indians. In the eighteenth century, for example, New Spain physicians looked to maguey succulents, and patients at the Béxar hospital consumed large amounts of a cacao remedy. This medical relationship, which linked Spaniards to Native peoples and to the environment, became entangled with the colonial process. First, it helped colonists preserve their health and colonize. Second, access to medicinal plants necessitated access to land. Thus as physicians touted the efficacy of New Spain's botanicals,

they laid medical claims on territory. Moreover, Spanish merchants utilized naturalists' observations of Native customs to develop resource-extraction ventures in the Americas. Cacao cultivation developed into plantation agriculture, further linking Spain's future in the New World to the landscape. Finally, the connections between Spanish and Native therapies shaped the Spanish sense of self, and Indian healing became a counterpoint to Spanish medicine.

Spanish perceptions of medical practice were an outgrowth of Spanish-Indian interactions. In this context of medical exchanges and cultural blending, Spaniards framed their medical practices as different. Their medicine was "scientific." This method of differentiation was rooted in the imperial project, which placed a premium on science and medicine, important symbols of Spanish civilization. Spaniards' definitions of what constituted proper medicine reflected their belief in white racial supremacy and in the superiority of scientific reasoning and European civilization. Their interpretations of medical practice were therefore laden with certain values beyond doctors' concerns for their patients. Spaniards practiced "scientific," or orthodox, medicine; Indian practices were something different, potentially heathen, dangerous, ineffective, and ultimately illegitimate. As varied as medical therapies were in New Spain, Spanish physicians and other elites understood medical practices through the same racial lens that they used to build societies composed of tax-paying Catholic subjects amid powerful Native peoples. Even though physicians and patients regularly crossed the imagined medical boundaries, exploring medico-cultural borders helps us understand how Spaniards sought to remake the borderlands and create Spanish societies that neighbored Native territories.

While the Spanish envisioned a colonial society where doctors had a monopoly over the medical marketplace, the boundary between Spanish/"legitimate" and Native/"illegitimate" medicine meant little in day-to-day life throughout colonial Mexico, where so few orthodox doctors resided. Because of the limited influence of orthodox medicine, a variety of healers flourished. Distinctions between Spanish and non-Spanish medical practice mattered little to patients: they just wanted treatments that worked. In practice, then, this medical division was not clear-cut. In the Texas borderlands, it remained blurry because Spanish visions of an ordered society organized by a socioracial hierarchy did not reflect the regional political, economic, and social world. Elite Spaniards did not hold a clear upper hand outside of their settlements. In northern New Spain, for example, nomadic Indians, whom the Spanish referred

to as "indios bárbaros," held much sway economically and militarily. By the late eighteenth century, Indian relations had become central to Spanish empire building. The Comanches exercised their power throughout the borderlands, defying any Spanish geographic vision of clear, frozen geopolitical boundaries and swaths of land under Spain's political dominion. The Spanish "province" of Texas was really just a set of clustered settlements peppering the landscape. Native peoples set limits on Spanish expansion in Texas by extending their influence and creating their own territorial boundaries. This reality was at odds with images of healthy subjects inhabiting healthy lands and seeking out physicians as heroic as the medicine they practiced, equipped with vaccines and other efficacious medicines, and stationed in well-supplied hospitals and infirmaries.

Health, Environment, and Spanish Colonization

Building healthy settlements on "new" and unfamiliar lands was the first part of the Spanish plan for Texas. Between the late seventeenth and late eighteenth centuries, Spaniards established settlements in the northeastern Texas woods, the hills around San Antonio de Béxar in southcentral Texas, and the southern Gulf Coast. In 1790 only about 2,500 Spaniards lived in Texas, and their success depended on their own health as well as that of Spanish soldiers and missionaries.⁵ In hopes of building diplomacy with the Comanches, Pedro Vial and Francisco Chaves vocalized the common Spanish American belief that the human body was permeable and sensitive to its surroundings. Climate, astrology, and diet directly affected one's health. In the Americas, as in Europe, settlers assessed the salubrity of different terrains because they believed that environments perceived as unhealthy could upset the body's balance of the four humors, causing sickness.⁶ They were particularly sensitive to climate, because they felt that places had their own essences that could nurture or harm one's health. Except for when commerce was concerned, Spanish colonists tried to stay away from hot and tropical lowlands and forests. They knew that some places were "healthier" than others, but they praised the "healthiness" of American climates, even some port cities and wooded areas.7 They agreed that Texas boasted healthy environments, but Spaniards read Texas lands in different ways. Some believed that cold weather weakened the body, and they specifically sought out the Texas heat.8 Others felt that the heat was a sign of an unhealthy climate, but the coast, which was often humid and also

home to numerous threatening plants, did not discourage Spanish new-comers. 9 In general, Spanish colonists believed in Texas's "healthy and unharmful" landscape. 10

While Spanish colonial dreams hinged on healthy surroundings and settlers, the reality was much drearier. The Texas environment became inhospitable at times, and soldiers, settlers, and missionaries were constantly battling disease. They often relocated to healthier climes, which threatened to destabilize the colonization project. Soldiers were responsible for protecting settlers and commerce from Indian attacks and protecting Spain's land claims in the contested borderlands. Missionaries had their own part to play in pacifying the region by transforming "barbarous" Indians into Spanish subjects. Constant mobility, then, hindered soldiers and priests' day-to-day tasks.

As climates that were once healthy became hostile, colonial officials in early nineteenth-century Texas received floods of travel requests for soldiers seeking to move to other locales. Because of the environmental view of health, relocation was a popular therapy. In August 1810, for example, Captain Josef Agabo de Ayala experienced several complications from his treatment for colic pains. His surgeon, Pedro Lartigue, treated de Ayala at the small settlement of Trinidad de Salcedo, about 200 miles northeast of Béxar. The captain appeared to be dying, but Lartigue slowly brought him back to health. Lartigue "believed that in order to obtain complete relief [de Ayala] must move to a better climate, since this one is extremely unhealthful."11 The final stage in the surgeon's treatment plan was to relocate his patient away from the hot and muggy August days in Trinidad. Similarly, in October 1802 Miguel Músquiz, a military officer at Nacogdoches, wrote to the provincial governor to request sick leave for two of his soldiers. Músquiz had "determined that Ermerigildo de la Cruz and José María Cortinas need[ed] a change of climate to improve their health."12 In October 1806 troops in Nacogdoches fell ill, and Commandant General Nemesio Salcedo sought to move an entire detachment. A few months after Spanish forces almost came to blows with a U.S. scientific expedition, Nemesio Salcedo told the governor that U.S. troops along the Texas-Louisiana border were inactive and suggested that the time was right to move the sick Spanish soldiers to a "more healthful and better provisioned location." Governor Manuel Antonio Cordero ordered the outfit to relocate to a military post on the Trinity River.¹⁴ Months later, Spanish troops again moved away from the "unhealthy" New Spain-U.S. border region. 15 While the moment to move seemed right, these soldiers were relocating at a time when Spaniards

felt the threat of U.S. expansion in east Texas and when Comanches and Apaches blocked Spanish efforts at controlling central, south, and west Texas. Soldiers could not seek health without traveling through Native lands that surrounded Spanish settlements, so they had to rely on their Native allies to escort them around Texas. ¹⁶ The military had to leave "New Spain," as it were, to transfer sick soldiers westward across Native territories, away from a potentially volatile area where two imperial powers and the Caddoan Indians vied for control. The stakes were high even before soldiers relocated.

Franciscan missionaries were also on the move. In the fall of 1796, for example, Fray Manuel de Silva wrote to Governor Manuel Muñoz, requesting to leave the Nuestra Señora del Refugio Mission for health reasons. Fray de Silva had helped establish the Refugio Mission, but now he sought to leave the southern Gulf Coast, where he suffered from an unnamed illness that had left him "in a state of helplessness." He wanted to go south to Nuevo León "to get some relief, and [also] to have my hands loosened . . . in the sulphur baths which are near the city of Monterrey."17 This was not Fray de Silva's first request to leave his post. In 1774 he received his initial assignment in Texas as a result of a petition to relocate for health reasons. He had been assigned to a hospice in Boca de Leones, Nuevo León, but the cold weather there "puts me in a weakened condition." "For this reason," wrote Fray de Silva, "I want to regain health, or at least some alleviation that I would feel in a warm climate."18 The College of Nuestra Señora de Guadalupe de Zacatecas therefore reassigned him to the San Antonio missions. Excerpts from the college's meeting minutes show that in the late eighteenth century, it approved many requests from Texas friars to leave their posts to obtain medical care in mineral baths.¹⁹ Missionaries regularly moved about the countryside to fulfill their duties as chaplains, establishing a new mission, replacing an outgoing missionary, tending to hospital patients, and offering last rites to those who did not make it. 20 When they left the missions on sick leave, though, the college did not send reinforcements immediately, leaving the missions without a clergyman.

In addition to moving to new surroundings, the Spanish established themselves in Texas by tapping into the landscape's more tangible healthful properties. Many Spaniards sought medical relief in mineral baths around northern New Spain. The baths were popular among soldiers, and in 1784 the crown published decrees regulating such travel for military personnel in its colonies in the Americas, the Caribbean, and the Philippines. For the crown, hospitals were the first line of defense. The

decree required that "this remedy be prescribed only to those persons who cannot get well with the remedies in use in the hospitals." After all else failed, soldiers could obtain a permit from the hospital physician, who designated the nearest baths. They then had to secure a passport from their commanding officers marking the date of departure from their respective posts as well as a signature from the bath caretakers marking the arrival date. Finally, soldiers had to submit an official form to get reimbursed for the six *reales* that covered the cost of the trip and the medical care.²¹

The medicinal bath decree did not fully reflect the Spanish medical world in Texas. Hospitals were supposed to be the first line of care, but the law preceded the establishment of Texas's first official hospital by over twenty years. In 1805, the colonial state built a hospital in the provincial capital of Béxar. It functioned as a military infirmary and employed one physician certified by the protomedicato, or Spanish medical board, and two or three nurses.²² Between 1805 and 1821, the Béxar hospital doctor was the only licensed practitioner working in the provincial capital. Before then, Texas Spaniards attended makeshift hospitals, which probably did not employ licensed doctors.²³ When the crown published the decree, soldiers in Texas obtained the required permission to travel to medicinal baths from their military officers. The strict regulations suggest that troops had been abusing the system. They were most likely a way for the colonial state to maintain the cost of medical care, since it footed the bill, and to further keep tabs on soldiers' whereabouts in the colonies. Trying to control soldier mobility, the decree shows that the crown worried about constant military movement in the colonies.

Health seeking necessitated movement, and in the borderlands, mobility was tied to Spanish colonial expansion, or to put it more accurately, barriers to expansion. Native territories surrounded Spanish enclaves, so sick Spaniards could not simply move from one locale to another. Movement depended on their relationship with neighboring Indians as well as Native peoples' willingness to allow Spaniards to move through their lands. ²⁴ Thus the colonial state was not simply concerned with soldiers and missionaries' relocation because it paid for their leave, which also obstructed missionization and settler security. State officials' concerns likely reflected the lack of control that the Spanish had over the Texas countryside. Any anxieties about Spanish movements came to the fore during epidemics, for the colonial state responded by sending medicine to the various settlements.

In the 1770s and 1780s, smallpox ravaged much of the Americas. It devastated Spanish frontier communities in northern New Spain from California and Sonora to New Mexico and Texas. In 1780 smallpox caused a 62 percent increase in the number of deaths in Béxar, a town with a population of just 1,200. The epidemic hit women of reproductive age the hardest, creating a large gap between the numbers of births and deaths in the early 1780s. To Governor Doming Cabello y Robles reported that the presidio La Bahía del Espíritu Santo, located on the southern Gulf Coast, was so infested with [smallpox] that . . . clamors, the ringing of bells, and funerals is all that is seen and heard all day long. The epidemic struck the countryside as well. Lipan Apache communities were ravaged, and Comanche leaders in Texas claimed that two-thirds of their population had died. The devastation that smallpox left in its wake focused attention on health in colonial settlements throughout New Spain.

The history of epidemics in and around Texas shows another way in which medicine was well situated within the colonial apparatus, for the outbreaks forced the crown to attempt medical treatment on a grand scale. A sound public health infrastructure did not really exist in New Spain, and the state mainly organized during or after epidemics. During epidemics, public health functioned in a top-down fashion: the crown developed health initiatives that eventually filtered to colonial governors and then trickled to local officials, parish priests, and physicians.²⁷ In 1786, for example, Governor Cabello received a royal order explaining how towns should respond when a colonist became infected: "As soon as any sign of smallpox is found in any town of your jurisdiction—the first victim, and those that may follow him, are to be transported to the hermitage or country house that you may have appointed or ordered built at a convenient distance from the city and in a healthful place."28 Reminiscent of the relocation stories, this quarantine involved moving patients away from populated cities and towns. In Oaxaca, these transfers triggered resistance and resentment, particularly from parents who saw the state take caregiving out of their hands and some who watched the state take their children away.²⁹ Thus during efforts at developing public health in the colony, the results were rocky. In Texas, the 1780s story is a bit unclear, but in a letter to the commandant general of the Western Provinces, Jacobo de Ugarte y Loyola, Governor Cabello expressed doubt about the state's ability to carry out the order because of "the ignorance, willfulness, and rashness of the people in this country."³⁰ Cabello's response foreshadowed other colonial officials' characterization of locals

during Spain's smallpox inoculation and vaccination campaigns the following decade. The governor's political correspondence does not clarify whether or not he instituted the royal order to move patients, but it does offer a window into the remote provincial governments' top-down organizing structure in response to epidemic disease. It also demonstrates that the crown's intentions came up against the harsh realities of administering care in the colonies.³¹

Smallpox returned in the 1790s, and again the colonial state acted with mixed success. The Spanish government initially tried to inoculate subjects by placing the live virus in an incision on a patient's arm.³² Officials in Mexico City established inoculation hospitals, but no one sought aid there for fear of or skepticism toward the medical practice. Inoculation was up for debate throughout colonial Mexico.³³ Other than in a few California missions, it did not catch on in earnest.³⁴ At the time, the English scientist Edward Jenner was working on a safer alternative to inoculation in which he implanted live cowpox—a milder disease related to smallpox—in a patient's skin, creating the first vaccine. Jenner discovered that vaccinated patients built immunity against smallpox, and vaccination quickly spread to other parts of Europe at the turn of the nineteenth century, including Spain. After a smallpox epidemic wreaked havoc in Santa Fé de Bogotá (present-day Colombia) in late 1802, King Carlos IV ordered Spanish authorities to immediately set out and vaccinate children throughout the American colonies.³⁵

The crown developed an ambitious program to protect the well-being of its subjects. Under the direction of the surgeon Francisco Xavier de Balmís, the Spanish Royal Maritime Vaccination Expedition transported smallpox vaccine, known as *pus vacuna*, from Spain to the Canary Islands, Puerto Rico, and Cuba, and then split into two parties to travel to Mexico, Guatemala, South America, and the Philippines.³⁶ The expedition set sail in November 1803. Texas governor Juan Bautista Elguézabal received word in late 1804 that it had reached Puerto Rico.³⁷ Soon afterward, the expedition arrived in Guatemala and then Mexico City.³⁸ Colonial officials continued to transfer the vaccine northward along courier and economic networks, and in early 1805 the pus vacuna finally made it to the northern territories.

Like inoculation, the vaccination campaign faced numerous obstacles, dashing colonial officials' aspirations for a smooth public health rollout. Before arriving in Texas, the vaccine first passed through Coahuila. Local authorities there faced several obstacles that hindered their ability to carry out the state's public health project and that threatened

the transfer of the vaccine to Texas. In March 1805 town magistrates received "instructions with the fluid vaccine for the initiative against the smallpox pestilence" from the provincial government, which they then forwarded to medical practitioners in towns and presidios.³⁹ Just as people in Mexico City and Oaxaca had resisted smallpox inoculation, individuals in Coahuila resisted the vaccine. In the small town of Candela, only sixteen children received the vaccine; most of the population refused it. The magistrate, Bartolomé Rivera, grew frustrated with the people of Candela, and echoing former Texas governor Domingo Cabello, he characterized candelanos as "idiots who cannot be persuaded about the good of this provision, . . . [and] their stupidity does not allow them to do so." He suggested to the governor that the state force parents to conduct the vaccination.⁴⁰ Rivera's rant revealed a tension between the people and the state, for not everyone automatically trusted the health initiative and allowed their children to be vaccinated. Like most Spanish subjects, ordinary candelanos sought medical help from practitioners who were not licensed physicians, including curandero/as and other healers, or even family members. Some relied on prayer instead of medical intervention, especially professional practices that appeared barbaric, such as bleeding and prescribing toxic medicines. Apart from their questionable appearance, practitioners who used these orthodox therapies could not deliver care to patients who believed that the supernatural caused sickness. Since family members in southern Mexico had resisted the state's efforts at taking caregiving out of their hands, perhaps candelanos were contesting the vaccination campaign along similar lines.⁴¹ What Rivera called ignorance may have been mistrust either of the government or of the healing practice it propagated. For Rivera, all that mattered was the candelanos' rejection of the crown's initiative. The people's response elicited strong language from the magistrate—candelana/o "idiots" and their "stupidity"—ultimately framing vaccination in an "us" and "them" fashion. Despite many candelanos' refusal of the pus vacuna, the provincial government forged ahead and transported the vaccine throughout Coahuila.

As in other parts of Spanish America, the vaccination campaign in northern New Spain hit multiple roadblocks beyond people's resistance. ⁴² In early 1806 Coahuila officials wrote that the vaccine had almost fully evaporated. There was little pus vacuna left and not enough for people in Coahuila who had yet to receive the vaccine or for passage on to Texas. Fortunately for the government, someone in Coahuila developed more pus vacuna from what little remained. ⁴³ In March Texas governor Manuel

Antonio Cordero y Bustamante finally received a "vial full of pus, and a paper box full of scabs of [cowpox], so that Your Lordship may make the corresponding use of it.... The pus is enclosed in a small box, along with instructions for using the scabs." By early April the Texas government at Béxar had received the vaccine materials, and the physician Federico Zerbán had vaccinated twelve children. Bexareños were more open to the campaign, and for the next couple of years, children in Béxar periodically received the vaccine. When smallpox appeared there in 1809, only one child died. While physicians actively vaccinated individuals at Béxar, it remains unclear if the pus vacuna made it to other parts of the province. But by vaccinating children in Coahuila and Texas, provincial officials carried out the state's public health vision of protecting its subjects.

The mixed response to the crown's vaccination campaign revealed that social divisions in the North could get in the way of the government's medical objectives.⁴⁸ When Béxar received the pus vacuna, Governor Cordero hoped to dispel "popular worries born of ignorance and lack of information" when he disseminated the vaccination decree around Texas in 1806.⁴⁹ Cordero's comments echoed Bartolomé Rivera's earlier tirade against "idiots," raising questions about how Spaniards in northern New Spain defined ignorance: what framed this perception of ordinary tejana/os? Above we saw former Texas governor Domingo Cabello show concern about the 1786 inoculation program because of people's "ignorance" and "rashness." Governors Cabello and Cordero may have just been well situated in the pro-inoculation and pro-vaccination camps, respectively, in which case their frustrations would have reflected the larger medical debates over how to tackle smallpox. But Spaniards also viewed certain healing practices as backwards, heathen, and ignorant, so their assessment of other Spanish Texans partly hinged on a boundary that Spaniards constructed between state-sanctioned medical therapies—like vaccination—and lay medicine. While this divide between orthodox and lay medicine was not so clear-cut in practice, colonial officials' confrontations with diverse conceptions of medicine made it challenging for them to carry out their mission.

Sickness introduced a high stakes struggle for the crown, as it grappled with a fragile colony that was meant to safeguard Spain's imperial position in North America. Colonists found healthy areas in which to establish themselves, but soldiers and missionaries constantly had to leave their posts to tend to their sicknesses, and settlers faced the onslaught of epidemic disease. New Spain northerners had learned about

the power of smallpox the hard way. For colonial officials, the high stakes were about more than personal survival. They were also about successful colonization. It was the crown's responsibility to protect its subjects from epidemic outbreaks. More than that, the methods that the crown used to protect the people also reflected a colonial vision that privileged scientific medicine over other forms of healing. Not everyone was on board with vaccination, though, and people's support of and resistance to the vaccination campaign showed that medical care could become a site of social and political confrontation.

Medical Diversity, Science, and Race

Spanish settlement in northern New Spain began with a search for healthy lands. Once settled, colonists preserved their health by praying, watching what they ate, and administering effective curative practices when sick. Encountering new terrains meant encountering new healing knowledge and new medicines. Spanish health and survival thus became linked with Native health. Colonists learned from Native peoples about the medicinal plants that the environment had to offer. Elites may have distinguished between healing methods and qualified orthodox medicine as superior, but centuries of cultural mixing in Spain and New Spain had blurred the boundaries between medical ideologies. When Spaniards arrived on the shores of Mexico, Spanish medicine had already blended Catholic, Jewish, Muslim, African, European, and Arabic medicine and religious worldviews.⁵⁰ In the early years of conquest, Spanish medicine came into contact and merged with new sets of medical practices. After the Spanish explorer Álvar Nuñez Cabeza de Vaca and his three fellow shipwrecked survivors escaped captivity, for example, they gained reputations as healers, which helped them journey throughout Texas and northern Mexico in the 1530s. In one village they were asked to perform a curing ceremony, and they recited prayers and a Hail Mary and made the sign of the cross over the sick. Cabeza de Vaca also imitated the community's medicine man, who "cut where the pain is and suck around it." He "found that it gave good results."51 Cabeza de Vaca praised the efficacy of Native healing practices and incorporated them into his therapies. The boundaries between therapeutic methods remained fluid in colonial Mexico.

When treating sickness, Texas Spaniards regularly relied on multiple forms of medicine. Even when they could access a physician, for example, they did not always choose to do so. In 1806, the same year

that the smallpox vaccine reached Texas, some bexareños signed a petition complaining about the physician Federico Zerbán's poor doctoring. The petitioners sought his removal because of "the lack of confidence and faith in him held by this community, for they subject themselves to his proscriptions only through politeness." The petition highlighted the patients' blending of medical styles. They "would rather subject themselves to Nature's own remedies than to those of a doctor whose ability they doubt." But they also asked the Texas government to replace Zerbán with another physician licensed by the protomedicato.⁵² In addition to seeking licensed doctors and practicing plant healing on their own, Texas Spaniards sought medical help from curanderos and curanderas. Curandera/os do not appear often in the historical record for colonial Texas, but there are a few allusions to their medical services in the early nineteenth century. The curandera María Benitez served the Nacogdoches population.53 And a curandero sat on Béxar's board of health during the 1833 cholera epidemic (discussed in chapter 3). Practitioners and patients regularly sought out different types of therapies and healers.

Throughout the colonial period, Spaniards witnessed a medical crusade against unlicensed practitioners. Colonial officials, the Catholic Church, and the medical profession targeted healers for centuries, particularly in urban centers. Numerous interrelated factors influenced their attempts at suppressing unsanctioned medical practice. First, physicians were concerned about competition, and the colonial state policed unlicensed healers—unsuccessfully—who sat outside the medical establishment. There was a racial and gendered aspect to this medical boundary between licensed and unlicensed practitioners and therapies. In Spain and New Spain, one had to be male and prove that he had "pure" blood (limpieza de sangre) to receive a medical education and license. A physician's competition, moreover, included unlicensed mixed-race, African, and indigenous healers. Thus medical laws privileged white physicians and orthodox medicine. Second, religion informed notions of medical legitimacy. Spanish conquest was a Catholic affair, and the Mexican Inquisition and missionaries specifically persecuted healers who infused their therapies with so-called heathenism or witchcraft. Even though many of the targeted healers engaged a hybrid version of Catholicism, it was often seen as an unsanctioned form of Catholicism. The crown especially targeted female healers. Male officials considered them a particular threat to Spanish society because they garnered power, which upset the gender hierarchy. Not only were these women often seen as engaging in religious heathenism but they were also accused of performing sexual

acts during rituals. Some Spaniards feared them because of their ability to harm, and women healers were paid for their healing services, both of which gave them social and economic power in a society that heavily privileged men.⁵⁴ Medicine became a frame through which Spanish elites and missionaries articulated notions of racial and gender superiority and inferiority.

Despite the economic, religious, social, and cultural boundaries that Spaniards drew around medical practice, cultural exchange and appropriation had an impact on Spanish designs for healthy living in Texas. Eighteenth-century physicians built on previous medical exchanges and continued to learn about and incorporate new therapies, further tying Spanish health to the landscape and to the health of New Spain inhabitants who provided this "new" medical knowledge. As we saw with the medicinal baths, for the Spanish, health and balanced humors hinged not only on the health of the environment but also on the environment's medical properties. Licensed physicians observed what plant remedies worked on Native bodies and came to rely on the same botanicals as their neighbors. Doctors and lay healers, therefore, often performed similar therapies.⁵⁵ In the eighteenth century, for example, Spanish physicians began treating patients with the maguey succulent, a popular healing method in New Spain. Several high-ranking Spanish royal doctors used maguey, or agave, remedies when more popular mercurial medicines failed to deliver. Francisco Balmís, the Spanish military surgeon who headed the vaccination expedition, treated a number of sicknesses with agave, including measles, smallpox, sexually transmitted diseases, and scrofula, an infection of the lymph nodes. In the 1790s another Spanish doctor, Nicolas Viana, presented his agave remedy to the archbishop, members of the protomedicato, and professors of medicine and surgery. Viana's cure included maguey root, snake meat, and rose petals. The physician declared that "in thirty-two days of taking this medicine, twenty-five patients of both sexes had been cured and were perfectly healthy, leaving the Hospital; five were almost Cured; and one woman with leprosy . . . had been perfectly cured and could leave the Hospital."56 Some of the protomédicos were convinced that Viana's remedy was more effective than the mercurial medicines, and so Viana traveled to Spain to present his findings. As imperial doctors scoured the New Spain countryside for medicines, both Balmís and Viana's remedies were products of medical exchanges, hybridization, and appropriation, which was common in Spanish medical practice.⁵⁷

The history behind a chocolate medical treatment in colonial Texas gives a window into how medical exchanges occurred, demonstrating that Spanish medicine at once involved the exchange of therapies as well as the differentiation between medical practices. It also underlines the connections between Spanish and Native health and American terrains. In the early nineteenth century, patients at the Béxar military hospital received *champurrado*, a heated chocolate drink. During a six-month period in 1808, hospital patients consumed over 260 pounds of chocolate, which amounted to 11.5 pounds, or six or seven cups per patient per day!⁵⁸ Native peoples throughout Mexico had been using chocolate for healing purposes well before the Texas hospital employed the treatment.⁵⁹ Spaniards had been appropriating the therapy since the early years of conquest. To understand how Texas practitioners came to treat Spanish patients with a cacao remedy, we must shift our purview back in time and southward to Mesoamerica.

Two Spanish naturalists' approach to cacao healing in the sixteenth century show that before Spanish practitioners incorporated a new Indian therapy, they differentiated Spanish from Native medicine, qualified Native healing as inferior, and repackaged Indian therapies as scientific for fellow Spaniards. In 1535 Captain Gonzalo Fernández de Oviedo, the official royal chronicler of the Indies, published his *General and Natural History of the Indies*, in which he described his use of a Native cacao oil treatment. While passing through Nicaragua, he experienced shooting pains in his foot, and one of his slaves "told [him] that the Indians say that cacao oil was good for this kind of pain." He rubbed an oil-soaked cloth on his foot, and according to the captain, there was "no sign of pain in his foot" during the rest of his sixty-day trip. Similarly, Francisco Hernández, New Spain's chief protomédico in the 1570s, published his own work on medicinal plants in the Americas, and he described Indians' use of a drink made from the *cacáhoatl*, or cacao, seed.

Gonzalo Fernández de Oviedo and Francisco Hernández wrote about much more than cacao, and their works about the New World were part of a larger process of knowledge acquisition and creation that helped drive Spanish conquest. Naturalists trekked the rugged landscapes and recorded their experiences, helping the imperial state to make sense of the New World environments and find commodities to increase Spain's revenues. Spanish merchants quickly recognized the value of America's resources. It is unclear whether Fernández de Oviedo or Hernández's narratives directly contributed to Spanish cacao production, but their writings were part of a larger body of empirical knowledge that Spaniards drew upon when making commercial decisions. Spanish planters learned that indigenous peoples in Mesoamerica had been cultivating

cacao for centuries, with large centers of production in what is now southern Mexico and El Salvador. By the end of the sixteenth century, Spanish cacao plantations had replaced pre-Hispanic systems of cacao production. The first plantations were located in present-day Ecuador and Venezuela, giving them easy access to African slave labor. Elite Spaniards across New Spain became the primary consumers, followed by European trendsetters. Thus Hernández and Fernández de Oviedo were not simply reminiscing on what they saw and experienced; they were producing knowledge about the New World—its inhabitants and environments—that fed European expansion.

Francisco Hernández and Gonzalo Fernández de Oviedo were part of a stream of Spanish naturalists, physicians, and astrologers who collected plants and recorded their views of nature. Fernández de Oviedo wrote one of the first natural histories of the New World, and Hernández led the first natural history expedition there. In 1570 the Spanish king, Phillip II, ordered Hernández to collect samples of medicines. He eventually sent plants and seeds back to Spain and compiled fifteen volumes that covered more than three thousand plants. Hernández's contribution to the medical world and to the empire also included his own findings from medicinal plant experiments that he conducted in various colonial hospitals. Fernández de Oviedo and Hernández were the first participants in a wave of American scientific studies that influenced Spanish conquest and transformed global commerce as well as scientific inquiry itself.

Francisco Hernández's writings about cacao demonstrate another way that Spaniards read New World terrains medically. One theme we see in Hernández's narrative about cacao that we do not see in Fernández de Oviedo's is a medical explanation for cacao healing. Hernández's interpretation of a Nahua cacao remedy—not just his description of it—was also part of the story about colonial knowledge production. As a doctor, he was more interested than Fernández de Oviedo was in why the Nahua cure worked. He tried to understand the remedy's efficacy and explained it scientifically: "That drink . . . is commonly administered to the seriously ill, to mitigate heat, just as it is also given to those suffering from a hot disorder of the liver or any other part." According to Hernández, the cold drink was effective for Nahua patients because it brought balance to the body's humors. This scientific line of interpretation reflected a way of thinking that explained how the world worked beyond medicine. It was a way of seeing the world that Europeans brought to the

Americas. The language of science and medicine, particularly its claims to modernity, was the language of conquest. Europeans conquered the New World to search for commodities and also to spread civilization, which included scientific medicine. Science explained the workings of the human body and the various "types" of bodies, which helped create racial and gendered modes of differentiation. Associated with civilization and modernity, the belief in science as a way to understand the natural world—itself—became a marker of difference.

For Spaniards who encountered Indians, a scientific view of the world, including their assessment of the landscape's medicinal properties, made them superior. Francisco Hernández wrote that he "miss[ed] the superior intelligence of the Spanish," referring to the Spanish intellectual world that heavily valued science.⁶⁹ By framing the Nahua cacao cure scientifically, Hernández made Native healing knowledge legible to his Spanish audience. He was also marking it as both "Spanish" and "Indian." He made the cure "Spanish" by interpreting it with the language that other Spanish physicians, naturalists, and colonial officials could understand: cacao as a humoral balancer. But by using a scientific frame to interpret a Native cure that he learned from his interactions with Nahuas, he implicitly recognized Nahua explanations for the remedy's efficacy. The Nahuas also defined health as a form of bodily balance, specifically the balance of the human body and its souls in cosmic harmony. Resembling European identification of hot and cold sicknesses, the Nahuas believed in hot and cold presences within the body that, if disrupted, could cause disease; however, for the Indians, hot and cold presences in the body were part of their cosmic world, and divine punishment or spiritual possession caused that hot/cold disruption.⁷⁰ While Europeans believed that medicines could rebalance the body's humors, Nahuas believed their therapies contained spiritual potency.⁷¹ European physicians also may have thought about illness in religious terms, since there was not a strict divide between science and religion.⁷² Even though they practiced mixed medicine, however, hybridization did not always prevent Spaniards from making distinctions between medical traditions. Hernández analyzed cacao "scientifically." He most likely saw the Nahua explanation as "unscientific," thereby driving a wedge between his and the Nahuas' interpretations and categorizing the latter as "Indian" and "not Spanish." This medical form of differentiation had staying power among elites in Mexico.

In patients' eyes, Spanish medicine was certainly not the only avenue to well-being, and it by no means held a clear upper hand to other

medical customs, such as curanderismo and Native healing. Many patients found physicians' therapies questionable. What mattered was whether a treatment worked, and for the sick, orthodox medicine was one option among many. Nevertheless, Spanish elites were framing scientific inquiry as rational and reliable in opposition to Native medicine. By the late eighteenth century, science had been at the center of colonial expansion and exploration for centuries, and it was an important part of Spanish culture that was tied to elites' sense of Spanishness. When Spaniards encountered Indians, science was one of many cultural attributes that made the Spaniards "Spanish" and opposed to "Indian."

While the sources have limited this story to the Béxar hospital's distribution of champurrado, the larger history of Spanish medicine in New Spain suggests that this likely was just one of numerous examples of Spanish-Indian medical exchanges that shaped medical practice in Texas.⁷³ By the time Béxar hospital doctors and nurses were giving their patients champurrado, Francisco Hernández's scientific interpretation of the cacao's medicinal properties had been absorbed into the Spanish medical world. Native peoples had taught Spaniards about cacao's medical benefits, and the Europeans stripped the remedy of its Indianness and transformed its identity. Hernández's scientific medical view of Mexico's plants was influential because of his high position in the colonial government, which reflected the cozy relationship that existed between physicians and the state. The colonial government had a direct hand in medical practice through the protomedicato. The medical board administered a number of tasks that ranged from licensing physicians to managing the smallpox vaccine expedition to regulating and policing medical practice.74 The smallpox vaccination expedition shows that the government sought to protect the health of its subjects, and smallpox vaccination and other public health initiatives symbolized the colonial medical profession's modernity.⁷⁵ In addition to organizing the medical profession and promoting public health, the Spanish colonial state had a hand in hospital care, and hospitals became a space for Indian colonial instruction.⁷⁶ Medicine worked hand in hand with colonialism in less tangible ways as well. Indian medicine became a counterpoint to Spanish medicine, influencing elite views of Native healing well into the nineteenth century. Spanish physicians and other elites upheld the "superior" virtues of Western medicine and collapsed Native medicine into the larger portrait of Indian otherness. The presence of chocolate at the Béxar hospital shows that the boundary that physicians like Francisco Hernández placed between their work and lay healing was fluid,

but it mattered because it shaped Spanish colonial identities and helped produce far-reaching commercial and social consequences.

Focused on conquering "wild" lands, taming "savage" Indians, and developing sound settlements, Spanish medicine influenced attempts at creating order out of chaos and imposing the idea of proper comportment. The eighteenth-century thermal bath regulations, for example, were an outgrowth of earlier attempts at imposing social discipline. Since the moment that Spaniards arrived in Mexico, they accused Native peoples of subverting social order in the popular thermal baths. In a sixteenthcentury text, an anonymous author had scorned Mexica Indians because they had sex in Mexico City bathhouses. For the Spanish, baths were meant to serve a medical purpose, and Native peoples transformed them into spaces of "illicit" and queer sexual activity.77 In colonial Texas, the crown tried to create order with the thermal bath decree, but Indian bathing clashed with this colonial vision. In 1767 Fray Gaspar José de Solís argued that Texas Indians also misused thermal baths. He derided Native women in east Texas for bathing infants immediately after birth.⁷⁸ In general, Spanish critiques of Native birthing practices were tied to religion, because for many Indians, birthing was a religious event. Fray de Solís's discussion of this Native bathing ritual, then, was a comment on the Franciscan conversionary mission. When Native women bathed their newborns in Texas waters, the priest saw Indians obstructing Spanish efforts at instituting Catholic order.

Maintaining the baths as a medical space was one way for the Spanish to impose order in the disordered landscape. Native men were also guilty of behaving "inappropriately" at the baths. According to Fray de Solís, Karankawa men jumped into south Texas hot baths after careening about naked in the cold winter, "breaking the ice with their body." "They do all this," he continued, "to show that they are strong, valiant, and courageous." This display of masculine physicality did not impress Fray de Solís; he knew that Karankawa men really were "cowards and pusilanimous [sic]."79 Spanish masculinity did not revolve around physical strength; it revolved around the concept of honor. According to these social mores, Karankawa men were not "real" men. Elite and non-elite Spaniards achieved honor through lineage and racial purity, nonmanual labor, and protecting female family members' sexual virtue. Catholicism infused Spanish notions of sexual honor and family honor. For example, Catholic converts, by definition, had "impure" blood, which was a sign of dishonor.80 Men in New Spain could attain honor by performing heroic acts, which implied physicality; however, Karankawa performances of

courage did not translate into Spanish honor. If anything, Karankawa men's general nudity symbolized their lack of shame, and their non-Catholic religious background made them dishonorable. Fray de Solís's criticisms of Native bathing were part of his broader vision of a Catholic Texas, where Spaniards would create order by converting Indians to Catholicism and instructing them in Spanish gender roles. Spanish officials worked hard to mold New Spain's inhabitants into respectable Spanish subjects and contain "misbehavior" in New Spain, and they regulated a variety of bodily acts, including medicine, sex, religious practice, and dress.81 In the case of the baths, regulating bodies also meant controlling a medical space.

While Spaniards saw medicine as an avenue to building an ordered and civilized colonial society, achieving this goal proved difficult, since Spaniards ultimately did not control the region. Spaniards and Indians did not live in separate worlds in Texas, which kept those lines between Spanish and Native medicine blurry. A military official's response to a scuffle in his unit shows that Spaniards relied on Native healers. In the summer of 1810, for example, the Spanish soldier Juan José Calderón reported to his commanding officer, Captain José Antonio Aguilar, that a fight between two soldiers over an insult left one of the men with a stab wound in his back. The captain acted immediately. Aguilar quickly sent the alleged offender to the stockade and tended to the wounded man, Manuel Serbín. He then sent for a nearby Atakapa Indian healer to deal with the soldier's wounds. When the Native man arrived, he "sucked Serbín's wound, drawing some blood and he . . . continued to doctor [the wounded soldier] with some herbs." Without an interpreter at the post, the healer and Aguilar could not communicate verbally. Undaunted, the healer made the captain "understand by signs that the patient [would] not die and that he [would] get well soon." Knowing exactly where to turn in this situation, Captain Aguilar and the Atakapa healer must have had an existing relationship; however, Serbín did not believe in the healer as much as his commanding officer did. He begged to go to the military hospital at San Antonio de Béxar, "greatly worried for fear that the wound may be healing falsely." A few days later, Serbín departed to the hospital with two other sick soldiers.82 Evidently Spanish perceptions of Native medicine could play out in multiple ways in the northern fringes of the colony. Serbín's injury was not critical, so even though he had to travel to Béxar to see the only physician in Texas, he had time to choose one practitioner over another. His preference for the Béxar doctor brought the Spanish boundary between Spanish and Native medicine

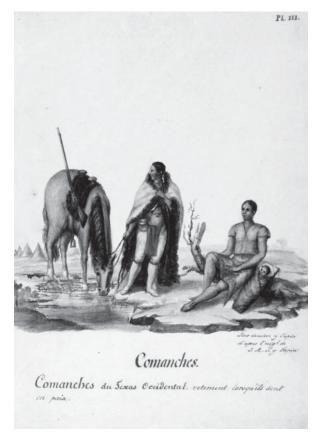


FIGURE 1. Watercolor of a Comanche family, by Lino Sánchez y Tapía from original by José María Sánchez y Tapía. Circa 1828 to 1834. Courtesy of Gilcrease Museum, Tulsa, Oklahoma.

into focus. Serbín was skeptical of Native healing, but his commanding officer saw no problem in calling on the Atakapa healer in this time of need, simultaneously blurring that imaginary line.

The fluid boundary between Spanish and Native healing resulted from close relationships between Spaniards and Indians. The colonist Juan José Hernández's story reveals the porousness of community boundaries. By 1800 Hernández had lived in three Native communities and multiple Spanish towns, and he had experienced several stints in Spanish jail for a series of crimes, ranging from rape to treason to murder.⁸³

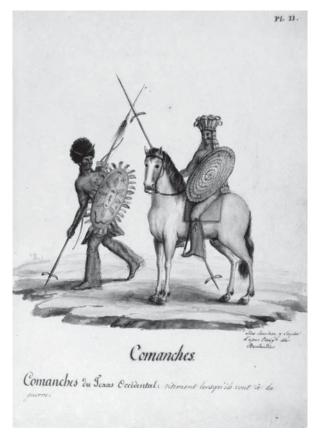


FIGURE 2. Watercolor of Comanche warriors, by Lino Sánchez y Tapía from original by Jean Louis Berlandier, ca. 1828–34. Courtesy of Gilcrease Museum, Tulsa, Oklahoma.

It is his time in a Comanche *ranchería* that shows another example of how some Spaniards rendered Spanish physicians' medical borders irrelevant. While living with the Comanches, Hernández did not abide by any lines that separated Spanish and Native medicine. Before he left the ranchería, he became ill, and Comanche healers nursed him back to health. Spanish physicians would have seen Comanche medicine men and women as "bárbaros," their "unscientific" medical therapies being one of many attributes that made them "savage." Like many living in the region, though, Hernández did not care about medical orthodoxy.

When someone got sick, Spanish negative characterizations of Native medicine often took a backseat to cures that appeared to work. Healing in New Spain shows that Spanish-Indian interactions resulted in hybrid medicine, that Spanish colonists relied on multiple healing customs, and that Spanish physicians borrowed from Native healers. In this colonial contact zone, however, Spanish incorporation of indigenous medicine did not occur separately from the overall power struggles that shaped Spanish-Native relations. Even though the divide between orthodox and lay medicine did not always matter in practice, and even though Texas Indians dictated many terms of their relationship with the Spanish, medicine became a way for Spaniards to mark themselves as superior and their Native neighbors as inferior during conquest. Medicine was tied closely to the colonial process, as the Spanish worked to create pockets of settlements in territories dominated by Indians. Elite Spaniards may have had the upper hand in their own communities, where their ideas about legitimate medicine and race held sway. But the moment Spaniards set foot outside of their own communities, Spanish medical boundaries and racial categories were essentially meaningless. Regionally, they often relied on "indios bárbaros," who blocked Spanish control of the healthy northern New Spain landscape and its medicinal properties.

In the late eighteenth century, health shaped Spanish colonization in various ways. The belief in the environment's impact on individual health was at the front of settlers' minds as they established themselves in Texas. Colonists sought "healthy" lands with cool climates and unthreatening flora and fauna, but the Texas heat and humidity did not sway newcomers. They did, however, face a constant battle with disease. Numerous military personnel and missionaries submitted requests to relocate to healthier climates, temporarily abandoning army posts and mission complexes. Major smallpox epidemics also washed through Texas in the 1780s and 1790s. The colonial state responded to the outbreaks with far-reaching initiatives. After its inoculation campaign of the 1780s did not protect the colony from future epidemics, the crown instituted a global vaccination expedition at the turn of the nineteenth century. It shipped cowpox vaccine from Spain to the Americas and the Philippines, and the pus vacuna eventually made its way to Guatemala, Mexico City, and north to Coahuila and Texas. The delivery of the vaccine certainly hit some bumps along the way, but it finally reached the northernmost Spanish territories around Béxar.

The smallpox vaccination campaign's struggles revealed the contested nature of medical practice in New Spain. Many of New Spain's inhabitants mistrusted and rejected the government's vaccination program, while some colonial authorities characterized the critics as "idiots." The conflict over the vaccine highlights the social and cultural significance of state-sanctioned scientific medicine. Despite the popularity of numerous available therapies, the hybrid character of New World medicine, and the questionable practices that physicians promoted, Spanish officials saw scientific medicine as superior. Science and medicine had become symbols of civilization, which shaped Spanish perceptions of Native healing in New Spain. They also influenced Spanish visions of what an ordered frontier society looked like. However, as the government and the medical profession defined "legitimate" and "illegitimate" medicine, patients and healers, both lay and licensed, regularly crossed the imagined medical boundaries. Spanish medical dreams quickly confronted a messier reality in Texas, in which Spaniards in the Far North depended on Native peoples, particularly after smallpox had passed through their settlements.

While Spanish colonists worked to create healthy, successful settlements in the Far North, Franciscan missionaries sought to develop healthy missions. In the late eighteenth century, the Spanish established missions along the southern Texas Gulf Coast and instituted a program of healthy living for neophytes. Some coastal Indians actually chose to live in Spanish missions for part of the year, follow the missions' guidelines, and adopt Spanish customs. Missionaries quickly found that they, too, had to confront their own health realities in the remote missions.

2 / The Health of the Missions: Spanish Friars, Coastal Indians, and Missionization in the Gulf Coast

Catholic missions proved central to Spain's imperial strategy alongside the conquest of land and formation of Spanish settlements. In eighteenthcentury Texas, missionaries and Spanish officials sought to "reduce" Native peoples while developing relationships with neighboring Indians. Health informed multiple aspects of the missionary project, from the sites that Spaniards chose to the priests' conversion program for Indians. The first thing the missionaries had to do was to find healthful lands in which to build the missions. In the early eighteenth century, they set their eyes on the southern Gulf Coast. The nearby Nuestra Señora de Loreta Presidio offered the mission protection, and the site was not too far from the San Antonio de Béxar missions and settlements. Fray Gaspar José de Solís, a College of Zacatecas missionary, later described the area as pleasant but called the climate "bad and sickly, warm and damp." 1 The coastal climate was humid, while inland it was semiarid, and the seasons were characterized by intense weather—summers were hot, winters were cold, and heavy rains turned into floods.² De Solís's assessment of the Texas coast reflected a broader colonial Spanish antipathy to hot, tropical climates that they associated with disease.3 The coastal environment could upset the body's humoral balance and cause sickness. The wildlife's potential effects on human health was not much better, as a small number of poisonous snakes and spiders as well as mosquitoes, gnats, and ticks inhabited the fresh water and land. Despite the unpredictable weather, the heat and humidity, and the threatening fauna, Fray de Solís remarked that the southern Gulf Coast could be "very healthful

and mild."4 The missionary's recollection revealed the contradictory ways that individuals read an environment: a landscape could be both healthy and unhealthy; one person's diseased coast was another's opportunity. For the Franciscans, the southern Texas coast seemed like a salubrious place to instruct Indians in healthy Spanish living.

Scholars have overlooked the health aspects of missionization and conversion, which are important for understanding Spanish colonization in Texas. This chapter places the Karankawa-speaking peoples—an understudied group—at the center of the story.⁵ It explores how Spanish concepts of Indian health were embedded in Catholic conquest. Spaniards believed that everyday living directly affected one's health. Missionaries' approach to making south Texas a Spanish place involved observing and reforming Native health.6 The way to colonize the southern coastal missions was to focus on Native religious practice, diet, dress, and work, daily practices that, in Spanish eyes, made coastal Native peoples unhealthy. The priests saw the missions as a place to "lead [the Indians] gently so that little by little they will forget the barbarous customs which they practiced and the licentiousness in which they lived on the Coast . . . [and to] succeed in attracting to the Missions, those Indians who fled from it." They took a multifaceted approach to hispanicize the "barbarians . . . [who were] given over to all kinds of vices." The moment that Native men and women walked through the fortified palisade surrounding the mission, they became objects of reform, and conversion involved multiple areas of instruction: Catholic prayer, colonial politics and law, husbandry, and "proper" diet and household living; Spanish marital traditions and gender, sexual, and familial norms; and the right way to dress.⁹ For missionaries, transforming Indians into moral people turned on health and medical care, which proved a priestly domain in the missions.

The Franciscan missionary college's plans for the health of Texas missions and the reality of life there were two different things. The College of Nuestra Señora de Guadalupe de Zacatecas established the three Gulf Coast missions-Espíritu Santo, Rosario, and Nuestra Señora del Refugio Missions—and by 1780 it oversaw all of the Texas missions. Mission directives filtered down from the college to the Texas missionaries. College officials idealized the conversion process with images of willing mission Indians; however, Texas missionaries had to contend with Native autonomy and negotiate mission practices with the coastal Indians. For example, missionaries recognized that many coastal Indians saw the mission as a food source and described the neophytes as

"Indians who accept the faith by way of food." The coastal missions constantly suffered from food shortages, however, and mission Indians responded by leaving. Moreover, mission Indians engaged Spanish customs and Catholic religion, but largely on their own terms. Finally, Spanish colonialism made coastal Indians vulnerable, as it fueled competition over Native hunting grounds and facilitated the spread of disease along trade networks. Disease constantly swept through the missions, and infant mortality rates remained high until missions became secularized after Mexican independence. Thus missionary dreams of healthy Native Catholics quickly faded into realities of Indian departures, religious mixing, disease, and death.

Lastly, the story about health in the coastal missions reveals changes in the broader missionary project as Texas transitioned from Spanish colony to part of the new Mexican nation-state. In the 1820s, national and state officials sought to take control of mission lands away from the Catholic Church as part of their efforts to colonize the North and boost the national economy. The government secularized the remaining Spanish missions and privatized their lands. Trying to maintain control of the land, missionaries argued that the Indians were not ready to enter Mexican society; however, the language of Native fitness had changed. In political discussions, Catholic conversion was no longer predicated on creating healthy Spanish subjects. Reflecting the new political economy and colonization policies that revolved around land grants and agricultural development, missionaries now described missionization as Native instruction in productive agriculture. The health elements of conversion were moved to the backburner during the secularization era. Texas missionaries were successful in staving off secularization for a time, as Mexican elites agreed that the mission Indians were not yet capable farmers. Tejana/o (Mexican Texan), Anglo-American, and European settlers flooded into the region, however, and coastal Indians eventually lost their lands. The Spanish had built the coastal missions in Karankawa territory to serve, in part, as laboratories for the making of healthy colonial subjects, writing health into Catholic conquest.

Constructing Healthy Missions

In 1722 Karankawa Indians witnessed the construction of a Spanish mission, presidio, and settlement in their territory near the coast. Built on elevated land by the banks of the San Antonio River, Espíritu Santo de Zúñiga Mission peeked through the oak trees and small hills of the

coastal landscape. The Gulf Coast's tropical environment did not discourage the early Espíritu Santo missionaries. What ultimately did deter them was what they saw as Native intransigence, leading to Espíritu Santo's quick downfall. The Karankawas had ignored Spanish overtures for a number of years, and the Europeans essentially abandoned the mission's tremendous stone structures in the late 1720s. During Spaniards' first years in coastal south Texas, Spanish colonization resembled the Espíritu Santo Mission complex: a grandiose façade, unable to fulfill its established purpose.

The Spanish returned to south Texas in 1749 with a new approach. Instead of trying to subdue the Indians and settle them in the mission, the crown positioned settlers at the front of the new colonization project, and colonists established the Río Grande villas del norte. 11 A few years later, the Spanish recognized that success partly depended on well-run missions to handle relations with the area's Indians, and they built another mission downriver from Espíritu Santo. The Nuestra Señora del Rosario de los Cujanes Mission targeted the Xaranames and the Karankawas, which included bands of Cocos, Cujanes, Coapites, Copanes, and the Karankawa proper. After the Spanish returned, the Karankawas and Xaranames incorporated the missions into their subsistence cycles, and many decided to live in the Catholic complexes for part of the year. In the spring and summer, the Karankawas broke into small groups and scattered inland to search for food, mainly bison and deer, and in the fall and winter, they congregated on the coast and concentrated on fishing and some small-game hunting and gathering. It was during these colder, more sedentary months that some Indians chose to inhabit the missions. Mission Indians left at various times to regroup with others on the coast or to join inland searches for resources. By 1758, missionaries had baptized only twenty-one Indians, a number that rose to two hundred a decade later. 12 Native peoples gravitated to missions for a number of reasons beyond religion, including access to trade goods, foodstuffs, and physical security.¹³ Whatever the Indians' reasons for being there, Texas missionaries hoped to serve Spain's imperial goals by transforming coastal Indians into Spanish Catholics. And in the coastal missions, conversion meant replacing "unhealthy" Indian habits with a civilized and salubrious Catholic sheen.

Saving Indian souls and preserving Indian health were one and the same in the eyes of the missionaries. When epidemics ravaged Native communities, for example, Spaniards saw God's response to Indian vice.¹⁴ Sin appeared akin to an infestation that only conversion could

remove.¹⁵ In his biography of the Texas missionary Fray Antonio Margil de Jesús, for example, Fray Isidro Félix de Espinosa recounted stories of Margil treating people with "souls sick from sinful habits" and "curing [a woman] of the malignant fever of jealousy." Religious practice and health unfolded along the permeable boundary between the body and the environment. When a missionary priest baptized a Native child, he "administered... the sacred washing as a corporal medicine." And when a doctor treated sick Indians, he healed them "by his exorcisms." In the eyes of missionaries, Texas Indians were contaminated with "wickedness" and a "repugnance and aversion to everything connected to Our Holy Faith, to divine things, to the observance of Our Holy Commandments and sovereign precepts." To have any hope of achieving wellbeing, Indians had to become good, moral Catholics. Spanish religious conquest contained a central medical element: unhealthy Indians were best treated by conversion.

Discipline structured the missionary approach to reforming Native peoples. The priests instituted a regimen that promoted Catholic observance and sought to obliterate older religious practices. Each night when the Rosario Mission bell rang, mission Indians would gather at the cemetery to recite "their prayers and the christian doctrine." Every Monday and Wednesday, the neophytes recited the catechism, followed by a sermon from the missionary.¹⁹ On Saturdays, they prayed the rosary, and on Sundays and feast days, they recited their prayers and the doctrine before saying Mass. Missionaries regularly instructed unbaptized Indian adults and children, sometimes in their barracks, other times in church. The missions held processions during feast days and Holy Week. At Mission Espíritu Santo, "all of the Indians . . . guarded the Holy Sacrament by day and by night, acting guard continually at the door of the chapel." Missionaries established other religious procedures beyond the prayer schedules. Native boys learned Catholic theology, the Spanish language, and moral living, until they grew up and married. It was also customary for mission judges and Indian boys to kiss the missionary's hand after they prayed in church in the evenings or after Mass.²⁰

Spaniards saw diet as critical to bodily health, and missionaries used readily available food stores to attract potential coastal Indian converts to the missions.²¹ The friars described south Texas Indians as "hungry Indians who accept the faith through the enticement of food."²² Native peoples relied on mission foods when they inhabited the missions, and they left when the food ran out.²³ Indians eschewing the missions still drew on the fledgling institutions as a food source.²⁴ Beef was the

centerpiece of the mission diet. On Sunday, missionaries oversaw the weekly slaughter of cattle. The mission cook then prepared the meat so it would not spoil. While the cooks were in charge of the meat, Native women received their own rations of maize. The amount depended on the harvest and on the women's marital status: after a good harvest, four rations of unshucked corn were given to married women and two and one-half for unmarried women; when there was little corn, married women received three rations and unmarried women received two. Indian women were also appointed to make tortillas, although the Rosario Mission did not have a metate to grind maize and a comal to heat tortillas, so Rosario Indians ate cooked maize. During Lent, missionaries ordered Native cooks to prepare large pots of beans to prevent the neophytes from eating meat. They offered chocolate on Easter Sunday. At Espíritu Santo, mission Indians grew and ate corn, watermelons, cantaloupes, sweet potatoes, "Irish" potatoes, peaches, and figs. Missionaries were ordered to ration the fruit when it was harvested "so that food is not wanting to the members of the mission, and thus they do not search for food in other regions."25 They worked hard to ensure a regular supply of foods.

The Spanish focus on diet was rooted in the European belief that "proper" foods produced a healthy humoral balance. Humoral medicine stipulated that the four humors that governed the human body were constantly in flux. The "right" diet made one healthy, and the "wrong" diet made one sick.26 Fray de Solís, for example, claimed that nuts and the "fiery" fruit of the medlar tree caused "blood dysenteries" among coastal Indians. He also believed that the consumption of whiskey and sugar cane wine "as if it were water" caused a range of diseases, including "smallpox, measles, typhoid fever, [and] fevers."27 Observing their diet, he described the Karankawas as "very gluttonous and ravenous" who "eat meat almost raw, roasted, and dripping with blood. In order to be at liberty in the woods or on the beach, they prefer to suffer hunger, nakedness, and lack of shelter, which they do not suffer when they are in the mission, since the Father aids them in everything, in food and in clothing and in other necessities and comforts."28 For the missionary, Karankawa foodways signaled barbarism and unhealthiness that demanded transformation; a Spanish mission diet offered a healthy alternative to "savage" Native living.

Spaniards had long seen diet as a crucial part of American colonization. They believed that local foods preserved the humoral balance, and a change in diet could harm one's body. This idea linking diet and

place animated the early years of conquest, and Spaniards felt they had to maintain a Spanish diet to survive in the New World. Since controlling one's diet was much more feasible than controlling the climate, Spaniards saw wheat, wine, and meat—which they found lacking in an indigenous diet—as the avenue to maintaining a balanced and European body when they first arrived in the Americas. Thus they believed that Native and Spanish bodies differed because of diet. Unhealthy New World foods and environments had harmed the bodies of Indians who descended from their Old World ancestors. Centuries before Fray de Solís observed Karankawa foodways, other Spaniards had seen the Spanish diet as a civilizing tool for Indians. This approach to conquest exposed a colonial contradiction because Spanish settlers attributed Native illness and mortality to a new diet and environment, changes that missionaries set in motion.²⁹ The notion that changing diets could cause sickness did not sway Texas priests away from reforming Indian foodways and centering mission meals on meat. Perhaps by the eighteenth century, missionaries did not see the introduction of beef as potentially harmful to Native bodies, since many of the Spanish-imagined boundaries that separated Spanish diets from Indian diets had dissolved.

The consumption of starches in the coastal Texas missions shows that Spaniards were settling into the American environment. Spaniards had framed certain starches as unhealthy in the sixteenth century, but in the late eighteenth century they served these foods to Native peoples and Spaniards in the coastal missions. In the early years of conquest, Spaniards viewed starches in Native diets with an incredibly critical eye. They elevated European wheat, not only because they wanted to maintain a Spanish diet but also because wheat represented both Spanish food and Christianity for Spanish Catholics. Spaniards ate wheat bread because, according to humoral medicine, it was the most nutritious food. Catholics also were required to celebrate communion only using wheat bread and grape wine. By contrast, maize, tortillas, potatoes, and other starches represented Native "breads" and, in some sense, the "anti-wheat." To the Spanish, these New World foods symbolized both the "unhealthy" and "savage, un-Christian" Indian diet. 30 These earlier images of "un-Spanish" and "un-Catholic" foods did not affect Texas mission diets in the eighteenth century. Instead, in the very places that existed for Spaniards to mold Texas Indians into Spanish subjects, they did not restrict the cultivation and consumption of foods once marked as "un-Christian." Spanish perceptions of these foods and their links to "Indianness" gradually changed. By the time the Spanish established the

south Texas missions, they had incorporated New World foods into their regular diet. Fray de Solís certainly associated Karankawa "savagery" with certain foods and eating habits; however, mission diets were the product of Spanish-Indian exchanges, which rendered divisions between "Spanish" and "Indian" foods ambiguous in late colonial Texas.

While Spanish conceptions of Indian food changed, they continued to see diet as an indicator of Native health. This link between food and wellbeing affected other aspects of mission instruction beyond meals. The right clothes, for example, could offset the ill effects of eating the wrong foods. When Fray de Solís inspected Rosario Mission in the late 1760s, he found the Indians "very dirty, foul-smelling and pestiferous, and they throw out such a bad odor from their body that it makes one sick." He attributed the smell to the Indians' consumption of the ferret-like polecat.31 Odor signaled incivility and unhealthiness for the Spanish. Part of this association had to do with the belief that disease emanated from dirty airs, or miasmas, and offensive odors were a sign of an unhealthy environment. In Fray de Solís's case, it also had to do with the porous boundary between the inside and outside of the human body; Native diets produced an odor that threatened Indians' health as well as the health of the individuals around them. Indians would have to solidify that permeable border around the body in this time when regular bathing was not common.32

The missionaries saw it as their job as religious reformers to harden that border. The priests made Indians wear more layers of clothing to eliminate the unhealthy odors that supposedly emanated from their bodies, while simultaneously instructing them in Catholic gender and sexual norms. The missionary college outlined specifics about Indian dress in the missions, and modesty was the key. Missionaries distributed linen for the production of Indian clothing and the finer Puebla cloth for the mission authorities' clothes. They ordered the men to wear white linen shirts, pants, a hat, wool stockings, cotton socks, shoes, spurs, a wool pullover, white underwear, and a rosary. Women wore a blouse, a flannel skirt, linen underskirts, camisoles, petticoats, silk hose, shoes, earrings and necklaces, ribbons, and rosaries.³³ Lastly, they required the women to enlarge the skirts by adding "an extra piece of [linen] . . . so that they are not too tight."34

Dressing Indians was one of the missionaries' first steps in transforming smelly, sick Native savages into healthy, civilized Spanish subjects. Dress served as a form of communication, critical to the way that Spaniards presented their status and identity to the public.³⁵ Together with



FIGURE 3. Watercolor of a Karankawa man and woman, by Lino Sánchez y Tapía. Circa 1828 to 1834. Courtesy of Gilcrease Museum, Tulsa, Oklahoma.

food, fashion helped make Native bodies the terrain on which Spanish colonial identity was fought and formed.³⁶ Karankawa men wore deerskin loincloths, and on their heads they wore wreaths made of plant fibers and ornamented with feathers. Women wore short, sleeveless upper garments made of skins, leaving a bare midriff, and buckskin skirts that reached the knees.³⁷ Refugio missionary Fray José Francisco Mariano Garza described Karankawa dress as "nude shame."³⁸ For Texas missionaries, it was unacceptable and "indecent for the Indians to enter

the Church, attend the Holy Sacrifices of the Mass, and receive the Holy Sacraments with the inhumane slovenliness and nakedness with which they live in their uncultivated heathenism." Nudity was a sign of Native peoples' sexual degeneracy; Texas Indians were driven "by the cords of their superstition, ensnared in their lascivious lust."39 Fray de Solís characterized the coastal Indians as "given over to . . . the vices of lasciviousness, robbery, systematic thieving and dancing." He singled out the men for their unbridled sexuality, particularly married men, who exchanged and shared their wives with one another and traded Native women in local markets. 40 Texas missionaries saw themselves entering into a sinful world contaminated by wickedness, and new clothes were a way for them to set the Indians on a straight and moral path. Missionaries, therefore, made sure "that the recently converted Indians dress according to the sovereign intentions of Our Catholic Monarch."41

Dress reform reveals missionary links between physical and moral health in the conversion project, as priests worked to convert Native peoples into healthy, virtuous Catholics. Proper attire certainly accentuated the appearance of the outermost layers, but it also concerned the inner layers by covering bare skin, a sign of Indian sexual degeneracy and wickedness inside the body.⁴² Native sexuality, in general, was seen as evidence of the devil's contagion, and syphilis (gálico) threatened mission Indian health, both of which influenced the priests' program of sexual transformation in the missions.⁴³ In the late eighteenth century, syphilis swept through missions in northern New Spain, and missionaries responded by enforcing Catholic gender norms in the missions. 44 The dress codes cloaked Indian bodies, reflecting Spanish ideas about marriage, sexuality, and proper comportment and rooted in Native peoples and women's so-called sexual deviance. 45 In northern New Spain, women were responsible for maintaining their sexual virtue before, during, and after marriage. For the Spanish, uncovered female bodies signified seduction, and it was disgraceful for women to seduce men and to have premarital and extramarital sex. Violating these norms brought shame to them and dishonor to their families. This is why, in 1794, when Juan José Hernández was tried in San Antonio for raping "María Martínez, a free mulata of tender age," the charges stipulated that he "spoiled" the young woman.46 Men, on the other hand, did not face repercussions for illicit sex unless they committed sexual violence, in which case they may have faced legal action. They actually attained honor by sexually conquering other men's women.⁴⁷ Missionaries policed Native sexuality not only by dressing all Indians in "proper," modest clothing but also

by covering younger women's bodies in more layers than men's; older women were not required to wear a lining under their skirts.⁴⁸ The layered clothing protected women's virtue, which, in turn, safeguarded them and the mission community from the spread of wickedness and sexually transmitted disease.

Once mission Indians put on a healthier set of clothing, the next element of healthy living was work. Priests set out to teach Indians to preserve their health by working hard and maintaining clean missions. Physical labor was the key. Spanish missionaries believed that work helped produce healthy bodies. It even had the potential to heal sick bodies. When soldiers around the missions got sick, the friars specifically sent them to the fields to work tending cattle.⁴⁹ The other side of this coin was the belief that idleness caused sickness. Fray de Solís referred to the coastal Indians as "barbarians, given to idleness, lazy, indolent," implying that they were unhealthy.⁵⁰ The friars created labor schedules that revolved around order, Spanish gender roles, and cleanliness. In Karankawa communities, men hunted and women gathered food and prepared the meals.51 This changed in the missions, where Spanish gender norms structured work.⁵² Men were to give up hunting and become farmers or ranch hands. Others trained to become blacksmiths and carpenters. Some men worked their own parcels of land in addition to the missions' communal lands. Rosario men, for example, held individual plots with "exact boundaries [around] their lands."53 Women were to abandon agricultural work and mainly perform domestic labor. They spun thread and sewed. Wives made clothes for their husbands, and unmarried women made clothes for unmarried men. Women also cooked for their families and for the missionaries, and they occasionally picked cotton with their children. Missionaries segregated men and women, and they specifically prohibited women from helping men tend the crops. Sexualized images of Native men and women shaped labor because the missionaries felt that a female presence "resulted in the men's not working fully because they paid too much attention to the women."54

Since the environment helped determine the body's humoral balance, neophytes were ordered to keep the missions clean. Women were largely responsible for mission cleanliness because of the gendered division of labor. Every Saturday, Native women swept the patios of the friary and the church and sacristy. "When that is finished," the mission guidelines stipulated, "all the women come for a portion of soap, which the *fiscal* distributes to each according to the size of the family and the clothing that is to be washed." Indians became healthy colonial subjects by

working hard, and women protected the health of the community by maintaining clean missions.

Missionaries contributed to the health of the missions by offering and overseeing medical care there. Unfortunately, the historical record on medical practice in Texas missions is thin, but a few sources offer a small window. As we saw in chapter 1, Spanish missionaries often viewed Native medicine with skepticism and religious contempt. In a 1777 inspection tour of Texas missions, one friar described Native healers as the "greatest obstacle to the conversion of the Indians to our holy religion."56 Missionaries took the lead in mission medical care, and it is likely that they tried to clamp down on Native healing. While the colonial state generally tried to limit medical practice to protomédicos, or licensed physicians, clergymen did provide medical services. Religious orders ran hospitals for charity and potential conversion.⁵⁷ The College of Zacatecas, which oversaw the Texas missions, ordered missionaries to attend to patients, visit them regularly, and "see to it that they use the remedies which he can obtain."58 Missionary medical practice became critical when smallpox struck Texas in the early 1780s. Fray Joaquín Escobar, for example, treated sick Indians at Rosario Mission.⁵⁹ Missionaries also directed medical care performed by other practitioners. For example, the San Antonio Mission Concepción hired barbers to administer bleedings, a popular therapy in the Spanish colonial medical world.⁶⁰

In certain circumstances, missionaries also administered childbirth. Mestiza and Indian midwives (parteras) were the main practitioners to assist women during childbirth in New Spain. They also were often summoned to examine women in rape cases.⁶¹ Midwifery was the only area of medicine in which the profession recognized women.⁶² In the late eighteenth century, however, midwives faced several challenges. In 1804, for example, a royal decree gave missionaries the power to perform emergency cesarean sections, bypassing midwives. After missionary medicine had gained notoriety in Europe, King Carlos IV issued a royal decree on postmortem cesarean sections for all of Spanish America and extended medical authority to missionaries.⁶³ The decree sought to prevent the burial of deceased pregnant women in order to make sure that the babies were delivered and received baptisms. The crown stipulated that physicians—not midwives—were to carry out the procedure. But now that the state recognized missionaries' medical skills, the decree granted medical authority to the friars, just in case: "In the towns where there is no physician," the law said, "in order to carry out this operation with utmost care, the priest, being warned and instructed beforehand, may

help if necessary."⁶⁴ The decree included instructions on how to perform the operation, which required the most basic of tools: "The only instruments needed are a sharp scalpel for the incision and another with a blunt tip, or if these are lacking, a razor or even a penknife will suffice."⁶⁵ There were more available midwives than doctors, who were just beginning to make their way into deliveries, so it is telling that the *cedula* bypassed the midwives for the priests. Medical obstetrics was gaining support in late eighteenth-century Spain and New Spain, which reinforced perceptions of midwives—physicians' unlicensed competitors—as incompetent. Many midwives were mixed race and Indian, moreover, so coupled with the fact that they were women, their authority and success were seen as threats to the medical establishment.⁶⁶ The cedula helped spur the shift from midwives to surgeons at Spanish American deliveries.⁶⁷

During Spanish conquest, religion and health turned women's bodies into battlegrounds, and the royal cedula intended to give missionaries ultimate control over pregnant Native women's bodies in the missions. Priests performed cesarean sections in Puerto Rico and California missions, but it is difficult to trace whether Texas missionaries took advantage of their newfound, state-sanctioned medical authority.⁶⁸ Limited baptismal records from Refugio Mission indicate that one cesarean section and baptism may have been performed in south Texas. Maria Francisca was born on March 10, 1821. Eight days later, she was baptized by Fray Miguel Muro, a Refugio missionary, in a ceremony outside of the mission. Her father, Juan de Dios, was a Catholic Karankawa, which helps explain why Maria was baptized, even if they were not living in the mission at the time. Despite Juan de Dios's ties to the mission, the identity of Maria's mother remains unclear. When missionaries filled baptismal ledgers, they normally listed both parents' names; however, only Juan de Dios was named next to Maria Francisca.⁶⁹ Perhaps her mother passed away, and Fray Muro performed the cesarean section. If Fray Muro delivered Maria, the labor would have been an emergency, most likely one that occurred outside the mission walls, since the baptism occurred outside of the mission. We may never know the true fate of Maria Francisca's mother and the story of her birth, or to what extent missionaries performed cesareans and baptisms. It is possible, though, that missionaries in Texas carried out the 1804 royal decree, which enhanced their medical authority in the missions.

Catholic priests were ordered to establish Spain's position in south Texas by conquering coastal Indians through missionization. Their project revolved around the notion that coastal Indians lived unhealthy lives.

The daily mission schedule reflected the belief that Catholicism was the healthy antidote to Indian savagery. The neophytes' tasks—from new clothes to a new diet, from prayer to work—would make them Catholic and healthy and the place "Spanish." However, missionary dreams quickly came up against colonial realities.

Disease, Death, and Destruction around the Coastal Missions

For College of Zacatecas missionaries, the Indians' transformation into healthy Spanish subjects hinged on their observance of Catholicism, their rejection of religious "heathenism," and the adoption of mission diets, dress codes, Spanish gender norms, and work schedules. While mission Indians incorporated many of these aspects of Indian conversion, the neophytes confronted a series of realities that blunted the missionaries'—and, by extension, the crown's—goal. Ironically, these were realities that Spanish colonialism helped set in motion, which pressed on coastal Indians' access to food and produced an environment that facilitated the spread of disease. While Spaniards were working hard to develop healthy missions and convert Indians into healthy subjects, Spanish colonialism simultaneously unleashed a violent conquest that made Indians vulnerable and harmed Native health.

Coastal Indians saw the missions as a food source, and missionaries tried to take advantage of this to attract potential neophytes. The Native incorporation of the missions into their subsistence system suggests that their traditional subsistence methods had become inadequate. Spaniards had introduced cattle into the area, and over time the cattle displaced bison from grazing lands, removing a main Karankawa food source. Moreover, the Indians found themselves competing for resources, not only with Spaniards but also with other Native communities displaced by Apache and Comanche expansion. The coastal Indians responded to these changes by incorporating cattle into the diet, which often meant stealing livestock from the missions, and some Native peoples adapted to the subsistence challenges by migrating to the missions for part of the year.

However, the missions were often unable to maintain enough food supply to satisfy Native demand, driving people away. One of the first requests Fray Garza made to Governor Muñoz upon the founding of Refugio in 1793 was a constant supply of cattle to sustain the 138 mission Indians. He knew that they could not subsist only on a maize diet, so he asked for enough livestock for the Indians to consume eight heads

of cattle per week. He was asking for two heads less per week than what Espíritu Santo's population of 132 Indians consumed, hoping to show the governor that he was willing to cut costs. Without this supply, Fray Garza felt he would not be able to satisfy the mission inhabitants and "congregate the other Indians still to come." The governor complied with the right number of cattle, but of poor quality. Two months later, Fray Garza wrote him that the cows were too thin to eat or to breed.⁷² Already by the summer, forty-eight Native peoples had left the mission to look for food. From the beginning, Fray Garza felt that the food shortages hurt his future recruitment prospects because they sent the message that the Indians should stay on the coast.⁷³ Between December 1793 and March 1794, missionaries and other colonial officials reported to the governor five times that there was not enough food at Refugio.⁷⁴ In the summer of 1794, a group of mission Karankawas stole food from Refugio's supply and fled.75 In one instance Rosario Indians, who did "not have food to eat," stole Refugio's cattle. This created a shortage at Refugio, and the Indians "went to the countryside to look for food," leaving the mission entirely.⁷⁶ Reports of food scarcity continued in the late 1790s.⁷⁷ A mission Indian exodus was a common sight in the Gulf Coast. Fray Silva wrote that when the Indians left "for lack of sustenance," they "reverted to their licentiousness."78

Coastal Indians could not satisfy their subsistence needs in the missions, and the friars therefore were never successful in persuading a significant number to inhabit the missions year-round. Archaeological dietary patterns show that many coastal Indians lived in the missions only for part of the year: in the spring and summer, while some bands traveled to find resources, or in the fall and winter, when the seasonal migration period ended. Just one segment of the Refugio population consumed maize and beef, the mission diet. Many others subsisted on marine foods or on a different diet altogether.⁷⁹ The Refugio missionaries administered a few censuses, which also depicted a fluctuating population. In 1795, 82 Indians inhabited Refugio Mission; in 1797, 175 lived there; in 1804, the population numbered 61 Indians; and in 1808, 96 Native peoples lived in the mission. 80 Soon after the Franciscans founded the Refugio Mission in February 1793, Texas governor Manuel Muñoz decried how missionaries "allowed" the Indians to leave and migrate constantly between the new mission and the coast. Fray Garza told the governor that it was "impossible to completely reduce [them] . . . to complete submission, and to disregard their way of life and change Indians who have always lived freely."81 The missionary articulated the challenges

that the Spaniards had been struggling with for decades while trying to conquer the coast. Mission Indians came and went as they pleased, trying to find nourishment.82

In addition to the food shortages, high rates of acute and epidemic disease struck the missions even though health took center stage in the conversion process. Missionaries were forcing Indians to reform their everyday practices and adopt Spanish notions of healthy living, while colonial expansion fueled the spread of disease. The Indians' subsistence struggles, exacerbated by the growth of Spanish and new Native settlements in the coastal area, probably caused malnutrition and contributed to sickness among mission Indians. Moreover, the priests' heavy work schedules also probably contributed to Indian sickness. About twenty epidemics struck Texas during the Spanish colonial period, including smallpox, typhus, and measles, several of which swept through Karankawa communities on the coast and in the missions.83 Epidemic disease moved along exchange networks, so the development of trade between Spaniards and Indians additionally fostered the spread of disease.84

In the 1780s and 1790s, in particular, smallpox ravaged Texas multiple times, and Native peoples bore the brunt of the outbreaks. In both 1780 and 1782, it swept through the Gulf Coast. The first wave decimated the Lipan Apaches around Espíritu Santo.85 Two years later, it afflicted a Spanish convoy that was in the process of transferring Native prisoners from northern Mexico to Cuba.86 The group rerouted one of the prisoners, a Karankawa leader named José Luís, to Rosario Mission and placed him under the care of Fray Escobar. José Luís survived and later helped broker a peace between the Karankawas and the Spanish, but others were not as lucky. 87 Smallpox returned again in 1798 and struck Presidio La Bahía at a time of heightened conflict between Karankawas and Spaniards. The epidemic might explain an upsurge in Karankawa attacks on the missions. The disease most likely reduced the number of hunters, prompting an urgent need for secure resources. And during this wave of smallpox, the raiding Indians heavily targeted the mission's livestock.88 In addition, all of the Refugio Mission Indians who had left for the summer returned at this time, seeking the relief that José Luís had received at Rosario years before.89

Acute illnesses and high infant mortality rates also harmed the health of the coastal missions. As we saw above, Refugio Indian men and women suffered from syphilis.90 In addition, the infant mortality rate at Refugio was astronomical for both the Native and non-Native population.

Almost 50 percent of the deaths at the mission were of children three years old and under. The adult morality rate was low—about three deaths per year—and bone remains suggest that excessive physical hardship did not directly cause sickness; however, hard labor together with regular food shortages certainly created conditions ripe for disease.⁹¹

While mission Indians were battling epidemic and chronic disease, off-mission Indians were fighting Spanish soldiers, exposing another tension in Spain's medical conversion plans: missionaries were at work, trying to mold mission Indians into healthy subjects, while the army was battling and killing coastal Indians outside of the missions. After the Spaniards resettled the coast in the mid-eighteenth century, Spanish-Indian relations were tense and violent. Just before the 1780 smallpox epidemic, for example, Karankawa leader José María and his brother José Luís led an attack against a Spanish military expedition in which they plundered a ship, killing the captain and most of the crew. The Spaniards retaliated, caught José Luís, and held him prisoner for three years. But they really only wanted his brother. They offered the Karankawas a reward to "bring about [José María's] capture and mete out the exemplary punishment to which he was entitled." To secure his own release, José Luís organized a meeting of three Karankawa chiefs, including José María, and Spanish officers. José María offered peace, and Governor Cabello accepted. 92 But nothing seems to have come out of this meeting, because Spanish campaigns against the Karankawas in late 1783 and early 1784 suggest that the two parties did not negotiate a peace treaty. They arranged another diplomatic meeting five years later.⁹³ Over time, the Karankawas sought a Spanish alliance against a more immediate foe, the Lipan Apaches, who were approaching the coast.94 Governor Rafael Martínez Pacheco hoped to end cycles of violence that continued to plague northern New Spain, including skirmishes between Spaniards and Karankawas in Texas and between Spanish soldiers and Julimeño, Mescalero, and Taraumara Indians in Coahuila and Chihuahua.95 Karankawa leaders and Spanish officials eventually outlined a peace in 1790.96

While Native leaders entered into the treaty, many ordinary Karankawas did not feel that they were bound to the agreement. Violence between the Spaniards and Karankawas continued, sometimes spilling into the missions. In the spring of 1798, around the time when another smallpox epidemic struck the area, some Indians at Rosario stole the mission's livestock.⁹⁷ In October, when they began to return for the winter, a group attacked the Refugio Mission to steal more livestock.⁹⁸ The

Spanish quickly organized to retaliate, but smallpox soon required their attention. ⁹⁹ While the Karankawas and the Spanish built a relationship in south Texas, peaceful relations between the two sometimes soured.

The violence against coastal Indians alongside the health-reform projects inside the missions seems like a contradiction, but the Spanish viewed these two processes through the same sociocultural racial lens. During American colonial encounters, Europeans articulated appropriate and inappropriate forms of violence and objects of violence. Spanish officials sanctioned attacks against Indians on the coast, not only in retaliation against those who attacked colonial settlements but also because the Indians fell outside of the colonists' notion of civilization. Spaniards defined Native violence as a marker of Indian barbarity, while their own acts of violence would never threaten their sense of civility and superiority. In the missions, Indians were in the process of becoming civilized Spanish subjects, so missionaries justified their heavy-handed actions against neophytes as part of conversion. In both instances medical reform in the missions and anti-Indian violence outside the missions—Spaniards were outlining and actively policing the same boundary between civilization and savagery. 100

Nevertheless, there was a significant disconnect between the missionaries' vision and the reality of Indian conversion. College authorities created a plan to mold Indians into healthy Spanish subjects by reforming many aspects of neophytes' daily lives. Catholic ideals of healthy living proved difficult to bring to life in the missions. The cleanliness, hard work, Catholic penance, and self-control that missionaries believed would bring the Indians health were elusive, as Spanish colonists and friars contributed to the unhealthiness of the missions. They struggled to offer Native peoples sufficient food, and Indians responded by leaving or stealing cattle from nearby missions and settlements. Acute and epidemic disease devastated the missions throughout the late eighteenth century. Texas missionaries did not openly attribute mission Indian sickness and mortality to their "failure" to adopt "healthy" Spanish practices; however, their health reform efforts did not protect the Indians in the missions and helped create an environment where disease could thrive.

Secularization and the Absence of Health in Indian Conversion

The secularization of the coastal missions after Mexican independence from Spain removed healthiness from the image of the ideal Indian

convert. From the beginning, the ultimate goal of the Spanish missionary project was to turn Indians into tax-paying Christian subjects and to secularize the missions. Secularized missions would become parishes led by a priest, and mission lands would be privatized. 101 In Texas, the process began under Spain's rule, but the Gulf Coast missions continued to function. The new Mexican government saw the mission project as obsolete and had other plans for colonizing Texas and advancing the nation. During the early national period, it prioritized commercial agriculture and large-scale productivity. The state of Coahuila y Texas worked to boost the economy by recruiting foreign colonists to settle and develop land into farms and ranches. Secularization went lockstep with nation building, and a healthy Catholic neophyte was less important to the nation than an agriculturally productive Mexican citizen. South Texas missionaries tried to delay secularization. They had two reasons for wanting the missions to stay open: politically, it meant that the state was pulling authority away from the Catholic Church, so they tried to maintain some influence; and on a more local level, the priests did not feel that the Indians were ready to enter Mexican society. When they appealed to the government to keep the missions open, they adjusted their tune to the language of nationhood and argued that the Indians had not yet become agriculturalists. In the priests' political strategy, the Indians' so-called unhealthiness fell by the wayside.

Although secularization was a set plan, there was no set timeline. In Texas, secularization began in the 1790s with the San Antonio missions. Disease had ravaged mission populations, many Indians had left the missions permanently, and others had married Spaniards, increasing the missions' non-Indian population. In 1792 Fray José Francisco López of the San Antonio de Valero Mission advocated secularization to begin the following year. 102 By 1794 the Spaniards had secularized the five San Antonio missions and distributed mission property to individual Indians. 103 The Gulf Coast missions, however, were exempt from this phase of secularization, and Refugio Mission was even established at this time. In 1807 the Spanish government ordered the closing of the Rosario Mission and removal of the mission Indians to Refugio. A Spanish landowner, rancher Martín de León, and his neighbors purchased the former Rosario lands from the colonial state, foreshadowing contests over land that would plague the coastal Indians for decades to come.¹⁰⁴ The Spanish passed another secularization decree in 1813, but the coastal missions again received an exemption. Espíritu Santo and Refugio continued to function as a place to mold Indians into healthy Spanish subjects.

Mexican independence in 1821, however, would mark the beginning of the end for the Gulf Coast missions. Government officials in the new republic felt that the mission project was outdated. The federal government abolished the Spanish regimen de castas and affirmed, by law, the equality of all Mexicans. The new law certainly did not end racial discrimination in Mexico, but it symbolized the notion that the missionary college's Indian conversion project was out of fashion. Singling out Native peoples for reform violated the spirit of the new constitution. 105 Moreover, the Mexican government sought to cede power from the Catholic Church by stripping its control of mission lands and to boost the national economy by selling former mission lands. Land purchases were technically available to anyone, including former neophytes. The Mexican government therefore passed another series of secularization decrees.

In this context of nation building, Mexicans most likely still saw a relationship between health and hard work; however, Tejano elites did not dwell on improving Indian health. The changes in Mexico's political economy formed the backdrop of Texas missionary efforts to delay secularization. Their political strategy hinged on Spanish Mexican perceptions of Indians as backwards and unfit for citizenship. Despite the persistence of such racial characterizations, however, the language of Native savagery changed to reflect Mexico's new political culture, which sidelined former discussions of health and Native culture. The Church was losing its influence in the North, and Native citizenship in the Mexican nation was no longer based on Indians' transformation from unhealthy "heathens" into healthy Catholics. 106 Catholicism certainly continued to shape Mexican political identity—as we will see below, immigrants had to convert to Catholicism to become naturalized citizens—but Native inclusion into the national community, as the nation was being conceived in Texas, was predicated more on agricultural productivity. Looking to develop the nation, northern Mexican elites promoted private property and agricultural production in efforts to colonize and "civilize" the frontier. For Mexicans, the act of transforming nature was a sign of civility.¹⁰⁷ These political changes rewrote the conversation about Indian health. The missionaries' visions of healthy Catholic bodies took a backseat. Responding to a national focus on settler recruitment, colonization, and economic development in the North, the priests' strategy was to highlight Karankawas' so-called agricultural incapability in their appeals to political officials. They kept to themselves any desire to make Indians healthy.

The missionaries faced their first test in 1823, when the state ordered the secularization of Refugio and Espíritu Santo Missions. Fray José Antonio Díaz de León spent the next few years trying to prevent secularization, and his approach was to prolong the bureaucratic process by continuously petitioning state officials.¹⁰⁸ In one of his pleas, he painted a portrait of Indians in need of instruction at the two missions, and there is no mention of unhealthy Indians or even healthy Mexican living. Fray Díaz de León outlined three classes of coastal Indians. First, he counted 150 mission Indians—mainly Karankawas and some Cujanes—who went to the missions for protection from Comanche raids but who continued to engage in "barbaric" practices. Fray Díaz de León argued that the mission Indians were inherently violent and that they killed mission livestock and captured and traded children and female prisoners. The second group consisted of Karankawa "infidels" who lived in the area and were more numerous than the mission Indians. These Indians visited the missions and collected gifts there, and they had a relationship with the priest. This "barbarous" group sometimes attacked Anglo settlements in the area. The third group was made up of eight to ten families of Cocos that had lived in the missions but returned to the coast. Fray Díaz de León believed that with the state's military and financial support, he could teach the mission Indians how to farm their own plots and tend their own livestock. This would not only prepare Native peoples to contribute to the Mexican nation but also help the priest pacify the coastal bands, which would serve the national economy by enabling settlement in the region. 109 The priest discussed the importance of Catholicism in this process, but in emphasizing private land cultivation and Indian pacification, he highlighted the agricultural, economic, and security benefits of missionization.

In 1825, Fray Díaz de León used the agricultural approach in his effort to protect Indian landholdings near Espíritu Santo Mission, sparking a backlash from Tejana/os who coveted those lands. 110 In the early 1820s, newly arrived Mexican settlers started to encroach on Xaraname territory around Espíritu Santo, which also challenged the Indians' access to their lands in the mission. Fray Díaz de León helped thirteen Xaraname families petition the state for land around the mouth of the Guadalupe River. 111 However, the political chief at Béxar, José Antonio Saucedo, defended the Tejana/o settlers' occupation of the area and argued that the Xaranames were not good agriculturalists, "having nothing to start to raise [livestock.] When they lack all of the resources, . . . they are a moth in this Presidio [La Bahía]." 112 Despite the settlers and Saucedo's

opposition, the Xaranames initially retained control of most of their lands. But Saucedo continued to fight to transfer three lots to Mexican settlers. He asked the governor that the "lands that Padre Fray Antonio Díaz de León defends for the . . . [Xaraname] families of the Mission of Espíritu Santo be passed to [Tejana/os'] hands if it stays in the hands of [the Indian] families without resources nor application of agriculture and cattle breeding."113 Native struggles to hold onto their lands and Tejana/o efforts to obtain those lands revolved around the question of whether Texas Indians could be agriculturally productive citizens. In the Espíritu Santo case, the Texas government ultimately decided that because the Xaranames were unfit to cultivate off-mission lands, they would continue to receive agricultural instruction using existing mission lands, but they could not expand outside the Espíritu Santo boundaries.

Fray Díaz de León's tactic of focusing on agriculture instead of health was successful, and Refugio and Espíritu Santo evaded secularization for much of the 1820s; however, the Xaranames' story became more and more common as mission Indians fought with newcomers over land. In 1824 the government granted a colonization contract to Martín de León, which included lands around the two missions.¹¹⁴ As a recipient of this empresario contract, de León was responsible for settling families on the land granted to him. If those colonists were foreigners, they first had to become naturalized Mexicans by professing loyalty to Mexico and, if Protestant, converting to Catholicism. De León's land grant opened the door to a rush of Mexican settlers around the missions. Then on March 6, 1829, the two missions were finally secularized, and the former mission lands went up for sale. 115 Fray Díaz de León stated that the "Indians [were] incapable to enter the life of citizenship" and should remain in functioning missions to continue instruction on the "value of personal work and [to] work on the lands awarded to them." Trying to secure mission lands for agriculture and ranching, the priest again prioritized agricultural work and commerce over health.¹¹⁶ This time the state did not exempt the coastal missions, and it included the former mission lands in a land grant allocated to two Irish impresarios, James Power and James Hewetson. The new empresario contract opened up coastal lands for more newcomers.

In 1830 Karankawas and other coastal Indians responded to this migrant influx by attacking Mexican, Irish, and Anglo settlements in south Texas. According to a Mexican official, Native peoples tried to force settlers to respect Indian property because "upon dissolving [the Espíritu Santo] mission the [government] distributed its lands to private

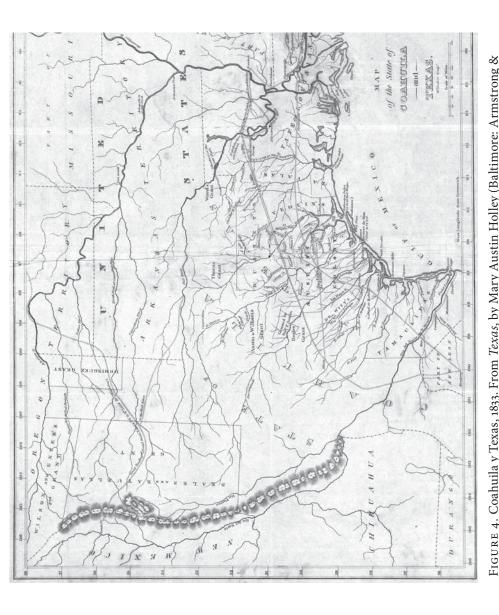


FIGURE 4. Coahuila y Texas, 1833. From Texas, by Mary Austin Holley (Baltimore: Armstrong & Plaskitt, 1833). Courtesy of the Texas State Library and Archives Commission.

individuals and assigned part of them for the [Irish] colonies, depriving the formerly 'reduced' tribe of the means of subsistence."117 At the beginning of the year, a group of Karankawas and Cocos attacked several ranches in the area, prompting a response from the local military. On February 12 Captain José María de la Garza and five soldiers left Goliad (formerly La Bahía) and headed south toward the Karankawa and Coco rancherías to retaliate. They arrived the following day and met with Prudencio, a Karankawa chief. Prudencio cooperated with Mexican officials, identified the culprits, and handed them over to de la Garza. He claimed that the offenders were members of a party led by Antoñito, another Karankawa leader.¹¹⁸ The six soldiers spent the night at the Karankawa ranchería, leaving the next day with thirty-nine Karankawa and six Coco prisoners. 119 Later that year, citizens of Goliad complained that Antonito and a party of about fifty Karankawas stole and killed their livestock. 120 Martín de León then led a group to punish the guilty party and to make peace with the local Karankawas. 121 The outcome of de León's campaign is unclear, and the attacks continued. Two months later, Placido Benavides, a settler in de León's colony, reported that Karankawas stole eight of his cows, and he requested the support of the troops. 122 The Karankawa and Coco incursions were localized to the areas around Refugio and Espíritu Santo, and they centered on property of those Tejano settlers who sought control of mission lands. They targeted livestock, suggesting that they continued to struggle to subsist as the area became more populated. More important, the Indians were asserting their claims to the missions.

Native attacks reinforced Mexican images of "uncivilized" and "unfit" Indians; however, the Karankawas were able to force Mexican landowners and local officials to the negotiating table. The Karankawas made numerous demands: they asked for Refugio Mission lands and agricultural tools; they requested additional help for defense against the Comanches; and they asked to "remain situated and subject to [the state] under the same terms, ways, and form in which they had lived in this Mission" prior to secularization, including maintaining a priest as the head of the mission. Missionaries would retain control over the land and access to Indian souls, and the coastal Indians would utilize the missions as they had during the Spanish era. They continued to seek Catholic guidance and wanted to return to a time when they practiced Indian Catholicism in the Native spaces of the missions. 123 With the return to the status that they enjoyed when the mission was functioning, the Karankawas could reincorporate the mission into their subsistence

practices, they could remain secure against the Comanches, they could continue learning Catholic doctrine, and they could retain access to areas in which to perform their own religious rituals. Despite reservations about Karankawa land use, the Goliad *ayuntamiento*, or city council, approved the agreement, and they briefly acceded to the Indians' demands as the Spanish had done. One city councilman wrote that "even though right now they do not fully take advantage of the place, in two years they will." The ayuntamiento struck a deal with the Indians hoping to minimize the violence between settlers and Native peoples. The Karankawas and other coastal Indians reacquired a portion of the Refugio territory, and the state government supported Power and Hewetson's rights to the rest of the mission lands. 126

Ultimately for the Indians, however, this agreement was a temporary victory, because missions held a marginal position in the new nation. The Church's conversion of Native peoples into farmworkers or even healthy citizens did not fit into the national imaginary. The missions no longer served a central role in the colonization of the North. Now, under Mexican rule, land distribution and settlement were the main colonizing tools. Tejanos saw the new national colonization project as a threat to their landholdings, and they worked to keep the missions open specifically to block colonization—Irish colonization—not to transform Indians into Mexican citizens. Like the missionaries, they wrote their political strategy using the language of nationhood, and they emphasized their Mexicanness, Irish foreignness, and coastal Indians' lack of fitness in order to reopen the missions and protect their lands. Their concerns over foreign incursions paralleled debates among Mexican officials regarding the role of Anglo and European immigration. Concerned about the major flow of Anglos into Texas, the Mexican government passed the Law of April 6, 1830, which prohibited Anglo immigration, rescinded empresario contracts that had not been completed, and prohibited the introduction of slaves into Texas.¹²⁷ It continued to allow European immigration into northern Mexico, so the dispute between de León and Power and Hewetson continued. Béxar political chief Ramón Músquiz mediated a compromise between the two parties, privileging their visions of the land over the Indians' claims. The Irish empresarios realized that they could not populate their colony with the four hundred Irish families as promised, so they accepted petitions from Goliad Mexican settlers for land titles. 128 Moreover, Power, Hewetson, and de León agreed on new boundaries between the two colonies to settle the dispute, a settlement that encroached on coastal Indian lands. 129 All of the land agreements—between the Karankawas and Tejana/o settlers, and between the Tejana/os and Power and Hewetson-hinged on the racial trope that Indians were unproductive, which made them unfit for citizenship. The Indians saw access to their lands slowly disappear. Some Karankawas did acquire private plots from the former missions; however, most continued to occupy the coast, away from the mission lands, struggling to retain land and maintain the way of life they had enjoyed before the settlers arrived.

The new Mexican political economy rendered Indian missionization and Catholic health work obsolete. Mexican officials tried to colonize the North and make Texas Mexican using other ways. Federal and state authorities sought to pull authority away from the Church, and missions in the North became the targets of this political power struggle. The Mexican government offered legal citizenship and equal rights to Native peoples. For the missions that continued to function after Mexican independence, then, the endgame shifted: instead of molding Indians into healthy Catholic Spaniards, missionaries would turn them into productive Catholic Mexicans. As they fought secularization, the priests argued that Texas Indians were not ready to live independently; they had not been converted into successful farmers. This image of incapable Native Mexicans delayed secularization through the 1820s. Refugio and Espíritu Santo Missions, however, succumbed to state and national officials' nation building project for the North, which centered on land grants and agricultural development. While coastal Indians could receive grants and own land according to Mexican law, for Tejana/o and Irish settlers in the Gulf Coast, they became an obstacle to colonization. They fought for their land in the first decade after Mexican independence, but the new system of land distribution and settlement ended the missions' tenure, displacing the Karankawas from former mission lands to the inland countryside.

In the eighteenth century, the Spanish made a territorial claim to the southern Texas Gulf Coast through missionization. Missionaries would transform the coast into a Spanish place and mold its Native inhabitants into healthy Spanish subjects in the missions. After settling in the salubrious coastal landscape, colonization meant teaching neophytes the virtues of Catholicism, layering them in Spanish clothing, refocusing Indian foodways around meat and maize, and developing work schedules that taught the medical value of hard work and clean missions. Many coastal Indians lived in Spanish missions for part of the year and

integrated them into their subsistence cycles. Drawn to the missions for food and physical security, they navigated Spanish missionary dreams of conversion. Despite the priests' plans of Indian "reduction," though, Texas missionaries faced a more complicated reality that became a balance between the exigencies of frontier life, Native autonomy on the coast, and the spread of disease. The friars often could not deliver on their promises of a regular food supply, and mission Indians could effectively leave the structures whenever they saw fit. Moreover, disease and infant mortality rendered the missions unhealthy. Missionaries worked to keep the structures open after Mexican independence, but there was little room for them in the new political economy of Texas. Mission lands were distributed to non-Indians, displacing the Karankawas and other Native peoples from the coast.

Missionaries were never successful in stamping out Native practices, including healing, which in the eyes of Spanish Mexicans often made them suspect and often served as another marker of Indian savagery. This characterization of northern Indians came to the fore when a cholera outbreak swept through the Americas in 1833. Healing practices that made the Indians "backward" and "not Mexican" suddenly became relevant, as state officials witnessed the mortality rate skyrocket and public health initiatives fail. Physicians sought new healing knowledge to combat the devastating disease, and they ultimately turned to mission Indians in Tamaulipas, just south of Karankawa territory. The following chapter explores the epidemic in northern Mexico, when authorities appropriated Native healing practices for a national public health project.

3 / Cholera and Nation: Epidemic Disease, Healing, and State Formation in Northern Mexico

Health might have fallen out of the image of the ideal Indian convert, but the health of the nation still mattered. In the 1830s, the Mexican conquest of the North meant conquering epidemic disease. A few years after the Mexican government secularized the south Texas coastal missions, a cholera epidemic that had struck Europe, Asia, and North America made its way to Mexico.¹ Cholera ravaged much of Mexico, stretching from Chiapas in the south to Coahuila y Texas and Tamaulipas in the North.² When the disease hit the south in the spring of 1833, the federal and state governments sent preventive measures to city councils throughout the North to combat the disease. These initiatives centered on cleanliness, and municipalities worked hard to remove harmful filth from their respective locales. Towns all over the North complied. But cholera roared on. When it finally hit the state of Coahuila y Texas, the state government sent more cleanliness measures, plus the physician Pascual de Aranda's prescription to treat the unlucky patients. Out of desperation, it later supplemented that scrip with a different remedy developed by Ignacio Sendejas. In his search for a cure, Sendejas tapped into existing cross-cultural ties in Tamaulipas and observed Forlón Mission Indian healers employ peyote, a plant known to cause hallucinations and associated with Native religious practices. He incorporated peyote into his own remedy to combat cholera and passed it on to the Coahuila y Texas government. Sendejas's cure became the state's preferred prescription.

This chapter shifts the focus on health from missionaries to doctors, and from the role of health in church and state relations to the role of

health in state and federal political action. While Mexican independence pushed Native health to the sidelines of mission politics, the 1833 cholera epidemic foregrounded health and healing in discussions about the nation's future. As state governments and municipalities tried to prevent the spread of disease, they reintroduced conversations about healthy living and proper notions of healing in the political and medical arenas. Many of the medical ideas that had animated Spanish colonialism continued to hold sway in the Mexican era. In their efforts to build a modern republic, Mexican elites touted a sound public health infrastructure and scientific medical innovation. At the nation's northern limits, moreover, the practice of medicine continued to grow out of cross-cultural encounters between Mexican and Native practitioners. Physicians and lay practitioners' therapies influenced how Mexican elites framed "legitimate," national medicine. The story of cholera, then, is also a story about how Mexicans constructed cultural identities and nationhood around healing. At this time, there was no clear division between religion and medicine. Mexican Catholics used prayer as medicine, for example, and curanderismo—a hybrid form of Mexican lay healing—had deep religious roots. Curandera/os provided therapies for supernaturally and socially caused sicknesses, care that physicians could not provide or even explain.³ While many Mexican health practices blurred the line between religion and medicine, however, Catholicism continued to influence Mexican perceptions of Native healing. Some Native healing practices peyote healing-had religious overtones that made Indians savage in the eyes of many Mexicans. When Mexicans marked Indian healing as "superstitious," they were not simply drawing a line between therapies themselves, especially since doctors and Native healers employed some of the same therapies, such as the use of botanicals. They were referring to conflicting religious and medical worldviews. Both science and religion underlined a racial boundary that Mexican elites drew between Mexican orthodox medicine and Native healing.

Physicians and political officials crossed those boundaries during the epidemic and appropriated Indian medicine to treat Mexican citizens. In these nascent years of nation building, Mexican physicians and state officials struggled to fulfill their political obligation and protect the health of northern Mexican citizens with cleanliness initiatives and orthodox medical therapies. Native medicine answered the state's problems. Any line that separated Mexican scientific medicine from Indian health practices was, in reality, ambiguous; however, the physician Ignacio Sendejas and state authorities could not accept a peyote remedy that reflected their

conception of Indianness. Many Mexican officials saw public health and scientific medicine as symbols of the modern nation-state, so what would it mean if they used a "backwards" and "superstitious" Native therapy to treat citizens?⁴ Before passing on his remedy to the state capitol, Sendejas legitimized peyote for himself and for the government through medical theories and scientific experimentation, ultimately stripping it of its "Native" identity and making it "Mexican." Peyote healing, a practice that many Mexicans marked as heathen and non-Mexican, allowed the Coahuila y Texas state government to serve its citizens.

The peyote exchange and Coahuila y Texas's public health initiatives also fulfilled elite national goals by linking medical practice in the North with medical developments at the national level. In the mid-1830s, Mexican physicians were actively reorganizing the profession, redefining Mexican medicine, and outlining how they could serve the nation. To understand how medicine in the North reflected this national debate, the last section of the chapter shifts the focus from Coahuila y Texas to Mexico City, where physicians articulated their visions of medicine's prominence in medical journals. They believed that orthodox medicine offered a road to modernity and global relevance for Mexican doctors and for Mexico, intensifying physicians' differentiation between orthodox medicine and Indian healing. Of course, this did not stop Ignacio Sendejas from seeking medical knowledge from Native peoples, despite characterizations of Indian cultures as obstacles to modern nationhood. Rather, it fueled such medical appropriations, as Mexican physicians began to tout their practice of cutting-edge medicine. Because Mexicans saw some Native healing practices as superstitious, Sendejas was working against the grain by incorporating peyote.

Race and Native Healing in Northern Mexico

Spanish characterizations of Native peoples continued to shape Mexican racial ideologies after independence. After all, Spanish Mexicans were responsible for colonizing and civilizing the frontier, now for the new nation. Mexican categories of indigeneity in the early national period resembled Spanish racial formations, even though the new Mexican government had abolished the *regimen de castas*: Indians who mixed into the ethnic Mexican society in towns or settlements; mission Indians; Native migrants from the United States; and "*indios bárbaros*," who were mostly nomadic peoples.⁵ Far from representing a strict division of Mexican society, the categories point to a spectrum of civilization along

which Native peoples could move. An "indio bárbaro" could become "Mexican" if they gave up raiding and a nomadic life and adopted farming and ranching. Mexican identity and its indio-bárbaro counterpoint now reflected the national political economy in which the Mexican state privileged individual landownership and sedentary agriculture to recruit Mexican and foreign settlers, secure and colonize the North, and insert the region into the global economy. Land use was about more than just the economy; it was also about the future of the nation. Indians became equal citizens under the constitution, but the state abolished collective ownership of land after independence, attempting to force Indians to become private landowners. As we saw in chapter 2, the government sought to incorporate indigenous peoples into the body politic as agriculturalists.

The state government of Coahuila y Texas was concerned about how nomadic Indian activities would affect economic growth. Resembling the Spanish approach, Mexican colonization in the Far North necessitated Native cultural change. The problem for Mexicans, however, was that the so-called indios bárbaros still held sway.7 The Comanches continued to dominate much of the region and threaten northern settlements, and the Lipan Apaches, another nomadic group, threatened Mexican settlements on both sides of the Río Grande. State officials saw Lipans as sinfully violent and larcenous. In 1828, for example, José Francisco Ruíz reported on the Lipans and presented his findings to General Manuel Mier y Terán. He described the Lipan Apaches as excessively violent: "these Indians . . . sometimes eat those they kill in war." For Ruíz, the Lipan "tendency to steal" also proved their savagery: "Sometimes they steal the townspeople's animals and burn the owner's brand with gunpowder, or use a branding iron. In this manner the original owner will not be able to reclaim his animal. This is the greatest damage the Indians have been perpetrating. When they steal cattle to slaughter and eat, they are not nearly as reprehensible as when they steal animals to sell later." Ruíz decried Lipan efforts to alter or remove ranchers' brands from livestock because it was a direct affront to individual property ownership and, therefore, overtly transgressed the Mexican nation-building project. Ruíz also differentiated between Indian theft for survival and theft for sale, particularly because of the effects of the latter on the regional economy. Stealing to survive hurt the owner of the animal; stealing for trade purposes undermined the Mexican economy. Ruíz expressed these concerns at a time when economic development in the Mexican North was limited. In his eyes, Native peoples were threatening nation-building

efforts. Because of Mexicans' economic and security needs in Coahuila y Texas, Ruíz argued that Indians could be civilized and brought into the nation. He suggested that the government "make a concerted effort to change the Lipans' ways and settle them down." If only Lipans and Comanches could embody indios civilizados, or civilized Indians, both groups may be able to enter the Mexican national polity and society.8

Mexican officials knew that cultural conquest was unrealistic. Their racial perceptions of violent and incompetent Indians did not preclude them from building relations with Native peoples, because Indian-Mexican struggles threatened national stability, economic growth, and the allure of the North for Anglo and European emigrants. Mexican state officials built and nurtured alliances with Native groups to protect settlements and develop trade, some of which dated back to the Spanish period. Spaniards in the province of Nuevo Santander—which became Tamaulipas, the site of the 1833 peyote exchange—developed alliances with Indians they saw as peaceful, including the Olives, Palagüeques, and Camariguanes. They hoped this would minimize violence in the region.9 In some cases, Spaniards provided trade goods specifically to build peaceful relations with Nuevo Santander Indians.¹⁰ Other times, Spanish settlers needed certain goods that only the Indians could provide. For example, Fray Vicente de Santa María, who traveled to the northern provinces at the turn of the nineteenth century, described a history of exchange in the region, in which Spanish settlers offered Native peoples fabric, cotton, and wool in exchange for deerskins and other animal hides. 11 Local markets in hides flourished, probably because Spanish borderlanders made garments out of animal skins. 12 In southern Nuevo Santander, where the Spanish established the Forlón Mission in 1803, Spaniards regularly traded with the Mariguane Indians.¹³ While Native peoples of Nuevo Santander resisted Spanish efforts to convert them into imperial subjects, the Indians did offer military assistance and necessary goods. Spanish colonialism throughout northern New Spain centered on sustained interactions with diverse populations of Indians. The independent Mexican government continued to promote trade, diplomacy, and military alliances and approved treaties and, in some cases, land grants for Indians, since all parties needed trade partners and military allies, even if they were dealing with "wildly" mobile Native peoples. These diplomatic, economic, and military connections gave rise to cross-cultural marriages, consensual and coercive sexual relationships, and mestizaje in the borderlands.14 After years of interdependency and racial and cultural mixing, though,

Mexicans' interactions with Indians continued to shape their sense of self as non-Indian.

Constructing identities around everyday living, Mexicans' notions of "Mexicanness" did not revolve around agrarianism, and nomadism and violence were not the only attributes associated with "Indianness." Religious and medical practice also influenced identity formation. One official's descriptions of Texas Caddos, Comanches, and Apaches show how religion and medicine could take center stage in racial demarcation and definitions of Native savagery. Juan Antonio Padilla wrote that the Caddos had good "moral customs" and were "not ambitious like the Comanche and Apache," even "considering the fact that they are heathen."15 Padilla's estimation of the Comanches and Apaches reflected the widely held view of nomadic peoples.16 The "friendly [Caddo] nations" were peaceful in the eyes of settlers and state officials; however, they retained their savagery because of their religious and medical practices. Padilla commended Caddo "knowledge of many medicinal herbs which they use for wounds and other accidents with good results; although, in their method of cures," he continued, "there is always present superstition and excesses."17 Euro-American representations of medical superstition involved more than capability and more than just method, since many healers in Mexico, lay and professional, relied on botanicals, while only some forms of plant healing were deemed superstitious. Padilla approved of Caddo agricultural customs because they fit into the Mexican national imaginary, but their spiritual cures made them suspect.

French scientist Jean Berlandier's travel narrative demonstrates that individuals with authority in the Mexican government framed Indian medicine as superstition. In the late 1820s, Berlandier reported on Native health practices during his travels through Texas with General Manuel Mier y Terán. According to Berlandier, healers used plants to combat numerous diseases, including syphilis, smallpox, measles, and various respiratory problems. Throughout his narrative, he distinguished between Indians and non-Indian peoples. Without identifying his subjects, he wrote that the "crude medicine of the natives is limited to [the] performance of a few superstitious ceremonies and the use of a few simple medications." These unnamed Indians called on medicine men "gifted with supernatural abilities" and plant knowledge. To treat sickness, healers would set up a tent and summon community members three times a day to chant, exorcising the spirit of the illness from the patient's body. Berlandier referred to the supernatural twice in his discussion of Indian healing. He called Native plant healers' skills "supernatural," and

he mentioned the supernatural when writing about "civilization": "The natives are by no means of limited intelligence, though they are not gifted with that supernatural intelligence or genius that is the boast of . . . civilized worlds." Berlandier described both Native healers and "civilized" practitioners' abilities in a superhuman way, but, in his eyes, the former did not possess the level of superhuman intelligence of the latter. For the Frenchman, only the Indians practiced "superstitious ceremonies." ¹⁸

Taken together, Berlandier and Padilla believed that a certain way of engaging the supernatural constituted superstition. Mexican authorities did not define Native healing as superstitious simply because it sometimes included religious healing ceremonies. Mexicans also blended religion and medicine. After mission secularization, for example, missionaries' role as practitioners transferred to curandera/os, who practiced hybrid forms of medicine rooted in multiple religious traditions. Already popular among Mexicans of all classes, curandera/os treated serious afflictions by prescribing botanicals, practicing healing rituals, and engaging with canonized and locally recognized saints. Curanderismo's popularity among Mexicans shows a fluid line between religion and medicine that did not reduce religion's influence on medicine to either Catholicism or Indian religions. Curandera/os blended religious traditions, which might have posed a problem for those who believed in religious purity or exclusivity. In the North, however, not everyone observed a particular religion in the same way. Catholicism and Native religions were fluid.¹⁹ In this contact zone, Native medicine raised red flags when therapies were based on certain forms of Native religion, not Native religion itself.

The "superstition" label constituted more than just ideas; it referred to the ways in which religious ideas were expressed in practice or how people practiced religious healing. In their encounters with Native peoples, Mexicans assessed Native medicine along the lines of "proper" and "improper" religious practice, a way of seeing tied to Mexican notions of Mexicanness and nationhood. In late colonial and early national Mexico, Catholics promoted self-restraint, defining superstition as the antithesis of Catholic self-control. Elites took these ideas a step further by singling out women as particularly prone to superstition and, therefore, in need of spiritual guidance. For example, as stated in a colonial decree, peyote caused "fantasms [sic] and representations upon which divinations are founded." It came under scrutiny during the Inquisition era in New Spain, and women practitioners who used the plant bore the brunt of the crackdown in colonial centers. The peyote decree shows

that the phantasms, hallucinations, and divinations—physical expressions of religion—were part of the problem. Peyote healing was often practiced by female healers, who were seen as a threat to Spanish male authority. It caused people to act in unsavory ways and gave power to the wrong people. It endowed lay people with the ability to play a more active role in religious rituals, something that ran counter to the hierarchical and authoritarian Catholic Church, in which only the clergy were permitted to interpret scripture or lead religious ceremonies. For Spanish Mexicans, then, it was overtly non-Catholic. Mexican officials viewed aspects of Native medicine as superstitious based on the ways Indians expressed religion in botanical cures and healing rituals.²²

From the moment that the Spaniards arrived in Mexico, they viewed peyote as a threat to the Catholic Church, and they targeted healers. In 1620, for example, the crown issued an edict against the use of peyote.²³ People from all rungs of the social ladder nevertheless sought out unlicensed healers for various spiritual and medical needs and often used peyote.²⁴ Some Indian healers incorporated the spiritual use of peyote into Catholicism as a way of maintaining Native rituals during the Mexican Inquisition.²⁵ The development of missions in Texas also helped spread knowledge of peyote, because people migrated with missionaries from areas where peyote thrived to areas where it was less known.²⁶ Peyote's historic and widespread use in the North for healing purposes could explain the Mexican physician Ignacio Sendejas's familiarity with the cactus and its healthful properties when he confronted the plant during the 1833 cholera epidemic.²⁷

For those who consumed peyote, the meanings surrounding the plant depended on whether people were using it for therapeutic, religious, and secular reasons. In the eighteenth century, east Texas Caddos swallowed peyote during religious rituals.²⁸ Men and women drank liquid infused with the cactus and performed ritual dances. The Caddos also used peyote before war to produce visions of their enemies' military tactics.²⁹ Similarly, Indians along the Río Grande drank "peyote and [the juice of] other herbs which cause a disturbance of the senses producing visions and apparitions," thereby enhancing their religious ceremonies.³⁰ And in colonial Nuevo Santander, several elaborate Native rituals included peyote consumption. Indians there organized lavish, communitywide feasts and occasionally invited people from neighboring villages to celebrate harvests, military victories, and changing seasons. They placed fruits around a bonfire and danced in celebration to a drumbeat and chants. During the ceremony, Indian girls and older men served peyote

to guests.³¹ Though filtered through colonialist eyes, these descriptions suggest that many Indians believed in peyote's spiritual potency. But for Spaniards, peyote consumption represented witchcraft or improper religious expression, resembling the ways that Spanish missionaries characterized Karankawa religion. The association of peyote consumption with Native religion, then, probably informed Mexican perceptions of Ignacio Sendejas's remedy in 1833.

The association of Native medicine with heathenism did not necessarily affect day-to-day life in Mexican Texas, since, as in the Spanish era, Mexican racial ideologies meant little outside of their own settlements; however, this characterization was common, which will help us understand peyote's role in Mexican nation-state formation and northern colonization. The view of Indians in the North as superstitious or irrational would influence how Sendejas saw peyote as a potential cure for cholera, how he incorporated the plant into his remedy, and how he presented his cure to the state government of Coahuila y Texas. Two historical processes had set the stage for Sendejas's appropriation of peyote healing. First, the exchange occurred amid sustained interactions between Spanish Mexicans and Native peoples throughout the Texas-Coahuila-Tamaulipas region that dated back to the colonial era and revolved around trade, security, and cultural practice. In addition to this long history of cross-cultural relations and exchange, a more timely and pressing factor played into Sendejas's dealings with Indians who consumed the hallucinogenic plant. The peyote remedy followed a series of public health initiatives passed in the North that were meant to stop the spread of cholera. Sendejas crossed cultural boundaries in part because of the state's failure to arrest the epidemic.

The 1833 Cholera Epidemic in Northern Mexico

The Mexican government tied economic success in the North to population growth and land development. Epidemic disease threatened these national goals for the frontier. The Mexican government saw the protection of the citizenry's health as its responsibility, and in 1833 it was faced with a bleak medical scenario. Mortality rates soared during the cholera epidemic, and cholera caused much pain for those afflicted. It produced dehydration, cramps, muscle spasms, and thirst and caused uncontrollable vomiting, diarrhea, and sometimes bleeding.³² This horrible illness did not deeply affect only victims but also the communities in which they lived.³³ Because of cholera's brutal effects, it is no surprise

that its appearance in southern Mexico in the fall of 1832 produced a ripple effect, igniting social and political activity across the young republic.

The government's first move in its battle against cholera was to revive the dormant public health infrastructure. In November 1832 Coahuila y Texas inhabitants began to prepare for the imminent arrival of cholera. The epidemic had already afflicted the eastern and southern coasts of North America, and soon it would hit northern Mexico. As directed by the political chief of the Department of Texas, Ramón Múzquiz, municipal officials braced themselves by reorganizing juntas de sanidad, or boards of health: "Having knowledge of the proximity of the dreaded disease to this Department, you will have time to use all the means in your power to prevent the occurrence of this destruction by the legal means of establishing boards of health although they be with a provisional character."34 When the federal government learned that cholera had invaded the republic through the southern state of Chiapas in February 1833, the news trickled down the political ladder. The national government offered recommendations to the states. The governor of Coahuila y Texas passed the word to Múzquiz, who then communicated those measures to Texas municipalities, measures that dictated cleanliness and urged citizens to wear a copper medallion around their necks as a precaution against cholera.35

For about a month, cholera spared Texas, even though it already had taken many lives in Louisiana to the east and farther south in Chiapas. Heavy rains and flooded rivers prevented the transport of mail in Texas for much of April, so news of the disease moved slowly.³⁶ But in early May, Stephen F. Austin, who fulfilled his father's empresario contract to become the first Anglo-American empresario in Texas, reported to the Béxar ayuntamiento that cholera had taken the lives of Anglo colonists along the Brazos River. "From April 10 to 12," Austin wrote, "eleven to twelve of the thirty or so North American colonists of San Felipe de Austin were attacked [by cholera] . . . and seven had died by April 16." Since there were no resident doctors in the colony, Austin diagnosed the situation himself. He deduced that it was cholera that had struck the area, for "the symptoms of this disease were similar to those that have been communicated to us through news from Europe and through our Republic's newspapers."37 Perhaps the disease traveled from the east and not the south, for no one reported a case of cholera anywhere south of Béxar until early August, and municipal officials were certainly on high alert.

Later in the summer of 1833, cholera hit other parts of northern Mexico. Even though it entered through the state of Tamaulipas, which



FIGURE 5. Global diseases in the early nineteenth century. The middle map at the bottom depicts the spread of cholera from Europe to the Americas in the early 1830s. It was published in the German geographer Heinrich Berghaus's two-volume atlas, Physikalischer Atlas. From Planiglob zur Übersicht der geographischen Verbreitung der vornehmsten Krankheiten, by Heinrich Berghaus (Gotha: Justus Perthes, 1849). Courtesy of the David Rumsey Historical Map Collection, www.davidrumsey.com.

bordered Coahuila y Texas, the news of its arrival there came from Mexico City. On July 19, the federal government reported to the governor of Coahuila y Texas that "cholera has invaded the Republic, appearing for the first time in . . . Tampico in the state of Tamaulipas, causing . . . strong damages, and the number of dead has been increasing; since the 6th of this month, 40 people have died."38 The report took longer to travel to Texas than to Coahuila, so the Coahuila ayuntamientos were able to act earlier.

Conquering cholera would mean improving urban cleanliness, so the state's public health initiatives focused on individuals' daily practices

in an effort to maintain clean towns. Since people believed an unclean environment caused illness, many of the measures targeted dirty places for clean-up. The governor of Coahuila y Texas produced a list of thirteen preventive measures. The initiatives reflected a discursive shift in theology and medicine that had occurred at the turn of the nineteenth century, in which clergy and physicians, together, emphasized "individual responsibility by promoting the idea of the body as an object of self-management, an entity that required constant and self-conscious attention to maintain health."39 This medical angle on personal responsibility revolved around an individual's relationship with the environment. To combat cholera, the state first prohibited the slaughter of animals near acequias, or irrigation ditches. The efforts at creating and maintaining clean spaces had implications for households. The juntas were in charge of "care of the streets, plazas and other passages of public use, and removing trash, rocks, . . . or . . . other potentially harmful things," while individuals were told to "bathe and shower at least every Saturday." Numerous measures addressed the preparation of food, including meat and fresh fruits and vegetables. Vendors had to get permission to sell fruit in the city. All individuals had to keep their tools, homes, and themselves clean, particularly people who handled meat; one measure stated that the "slaughter of livestock . . . for consumption by the inhabitants can only be done outside of the city." Residents were not allowed to keep livestock in the city, and the juntas gave owners one month to make arrangements to remove the animals.⁴⁰

A few months later, the state sent more public health initiatives to institute healthy living further by enhancing cleanliness on top of the earlier provisions and prohibiting additional unhealthy activities. These measures were more rigorous than the previous set. Municipalities would continue to manage the cleaning of public places, but they told residents to take their trash out by seven every morning when the city would start pick-up. Citizens had to clean the inside of all buildings, including homes and places of business. The ayuntamientos prohibited washing, bathing, "or any other thing that could dirty" the wells or acequias. As before, food vendors had to keep slaughterhouses clean and could only kill animals outside of the city. Moreover, the sale of unsanitary seeds or spoiled fish or meat was prohibited, as was the "sale of green fruit, vegetables, spicy foods, liquor; but [alcohol] with medicinal value can be sold to people who [the seller] knows will not become accustomed to drinking it." The state even tried to regulate leisure activities, mainly at night. Physicians believed that exhaustion weakened an individual's constitution and led to illness, so

"dances . . . that will enliven the citizens and give them a chance to stay up late" were prohibited. Last, residents could not disrupt or resist the municipalities' efforts, including private home inspections. The punishment was a "fine of four to twenty-five pesos for the first offense." If offenders could not pay the fine, they were to be "placed at the disposal of the city officials, who can raise the fine up to fifty pesos or impose another penalty that corresponds with the crime." Targeting large cities and small towns, the state hoped to prevent the spread of cholera in Coahuila y Texas with the extensive and intrusive public health laws.

The government of Coahuila y Texas then supplemented the cleanliness provisions with two prescriptions for those afflicted with the disease, both of which engaged the landscape's medicinal properties. In Coahuila, the ayuntamiento of Guerrero received twenty copies of a cholera prescription developed by Pascual de Aranda, a professor of medicine.⁴² De Aranda first outlined a list of drinks that Indians at the Forlón Mission in Tamaulipas had used to combat cholera earlier that summer, including vinegar, nejayote, and juices derived from lemon, lime, and ashwood.⁴³ He used these liquids to concoct a plaster of "Lime whipped in Vinegar and Lemon juice" to apply to the stomach, legs, and joints. De Aranda then offered his own liquid mixture for patients to take in addition to applying the plaster: a mixture of water, chamomile, citron syrup, and laudanum. Patients were to drink a pint of the liquid in half-cup intervals every five minutes. Afterwards, the sick were to apply a "hot brick to the plant of the feet, the brick wrapped in woolen cloth, or use bottles full of hot water, and friction all over the body with the hand wrapped up in woolen cloth." For stomach cramps, de Aranda prescribed a stomach massage with whiskey and salt, in addition to the plaster and the drink, which included the pain reliever laudanum. Physicians commonly used laudanum, but de Aranda knew that there were few licensed doctors in the northern frontier. He noted that "in places where there is no means of obtaining the medicines mentioned in this curative method," caregivers should "first of all apply to the patient a strong infusion of mint, chamomile powder, and poppie, trying to get supplied at once of the medicaments already indicated."44 De Aranda described such alternatives not only because physicians were lacking in remote areas but also because of people's familiarity with and even preference for plant cures in the region. Municipal officials did not comment on de Aranda's prescription. But his inclusion of cactus and other local plants suggests that both physicians and the state government supported remedies practiced by unlicensed healers.

Béxar's public health activity also revealed the state's acceptance of unlicensed practitioners. By September, the people of Béxar also had not yet felt the brunt of cholera, but the ayuntamiento was prepared for the worst. Following the governor's orders, the municipality formed a junta de sanidad. The health board consisted of eighteen individuals, including "just one curandero or medio Medico," or "average healer." Despite the negative characterization, the inclusion of a curandero in the board of health indicated that the healers were valued members of the local medical marketplace. 45 Presumably, some bexareños frequented curandera/ os, and their popularity among townspeople explains the inclusion of a curandero on the Béxar junta de sanidad. Like de Aranda's alternative prescription for cholera, this signified the blurry division that existed between orthodox physicians and lay healers. Moreover, the appointment of a curandero to the junta was another example of how local and state governments incorporated diverse healing methods in their battles with epidemic disease, despite the state's medical licensing system. The junta divided the town into five parts, and small groups of board members oversaw each section. The head of the Béxar ayuntamiento, Miguel Arciniega, ordered the representatives to administer the "three diverse, worthy prescriptions that the . . . Vice Governor communicated, giving much preference to the peyote for its simplicity, [and] . . . in many places it has been curative."46 Arciniega enclosed copies of a peyote prescription that the physician Ignacio Sendejas developed in Monterrey and covered the cost of the delivery of peyote, "attending to the great poverty in which [Béxar] finds itself."47 Texas officials acted fast and reorganized the public health system to facilitate the distribution of medicine.

Following orders, the ayuntamiento in Béxar outlined what to do if cholera entered the city . If anyone got sick, heads of family had to report to junta leaders of their respective section and describe symptoms. If the epidemic struck the city, members of the ayuntamiento were told to meet every three days and also to consult Alejandro Vidal, who was not a doctor but an unlicensed medical practitioner. The practice of inviting a knowledgeable Euro-American to care for residents in the absence of a licensed physician dated back to late eighteenth-century New Spain. Since there were no physicians in the city, Vidal helped care for the poor, and he "offered his medical services . . . to the indigent free of charge. A group of elites covered much of the cost of medicines and care for the city, and one resident and well-known politician, Erasmo Seguín, arranged to furnish the city with meat if cholera actually hit. Their actions reflected the self-sufficiency of Mexican *norteños*, even when the state claimed

responsibility for public health. The last municipal preventive measure concerned the distribution of medicines. The board of health circulated information on three state-sanctioned prescriptions to citizens in each of the five sections of the city. The city ordered the junta to provide sufficient quantities of peyote to anyone who needed the medicine.⁵¹

Despite the government's strong efforts, many in Coahuila y Texas did not escape the epidemic unscathed. Several members of the Sánchez Navarro family, who owned much land around Saltillo, Coahuila, suffered the ravages of cholera. Writing from Mexico City, brothers Jacobo and Carlos Sánchez Navarro y Beráin were anxious to hear from their mother, María Apolonia Beráin de Sánchez, when they learned that cholera had hit Coahuila. They were especially worried because they had seen the power of the disease as it raged through the nation's capital: "Here this epidemic seems to have calmed after having killed more than nine thousand people[.] We and all of the family have escaped [the disease], but it attacked the cook with such strong force last night that it left us all terrified."52 Their family members and friends in Coahuila were not as fortunate. María Apolonia's husband, José Melchor, contracted the disease, but he was lucky enough to survive it.53 Sadly, close friend Ramón Mendoza de Rojas died. Mendoza contracted cholera in September, but initially he refused to take any medicine to alleviate the symptoms. A few days later, he "took some [medicine], but it was not enough and too late."54 The death rate soared until mid-October, when the epidemic in Coahuila finally subsided. In the end, the small town of Gigedo counted "sixty-six dead; the divine majesty finished [flexing] his arm of divine justice, ending the epidemic thank God."55

Texas settlements were not spared either. As in April, the settlers in Stephen F. Austin's colony felt the devastation. Residents of Brazoria suffered tremendously, Anglos and African American slaves alike:

The colera [sic] has made destruction in Brazoria and its border, among the dead are . . . D. John Austin, and his son, the wife of his brother Mr. Williams and his daughter, Mr. James Westall, Mr. Anthony Ediston of the *Gaceta*, Mr. Reynaldo, formerly partner of Mr. Wiliam [sic] Austin, the oldest son of Mr. Bell, the oldest daughter of Mr. Henry Austin, many other persons unknown to me and many negros [sic], also it is said that Mr. Westay, the father, has died. They tell me that now only some five or six persons remain in Brazoria, all the families have moved to other points to get away from the plague.⁵⁶

Altogether, eighty people died in Brazoria. The epidemic also struck other parts of Austin's colony. Many of the residents of Velasco fled the epidemic there, while cholera took the lives of numerous settlers at Matagorda. The center of the colony, San Felipe de Austin, however, escaped this time. One settler, Luke Lessier, felt "satisfaction . . . that major harmony and tranquility reigns on this municipality [of San Felipe de Austin]. And even though in some parts of the colony there has been much illness of cholera, in this [area we] have not suffered illness other than fever and chills."

The state government organized extensive public health initiatives to prevent cholera's spread and to preserve bodily health by regulating everyday practices, and private citizens contributed to the government's efforts. Cholera roared on, and the ayuntamientos grew desperate. As a result, Mexican physicians looked for less orthodox healing methods to stop the spread of disease.

Desperation Fosters Creativity: Peyote and Cholera

Even though Spanish Mexicans questioned some Native health practices and framed them as illegitimate medicine, physicians still appropriated Indian healing methods. One of those less orthodox cholera cures involved peyote, a hallucinogenic plant, and its use derived from Native practices. The remedies Spanish Mexicans and Native peoples employed were often the same, but the theories behind the remedies and their application were culturally defined. Medical practice could cut across racial lines, but for professional doctors, medical theory did not. They therefore had to repackage peyote as science in ways that resembled Spanish physicians' appropriation of Native medicine. Mexican doctors could make any therapy "medical" through scientific testing. Mexican officials ultimately endorsed a cure from communities they often considered barbarous obstacles to colonization. Elites drew a racial boundary marking these communities' practices as unbecoming of a Mexican. So when Sendejas and the state of Coahuila y Texas adopted peyote medicine, it may have seemed as though they ignored the cultural exclusivity of the imagined nation. To maintain the nation's cultural boundaries and serve Mexican citizens with what appeared to be a backwards practice, they reframed it as medically legitimate and appropriate for Mexican doctors and patients. Desperation in the time of cholera magnified the relationship among race, culture, and nation-state formation, as Ignacio Sendejas appropriated the practices of non-Mexican peoples to combat

cholera and display Mexico's modern status through successful public health initiatives. His peyote remedy carried political weight, moreover, since the government of Coahuila y Texas promoted it as the most effective cure to the municipalities.

In the nineteenth century, ethnic Mexicans redefined Native savagery in national terms, questioning the fitness of Indians for Mexican society based on cultural practice and placing them figuratively outside of the nation. When cholera ran rampant in 1833, the healing customs that made Native peoples into heathens took on new meaning because the state found use for a so-called superstitious Indian practice. Learned from Native practices, Mexicans' appropriation of peyote healing revealed the state government's anxiety over the protection of its citizens. The cholera epidemic elicited a sense of crisis among federal, state, and municipal officials. Death rates soared, and the disease spread throughout much of the republic despite preventive efforts. When cholera first appeared in New Orleans, municipalities in Texas began to prepare for an imminent attack. The disease struck southern Mexico in the spring of 1833, and the federal and state governments sent preventive measures to combat the disease. The epidemic diminished for a month or so and then reappeared in Tamaulipas. This time, the government of Coahuila y Texas sent more measures, plus Pascual de Aranda's prescription. Soon after, the state government supplemented de Aranda's scrip with Ignacio Sendejas's remedy, which was similar to the former but incorporated peyote. In the long run, Sendejas's cure became the state's preferred prescription.

De Aranda and Sendejas based their prescriptions on plant healing methods learned from Forlón Mission Indians in Tamaulipas. As in the Spanish period, Native health and Mexican health were linked to one another and to the landscape through Indian plant healing. Moreover, their exchanges with Native peoples were an outgrowth of cross-cultural interactions that had become mainstay in the borderlands centuries before cholera's arrival. Decades prior, Spaniards had developed alliances with Olive, Palagüeque, and Camariguane Indians, and built missions to try to limit Indian attacks and Indian mobility.⁵⁹ Many Anacaná and Palagüeque Indians moved into the San Juan Capistrano de Suanzés and San Francisco Javier Missions for security.⁶⁰ In the early nineteenth century, Franciscans established a mission in the Paso del Forlón in the state of Nuevo Santander, which became Tamaulipas after Mexican independence. Missionaries targeted several Native populations who occupied the area, including the Saracuayes, Truenos, Ximariguanes, and Mariguanes. 61 The doctors visited the mission and observed that the residents

of Forlón successfully used limewater (calcium hydroxide) and *nejayote* in their cures. ⁶² Sendejas took note of Indian practitioners' use of peyote.

As a physician, Ignacio Sendejas used scientific theories to justify the inclusion of peyote in his cholera remedy. He contended that the "abnormal flow of the digestive juices" produced deadly gases and caused cholera. He sought to break down those gases with chemicals present when peyote was mixed with lime. His remedy, then, focused on the dilution of harmful gases:

One slice of peyote, one finger in width and two fingers in length, is allowed to boil [lightly] in one cup of water. The liquid is then strained. To this liquid is added as much purified slaked lime as will be held on a silver [coin]. It should then be [mixed well] and drunk. If the symptoms are not lessened within a half hour, the dose [can] be repeated.

A light concoction of tea or orange leaves, with six drops of laudanum, [is] then . . . given every two hours. If cramps are experienced, the parts of the body thus affected [are] rubbed with a woolen cloth. The foregoing method is so soothing that any form of relief will be sufficient.

Until eight hours after the attack, no nourishment shall be given, taken. From then until the patient recovers completely, only a thin mixture of *atole* should be given. After complete recovery, soup and tender broiled or stewed meat may be given the patient. If the patient should perspire much, care should be taken to put warm sheets on the bed in order to avoid contact with cold perspiration. Lastly, the narcotic effects . . . (without the unwelcome results of opium) are well known; it is more soothing than opium.⁶³

Sendejas believed that if the "development [of cholera] is arrested by a chemical substance which may have a diluent affinity, the terrible catastrophe can be prevented."⁶⁴ For the doctor, the combination of calcium hydroxide and peyote constituted such a substance.

Aware of how his peyote remedy might look as northern Mexicans were outlining what it meant to be Mexican and culturally separating themselves from Native peoples, Sendejas addressed the cure's character and potential reception in his description of the remedy. He referenced the plant's historic presence in Mexico and acknowledged its narcotic side effects. Perhaps he felt the need to do so not only because the cactus caused hallucinations but also because he was appropriating a plant



FIGURE 6. Ignacio Sendejas's *Metodo Curativo*, August, 13, 1833. This is a copy of the official peyote remedy that Sendejas developed and the state of Coahuila y Texas promoted. Fondo Siglo XIX, Archivo Municipal de Monclova, Coahuila, Mexico.

associated with "superstitious" Indians. Just as colonial elites had highlighted so-called impressionable women in their discussions of superstition, Sendejas also singled women out in his narrative. Before he outlined his remedy, he wrote, "The following prescription has produced such admirable results, although at first it seems to be worthless and like one

of those cures commonly known as [old women's remedies]."65 He used the gendered phrase "old women's remedies" to denote the ignorance reflected in popular cures. The phrase also suggests the popularity of female healers. Historically, female healers in Mexico incorporated peyote into their therapies. In the colonial era, Spaniards saw these women as a threat to church authority because they garnered social power with their skills.66 Spanish men also worried about women who used witchcraft to exercise power in sexual relationships, an affront to colonial manhood.⁶⁷ Moreover, the colonial medical establishment saw female healers as a threat to the ability of licensed practitioners, who constituted a minority of all practitioners in Mexico, to monopolize medical practice. 68 When Sendejas recorded his therapy, then, he worried that people and the state might dismiss the peyote prescription because it resembled the unsanctioned folk cures of "old women." Thus he followed with a note on the efficacy of his method. "In order to dispel any apprehension, during the eight days that the epidemic has raged in [Monterrey]," Sendejas wrote, "over two hundred persons attacked by cholera have been cured with this prescription; and within the last seven days no one has died in the hospital, except . . . two patients."69 Despite his declaration of peyote's curative power, Sendejas still felt the need to justify his use of the cactus. Perhaps he was aware of the discursive tension that arose from his reliance on what may have appeared to be an illegitimate practice to serve the nation.

Even though Native peoples and a Mexican physician used peyote, for Sendejas, their respective practices differed racially. In the North, Mexicans defined race around a set of qualities, practices, and behaviors in opposition to "indios bárbaros." When Sendejas merged the cure with his own methods, he stripped it of its so-called Indianness and gave it new meaning. Because Sendejas and other Mexican physicians viewed Native healing through the lens of race, they were able to borrow aspects of Native cures without compromising their own perception of their work as professional and their perception of themselves as civilized and racially superior. Through his self-conscious disclaimers about a cure associated with Native and women's practices, Sendejas distanced himself from these populations. His explanations, moreover, revealed the gender and racial hierarchies embedded in nineteenth-century Mexican scientific and medical practice.⁷⁰

Ignacio Sendejas conceptualized the recipe for the peyote concoction through encounters with mission Indians, but remade it to reflect his scientific view of medicine and the environment—the plant tempered

harmful gases. The government of Coahuila y Texas surely would not have incorporated Sendejas's remedy into the state's public health program if the physician had not proven its efficacy using scientific methods and if it, in any way, resembled improper behavior.⁷¹ He emphasized the science of his prescription, stressing that its purpose did not include intentional hallucinations (whether therapeutic or spiritual), but rather a treatment of cholera in line with nineteenth-century orthodox medicine. He distanced his method from some of the Native practices associated with peyote and maintained that the therapy he promoted was appropriate for a professional doctor and his patients. For Sendejas, Indians were not racial "others" simply because they used peyote as medicine, nor because their religion influenced their medicine; they were racial "others" because they were using it for "heathen" religious purposes. Medical practitioners like Sendejas, who held a state-sanctioned medical license, regularly crossed racial and cultural borders and searched for cures among those marginal to the nation-state. Once they borrowed those practices, however, the meanings of the cures changed. The state government could then embrace the peyote remedy stripped of its "Indianness," rendering it legitimate in the eyes of Mexican officials.

In Béxar, Texas's political center, local authorities distributed the peyote remedy and praised its efficacy. In the fall of 1833, the peyote scrip circulated around the North, as the epidemic moved through the region. In Texas, the towns of Goliad and Nacogdoches escaped the epidemic, but Béxar was not as lucky.⁷² Political correspondence from September 1833 revealed that the Béxar ayuntamiento privileged the peyote cure over the other two that the state provided.⁷³ In October, officials reported that the junta de sanidad successfully had treated cholera patients in Béxar, presumably with the remedy.⁷⁴ While they claimed that the state-sanctioned measures saved many people from the ravages of cholera, the politicians who penned letters praising the government's public health initiatives rarely questioned the governor's actions, at least in writing, and showed reverence to their superiors in their correspondence. In the interest of their political careers, they had to commend the governor and attribute the escape from cholera to the actions of their superior. These political obligations, then, make it difficult to determine whether or not they felt the peyote remedy was the success that they painted it out to be. What is more important for us, though, is not whether they truly attributed cholera patients' recovery to peyote but that Sendejas's framing of the cure reveals that health and healing affected the ways that Mexicans differentiated themselves from Native peoples in early national Mexico and that health informed state political projects in northern Mexico.

Cholera resurfaced the following summer, causing much more damage than the previous outbreak and disrupting local politics. In June, the ayuntamiento at Béxar received word that the "illness Asiatic or cholera morbus has invaded [Goliad] and caused the death of 10 people in just 2 days and there remain several with the disease in a very grave [condition]."75 This set the public-health wheels in motion in both Goliad and Béxar. The state government called for the re-formation of the juntas de sanidad and passed preventive initiatives similar to those passed the year before concerning cleanliness, food sale and preparation, and popular cooperation.⁷⁶ Much of the Goliad population, including members of the ayuntamiento, fled the town to escape the disease.⁷⁷ As a result, the state government sent military troops to halt the exodus, something it had done in 1833. The Béxar municipality ordered soldiers to "stop the movement of people from the Villa of Goliad to this City [of Béxar] . . . with the objective of intercepting the cruel disease of Cholera morbus that currently invades that Population using all possible measures."78 Many bexareños also went to the "countryside because they believe they [could] save themselves by migrating."79 Béxar official Luciano Navarro was among those who fled, even though he sat on the board of health.80 Panic tore through the two Mexican towns, and most of the preventive efforts came too late, especially in Goliad.

This time, the ayuntamientos did not promote or report the use of peyote for cholera despite the strength of the epidemic in southern Texas. The residents of Goliad were not as fortunate as they had been the previous year. The outbreak lasted about two weeks there, and more than ninety people died, while many others left town. 81 Several Goliad officials were among cholera's victims: José María Falcón, who was involved in the public health initiatives; Juan José Hernández, who was in charge of municipal taxes; and José María Cobián, a customs administrator. 82 An English doctor went to Goliad in early July to offer his services, and he died just a few days later.83 Politics in Béxar also were paralyzed by cholera, since most people eventually left town. The city council could not convene enough members for most of July.84 Fortunately, no accounts of death from cholera emerged there. The epidemic reportedly spread to Austin's colony without causing as much destruction as the year before.85 Cholera remained only in Texas and did not strike Coahuila that summer. Perhaps this outbreak was such a surprise that state officials did not have time to offer as much assistance as they had in 1833, especially

considering that townspeople fled their homes so quickly. The ayuntamientos could not convene as often, moreover, because politicians were among those who took flight. The state-sanctioned appropriation of peyote was short-lived, and Ignacio Sendejas's remedy served the victims of only the 1833 cholera epidemic. Even though its presence in Coahuila y Texas was fleeting, Sendejas's remedy is significant in the history of Mexican Texas. As a centerpiece of the state's 1833 public health program, it demonstrates the impact of indigenous medicine and local medical exchange on Mexican nation building.

Medicine and the Mexican Nation

Cholera arrived at a moment of political upheaval in Mexico. Coahuila y Texas state officials thus grew worried about the effects of cholera on regional politics, which had been drawn into civil struggles that had erupted throughout Mexico. Mexican peoples were fighting over what form the federal and state governments would take, and in the North, Anglo-American colonists had pushed to develop Texas into its own state apart from Coahuila, giving a regional twist to a national conflict. Around the same time, moreover, physicians in Mexico City were organizing their profession and discussing how medicine could serve the young republic. The political tensions and national medical debates further illuminate how the history of the peyote remedy and Coahuila y Texas's 1833 public health initiatives were not simply local events; they were part of a larger national and transnational story that brought Mexican concerns about health in the North into conversations about Mexican nationhood.

In March 1833 Ramón Múzquiz ordered soldiers to punish colonists along the Texas-Louisiana border because a group of *extranjeros*, or foreigners, had called for separation from Coahuila. Moreover, the political contests that had engulfed much of Mexico after independence had reached the North. As lawmakers reorganized Mexico's political structure after 1821, the municipality, or ayuntamiento, emerged as a key institution that connected local politics to the nation. The ayuntamientos became especially charged when federal political conflicts bled into local struggles, particularly during the federalist-centralist disputes of the 1830s. Far from the national capital, Coahuila y Texas was a stronghold for federalism, which advocated state and municipal political autonomy. Centralism, on the other hand, sought political centralization in Mexico City. Coahuila y Texas enacted its own sovereignty in part through land distribution, a main component of the state's economy and politics. The federal government

sought to attract settlers to the North by offering land grants as a way to boost the regional economy. This system of land distribution brought local power and prestige both to the land administrators involved in the survey and sale of land tracts and to the landowners who ascended to high political rank. Despite the federal government's support of regional land policy, its involvement in land sales increased political strife in the North. Centralists rose in power nationally in the early 1830s, and this rise influenced state politics. In Coahuila y Texas, state and federal authorities struggled over the parceling of Texas land, reshaping politics in the northern state.⁸⁹

Cholera eventually forced health into the region's messy land disputes and political conflicts. Historians have shown that nineteenth-century borderlands inhabitants forged strong regional identities based on their experiences in the political periphery. For many, regional political identity in Coahuila y Texas developed into a federalist vision for the Mexican nation. In the late 1820s, though, centralists in Coahuila began to gain power, and conflict between federalists and centralists in Coahuila boiled over a few years later. Centralists developed a stronghold in the state capital of Saltillo, and in 1833 voters elected to move the capital from Saltillo to the federalist city of Monclova, since more *norteños* supported federalism. Even though federalists continued to hold most of the high-level positions in the national government, centralism was on the rise throughout the nation, Coahuila included. When cholera arrived, the federalist-centralist struggle in Coahuila was reverberating into Texas.

The cholera epidemic caused some state officials to worry about the effects of disease on political struggles within the state. Many Tejanos remained committed to the federalist cause. Anglo Texans, on the other hand, did not initially engage in the centralist-federalist struggles that plagued Coahuila, for neither faction fully represented Anglo interests, which were far from the state capital and economically and culturally bound to the United States. Many Anglo political leaders advocated federalism, but they had trouble mustering support for actual political action. 91 Since the epidemic ravaged Anglo communities, Mexican political officials in Texas worried that Anglos might embrace the centralist cause and counter the federalist strongholds in Texas. When the political chief at Béxar learned about the destruction cholera had caused in Brazoria, he voiced concern about the effects of the epidemic on Anglo political sentiment. In a letter to the governor, who was now in Monclova, Miguel Arciniega wrote that Austin's colony had become calm once the threat of cholera disappeared. He also noted that the colonists continued to reject centralism: "I find the colony with the greatest peace and tranquillity [sic]," he wrote, "and not

at all disposed toward the new manifestos in favor of the central government." Perhaps he thought that cholera could shift Anglo political positions if Anglos thought the state government had failed to protect them. Arciniega and other local and state officials feared a centralist bloc among Anglo Texans. 92 They worried that the effects of cholera in the Anglo colonies might exacerbate an already tense political atmosphere.

Tejanos felt that national success in the North hinged on the health of the citizenry. After the epidemic moved on, no political dissent around cholera came out of Anglo east Texas. Perhaps silence emanated from Anglo settlements because U.S. Americans did not consider protecting the health of citizens as the job of the government. In the early nineteenth century, individuals in the United States felt that public health reeked of government intervention. People only came to accept such intervention during processes of urbanization in the mid- to late nineteenth century.93 Tejanos' concerns that the suffering in east Texas would lead to Anglo political criticism showed that they believed that the government was in charge of public health like their political counterparts in Mexico City.

Around this time, questions about the politics of public health emerged as Mexican physicians were actively reorganizing the medical profession. Science and medicine had influenced politics dating back to the Spanish period. During the late colonial era, elites throughout Spanish America began to adopt Enlightenment thinking that emphasized science and rationality in the service of progress, and colonial officials sought to apply such ideas to politics and society.94 After Mexican independence, elites saw medicine as one way to bring about national progress. Professional medicine at this time was largely experimental. Doctors based their beliefs on what did and did not work. Lay healing was also empirical, and a hard line between physicians and lay healers' therapies did not exist in practice. As we have seen, for example, many practitioners relied on botanicals, patients sought out different kinds of practitioners, and the exchange of healing practices was common. Still, some nineteenth-century physicians differentiated their work from other healers partly through their dialogue with European medical theories and practices. 95 In these physicians' eyes, their work was scientific because they considered physiology and chemistry when diagnosing and treating illness. And for them, their contributions to science and to the medical profession were contributions to the Mexican nation.

As much as Ignacio Sendejas's view of peyote was a product of Mexican-Indian encounters, it was also a product of Mexico's professional medical culture. The line that he drew between his peyote remedy and Native peyote

healing was the same line that Mexican physicians drew around their profession in the 1830s. Licensed physicians regularly crossed the boundaries between "legitimate" and "illegitimate" medicine, but the framing of healing in this way exposed the cultural divisions that existed within Mexican societies, helping us understand how elites envisioned their contributions to the nation and to the profession in the early years after independence. Nineteenth-century Mexican doctors saw their medical practices as professional, and the state-sanctioned medical board outlined which therapies were legal and which were not. The Mexican protomedicato, or board of medicine, was first established in Spain and then in New Spain during the colonial era. 96 It served as the organizing body of the medical profession and worked to regulate the practice of medicine in colonial and early national Mexico. However, the protomedicato had been slow in adopting medical innovations. Despite its official promotion of bleeding, for example, some doctors had stopped using the therapeutic method in favor of methods that stimulated patients' systems. 97 In 1833 the Scientific Medical Institute took over the functions of the colonial medical board.98 And later that decade, physicians sought to modernize the profession by organizing the Academia de Medicina de Mégico (or Medical Academy of Mexico) to offer their "contributions to science, to support its theories, [and] make them known."99 As part of this institutional shift, physicians differentiated their healing practices from those of the masses, even as they remained curious about popular cures. A Doctor Schiede asked how the professional medical world could incorporate the "medicines known to the people of the countryside and unknown to doctors." He stressed that "the important question was how we are going to present these elements to the scientific domain."100 Mexican physicians were well aware of their limits and knew they could afford to learn more therapies. When doctors adopted "unorthodox" therapies, they grounded them in scientific theory to legitimize them for the profession.¹⁰¹

Ignacio Sendejas's peyote remedy served the nation, not only because it helped Coahuila y Texas protect the citizenry, but also because by doing so, Mexico was showing that it was a modern nation. Physicians believed that their work would create a better future in Mexico. In the first issue of the *Periódico de la Academia de Medicina de Mégico*, the doctor L. Blaquiere outlined the importance of the educated, elite class and of professional medicine in his definition of national progress. He praised Europeans for their ability to put differences aside for the good of their nations and felt that Mexico's civil wars and social and political conflicts produced "useless and ruinous results." Blaquiere believed that the struggles in Mexico

had silenced the "learned people who have affirmed the *doctrine of prog*ress, a doctrine at once peaceful, regulatory, happy about the future." For Blaquiere, Mexico's civil wars obstructed doctors' efforts and therefore hindered national progress.

Mexican doctors' appropriation of new and unfamiliar practices in the early nineteenth century allowed them to participate in contemporary global medical innovations. Other physicians took the same approach. In this moment when medical therapeutics was moving away from heroic depletion, for example, Doctor L. Rio de la Loza tried to extract calcium oxide from clams, hoping that it would stimulate patients' weak physical constitutions and restore their health. 103 Rio de la Loza was participating in a new and broad shift toward bodily stimulation that was gradual, occurring roughly between the 1820s and 1880s. In a short medical article, he concluded that clams offered neither a restorative therapy nor a savory dish. His piece, however, contributed to the movement away from depletion, and he sought to start a medical discussion on the use of clams.¹⁰⁴ In another experiment, Rio de la Loza and his colleague, R. Lucio, used tarantulas to create a concoction that also stimulated patients' bodies and combated illness by causing them to sweat.¹⁰⁵ They obtained the spiders from southern Mexico and soaked them in alcohol for fifteen days. They then prepared a solution with the liquid, ether, and cerate, which was a mixture of wax and resin. Rio de la Loza and Lucio used the cure on thirteen patients at the Hospital San Lazaro in Mexico City, mostly to treat leprosy, and recorded positive results in a Mexican medical journal. Patients sweat for days after taking the concoction, producing such perspiration that "clothes sometimes get completely soaked." The doctors further reported that patients' pulses did not change considerably and there were no digestive problems. While patients sometimes experienced hunger, not one grew thirsty. The doctors concluded that "from this animal product, some patients were cured, and if not, others obtained notable relief."106 The peyote, tarantula, and clam trials demonstrate that Mexican doctors experimented with unfamiliar healing methods, tested the therapies' potential, and explained their research according to the rules of science. Two of the physicians, moreover, were participating in the movement away from heroic medicine, which was reshaping the medical world.

Placing their work in dialogue with physicians from Europe and other parts of Latin America, doctors ushered a new era in Mexican medicine. They were breaking from the Spanish period, when colonial "despotism" all but extinguished the "medical lights" of innovation that connected Mexican and European doctors. ¹⁰⁷ In the mid-1830s, the Medical Academy

of Mexico developed a journal to engage with the global profession, the Periódico de la Academia de Medicina de Mégico, or Journal of the Medical Academy of Mexico. Numerous articles highlight the interchange between Mexican physicians and scholars from around the world. For example, the journal published a translation of a French doctor's research on gastric juices, echoing Ignacio Sendejas's explanation that sickness resulted from harmful gases produced by the stomach's juices. 108 In another piece published as a series, a Doctor Andrade described his extensive research on Paris's hospital system, in which he looked into hospital and hospice administration, financial structures, medical faculty, food offerings, and pharmacies. Andrade admired the Paris model and hoped that "one day we will see the same methods applied [in Mexico] with such positive results."109 Articles regularly appeared in the Periódico that presented new research. For example, one piece discussed a French physician's study on the use of calomel for typhoid patients.¹¹⁰ Doctor Schiede discussed plant healing methods from Peru and Chile in his article on Mexican botanics. III Finally, the Mexican physician M. Robredo urged his colleagues to test a Doctor Donne's experiments on the chemical characteristics of saliva. 112 Breaking from the Spanish medical past, Mexican doctors in the 1830s actively engaged medical research from other parts of the world. They placed themselves at the center of global medical invention when they applied new research and also when they published on their own investigations.

While Mexican doctors were part of a global medical community, they also thought about their work in national terms. Some physicians served the nation and profession by working directly with the state. Ignacio Sendejas, for example, developed his cholera cure for the government of his home state, Coahuila y Texas. Another doctor, Juan González Urueña, also worked with the government, but in a different capacity. He conducted research on puberty, sex, and marriage to offer a medical recommendation for Mexico's marriage laws. He argued that the minimum marital age should be fourteen or fifteen for females (instead of twelve, the existing legal minimum) and seventeen or eighteen for males (instead of fourteen). The new marriage ages, he contended, would produce the healthiest offspring, improved health for the parents, stronger and "happier families, and a prosperous republic."113 Hoping his work would reshape the existing law, González Urueña drew a clear medical link between the fate of married couples and the fate of the nation. While some doctors interacted directly with the government, most felt they were of service to the nation in other ways. Many doctors boasted about their work and argued that

Mexico had something special to contribute to the global profession. Plant healing, in particular, was a source of national pride for Mexican physicians. They felt that they contributed to the medical world through the successful application of Mexican plants in their therapies. Doctor Schiede extolled the virtues of medicinal plants and argued that "every doctor . . . especially in [Mexico], agrees [on the use] of the medicinal virtues of many of the plants that this rich soil offers us."114

According to some physicians, refined public health institutions could strengthen the nation. Most Mexican cities and towns did not have developed public health infrastructures. 115 While initiatives came from all levels of government, success depended on the particular locality. 116 For example, municipalities in Texas organized boards of health that acted only in critical moments. They often relied on private funding, even when the state offered to alleviate "the costs of the purchase of medicines and other items that can help... the people."117 Public health efforts in nineteenth-century Mexico City were limited as well, and one physician argued that the federal capital's inefficient system blocked national progress. Manuel Robiedo critiqued public health in Mexico City and also used Europe as the standard for medicine and civilization. He argued that an improved system could reduce "public health problems . . . [and] would shorten the long repair time left to put us at the level of the cultured populations of Europe."118 Robiedo saw a "cultured" nation as one that offered good public health to its citizens, and for him Mexico lagged behind. Mexican doctors struggled to control medical practice throughout the colonial era and into the early national era, and the availability of and people's preference for "unorthodox" medicine and lay healers strengthened physicians' determination to police the boundaries of the profession.¹¹⁹ It is likely, then, that the doctors' discussions about the different ways orthodox medicine served the nation were part of those efforts to control medical practice. In the process, though, they articulated their vision of Mexico as a modern nation that could offer scientific medical contributions and sound public health.

This view of medicine's role in the young nation drove Ignacio Sendejas's experiments with and Coahuila y Texas's adoption of peyote. In addition to strengthening public health in the region, northern physicians and state officials were participating in a national shift to modern medicine with the peyote remedy. Sendejas belonged to a medical community that saw itself as a proponent of national progress through its work with patients. Since many physicians viewed their scientific therapies in these nationalistic terms, they were signaling that some therapies did not conform to proper Mexicanness and were, therefore, not part of the national imaginary.

Native practices had to be translated and cleansed before they could be of value to Mexican citizens. Dating back to the colonial era, protomedicato licenses were limited to white elites. 120 Moreover, Mexican physicians saw themselves practicing cutting-edge scientific medicine. Yet doctors and state officials did not limit their assessments of therapies to science. Mexicans understood medical practice in broad cultural terms, which included their views of proper religious practice and its role in healing. Physicians generally did not see a problem with religion in medicine, but peyote healing reflected religious traditions that many non-Indian, northern Mexican elites considered savage and superstitious, which is what made it suspect. The therapy had to be stripped of its "Indian" identity to become officially medical and "Mexican." During the 1833 cholera epidemic, Ignacio Sendejas linked orthodox and lay healing with the peyote remedy; however, he used the languages of science, religion, and race to modernize it for the profession and the nation, fracturing any tie that bound them together.

Health concerns at the local, regional, and national levels shaped how northern Mexicans transitioned from Spanish colony to Mexican nationstate. State officials' adoption of Sendejas's peyote remedy fueled Mexican state formation because it allowed Coahuila y Texas to fulfill its role as protector of the citizenry and it followed physicians' vision for the young republic. In this immediate post-independence era, politicians and landowners had dreams of Mexican peoples ranching and farming the land alongside Native and foreign agrarians, and physicians dreamed about a national profession well integrated into the global medical community. The state and federal government opened Mexico up to the world, presenting a break from the Spanish period. They actively invited immigrants to settle, developed economic relationships with the United States, and supported medical innovation in a way that the Spanish crown never did. Doctors, moreover, engaged new medical research and inserted themselves into the global profession with their own work. Following these dreams, however, was a balancing act. State officials had to build relationships with "barbarous" Indians to develop and protect regional trade and land development. Texas Indians did not fit neatly into Mexicans' vision of peaceful, sedentary agriculturalists, and they refused to abandon their customs in order to become members of the national community. Northern doctors also walked a tightrope. They strove for medical modernity and control; however, they had to come to terms with the reality that they did not control the medical marketplace, and they faced their own professional limitations when serving the state and the profession. Of course, they found

ways to legitimize so-called unsavory medical practices for their political superiors and medical colleagues, using scientific theory and language.

In the North, the state's response to the 1833 cholera epidemic reflected post-independence changes, and it was rooted in the region's Spanish and Indian past. Ignacio Sendejas's appropriation of peyote was an outgrowth of long-standing relations between the state and Native peoples and of colonial racial ideologies. Despite Spanish constructions of Texas Indians as savage and despite Native peoples' resistance to Spanish, Indians and Spaniards had developed economic and diplomatic relations in order to carry out their own political and economic visions and to survive. In the eighteenth century, mutual needs forced diverse groups to cooperate, even in a violent context. These cross-cultural relationships set the stage for the peyote exchange and highlight the fluidity of power relations in the borderlands. While northern Mexican officials constructed superior Mexicans and inferior Indians around health and healing, Mexicans continued albeit begrudgingly—to look to Indians to address Mexican needs. By scientifically extracting medicine from a Mexican plant and by activating the dormant public health infrastructure, northern Mexico's battle with cholera fell in line with physicians' professional plans for Mexico. In addition, the epidemic became enveloped in the state's position in national debates between federalists and centralists. Hoping to fend off centralism's rise in the North, federalist Tejanos worried that Anglos would interpret their medical suffering as a government failure. The cholera outbreak did not produce an Anglo political backlash, but Tejano anxieties were an expression of national political tensions and medical aspirations.

While Mexicans faced a vicious cholera outbreak and violent civil struggles, another threat loomed to the east. Anglo-Americans were flooding into Texas, which culminated in a Tejano-Anglo alliance to secede from Mexico. Anglos continued pushing westward in the 1830s and 1840s, and their dreams of settling "healthy" lands brought them to the borders of Comanche territory in central Texas. Anglos vaunted Anglo-Saxon racial superiority and the health of American agrarianism as they debated the future of an expanding nation that might force its white citizens to rub elbows with racial "inferiors." Their desire to live healthy lives would affect how they viewed the health of their new Native neighbors.

4 / Making Healthy American Settlements:U.S. Expansion and Anglo-American,Comanche, and Black Slave Health

Three years after cholera swept through the Texas borderlands, Anglos and Mexicans in Texas pushed to secede from Mexico.¹ What began as a civil struggle about how to govern the young republic ended with the creation of a new nation, the Republic of Texas. Anglo-American settlers, squatters, and slaveholders, mainly from eastern Texas and the southern United States, saw the end of Mexican rule in Texas as an opportunity to move west. They established cotton and wheat farms and plantations in central Texas, on the eastern border of Comanchería, or Comanche territory. For the Comanches, the Texas Republic looked a lot like the Mexican nation, a loosely connected set of settlements in lands that the Comanches, in fact, dominated.² Just like Mexican independence, Texas independence—the object of much Lone Star State mythmaking—proved insignificant to the Indians; grand geopolitical claims did not mean much to them, since it was the Comanches who controlled access to Great Plains trade networks. The Comanches had demonstrated since the eighteenth century that they were a military, economic, and physical force. Contrary to Anglo dreams of independent agrarian living in new U.S. lands, Anglo farmers initially relied on Comanche traders for equine power in these unfamiliar lands in the Texas Republic's western border. The Texas Comanches had new neighbors that they would incorporate into their sphere of influence, and negotiating with outsiders was something that the Indians had long mastered.

Health concerns were wrapped up in Anglo-Americans' expansionist mission and settlement efforts in the Republic of Texas and then in the U.S. state of Texas, shaping how Anglos in central Texas interacted with the land and its inhabitants. People continued to believe that the boundary between the environment and the human body was permeable and that the environment had a direct bearing on human health. Thus migrants sought to settle lands they deemed healthy. The environment helped structure their everyday practices, and for westering Anglos, colonizing Texas and building a healthy life there also meant living a sedentary life, abiding by white American gender roles, and respecting property boundaries. Articulating how to create healthy, successful American settlements, Anglos drew strong connections between moral and physical health. They felt that immoral behaviors—laziness, excessive drinking, and sexual promiscuity—caused disease. Several Anglos, physicians included, urged settlers to be upstanding moral citizens for their own health and for the health of the nation. Establishing a healthy civilized society in Texas involved numerous aspects of everyday life, from where people lived, how they carried themselves, who they had sex with, and how they interacted with the environment and with their neighbors.

Like the Spaniards and Mexicans before them, central Texas Anglos regularly encountered Indian populations, and they were attuned to Native health during colonization. The U.S. surgeon general ordered military doctors to observe Texas Indians and examine Indian well-being in order to assess the health of central Texas lands for U.S. settlement. Because of close trade relationships between Anglos and Comanches, the physicians often confronted Native peoples and thought about their daily activities in health terms. The physicians diagnosed that Comanche nomadism and labor practices made the Indians sick and inferior. Their medical interpretations of Comanche practices influenced their understandings of healthy living, and through their interactions with sick Comanches, they concluded that U.S. agrarianism offered the clearest path to good health. U.S. agrarian living served as the healthy counterpoint to unhealthy Comanche living. U.S. military surgeons were the first to articulate this view of Comanche health, but they carried weight beyond the military medical world. These diagnoses entered discussions about Indian reservations. In the mid-1850s, Comanches and other Texas Indians were pushed west and forced onto one of two new Indian reserves on the Brazos River. Indian agents taught them how to practice

husbandry, and they adopted white American customs. As a result, Anglos were able to institute their colonial vision in Texas, unlike the Spaniards and Mexicans before them; they confined and later removed populations they deemed obstacles to the nation-building project. Moreover, Robert Neighbors, the Texas Indian agent, concluded that Indian health actually improved in the reservations, as Anglos instructed Comanches on proper, healthy "American" living.

As Anglos were articulating the medical risks of Comanche living and crafting reservation policy, the expansion of black chattel slavery was allowing settlers to implant themselves in central Texas. Economic development did not hinge only on healthy Anglos, it also hinged on healthy African American slaves; however, masters and slaves understood slave health in different ways. The question for slaveholders was whether or not slaves were healthy enough to work. Since they structured much of their slaves' daily lives, they did not define slave living as unhealthy in the way that Anglos viewed Comanche practices as health threats and associated Comanche bodies with sickness. For slaves, health revolved around their relationships to their fellow enslaved community members, their kin, and to the spiritual world. Thus while a master may have seen slaves' situation as healthy—or healthy enough—slaves often did not. Texas slaves constantly faced grueling work and poor living conditions and took their health into their own hands by treating themselves and other slaves. While slave doctoring helped slaves survive such brutality, it also served the master, who understood slave health in terms of property and profit. Ultimately, slave healing reinforced the chains that bound slaves to the Texas political economy, which helped shift the balance of power in central Texas from Comanches to Anglos.

A focus on health in central Texas during the antebellum period highlights how U.S. westward expansion, Comanche displacement, and black chattel slavery were interconnected, an understudied aspect of antebellum Texas history. Since health drove Anglo westward migrations, this emphasis on well-being uncovers newcomers' use of medical language to justify their conquest of Comanches as well as the shift in power from Comanches to Anglos in the mid-nineteenth century. Several significant geopolitical events—Texas independence (1836), U.S. annexation (1845), the U.S.-Mexico War (1846–48)—continuously opened a door for Anglo citizens and soldiers into the region, reshaping the central Texas borderlands; however, these political moments do not take central stage in this chapter. Far away from political and commercial centers, life in central Texas continued to revolve around Indian trade and European

and Euro-American agriculture throughout the first half of the nine-teenth century. Ecological and demographic changes in central Texas and Anglo efforts to connect the region to the U.S. political, economic, and military infrastructure eventually shifted the political economy away from Anglo-Comanche trade by the 1850s. The U.S. victory in the war with Mexico enhanced the expansion of Anglo settlements and the construction of three new military forts in west Texas. In the mid-1850s, the United States worked to protect its territorial claims and its citizens and to open up land by confining once-dominant Comanches and other Texas Indians on reserves.

Anglo Agrarian Dreams, Health Realities in Central Texas

Anglos framed American agrarianism and white manhood as healthy through their interactions with Comanches in mid-nineteenth century Texas. Before exploring the construction of healthy agrarian culture and male whiteness in Texas, we must first look at the role of agriculture in U.S. national identity to understand its cultural role in Anglo westward expansion. By the time Anglo settlers were pushing into central Texas in the 1830s and 1840s, agrarianism had taken a central position in the American national imaginary. During the British colonial period, white male agrarians defined white manhood and personal independence in opposition to Native cultures.³ After U.S. independence, American men from Thomas Jefferson to ordinary yeomen farmers articulated a vision of the new republic that centered on agriculture and expansion into Indian lands. In the early years of U.S. nation building, Jefferson argued that agriculture made men virtuous. He wrote, "Those who labor in the earth are the chosen people of God, if ever he had a chosen people, whose breasts he has made his peculiar deposit for substantial and genuine virtue."4 For many Anglos in the early republic, the male farmer became the image of the quintessential American man. The market revolution of the 1820s and 1830s altered this conversation, as agriculture became entrenched in the market. An ideal American man not only subsisted off of the land but produced profit off of it as well.⁵ We see, then, a slight difference in the ways Anglos imagined their relationship with the land compared with Mexican Texans in early national Mexico. Elite and nonelite Anglo men sought to own individual, clearly defined land plots to work, subsist, and produce commodities. Tejanos also glorified private landownership, but in Mexican Texas, Tejano elites were the only group that owned significant tracts of land. Mexican ranch and farm workers

subsisted off of land that others owned, barely making a living. As we saw in the southern Gulf Coast, those tracts were not always clearly demarcated. In the 1820s, the regional economy was weak, motivating the Mexican government to offer *empresario* contracts to wealthy Anglos. Anglos' desire for land, as "true" white American men, merged with Mexican elites' efforts at building the regional and national economy in the post-independence era.⁶

Agrarianism drove Anglo migration into so-called new and vacant lands in the 1820s and 1830s U.S. South, northern Mexico, and the Republic of Texas. With systematic Indian removal in the 1830s, the U.S. government opened up former Native lands for white slave owners and settlers to develop productive farms and plantations and build the national economy. Indian removal and Anglo settlement fueled an economic boom, further entrenching black chattel slavery in the South. White slave owners achieved agrarian success on the backs of African American slaves, and slavery structured society throughout the southern United States, even though many southern whites did not own slaves. When white Americans pushed further west and moved to Texas in the 1820s, 1830s, and 1840s, the men went armed with visions of the agrarian ideal.

Migrant dreams quickly became settler realities. While westering Anglos moved in search of new beginnings, they faced numerous challenges during migration and settlement. The 35,000 Anglos and African American slaves who moved during the Mexican period (1821–36) mostly settled in unfamiliar east Texas terrains, a place governed by a "foreign" power and inhabited by about 7,500 recently arrived and resident Native peoples and about 530 Tejana/os who lived in the Nacogdoches area.8 Those who arrived after Texas independence in 1836 established themselves in east Texas, where Anglos had come to dominate politically, socially, and economically. However, they were arriving during a politically unstable time, and a minority of migrating Anglos, Europeans, and black slaves trekked across Native lands to the central Texas hills in the 1840s. Many migrants left family members behind, made the arduous journey to and through Texas, and took an economic risk seeking out new ventures in the West. Once they settled, Anglo migrants then had to acclimate to Texas environments.

A healthy body was essential to achieving any success, and Anglos believed that central Texas offered the climate and landscape that produced bodily health. Aware of the effects of the environment on the human body, settlers sought out "healthy" lands. When writing to loved

ones, Anglo migrants regularly commented on the health of the terrain.9 To prepare migrants, nineteenth-century travel guides described the climate that they would encounter in Texas. These letters and guidebooks reveal what Anglos meant by a "healthy" environment. Writers praised the healthfulness of the central Texas hill country and the level lands in eastern Texas. A few years before she published an emigrant guide, Mary Austin Holley noted the healthfulness of east Texas flatlands in a letter to her cousin, Stephen F. Austin. When she arrived in the central Texas hills, though, she was astounded and remarked that central Texas was "much more healthful and pleasant than that of the level region." In addition to the agreeable climate, the water flowed nicely through the area, which prevented the accumulation of "miasmatic" stagnant waters. 10 In 1836 David B. Edward published his own emigrant guide, and for him, the lack of "swamp and stagnant pool," which people associated with sickness, differentiated Texas from Mississippi and Louisiana.¹¹ Both Edward and Holley highlighted the climate's breeziness, particularly in the central part of the republic and the southern coast. Edward boasted that "Texas is renewed and refreshed by lively breezes, rolling over its dry, verdant, and waving surface, imparting health and vigor to all that inhale them."12 For migrants, the constant breeze was essential, since it removed harmful substances that might exist in the air.¹³ When she eventually published her emigrant guide, Holley praised the "salubrity [of the Texas climate,] which we look for in vain in the low country of the Southern United States."14 The hilly landscape and breezy climate of central Texas offered migrants the healthy lands that they were seeking.

Glowing accounts of the healthiness of the Texas environment must have been common in the early nineteenth century, for in his 1850s travel narrative, Frederick Law Olmstead warned readers against these optimistic outlooks. "So anxious is every one in Texas to give all strangers a favorable impression," Olmsted wrote, "that all statements as to the extreme profit and healthfulness of lands must be taken with a grain of allowance." The emigrant guides and other written narratives did discuss the Texas environment's unhealthful elements. For example, military physicians sometimes saw harm in the very breeziness that Edward and Holley praised. Stationed at Fort Merrill along the Nueces River, Assistant Surgeon J. Frazier Head worried about breezes that carried noxious airs. Head noted that the "rise and fall of the [Nueces] river was followed by an increase of the sick-report" between July and September. He explained that the hot summer sun beat down on the overflowed waters and rendered them unhealthy, and winds then blew the miasma

that emanated from the water in the direction of the fort. ¹⁶ Surgeon S. P. Moore attributed yellow fever at Fort Brown, located near the Gulf Coast, to sudden temperature changes in the fall when heavy winds carried the noxious airs that emanated from decomposing vegetables and animals. ¹⁷ The doctors warned that the Texas environment could become hostile. Assistant Surgeon Israel Moses pointed out a "marked increase in the number and intensity of the fever cases immediately after a rainy period" when he was stationed at Fort Merrill. ¹⁸ Because of the harshness and potential danger of the Texas heat, Mary Austin Holley urged people to arrive in October, which was the "most favourable season on account of health." If they were to arrive in summer, "they experience too sudden a change, and are always more or less affected by it." ¹⁹

Mindful of the connection between the body and the environment, concerns about Texas lands were grounded in the idea that people had to acclimate to new and changing environments. Migrants were apprehensive of their ability to acclimate to new surroundings. David Edward warned that sickness was inevitable upon arrival, because environmental "causes, when combined with that change the corporeal frame has to undergo, immediately after the removal from one country to another" caused illness, and could even cause death. ²⁰ Settlers had to prepare for the worst.

Acclimating to new environments involved constant vigilance of how daily activities affected one's health. Both civilians and military physicians observed "habits and modes of life" and spelled them out in health terms.²¹ Civilians were trying to make sense of the world around them, survive, and create something new and "better" in these now-U.S. lands. In his advice to emigrants, Edward argued that healthy "moral habits"—cleanliness, hard work, temperance, and order—trumped the environment's effects on the body: "Can any climate, however good it may be, wholly counteract laziness, disorganization, and intemperance? No!"22 Texas physician and politician Ashbel Smith warned that the hot sun and fertile soil of Texas could engender laziness because it required less effort to produce crops. He suggested that Anglo Texans seek "compulsory labor or slavery" to prevent the development of lazy, unhealthy Anglo bodies, which would hinder colonization.²³ Of course, Smith did not comment on what this meant for Anglo slaveholders, who remained free from physical labor. Still, a sick population did not produce a successful frontier society. Practicing these moral qualities would help Anglos achieve their expansionist goals of creating upstanding, productive, and healthy societies in Texas. Anglo men had a difficult path ahead

of them, wrote Mary Austin Holley, but "he will learn to find society in nature, and repose in solitude, health in exertion, and happiness in occupation."²⁴

In Texas to assess lands for Anglo settlement and minister to sick soldiers, military doctors also warned about the ill effects of behaviors deemed immoral. They echoed middle-class Americans in the early nineteenth century who were preoccupied with temperance.²⁵ Doctors argued that drinking exacerbated susceptibility to disease and weakened an individual's physical constitution. Surgeon S. P. Moore commented on intemperance as a major contributor to illness on the military frontier. Moore painted pictures of drunken soldiers leaving their posts at night and stumbling around nearby Brownsville and other Texas towns. "Nearly every intemperate man, seized with the fever, died." Assistant Surgeon W. W. Anderson described excessive drinking in the actual army post. He fought to curb the "nefarious traffic" of alcohol in Fort Terrett when a whiskey dealer from the west-central Texas town of Fredericksburg "squatted within two or three miles of us, and has disturbed very much the quiet, orderly condition of the post, by retailing liquor to the soldier." The doctor was concerned about the health of the soldiers: "if continued, this state of things may lead to some unpleasant or fatal consequences."27 In the site of conquest, the health of the nation depended on people's everyday actions, civilian and soldier alike.

Anglo migrants were well aware of daily life's effects on their wellbeing after settling in "vacant" and "healthy" central Texas environments. The newcomers echoed Spanish and Mexican concerns over the impact of morality on one's health. Like their colonial predecessors, moreover, Anglo definitions of healthy moral behaviors hinged on their views of resident Indians. Thus we see continuities in how health shaped colonization in Texas. However, a new regime had taken over the region, and a new racial system had arrived in Texas with its own long history of Anglo-American white supremacy, black chattel slavery, and Indian removal and extermination. In the 1840s, Anglos were incorporating Texas into the nation politically and economically. Midcentury medical discourse shows how they were also linking Texas to the rest of the United States in social and cultural terms. When Anglos stressed temperance, industriousness, and cleanliness, they were articulating what it meant to be white, like their contemporaries were doing back east. But they were also crafting U.S. imperialism on site by communicating what it would take to build a productive nation in contested Texas lands. Viewing culture through a health lens, Anglo newcomers extolled the

healthiness of white American middle-class culture against images of "unhealthy" Texas Indians, which shaped their conquest of Native territory, as they drove their plows into the ground.

Race, Health, and Comanche-Anglo Relations

When considering the role of everyday practices in Anglo views of health, migrants' perceptions of their Native neighbors and their impact on Anglo constructions of healthiness come to view. Anglo depictions of Comanche unhealthiness helped them understand their own health and their future in this unfamiliar terrain. Their anxieties about acclimation to this "new" place were tinged with racial preconceptions and characterizations of Texas as an "Indian" place. When migrants arrived in central Texas, they realized quickly that they were in Comanche-dominated territory. Comanches controlled trade networks that extended across the region, and they presented themselves as a physical force through continuous raiding. This gave the Indians an upper hand in diplomatic negotiations with their Native and Euro-American neighbors. Anglo settlers recognized that the Comanches could offer them materials they needed for their farms and plantations, access to markets for the goods they had to offer, and commodities that they could turn around and sell or trade. With the support of the Republic of Texas government, central Texas Anglos established trade relationships with Comanche traders. Not only were Anglos going to have to acclimate to an "Indian" place but they also were relying on Comanches to survive and carry out their own agricultural and economic ventures. For migrants, in some ways, this was a world turned upside down.

Perhaps the most glaring way that Anglos entered into Comanche exchange networks revolved around the horse trade. Comanches offered horses, providing the equine power that Anglos and African American slaves used to work farms and plantations in central Texas. In the Works Progress Administration slave narratives, former slaves described farm and plantation labor in mid- to late nineteenth-century central Texas. Even though their recollections refer to a period after the Texas Republic era, they offer a window into what it might have been like to farm those central Texas lands in the 1840s. Horses were a crucial part of their daily tasks. For example, some farmers owned horse-powered machines to process crops like wheat and cotton. On the Harrison plantation near Waco, slaves ran wheat through an "old fashioned thresher dat wuz driven by a horse on what dey called de treadmill, he would go roun

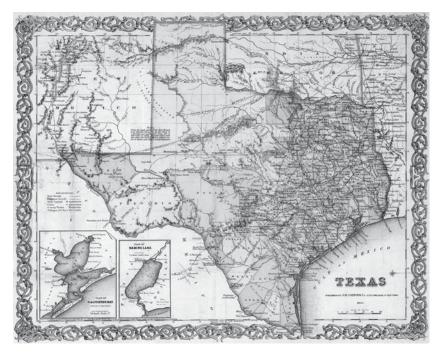


FIGURE 7. Texas, 1855. This map depicts the midcentury borderland between eastern Texas, which was divided and organized into counties and incorporated into the United States, and Indian country in central and western Texas. This map was published by J. H. Colton and Company in 1855. Courtesy of the David Rumsey Historical Map Collection, www.davidrumsey. com.

an' roun to keep de mill goin' an' dis is why dey call hit de tread mill." Farmers from the Waco area would travel to General James Harrison's plantation to process their wheat, increasing the workload for Harrison's slaves, which already included the cultivation of "cotton, corn, cane, oats, cow peas an' wheat." Slaves and farmers also employed horse-drawn plows to clear and prepare farmland. Joe Oliver, a slave in Hill County, for example, used horses to plow James Gatlin's farm. 4 About sixty miles east of Waco, Burke Simpson and other slaves on Rod Oliver's farm processed the cotton they picked with a horse-powered cotton gin. According to Simpson, "wid good steady work dey would gin 'bout four bales a day" using the gin. 10 Planters and slaves harnessed the equine

power from horses that Comanches introduced into the central Texas trade economy.

This dependency on the Comanches did not preclude Anglos from characterizing the Indians as racial inferiors, which took on new meaning when Anglos saw their bodies acclimating to a Native place. Despite grand ideas about destiny and divine right, migrants worried that their exposure to climate change in Texas would inevitably make them sick, threatening to transform their white bodies into something else, something worse. As historian Conevery Bolton Valenčius describes, for some migrants, the process of seasoning in the U.S. West "was intricately related to how white newcomers defined themselves as different from black people and Indians."31 In an expansionist era that saw diverse populations vie with each another for control of one space, acclimation triggered racial anxieties and heightened attention to racial hierarchies. Anglos conceptualized race in multiple, overlapping ways in the borderlands. They linked race to place and believed that people grew to fit physical surroundings, they used racial science to differentiate themselves from locals, and they constructed race around everyday practice. Before migrants even came into contact with their new neighbors in the 1830s and 1840s, they saw Texas and the West as ripe for the taking based on the notion that Indian and Mexican residents were unfit to govern. Anglos described race as though it were fixed and unchanging, and whites were superior to African American, Native, and Mexican "races." In the Anglo mind, this gave them the right to colonize the place and its peoples, justifying violence against Native and Mexican populations that were seen as obstacles to making manifest U.S. claims to the land.³² Notions of racial supremacy drove Anglo conquest like the Spaniards and Mexicans before them; however, the new racial system in Texas in some ways departed from Spanish and Mexican conceptualizations of

Around the time that Anglos were worrying about health and seasoning, scientists were revising existing theories of human difference, which advanced notions of fixed and stable races.³³ Before the mid-nineteenth century, U.S. scientists argued in favor of humankind as a single species, holding that climate and other environmental forces caused racial differences. Monogenists promoted ideas that were in line with those of many white Americans, who believed in the biblical notion of one creation and those who argued that environmentally induced differentiation had degraded and dehumanized African and other nonwhite peoples. By midcentury, the once less popular theory of polygenism had gained

ground in response to the growth of abolitionism and slave revolts in the U.S. South. Scientists worked to prove that white and black people constituted separate species. Despite criticism from the clergy, polygenists argued that different races of people were created during multiple creations. Polygenists included such well-known scientists as Samuel Morton and Louis Agassiz. Morton proved his theory using what was known as the science of phrenology. He measured skull sizes of five different so-called races and developed a racial hierarchy: Caucasoid, Mongoloid, Malay, American (Indian), and Negro. Morton based this hierarchy on skull measurements, presupposing that large skull (or brain) size correlated with intelligence. These ideas were not limited to the scientific world; white Americans deployed racial science in political debates over slavery, for example.³⁴ Scientific racism was rooted in a popular discourse that differentiated between white and nonwhite bodies to denote white superiority. Despite the differences between monogenism and polygenism, both theories posited fixed racial differences.

Even though Anglos transported ideas about a fixed racial hierarchy, their own health concerns and their interactions with sick Comanches forced them to rethink those preconceived ideologies. Linking the environment and the body, Anglos also saw deep connections between place and race, believing that certain "races" were fit for certain places. In their eyes, "places simply made people different."35 Certain kinds of people belonged in certain types of places and, conversely, not in others. Some Anglos used this idea to justify racial hierarchies. In his emigrant guidebook, for example, David B. Edward claimed that an "inclement and unfriendly climate" did not allow Texas Indians to "subdue a stubborn wilderness to cultivation, or to preserve themselves from relapsing into their primitive state of barbarism."36 This connection between race, bodies, and place merged Anglo racial anxieties with their medical anxieties, because according to this idea, migrants had to acclimate to places they saw as fit mainly for Native and Mexican populations. If whites acclimated to "nonwhite" environments, what did seasoning mean for white racial identity?³⁷ Anglo migrants were hyperaware of their own health when they settled in central Texas, where they and their slaves regularly encountered Comanches.

As a result of migrants' health concerns, the U.S. government ordered military doctors to measure Texas's health for further settlement, which included assessments of Indian and Mexican health. Surgeon General Thomas Lawson instructed military surgeons at U.S. Army posts to acquire knowledge of local climate, geological formations, environment,

and disease and report this information to national officials. When testing the health of a place, Lawson asked physicians to observe local populations, "embracing every matter of information calculated to prove useful or interesting to the [War] department and the medical world."38 Anglo military surgeons therefore assessed Comanche health and included their diagnoses in medical topographies, which became a tool of the U.S. colonial project for the North American West.³⁹ The Army had built sixteen posts in the region it designated as Texas's Western Frontier, or lands west of Fort Worth, Austin, and San Antonio. Of the sixteen western posts, three bordered Comanche territory (Fort McKavett, Camp Johnston, and Phantom Hill). The medical topographies resembled the reports of U.S. government-sponsored explorers, who also documented their surroundings and local populations they encountered.⁴⁰ The surgeon general then compiled the medical topographies from all U.S. forts recorded between 1839 and 1855, and in 1856 Congress published and circulated the Statistical Report on the Sickness and Mortality in the Army of the United States. All of the Texas medical topographies were written in the early 1850s when the United States was trying to prepare south and west Texas for Anglo settlement. Since physicians were stationed in the outer limits of the U.S. nation, in contact zones alongside Native peoples, the topographies offer windows into how Anglos envisioned American society in the new U.S. lands.

West Texas military doctors revealed their view that sedentary agriculture was the healthiest way to live through their assessments of Comanche health. The physicians reported that the Comanches were a weak and unhealthy people because their everyday practices made them susceptible to disease. In 1853, for example, Assistant Surgeon S. Wylie Crawford wrote that most of the Comanches who lived near his post at Fort McKavett had died from respiratory illnesses. He identified a number of causes for the disease: "The lungs are, no doubt, weakened by the universal habit of drawing tobacco-smoke into them. . . . Their low houses are heated to excess, and they lie upon the ground; and this, often when the body is relaxed and profusely perspiring. They are indolent, and, with few exceptions, they are physically weak." Crawford highlighted the Indians' supposed indolence, which according to popular notions of health caused illness. Crawford also commented on Comanche diet. He noted that "their food is often insufficient," probably because the bison population had declined by now and because the Comanches had seen their access to hunting grounds slowly diminish.41 Images of sick and weak Comanches helped Crawford define his

Indian neighbors as racially inferior. He surely thought he was just doing his job in explaining why the Comanches were getting sick; however, the U.S. military mission as well as the notion that Comanches were inherently doing something wrong shaped his diagnosis. So the issue here is not whether Crawford's diagnosis was medically accurate. Rather, what is important for understanding how Anglos interpreted Comanche health during contact is the cultural picture Crawford painted inside a medical frame. The Comanches were unhealthy because of their so-called physical weakness and laziness and because their cultural practices caused disease. Comanches slept on the ground in portable dwellings because they were nomadic, and they smoked tobacco as part of some rituals. Crawford was contrasting the Indians with a way of life that he deemed both proper and healthy: sedentary agrarianism. He implied that if Comanches ceased to live nomadically and altered their practices, then their health could improve. Crawford revealed his racialized vision of a suitable and civilized American way of life in his assessment of Comanche health, a vision that drove U.S. expansion.

Anglo military doctors also closely observed Comanche labor and constructed unhealthy Comanche bodies based on perceptions of Indian work. Comanches had their own gendered division of labor. Labor practices helped make Comanche men "men" and made women "women." In general, Comanche men were responsible for hunting, and women were responsible for processing animals, preparing meals, caring for the household and family, and doing agricultural work. When the men returned to camp with a kill, Comanche and captive women butchered the animals and dried and cured the buffalo, venison, or other meat.⁴² They then prepared various labor-intensive dishes. Sometimes this included a mixture of cooked meat, dried corn, and vegetables.⁴³ Other times, "the meat was either eaten raw or boiled. The brisket was always roasted. Ribs were removed from the side and the meat roasted."44 Women would also serve ground meat prepared in wooden mortars, and Post Oak Jim remembered eating dried meat in long slabs and packed in a parfleche, which was a piece of hairless hide stretched on a frame.⁴⁵ Like many of the responsibilities assigned to women in Comanchería, all of these dishes, which involved processing the animals, preparing the meats to cook, cooking them in a variety of ways, and even making the parfleche out of hides, were physically demanding. Once the men returned from a hunt, they-particularly elite men-were generally exempt from such arduous work in the camps.⁴⁶

Trade helped structure Comanche gendered labor patterns, and it enhanced the physical nature of women's and captives' work. Comanche men, women, and captives' work was directly tied to the hide trade. Women processed hides, which men then exchanged for other goods. After men returned from a hunt, Comanche women and female captives would "bring in the animals that are killed, they cut and cure the meat, tan the hides, make the clothes and arms of the men, and care for the horses."47 Men also captured or traded for slaves and prisoners, predominantly women who were "put to the service and drudgery of the camp."48 An Anglo captive, Sarah Ann Horn, detailed the hideprepping process in her narrative of captivity. First she laid out the skin smoothly and shaved off all of the hair with a knife. She then dug a large hole in the ground and filled it with water. She placed the skin in the hole and tramped on it for an hour or two, depending on its toughness. Afterwards, she carefully stretched the hide to dry it.49 Because of this intricate link between trade and work, changes in the regional economy affected Comanche labor. The hide trade boomed in the early nineteenth century, increasing the market production of bison in Comanche camps and, therefore, reshaping work patterns and family structure. Since women processed the hides, more Comanche men adopted the practice of polygyny and had several wives to increase their respective family's labor force. The growing market increased grueling labor practices for Comanche women and slaves, marking them as laborers and allowing for men with large herds to gain and maintain prestige while signifying a decline in Comanche women's prestige. 50 The work that sustained the communities and made the male elites wealthy fell on the shoulders of the least empowered members of Comanche society. It also became the object of Anglo doctors' diagnoses.

Anglo-American military surgeons stated that while the Comanche community gendered its labor patterns, as did white Americans, the Indians did so in an unhealthy and improper way. They claimed that Comanche labor practices were inappropriately gendered, weakening Comanche men. While stationed at Camp J. E. Johnston, Assistant Surgeon Ebenezer Swift surveyed Comanche body types to diagnose the health effects of Comanche labor. Swift sized up men and described them as "large and well formed." To get a sense of what he meant by this sketch, we can look at the statistics he took on the age, girth, height, and weight of twenty men, which he felt gave a fair representation of the Comanches who lived around the camp. Of the twenty men, the average age was about thirty-one, average girth was 36.6 inches wide, average height was

Names.,	Age.	Girth.	Height.	Weight.	Names.	Age.	Girth.	Height.	Weight.
	Years.	Inches.	Ft. In.	Pounds.		Years.	Inches.	Ft. In.	Pounds.
Key-tum-sah	35	36	$5 10\frac{1}{2}$	158	San-ah-co	40	351	5 74	143
Kai-se-va-do	40	391	5 103	202	Ka-kar-ra-way	38	381	5 11	187
Quin-ah-cho-co-pe	34	35	5 113	166	Pe-an-et-same	40	401	5 61	187
No-vat-sac	33	34	5 51	134	Se-to-vai-te	55	371	5 9	152
Pe-ze-yeo-ko	25	341	5 61	125	Po-ta	26	361	5 10	155
Wo-va-na-ti-ka	19	341	5 61	153	No name	33	37	5 101	158
No name	34	35	5 93	148	No name	26	38½	5 91	153
No name	25	37	5 10	163	No name	20	36	5 81	161
No name	20	371	5 71	156	No name	23	371	5 61	153
No name	30	363	5 91	160	No name	25	361	5 91	160

FIGURE 8. Assistant Surgeon Ebenezer Swift's measurements of Comanche men's bodies. This table was published as part of Swift's medical topography. Ebenezer Swift, "Medical Topography and Diseases of Camp J. E. Johnston," in Statistical Report on the Sickness and Mortality in the Army of the United States, Compiled from the Records of the Surgeon General's Office; Embracing a Period of Sixteen Years, from January, 1839, to January, 1855, edited by Robert H. Coolidge (Washington: A.O.P. Nicholson, Printer, 1856), 385.

about 5 feet 7 inches, and average weight was 158.7 pounds. To Swift, these Comanche men may have been physically large, but they did not "have . . . great muscular strength." On the other hand, Swift described the women as "short, thick-set, and proportionally stronger and more muscular than the men. [The women] do all the drudgery, dress their food and skins, cook, pitch tents, take care of the horses, etc." For the surgeon, Comanche divisions of labor accounted for different body types between men and women and for men's so-called physical weakness. Women's work made them stronger than the men, an affront to U.S. gender roles and white manhood. Moreover, the labor practices that made Comanche men "men" and women "women" did the opposite in Swift's view. He saw only manly Comanche women and weak (read: feminine) Comanche men. White manhood and womanhood were healthier than Comanche manhood and womanhood.

Stationed at Phantom Hill on the Brazos River, Assistant Surgeon Alexander B. Hasson also painted a picture of sick Comanche men and women, Anglo superiority, and Comanche inferiority. Hasson highlighted the ill effects of Comanche nomadism and their division of labor. First, the surgeon claimed that exposure to extreme heat and cold weakened all Comanche bodies.⁵² By exposure, he meant that Comanches

lacked proper shelter, and they therefore were inadequately protected from severe temperatures, which made them susceptible to illness. He further argued that exposure particularly debilitated women's bodies, making them vulnerable to disease and too weak to survive childbirth. His interpreter claimed that "among the Comanche women[,] he has frequently known and heard of cases of death in child-birth, and that he has seen in the tribe many cases which he called rheumatism and consumption."53 For Hasson, sleeping in tents and nomadism produced weak Comanche women and children, who often died in infancy. Hasson then brought Anglos directly into discussions of Comanche labor and health and differentiated Comanche men from Anglo men to bolster his medical argument that Comanche practices caused sickness. He claimed that the infant mortalities from exposure could be prevented, presumably by living a more sedentary life. "In a civilized community," Hasson continued, "[those children] would have been reared to useful manhood."54 Hasson based his notion of men's usefulness in the work that they performed. Anglo men lived healthier lives while Comanche men's "unproductive" work caused health problems. He argued that Comanche men were not "useful" in the way that "civilized" Anglo men were. Coming from U.S. Army surgeons, these assessments praising the healthiness of sedentary life and of white middle-class gender norms were rooted in the U.S. expansionist project in the West. Surgeons Hasson and Swift both constructed white racial superiority by implying that Comanche labor practices produced weak bodies, which prevented the Indians from achieving white American masculine and feminine ideals. In the rural United States, "true" white men worked farms and "true" white women were confined to the household; according to the doctors, this was the right way to live because it was the healthiest way to live.⁵⁵

In the central Texas borderlands, concerns about how Anglo-Americans could survive in "Indian" lands brought race into the discussion of how everyday activities affected the health of Texas inhabitants, activities that they defined as healthy against so-called unhealthy Comanche practices. Migrants knew that they were going to have to acclimate to new environments. They therefore sought out "healthy" lands and engaged in "healthy" daily practices, working hard farming the central Texas countryside. Anglo civilians and military doctors' designations of healthy and unhealthy practices and behaviors coincided with their definitions of what was civilized and uncivilized, and they deemed Comanches unhealthy because of their perceived backwards or savage way of living. Anglo medical discourse therefore reflected

earlier Spanish and Mexican discussions about health. During the Spanish period in Texas, for example, missionaries also framed various Native practices as unhealthy, including foodways and sex, which then shaped the conversion project. In Mexican Texas, state and local officials also tried to regulate unhealthy behaviors associated with incivility excessive partying and drinking—during the 1833 cholera epidemic. Moreover, Spaniards and Mexicans saw Native healing as illegitimate and superstitious. While in different contexts, health shaped Spanish, Mexican, and U.S. colonial projects, as colonists marked everyday practices as civilized and healthy or uncivilized and unhealthy. Tying health to notions of civilization and proper behavior, colonizers in each time period demonstrated how race worked hand in hand with ideas about health and influenced processes of colonization. After U.S. military surgeons assessed Comanche health in efforts to understand whether west Texas was healthy enough for further Anglo settlement, it became clear that the medical discourse on Comanche unhealthiness was not limited to the military medical world.

Native Health and the Texas Reservations

For the state, Indian reservations became the site of cultural education. In 1851 Penateka Comanche chief Ketumsee asked U.S. officials to establish reserves in west Texas. Ketumsee rose to power after the 1849 cholera epidemic ravaged the Penatekas (southern Comanches, located mainly in Texas) and took the lives of two chiefs. He nurtured relations with Texas officials, driving a wedge between him and other Comanche chiefs. His request for a reservation fell on deaf ears at the state level, since Texas officials resisted the federal government's demands to establish reservations. In general, Texas Indian policy was inconsistent since independence in 1836. During Sam Houston's first tenure as president of the Republic of Texas, he tried to continue Mexico's policy of conciliation toward Native peoples. In 1838 President Mirabeau Lamar adopted a removal and exterminationist approach, which Houston reversed when he returned to power in 1841. Anglo-Indian trade flourished during Houston's second term; however, as Anglos moved west and clashed with Comanches, violence among Comanches, the Texas Rangers, and settlers engulfed midcentury west-central Texas.⁵⁶ The combination of Anglo settler anxieties and local newspapers' exaggerated reporting created a sense of crisis in which Anglos blamed Texas Indians, most notably the Comanches, for much of the violence that occurred. Meanwhile,

Texas Indian agents and military officials argued that anti-Indian Anglo Texans were causing most of the problems. In 1853 Texas state officials agreed with the federal government that reservations were the best way to control frontier violence, encourage healthy agrarianism among Indians, and create space for Anglo settlers, placing Texas in line with federal reservation policy for the midcentury U.S. West.⁵⁷ To keep the peace, General Persifor Smith proposed the allocation of over 50,000 acres for reservations on the Brazos River in Throckmorton County, about two hundred miles northwest of Austin.

In addition to fostering peace, proponents argued that reservations could improve Indian health both by distributing food to the needy and by introducing farming. General Smith recognized that Comanches were suffering because dwindling bison populations and droughts had reduced the food supply.⁵⁸ When Secretary of War Jefferson Davis named Robert Neighbors as the Texas Indian agent, Neighbors emphasized his desire to develop agricultural communities among Native peoples. According to Neighbors, the Comanches had "never planted corn or cultivated the soil yet, they say they will attempt it, if their Great Father will send some white farmers to teach them."⁵⁹ The creation of the two reserves would then open up lands for slaveholding farmers and other Anglo settlers, who would also teach the Comanches how to live healthy lives in confinement.

During the reservation building process, ordinary Anglos shared doctors' conviction that Comanche living was unhealthy. In 1854, when William B. Parker was surveying future reservation lands with the U.S. Army, he recorded his observations of Comanche customs. Much of Parker's piece concerned religion and ritual, but he heralded the medical virtues of white manhood in discussions of Comanche marriage customs and sexual relations. Colonial ethnographers often lingered on marital and sexual practices as a means of trumpeting their own civilization and race. Parker's work fits neatly within this colonial literary genre. 60 Focusing on marriage, he highlighted Comanche polygamy and described the process by which a Comanche man offered dowries to his wife-to-be's father. He suggested that because the women have "no voice in the matter, repugnance often occasions 'liasons' [sic] with former lovers."61 Parker claimed that the women's husbands and his friends resolved these situations, in which husbands would receive goods from the offending men. He painted a picture of sexually aggressive Comanche women that fit well with how Anglo-Americans perceived women of color in the nineteenth-century United States and Latin America.

Even though he described the sexual repercussions of women's lack of voice in marriage—extramarital affairs—it is unlikely that this was a critique of Comanche marital inequality. Marriage in the nineteenth-century United States was understood as a union of a dominant man and submissive woman. At this time, moreover, white American men saw themselves as irresistible, which, along with women of color's so-called unrestrained sexuality, served as their justification for their own affairs with indigenous women in sites of U.S. conquest and with enslaved black women. Parker's allusion to Comanche women's extramarital affairs was also a way of calling Comanche men resistible and therefore inferior to white men.⁶²

Echoing doctors' concerns about sexually transmitted disease, William Parker raised his own apprehensiveness about sex between white men and Comanche women. He claimed that "the greatest compliment a Comanche can pay his guest is, to assign him one of his wives, for his use during his stay in camp—a custom, to my taste, more honoured in the breach than the observance; as, I am sure, the most animal appetite would revolt at such a banquet."63 Parker was certainly performing "civilized," restrained male whiteness in rejecting the Comanche men's offer, but he was also articulating a health concern.⁶⁴ Elsewhere in his report, he pointed out that the army expedition's surgeon found that "venereal disease was common among [the Comanches]," a discovery that also appeared in Ebenezer Swift's medical topography. According to Swift, Comanches "contract syphilis and gonorrhea in their intercourse with their Mexican neighbors. . . . I have seen them badly mutilated from the former, and have treated them for both."65 This assessment must have informed Parker's views of sex between Comanche women and Anglo men. In this context of so-called rampant sexually transmitted disease, accepting this form of intimacy—if Comanches actually presented it was not only a moral offense but also an offense to one's disease-free body. As we will see in chapter 5, William Parker was not the only Anglo who worried about the ill effects of interracial sex on white men's bodies. Like the doctors' narratives, Parker's report was directly tied to Anglo settlement and Indian confinement. Using the reserves to teach Comanches how to act like whites presumably would include teaching them healthy and proper sex practices. Such sexual discipline would not only civilize the Comanches but also preserve Anglo health.

While commenting on Comanches' so-called sexual impropriety, William Parker ignored white men's sexual abuse of Native women, which surely contributed to the spread of sexually transmitted disease in Indian

communities. By the time Anglos arrived in the mid-nineteenth century, they were entering into a borderlands space that had witnessed much pain of colonial newcomers raping Native women. 66 While some westering Anglos married Indian women, many saw them as sexual objects and, as scholar Caren Deming puts it, "one of the natural resources to be exploited." Many of these stories remain hidden, in part because contemporaries like Parker were more concerned with highlighting the uncivilized sexual behaviors of Native peoples. For many Anglo men, moreover, the conquest of Indian women served as a marker of white manhood, masking the violence of interracial sex. 68 These stories about sexual abuse fell out of Parker's narrative, as did any discussion of how it harmed Native health.

Instead, William Parker's focus on the health effects of interracial sex was born from his overall assessment of Comanche sexuality, not Anglo sexuality, and he wrote about Comanche men's sexual abuse of Comanche women and captives. According to Parker, "the men are grossly licentious, treating female captives in a most cruel and barbarous manner; but they enforce rigid chastity upon their women—every dereliction being punished by cutting off the tip of the nose, as an indelible mark of shame." While William Parker was part of a colonial ethnographic tradition that trafficked narratives of indigenous inferiority and white male superiority to boast about the virtues of imperial conquest, he was not the first person to suggest that Comanche sexual abuse of captives was very real. Perhaps the most glaring example dates back to the Spanish period, when Fray Pedro Serrano described a Comanche public raping of captive Indian women and girls at a New Mexico trade fair. Fray Serrano wrote,

It is truth that when these barbarians bring a certain number of Indian women to sell, among them many young maidens and girls, before delivering them to the Christians who buy them, if they are ten years old or over, they deflower and corrupt them in the sight of innumerable assemblies of barbarians and Catholics (neither more nor less, as I say) without considering anything but their unbridled lust and brutal shamelessness, and saying to those who buy them, with heathen impudence: 'Now you can take her—now she is good.'⁷¹

Like Parker, Fray Serrano likely wrote about Comanche sex to paint a picture of Comanche barbarity, offering a window into the sexual abuse of captives. Historian Pekka Hämäläinen argues that the Comanches

performed public rapes to generate the captive market, since after witnessing them, Spaniards would want to ransom Spanish captives from the Indians.⁷² Whatever the reasons behind Comanche men's sexual abuse of women—desire, power, trade—the women clearly endured serious pain and brutality.

Sexual violence was not only directed at captive women on the trading block. Comanches sometimes adopted captives through ritual or marriage, and adopted captives sometimes suffered the same fates as captive women who remained outside of the community.73 In his journal, for example, Anglo trader and traveler Josiah Gregg recalled that the captured daughter of the governor of Chihuahua, Mexico, refused to return to her home and stayed with the Comanches. According to Gregg, she had sent word to her father that her captors tattooed and "disfigured her," that she was married and possibly pregnant, and "that she would be more unhappy by returning to her father under these circumstances than by remaining where she was." In her message to her father, she weighed two unfavorable scenarios: one in which she did not return home: the other in which she did return home, but disfigured, pregnant, dishonored, and ashamed.⁷⁴ Because she portrayed her decision of whether to stay or go as a lose-lose situation, she probably had little choice entering into marriage with a Comanche man. And if she did not recognize her partnership with her husband as a true marriage, then she would have considered sex with him an improper act, since according to Mexican gender and sexual norms, premarital sex was an act of dishonor for women, suggesting that the sex was not consensual.⁷⁵ Stories like these likely circulated in William Parker's world. While Comanche sexual violence may well have been exaggerated and sensationalized in the telling, such harrowing tales do reflect some of the reality facing women caught up in captivity. In the end, Parker saw Comanche sexual practices as signs of his superiority and the Indians' barbarity and of the potential health threats that Comanche-Anglo social and sexual intimacy could engender—one of many aspects of Indian life best reformed on the reserves.

In February 1854, Governor E. M. Pease signed legislation that established two reservations on the upper Brazos River and its tributary, the Clear Fork. One was established for the Comanches and the other for the Caddos, Wacos, Tonkawas, Anadarkos, Tawakonis, Keechies, and Delawares. Texas Indian Agency officials began to encourage "healthy" agrarianism among Native peoples. Several Comanche chiefs agreed to move to the Comanche reserve, and hunger drove other bands in. Contrary to Indian agent Robert Neighbors's expectations, however, only a

few hundred Comanches relocated onto the reservations.⁷⁶ For reservation Indians, the state enacted a policy of cultural violence, seeking to correct Indian behavior.

The medicalized views of the state's reservation policy surfaced in the Texas Indian agent's report to Congress on the first year in the reserves. By 1855, over 500 Comanches inhabited the Comanche agency at Clear Fork.⁷⁷ The first year there was rocky at best. A spring grasshopper infestation and a summer drought resulted in low yields on Comanche farms. Most of the corn crops were ruined, so in order to prevent another disaster, the agency made preparations for the cultivation of wheat. "By so doing," Robert Neighbors wrote in September 1856, "the Indians will be able to raise their own bread, even if there should be another failure in the corn crops." Despite the farming catastrophe, though, Neighbors did not see year one as a failure. He reported that "there has been great improvement last year in the moral and physical condition of the Indians now settled. They are gradually falling into the customs and dress of the white man; and by being well clothed, having houses to live in, and relieved from the continued anxieties attending a roving life, their health has greatly improved, and they now, for the first time for several years, begin to raise healthy children."78

Neighbors did not measure Indian health in terms of sustenance, even though hunger had pushed many Comanches onto the reserves. He measured health in terms of the Comanches' adoption of Anglo cultural customs, a program that also shaped Indian boarding school education.⁷⁹ For Neighbors, the Comanches' adherence to the agency's disciplinary project and the resulting transformations—the shift from nomadism to the practice of sedentary agriculture (even if unsuccessful), and the adoption of Anglo dress, household structure, and other unspecified customs—made the Comanches healthier. Framing the advantages of reservation life and the Comanches' adoption of "the white man's" practices in health terms, Neighbors used similar language as the military physicians just a few years earlier. The doctors had claimed that Comanche nomadism, tobacco smoking, and labor structure caused illness, and Neighbors's report reads like a direct response to those diagnoses. Neighbors declared that the Indians had shed those unhealthy customs and replaced them with the "customs and dress of the white man," resulting in better health. A vision of (un)healthy bodies drove the Indian agent's efforts "to impress upon [the Comanches] the necessity there was for at once adopting agriculture as a means of subsistence."80 Outside of the reserves, the goal of this project was to minimize violence

and distribute land to incoming settlers. Inside the reserves, the goal was to mold Indian bodies into civilized bodies. Fortunately for the state—"the Great Father"—Neighbors claimed that proper living revived the Comanches and made them healthy.⁸¹

In their reports on the Comanches, military doctors, William Parker, and Robert Neighbors framed Comanche culture as unhealthy and dominant Anglo-American culture as the healthy alternative. The U.S. government translated these visions into imperial practice with the west Texas reservations. As Indian agent, Neighbors carried out the U.S. government's plans for Native peoples in the West. The Texas state government maintained its day-to-day negotiations with Indians that it had developed during the era of the Republic. But now that Texas was a U.S. state, the federal government included the state's Native residents in its project for Indian peoples on U.S. soil. In 1850, for example, the Office of Indian Affairs had ordered all Indian agents to encourage Indians "to confine themselves within particular districts of the country . . . and to depend on husbandry for the means of subsistence."82 The promotion of sedentary agrarianism reflected the U.S. government's idea of proper and productive land use, which military doctors had described as the healthiest way. The decline of Native power in Texas by midcentury helped the United States enact it as policy, something its predecessors could not do. Neighbors's report shows that the nation's justification for the conquest of the West in the mid-nineteenth century became manifest in discussions of Indian and Anglo health.

While Neighbors touted Native peoples' newfound healthiness on the reservations, Comanches continued to struggle to subsist, both on and off the reserves. Comanches' harvests in the Brazos Agency were insufficient. Outside of the reservation, Comanches also could not subsist, and they suffered as a result. This malnourishment made Comanches vulnerable to disease. They were dealing with intense want for food in part because the bison population had declined dramatically. The Indians overhunted buffalo, and their large horse herds fed on grasslands on which the bison had also relied. Moreover, Mexican, Texas Republic, and U.S. colonization fueled Comanche hunger. Europeans, Anglos, and African American slaves had been migrating to and settling in Texas since the 1820s, competing with Comanches over lands that the Indians used as hunting grounds.83 In interviews, former slaves offered a window into the effects of Comanche hunger. They recalled instances when Native peoples came to their farm or plantation in search of food. For example, Clarissa Scales remembered that her mother would give food to

Indians who passed the Vaughan Plantation slave cabins in Hays County. Sometimes Native women would exchange jewelry for something to eat.84 Joe Oliver, who lived on James Gatlin's plantation in Hill County, recalled that Indians, possibly Comanches given the location, would stop at the plantation and "trade us some beans for corn or something to eat."85 John Crawford painted a more desperate scenario at the Rector Plantation in Travis County. He often saw Indians who "would beg fo' somethin' and Mawster Rector would give 'em whut they wanted."86 These slaves would have been children in the 1850s, so it is possible that they were recounting stories that happened in a later period; however, given the ecological catastrophe that the Comanches were experiencing, it is possible that these moments of Comanche desperation dated back to midcentury. Thus, as in the Spanish missions, the U.S. government was trying to teach Comanches how to be healthy on the reservation while simultaneously contributing to unhealthy living conditions for Indians both on and off of the reserves.87

Because of continuous violence in the region, the two west Texas reserves only existed for a few years before reservation Indians were removed to Indian Territory. Indian confinement did not quell hostilities. Tejanos argued that the government must continue to work to subdue Indians; otherwise, "their behavior will lead to extermination."88 The reserves altered Anglo Texans' approach toward Native peoples who remained nomadic, since Anglos generally believed that the reservations solved what they saw as the "Indian problem." After 1855, many Anglos, including military personnel and the Texas Rangers, did not consider their activities in west Texas an invasion of Indian lands, and they therefore felt justified in killing any Indian outside of the reserves.⁸⁹ The agency even declared "all Indians outside of the reserves hostile." Plains Comanches were growing desperate, and bands raided Anglo, Native, and Mexican settlements throughout the Texas borderlands. Northern Comanches went to the Comanche reservation for resources, to recruit warriors, and to organize attacks. Comanche raids and Anglo reprisals reignited the region and sparked political conversations about closing the reserves.91

During the violent period between the opening and closing of the reservations, ordinary Anglo Texans felt they had their own part to play in disciplining reserve Indians. They believed that since the state failed to protect them from Indian attacks, they had the right to police reservation boundaries themselves. The settlers' view emerged in policy debates in January 1859, after a party of Anglos from nearby counties

killed seventeen Caddo and Anadarko Indians from the Brazos reserve just before the new year. 92 In a joint statement, the party wrote, "We have no apology to offer for what we have done. We are sustained by hundreds of our fellow-citizens. We are well known in the country in which we live, and have ever been men obedient to the law." The party had initially organized in response to a string of horse thefts that it had traced to reservation Indians. When the Anglo group arrived at the reserve, the Indians claimed that they had recovered the horses from raiding Comanches and Kickapoos. The Indians offered to trade the horses to the Anglos, who believed that the animals were their own. The Anglo party left, but they remained suspicious and requested that the agents prevent the Indians from leaving the reserves. At this point, they wrote, they were "willing to make some allowance for irregularities among a people changing . . . from a savage to a civilized state, and we hoped our suspicions might prove groundless." Later, Indian hunting parties left the reserves and began to hunt among the Anglo settlements in the area. Anglos then demanded the Indians return to the reservation immediately or "the citizens would kill them." They did not comply, and one group stole horses from Anglo settlers. Afterwards, the Anglo party organized and came upon the Caddos and Anadarkos: "[We] killed all the men we saw, and, unfortunately and unintentionally, for it was positively against orders and our intention; to molest the women, still, from the situation of the men, being in the tents, it being early in the morning and raining, two women and one child were killed."93

Robert Neighbors, who by 1859 had become the superintendent of Indian affairs in Texas, tried to clamp down on Anglo violence, but he did not think that reserve Indians could "progress in the civilized arts" and therefore continue to improve their health fully confined to the Texas reservations. Discussions about removal had been floating around since the New Year's attack on the Caddos and Anadarkos, and he ultimately came to support Indian relocation. Neighbors initially had claimed that the Indians' adoption of white customs improved their health. According to this logic, the current state of the reserve Indians, in which they struggled to become "civilized," harmed Indian health. The constant threat from armed settlers and a series of unfavorable seasons made it impossible to subsist on the reserves. Neighbors concluded that better protection and more land for farming and grazing were required and could only be obtained outside of Texas.94 It did not take long for the commissioner of Indian affairs, Charles E. Mix, to put this new plan in place. He agreed that complete confinement on the small

reserves prevented the "domestication and improvement" of the Texas Indians, and three months later, Mix ordered the closure of the Texas reserves and removal of the Indians. Pobert Neighbors's vision for the new reserves reflected his earlier plans for the Texas reservations. They would be spaces for the United States to instruct Native peoples in sedentary agrarian living, but with sufficient lands for cultivation and grazing. In addition to farming, Indians would again practice other everyday white customs on the road to civilization. They would be "encouraged to lay aside their Indian clothing and adopt the order of the whites." The new reserves would become healthy spaces where Native peoples would transform into civilized settlers and therefore watch their health thrive, something they could not manage in west Texas.

White Masters, African American Slave Health, and Race

Anglo Texans forced Comanches out and entrenched themselves in central Texas, linking the region to economic networks that spread into the United States and even abroad and thereby strengthened the system of black chattel slavery in the Lone Star State. Integral to the Texas economy and politics, chattel slavery helped Anglo leaders and settlers stake geographic claims along the ambiguous borders with Native lands and with Mexico.⁹⁷ As slavery expanded into the U.S. West, slave health also became a concern for Anglo slave owners and slaves, albeit in a different manner.

About two decades before the state of Texas relocated the Brazos and Comanche reserves, Texas independence had ushered in a boom in racial chattel slavery, centered in east Texas. ⁹⁸ In 1837, about 3,500 slaves lived and worked in Texas; by 1840, the census counted over 12,000 slaves. ⁹⁹ Less than a decade later, Anglo slaveholders were pushing into Comanche territory. The majority of Anglo-American farmers there did not own slaves, and the majority of Texas slaves continued to live and work in eastern Texas, where some counties now had 3,000, 4,000, and even 7,000 slaves. Nevertheless, chattel slavery in central Texas was flourishing. In 1855, for example, the combined slave population of McLennan County, the primary site of 1840s Anglo-Comanche trade, and Travis County, where Austin was located, numbered about 3,100 slaves. ¹⁰⁰ African American slaves constituted a significant part of agricultural labor, even in the central region.

Slave health was crucial to the success of an economy that hinged on chattel slavery. Slaveholders needed a healthy workforce. Environmental

health merged with profit motives to shape slave owners' concept of slave health, which influenced how they treated slave property. Owners based the value of slaves on the concept of "soundness." On farms and plantations, Anglo definitions of healthy slave living revolved around the question of whether a slave was healthy enough to work, regardless of whether or not a slave saw himself or herself as sick. At the slave market, buyers would probe slaves on the auction block for signs of disease, physical strength, moral character, and women's reproductive capacity.¹⁰¹ Since slavery was largely about the bottom line, masters and overseers worked slaves to the bone in environments that they themselves deemed threatening to white bodies. The connections that whites drew between race and place informed the logic behind such slave labor. In some southern U.S. environments, for instance, whites justified their brutal labor regime by arguing that slaves were fit to work in "unhealthy" environments—swamps and coastal areas—because of the notion that they had built immunity to diseases such as malaria and yellow fever. According to whites, these were "black" places, similar to the way that they had characterized central Texas as an "Indian" place. 102 In some farms and plantations, whites ordered slaves to carve fields at lower levels and situate their own families on higher ground because they associated higher elevations with health and lower elevations with sickness.¹⁰³ They needed healthy slaves, but the health of their own white families came first. In general, masters wanted slaves healthy enough to work long hours and healthy enough to bear children.

For Anglos, then, African American living did not serve as the unhealthy counterpoint to healthy white American living. Anglos certainly differentiated black and white bodies, but they did not conceptualize African American slave health in the same way that they viewed Comanche health—as a racial group whose practices made them unhealthy—since slaveholders largely dictated slaves' daily lives. Whites determined slaves' work schedules, living situations, and the environments in which they lived. Slaveholders ordered overseers to manage slaves' diet, living conditions, work patterns, and hours of sleep to preserve the health of slaves. ¹⁰⁴ Physical and sexual violence were integral parts of slaves' experiences, which harmed slave health; however, for whites, healthy slaves meant productive slaves.

Suffering under the weight of slavery because of unhealthy conditions, undernourishment, violence, and an overworked daily regimen, African American slaves' perception of their own health often clashed with that of their white masters and overseers. ¹⁰⁵ They thought about their health

in terms of personal and collective survival. They considered individual relationships with community members and with the spiritual world when assessing one's health and defining healthy living. As a result, slave doctoring regularly engaged with spirits, either to understand the root of an illness or to treat an individual who suffered from a conjured affliction, for example. 106 Slaves, then, largely took matters of health into their own hands. 107 For example, they looked to certain plants to conjure physical protection, rooting herbal practice in a relationship between spirits, community members, and the natural environment.¹⁰⁸ Under the dark night, some Texas slaves would quietly drive a stick into the ground under the master's door. They worked in the dark because they believed that if the planter caught them, they would have bad luck until they had a chance to hammer another stick into the ground. If they successfully managed to place it unnoticed, "it would work and he would be real good to [them] until that stick rotted plum up." Then, when the stick withered away, they returned to the master's doorstep with another one. Even though they would repeat the process when necessary, the slaves tried to gather green sticks since they took longer to rot.¹⁰⁹ Slaves also used herbs for protection. Many slaves wore small bags of pungent asafetida, or "asfidity," around their necks, a popular preventative measure against disease. From a young age, Martha Jones remembered wearing "asfidity bags to keep de measles an' mumps, an' whoopin' cough off an' hit shore did keep dem off."110 Carter Jackson, who moved to Texas during the Civil War, recalled that his master administered a number of medicines when slaves got sick, but most of them wore asfidity bags to "keep off measles and sich like." While living in Rusk County, Millie Ann Smith used asafetida in a different way: "as regular as I got up I allus drank my asfidity."112 Worn in pouches or ingested to prevent sickness, Texas slaves looked to preserve their health using plants that served as a conduit between the spiritual and physical worlds.

While masters thought that slave living was healthy enough, slaves navigated conditions that they saw as unhealthy by taking charge of their health. African American slaves did not have say as to whether they settled in "healthy" environments, but they had some control over how they interacted with the environment. Even though they were relegated to areas that whites deemed less healthy, they successfully combed the landscape for healthful plants, like many other U.S. inhabitants.¹¹³ In the WPA slave narratives, former slaves highlighted the abundance of healthful plants in the Texas landscape. For example, Parilee Daniels recalled that when a slave at the Joseph Daniels estate in Red River

County became ill, the "old black mama . . . would get her sack and hoe and would go to the woods and get herbs to make our medicine out of. She used cami-weed sasfras-root, mayflower roots, red oak bark, peach tree leaves, rabbit foot leaves.... She used these remedies to keep off fever, chills, malaria, colic and so on."114 On the small Washington County farm on which Lizzie Atkins worked, the female healer would use those same herbs to make a medicinal tea. 115 Charlie Sandles recalled that the slave healer in his community cured most illnesses with herbs and roots: "For sores, cuts, bruise, burns or anything like that she would boil down poke roots to a syrup and mix yellow of an egg and then take corn meal and make a salve to go on it."116 The remedies often involved complex concoctions to cure specific physical conditions. For example, the slave doctor at Effie Zuma's Guadalupe River plantation made a salve out of chinaberry roots, pokeroots, and bluestone to rub on sores.¹¹⁷ Many of the plant species in Texas could be found throughout the U.S. South. As slaves migrated from southern states to Texas, then, they could apply the plant knowledge that had served them, their families, and their communities for generations.

These plant mixtures were an outgrowth of a particular familiarity with the environment, which grew from their and their ancestors' experiences. Many enslaved healers were women, and they learned about medicinal plants from various avenues. Female domestic labor contributed to herb healing, since other forms of women's plantation work required plant knowledge. 118 Women were responsible for weaving, spinning, and sewing. 119 As a young child, Susan Smith learned from her mother how to use plant products as dyes. Smith's mother "uster tek a hank of yarn and put it on. She uster dye it wid walnut bark and hull of maple bark, and put it on de loom. She could put any stripe in it she want to."120 Bondswomen sometimes dyed clothes with indigo. Slave owners occasionally purchased the blue coloring.¹²¹ But on Davy Cook's estate in present-day Navarro County, Lu Lee and the other women raised indigo in their gardens. To make the dye, they "would take the [indigo] stalk and beat it up and soak it in water and the blue would settle to the bottom just like starch. Then when you drained the water off and dried it you had bluing."122 Nap McQueen watched women make dye for woven baskets with walnut, red oak, and sweetgum. 123 Responsible for cooking for their communities and for slave owners, enslaved women had their own herb and vegetable gardens and tended to fruit trees, so they were familiar with their natural surroundings. In Montgomery County, Charlotte Beverly's mother and aunt made persimmon bread out of the fruits

that grew around the plantation.¹²⁴ Amos Clark recalled that around Ed Roseborough's farm near Belton, Texas, "wild grapes wuz plentiful in de woods an' wild dewberries. De wimmin got dese in de fall an' spring an' fixed up presarves."¹²⁵ Slave women's daily work responsibilities contributed to their knowledge of the environment.

Female slaves also acquired environmental medical knowledge from family members. Through years of experience, older community members generally had more knowledge of the surrounding environment, the medicinal properties of plants, and the steps required to create efficacious remedies. 126 Slaves passed down much of this knowledge to younger generations. Younger slaves apprenticed with the healers, often their mothers, in order to learn the art of healing. For example, Adeline Waldon's "mammy wuz a fair nuss an' dey come ter git her from far an' near. She tole me how to boil de herbs an' gib 'em."127 Vinnie Brunson recalled that slaves "had de remedies dat wuz handed down to us from de folks way back befo' we wuz born."128 African American healing transcended particular places, as many of the therapies that slaves passed down survived migration across the Atlantic and around the slave South. Relocation likely changed the meanings of healing rituals, but slaves continued to perform the rituals across spaces and over generations. Since plant healing was a crucial element of slave doctoring, however, migrant healers had to learn about indigenous plants after moving to new environments.

In charge of their health, migrating Texas slaves quickly grew acquainted with the medicinal properties of their new physical surroundings. Several of the plants that Texas slave healers relied on were native to the area. For example, many slave healers turned to "cami weed," or clammyweed. In his exhaustive review of slave narratives that discussed medicine, sociologist Herbert Covey shows that all of the former slaves who recounted cami weed remedies resided in Texas.¹²⁹ The slave healer at the Davison Plantation in Madison County used cami weed concoctions to cure chills and fever. Eli Davison claimed that the healer's "remedies... beat anything those white Doctors can give you." 130 In central Texas, John Mosley, Andy McAdams, and Lizzie Atkins all recalled the healers using a cami weed remedy to cure fever and chills as well as malaria.¹³¹ John McAdams and Charlie Sandles often took syrups made from cami weed and other botanics. 132 Several slaves from northeastern Texas also cited cami weed as a staple of enslaved healers' therapeutic repertoire, including Alice Cole, who listed the plant as a cure for typhoid fever.¹³³ Since "cami weed" is not a common plant name, slaves could have been referring to chamomile or calamus, two other popular

botanics among slave healers.¹³⁴ Those referring to cami weed, however, were describing a Texas plant.

Other Texas plants may have been new to slave healers. In central Texas, Vinnie Brunson treated himself with many plants, including red pepper, red oak, and sassafras teas for aches and fevers. He also claimed "yacca heals foot sores." Just fifty miles south of Brunson's home, Harriett Barrett scoured the woodsy hills in Walker County for herbal cures. Descending from an African-born father and a U.S.-born mother, Barrett served as the healer and midwife for her community. Her master, Steve Glass, additionally valued her skills as a healer and a cook and took her with him to the front lines of the Civil War. Barrett developed various plant cures, and she used cactus to heal several different illnesses, such as fever, chills, and colic. While some U.S. species of yucca and cacti grew east of the Mississippi River, many thrived in the arid landscapes of the Southwest. Slaves may have been encountering these plants for the first time when they or their parents arrived in Texas.

In addition to oral tradition and experience, cross-cultural exchange helped enslaved healers address slave health in Texas, for they often learned about plants' healing properties from whites and Native peoples. Slave women were charged with nursing slaveholding families, bringing together African American and Euro-American herbalism.¹³⁷ In the South, moreover, the transfer of plant knowledge was one of the most significant cultural influences that Native peoples had on African Americans. Many female slave healers cited Native women as a major source of medicinal plant knowledge. 138 These medical exchanges are difficult to trace or identify, but some slave narratives give us a glimpse into the transfer of medical knowledge. Julia Collins, a slave healer in central Texas, taught her daughter, Harriett, healing therapies that "she larned from de ole folks from Africy, an' some de Injuns taught her."139 Julia Collins moved from Virginia to Texas in 1850 with her master, future Texas governor Richard Coke. Coke established his plantation near Waco, in the Anglo-Comanche borderlands. 140 Collins may have learned about medicinal plants from Virginia Indians. Since slaves interacted with Native peoples around central Texas farms and plantations, it is quite possible that Collins learned about plant healing from her Indian neighbors. In addition, former slave Lucendy Griffen recalled that her community healer regularly used prickly pear remedies, a cactus on which Comanches also relied.¹⁴¹ Wherever the medical transactions occurred—on Texas plantations, in the fields somewhere in the U.S.

South, on slave ships, or in coastal Africa—cross-cultural exchanges contributed to slaves' knowledge of the environment.

While slave owners did not associate slave work, diet, or households on the farm or plantation with blackness in the ways that Anglos associated these practices with inferior and unhealthy Indianness, they linked slave healing with race. Slaveholders labeled slave doctoring "superstition" and saw it as a counterpoint to orthodox medicine, "superior" white medical training, and Euro-American claims on knowledge.¹⁴² This image of African American healing collapsed into larger constructions of blacks as "savage." While the language was similar, there was a difference between "Indian savagery" and "black savagery" in the mind of a mid-nineteenth-century Anglo. Native savagery informed Anglo justifications for Indian removal and Anglo land grabs in this era of economic and geographic expansion. Enslaved blacks did not possess land that Anglos wanted; they "possessed the labor that slaveholders appropriated to cultivate the 'vacant lands' they had taken from Indians and to produce surplus for the market." Slaves were going to remain in white society, securely fastened to the political economy and the lowest rung of the social ladder. While slave healing was something that made African American slaves "black" and Anglos "white," it was not seen as something for whites to transform, especially since slaveholders often depended on slave healers to treat sick slaves and on ordinary slaves to maintain their health.

As Anglos trickled into central Texas, many with their slaves, they were hoping that the area's hills and breezes would help them protect their health, even though they knew their bodies would have to acclimate to the new environment. Anglos were in Texas to build new American societies, which raised its own set of health concerns. For migrants, a moral society was successful, productive, and healthy. Anglo settlers therefore stressed the importance of temperance, hard work, and proper sexual relationships, working to counterbalance the potentially harmful health effects of the environment. At first, Anglo settlers nurtured relations with Comanche traders to develop their settlements; however, U.S. westward expansion occurred in concert with the decline of the Plains bison population, which limited Comanches' food and trade sources. Over time, the region became more closely connected with the United States economically, socially, and militarily.

At midcentury, military physicians became agents of empire tasked with assessing the health of Texas lands. Measuring the health of the

countryside involved surveying the health of its Native inhabitants. Doctors crafted the white American agrarian vision as the healthiest manner of living in these new U.S. lands, in opposition to so-called unhealthy Comanche customs. According to military physicians, nomadism, smoking, and a "problematic" labor structure enhanced Comanches' inherent weaknesses and produced unhealthy and inferior Indians. This medicalized racial discourse became the basis for how to interpret the Comanches' first year on the Brazos River reservation. Since their customs made them sick, the adoption of Anglo customs made them healthier in the eyes of the Texas Indian agent, even in light of farming failures on the reserves.

To the south, Anglo newcomers built towns among a predominantly Mexican population, who they deemed dirty, unhealthy, and inferior. Anglos reshaped the social and political structure and marginalized Mexican peoples in the late nineteenth century. The characterization of "dirty" Mexicans occurred alongside cross-cultural medical exchanges, which Anglo physicians turned into a new tool of empire.

5 / Healthy Anglos, Unhealthy Mexicans: Health, Race, and Medicine in South Texas

In 1849, months after the United States acquired a massive swath of northern Mexican lands, another cholera epidemic swept through the borderlands. The outbreak made the issue of cleanliness pertinent to discussions of migration, settlement, and urban and rural health in Texas. Many physicians and city dwellers considered unclean environments a major contributor to cholera epidemics in U.S. cities. A few months earlier, the Houston newspaper Telegraph and Texas Register had reported on the findings of a medical association in New York: "Filth and uncleanliness abounding in cities and habitations of the poor and profligate portion of the community, united with atmospheric gases, are the unfailing sources from [which] the infection of cholera is generated and propagated." Things were a little different in the sparsely populated rural countryside. Stationed at Fort Brown just outside of Brownsville, U.S. Army Surgeon N. S. Jarvis wrote, "In the country, . . . causes less favorable for [the] production and propagation [of cholera] existed than in the dirty and crowded huts of the poor." Brownsville, however, was reminiscent of New York City: "Here, as in other places or towns in Mexico, the greatest mortality was among the lower and poorer class, inhabiting dark, ill-ventilated jircals [sic] or huts on the outskirts of town. Crowded as these were with all ages and sexes in a limited space, living frequently on [a] most unwholesome diet, and subject to almost every kind of exposure, the only surprise is, not that so many died, but that so many escaped."2 Jarvis's remarks reflected the New York medical association's conclusions and highlighted how living conditions among impoverished ethnic Mexicans in Brownsville facilitated the spread of disease. It also demonstrated that Anglo physicians were attuned to Mexican health in south Texas.

Health helped drive Anglo settlement and Native displacement in midcentury central Texas, and it again factored into Anglo colonization of another Texas borderland, the Río Grande Valley. As we have seen, south Texas had been the site of a fair share of land contests in the late eighteenth and early nineteenth centuries: between Spaniards and Indians around mission-presidio clusters in the valley; Mexicans and Indians on both sides of the Río Grande; and Mexican settlers, Irish colonists, and Native peoples on the Gulf Coast. The area also stood at the center of U.S.-Mexico geopolitical tensions after the United States annexed Texas in 1845, a conflict that exploded into war the following year. As a result, U.S. military officials and their families began to trickle into the valley. After the Treaty of Guadalupe Hidalgo ended the war and granted the lands to the United States, about 2,500 Anglo settlers, soldiers, and military physicians flooded into the region.³ The new arrivals immediately maintained that the successful economic incorporation of south Texas required a healthy and productive population. They knew they were entering a potentially harmful tropical environment, but they found solace in the coastal breeze, flowing river, and warm weather. They also kept a keen eye on settler activity. Like their central Texas counterparts, Anglo military doctors and civilians preached the gospel of healthy living in the valley. Hardworking, temperate, clean, and sexually moral south Texans were key to colonization.

Central as health was to U.S. conquest, Anglo migrants and doctors felt they could learn a lot about healthy living in this unfamiliar place by observing the local Mexican population. They saw the 18,000 ethnic Mexicans who inhabited south Texas as a threat to Anglo health. For Anglos, ethnic Mexicans' dense and impoverished neighborhoods signified their inherent unhealthiness, and their so-called immorality—evidenced by their indolence, uncleanliness, and sexual impropriety—also made them seem unhealthy. "Dirty" Mexican homes and neighborhoods could contaminate the environment, and "loose" Mexican women could transmit sexually transmitted diseases and harm the Anglo men who sought the female fruits of Manifest Destiny. Finally, Mexican medical practice could facilitate the spread of disease, threatening all Anglos in the area. Disease and medicine thus informed Anglo-Americans' concepts of race and their visions for life in south Texas as in central Texas. Agents of the expanding nation—Anglo settlers, soldiers, and physicians—used health

to reproduce racial and gender differences and rationalize their civilizing mission.⁶ Accusing Mexicans of being inherently and intentionally unhealthy confirmed white superiority, justified conquest, and injected notions of cleanliness and morality into the colonization of newly acquired lands. The Anglo bearers of American civilization sought to cleanse Texas of dirty Mexican places and replace them with a cleaner, civilized Anglodominated society, a precursor to late nineteenth- and early twentieth-century immigration debates and intrusive public health measures that targeted "diseased" Mexican peoples.⁷ As Anglos colonized south Texas at midcentury, this racialized notion of healthy American living initiated the marginalization of Mexican peoples in the region, the only ethnic Mexican stronghold in mid-nineteenth-century Texas.

While Anglos had high hopes for Río Grande Valley settlements, they were battered by epidemic and endemic diseases, which again turned medicine into a site of cross-cultural exchange. Medical exchange was an outgrowth of Anglo-Mexican relations in south Texas. Even though some Anglos had called for the complete removal of ethnic Mexicans from the region, Anglo newcomers quickly realized that they could not impose a new social, political, and economic structure that fully excluded Tejana/os.⁸ Elite Tejana/os and Anglos merged business interests, often through intermarriage, and some Tejanos continued to occupy positions in local politics. This set the stage for continuous cultural transactions, which included Anglo military physicians' appropriation of a Mexican therapy—maguey healing—to treat U.S. soldiers sick with scurvy. The transfer of this medical practice was part and parcel of Anglo-Tejana/o accommodation. Yet even though U.S. military surgeons relied on local healing, the medical appropriation facilitated U.S. imperialism. As doctors merged healing customs, Anglo migrants were taking political control of the region, working to create U.S. societies in what was once northern Mexico. The maguey remedy ensured that healthy soldiers could continue to buttress Anglo colonization, displacing many Mexican residents. Anglo migrants implanted themselves in south Texas and used health to redefine what practices were appropriate and what practices were unbecoming of a U.S. citizen. Like Mexicans before them, Anglos racialized the nation in Texas, but they were more successful in gaining control of the region and building a racially exclusive nation in the periphery. Despite Mexican contributions to U.S. professional medicine through the maguey cure, and despite continued cultural hybridization in the borderlands, interdependency now went hand in hand with profound ethnic and racial subordination.

Making (Un)healthy South Texans

Anglo settlement in the Río Grande Valley had a different trajectory than in the central Texas borderland. The valley between the Nueces River and the Río Grande was claimed by both Mexico and the United States. When the United States annexed Texas in 1845, government officials argued that this strip of land had belonged to the Republic of Texas, which to them meant that the valley was now part of the U.S. state of Texas. The Mexican government disagreed and saw the land as part of Mexico. The dispute came to a head in 1846, when President James K. Polk sent troops to the Río Grande. Since Mexico claimed the strip of land, it saw Polk's move as an act of war, and its soldiers ambushed a U.S. military patrol on the north side of the river. Polk then asserted that the Mexican army had attacked U.S. soldiers on U.S. soil, and he used the incident to secure a declaration of war from Congress. For the United States, its response was nothing more than the defense of sovereignty at the limits of the nation, even though Polk, an expansionist president, provoked Mexico into a skirmish that escalated into a war.¹⁰ The Río Grande Valley quickly became a combat zone.

Immediately thereafter, the Anglo presence in the valley was tied to this geopolitical battle. The U.S. military moved into two sparsely settled Mexican settlements on the Río Grande. It set up on the coast in Matamoros, just south of the river, and created Fort Brown (initially named Fort Texas) across the river from a Mexican ranch that became the site of Brownsville. Military officials and their families slowly migrated into the area. After the United States won the war in 1848 and officially acquired the Río Grande Valley, Anglos rushed into settlements and existing towns on the north side of the river. The Río Grande now formed the border between the United States and Mexico. According to the Treaty of Guadalupe Hidalgo, Mexicans situated on the east and north bank of the river became legal U.S. citizens.

The establishment of the new border introduced commercial opportunities in Laredo and other parts of south Texas. Anglos had been moving into Laredo for years before the United States acquired the Río Grande Valley, and they eventually managed to wrest control of the city's local political structure away from Tejanos. Brownsville on the U.S. side replaced Matamoros on the Mexican side as the main port in the region, stimulating legal and illegal trade. For the most part, mainly Anglos benefited from this postwar economic growth. In the 1850s, however, south Texas's Anglo and Tejano/a elites established close economic ties

that were mutually beneficial. Interethnic marriages between Anglo men and Tejanas helped produce and solidify these ties. Though not necessarily in an equal fashion, Anglo and Tejano elites shared political power. Anglo Texans captured the county's political offices while Tejanos took most of the municipal positions. Evidently the unions that evolved in postwar Laredo cut across ethnic lines but followed the boundaries of class. This new arrangement eased hostilities between elite residents and newcomers, and Anglos and Tejana/os worked to maintain this peaceful structure. Municipal politicians, for example, published town ordinances in English and Spanish, and the people of Laredo celebrated both U.S. and Mexican holidays.¹³ But Fort McIntosh's presence just around the corner served as a constant reminder of who ruled this land.

Anglos newcomers looked for healthy south Texas climes, similar to migrants who were settling the western part of the state. The war called for posts near the coast, which brought many Anglos into Texas's tropical climate. Married to U.S. Army Lieutenant William Warren Chapman, for example, Helen Chapman moved from Massachusetts to Matamoros in early 1848, and after the war she and her family moved to Brownsville. Like other migrants, Chapman often described the health of the environment in her letters to loved ones. Writing to her mother in the summer of 1849, she reflected on her fellow coastal inhabitants who blamed the "dry oven heat" for causing such "extreme debility." Her own thoughts on the climate, however, highlight the different perspectives people had about the health of a particular locale. While others complained about the heat, she attributed her health to it. "Notwithstanding all this [heat]," wrote Chapman, "I am in almost robust health. The extreme dryness of this summer climate and unvarying temperature affects me most favorably."14 Chapman echoed writers from the 1830s, who had praised the aridity in Texas.¹⁵ She also echoed Swiss geographer Arnold Henry Guyot, who, as she read in the Home Journal, was a fellow proponent of the healthy tropics. Chapman believed that individuals who moved "from a cold to a warm region in the maturity or decline of life live longer for the change."16 While the war influenced where she settled, she found solace in the Texas coastal heat, particularly having moved from Massachusetts.

U.S. military physicians stationed along the Río Grande generally shared Helen Chapman's view of Texas's healthy riverine environment. Assistant Surgeon Glover Perin, for example, praised the mild climate around Laredo. Fort Brown Surgeon S. P. Moore found the "town [of Brownsville] and fort . . . decidedly healthy." Similar to the 1830s emigrant guides,

Moore basked in the "delightful Gulf breeze from the east every morning during the summer, which is the harbinger of health." Not all of the doctors found the valley healthy, however. Of the three military physicians stationed in the valley, Israel Moses had the bleakest view of his surroundings. He was located at the Ringgold Barracks, opposite the Río Grande from the Mexican town of Camargo. According to Moses, the Ringgold Barracks was "considered the hottest post in Texas." In a normal summer, the temperature reached 108 degrees; the summer of 1854 was unseasonably mild at 102 degrees. The brutal heat painted the landscape throughout the year. "The heat is constant for nine months of the year," wrote Moses, "and is excessively prostrating to the mental and physical energies." Settlers and physicians did not always agree on medical geography.

They did, however, agree that a healthy scenario could turn quickly into a threatening one. Throughout the mid-nineteenth century, the Río Grande Valley faced the onslaught of epidemic disease. As we saw above, cholera returned to Texas in 1849. According to Moore, yellow fever struck different parts of the valley in 1841, 1845, 1848, 1850, 1851, and 1853. Moses confronted hundreds of cases of "a malarial fever of unusual severity" among both soldiers and civilians. He detailed his patients' suffering in his report:

The symptoms, in all cases, were marked by great severity—the headache, pain in the limbs and back, were excruciating; there was complete anorexia and insomnia, with prostration of the mental faculties and physical strength; a pale, bloodless hue of the face, often tinged with a dull yellow, attended even the milder forms; while, in the severer types, all these were intensified—the head hot; face either perfectly exsanguine or of a mahogany color; conjunctiva injected, and of a deep yellow; tongue covered with a thick yellow fur; lips dry; sunken expression of the countenance; brain sometimes dull and oppressed, so that the patient could not utter his wants; in others, clear and active; and again, in a state of raging delirium, with constant crying out in loud tones and shrieks.²¹

Moses's scenes of pain and desperation conflicted with Helen Chapman's vistas of gentle breezes and salubrious heat. While the two depictions of Texas were not mutually exclusive, even in the minds of the authors, they were a reminder that the environment could become hostile and that settler bodies were fragile.

Doctors had multiple answers for why the epidemics hit the coast so hard. Moore had an environmental explanation for the outbreaks: they

struck when those healthy Texas winds were absent.²² Also looking to climate, Moses attributed the "unusual sickness" to heavy rains that flooded the Río Grande.²³ N. S. Jarvis likewise felt that the rains and moisture of the coast facilitated the spread of cholera in 1849. Jarvis offered another explanation and argued that cholera moved easily through Brownsville because the town lacked a physician. He wrote that "not one-third of the [600 people] who died were ever attended upon or seen by a physician. The poor creatures in many instances were satisfied with the occasional sprinkling of holy water, the repetition of some prayer or invocation to their protecting saint, in the absence of medical aid, which their poverty precluded them from employing."24 Jarvis's description shows that ethnic Mexicans in the borderlands continued to employ religious therapies, and he depicted these practices as the only recourse rather than a choice. It is possible that the sick and their family members decried the absence of a physician. In the mid-nineteenth century, though, Tejana/ os still found some physicians' medical explanations unconvincing. For those who believed that God caused cholera, for example, then a doctor certainly was unable to provide proper care.²⁵ The availability of a doctor in Brownsville would not have prevented residents from looking to saints and God for medical help.

Texas physicians argued that other factors beyond the environment caused epidemic outbreaks, and they considered everyday behaviors when discussing this medical question. Doctors and settlers equated moral and physical health. These health discussions were tied to a larger conversation about morality. White middle-class American men and women were actively engaged in moral reform movements all over the United States. In their eyes, early nineteenth-century industrialization, immigration, and urbanization had caused social chaos, and they were working to improve societies that had run amuck. For example, nativist movements sought to stabilize society by restricting European immigration. Nativism overlapped with temperance reform, as activists who associated excessive drinking with the Irish argued that it threatened safety and productivity in the workplace as well as family security. Middle-class Americans, moreover, saw poverty as a moral phenomenon. The "unworthy" poor—prostitutes, criminals, and idlers-who lived in dense, filthy urban environments were deemed responsible for their poverty as well as the diseases that came to them.²⁶ In the mid-nineteenth-century U.S. West, where middle-class Anglos encountered "incivility" and "barbarism," concerns about morality were magnified and racialized, particularly since newcomers hoping to build something great in these former Mexican lands believed that immorality made people sick.²⁷

In the interest of health, Anglo settlers and physicians promoted qualities associated with the nineteenth-century white middle class industriousness, cleanliness, and temperance. Proper comportment, which was essential to their definition of whiteness, equaled healthy living. They criticized behaviors among white newcomers that countered this social and medical vision. Helen Chapman, for example, decried the "villainous compounds, liquors, brandies, cordials, [and] oceans of claret" that filled Anglo men's glasses in Brownsville and Matamoros.²⁸ Military physicians tried to crack down on heavy drinking among U.S. soldiers.²⁹ Anglos believed that poor conduct was unbecoming and caused sickness. In her first year in Matamoros, Chapman told her mother about an Anglo woman, Mrs. Madison, who suffered from dyspepsia, a digestive illness. Madison had claimed a boat ride was the source of her condition, but Chapman and her friends believed that Madison's "sickness was . . . brought on and aggravated by her ungovernable appetites and laziness. Her whole life is to dress and see company and I never saw a woman more completely and universally despised."30 Clearly Chapman had little sympathy for her acquaintance, perhaps leading her to diagnose Madison in a way that also critiqued her character. Her comments nonetheless emerged from the pervasive idea that indolence caused disease. Idleness took on a particular meaning in this colonial context. It did not just cause disease; it also squashed human activity, and Anglo settlement and U.S. colonization were hard work. Coming from a place of concern for their own well-being and for successful settlement, Anglos argued that moral behaviors would safeguard the health of those who practiced them. The future of the race and the nation, which for whites went hand in hand, were at stake in these new U.S. lands.

Because Texas Anglos saw themselves as the bearers of civilization living among "uncivilized" and "immoral" nonwhite populations, race infused this link between moral and physical health. When Anglos argued that certain behaviors made people sick, they often spelled out their diagnoses in racial terms. For example, J.J.B. Wright explained that Mexican immorality caused the 1849 cholera epidemic in Surgeon San Antonio: "In this far-off region, where, until lately, the binding force of morals and the restraining influence of Christianity were alike unheeded and disregarded, men ran riot in dissipation and incurred the penalties, sure to follow, sooner or later, the infraction of the laws of nature." Wright dated his picture of San Antonio's immoral society in

a way that revealed his connection between race and moral and physical health. Immorality abounded in the city "until lately," when a new moral population had arrived. These newcomers were mainly Anglo, which implied that the residents of San Antonio, who were predominantly ethnic Mexican, "disregarded" their morals. Moreover, since he believed that immorality would eventually bring natural disaster, he was also saying that the epidemic was inevitable for a largely ethnic Mexican city like San Antonio. Through discussions about what caused disease, Wright crafted an image of immoral and unhealthy Mexicans.

Working to build healthy, moral societies in multiracial Texas, Anglos viewed their new Mexican neighbors as culturally and morally defective and constructed lazy, dirty, licentious, and therefore unhealthy Mexicans.32 They crafted race on site. Existing ideas about "lazy" Mexicans, for example, took on a new medical meaning in the Río Grande Valley. The relationship between disease and laziness implied that Mexicans were an unhealthy population. The Anglo stereotype of the lazy Mexican remained an important trope within a larger racial lexicon in the nineteenth-century United States, shaping characterizations of Mexicans in U.S. newspapers. Leading up to the U.S.-Mexico war, some Anglo-Americans opposed the annexation of Mexican territories and some supporters wavered, worried about the mere presence of Mexicans in the United States. In conversations that preceded the conflict with Mexico, one Anglo commentator defined the "Mexican race" as a "mongrel breed of Indians and negroes—about as lazy as the Hottentots, ignorant as slaves, and passionate as savages. . . . Even the descendants of the Europeans have so degenerated, that they retain but few vestiges of the Spaniards, as much as he is inferior to the early settlers of the United States."33 When soldiers entered Mexico during the war, they sent letters home with descriptions of Mexican towns, cities, and peoples. One such letter, published in a Massachusetts paper, the Pittsfield Sun, showed how interactions with Mexicans sometimes countered earlier images. Upon arriving in Matamoros, a Boston soldier remarked that Mexicans were "not the degraded people we have been led to suppose. True, they are lazy, most of them.—Still they are temperate in the use of ardent spirits."34 Face-to-face contact moderated this soldier's views, but it did not overturn his assessment of Mexican indolence. In a similar vein, Helen Chapman wrote, "They are a strange people, these Mexicans, good hewers of wood and drawers of water, but low on motive power."35 Upon arrival, Anglos interpreted the trope of Mexican laziness medically and implied that the entire population was inherently unhealthy.

Anglo concerns about health and morality during colonization gave birth to the image of the "dirty Mexican," another enduring U.S. racial trope. The belief that unclean environments produced sickness informed Anglo views of Mexican morality. Anglos defined their moral superiority around cleanliness and against the perceived immorality of "ungroomed," "unclean" people of the working class and of ethnic minorities. They saw Mexican neighborhoods as dirty, which made ethnic Mexican residents "unhealthy." When military physicians in south Texas put together their medical topographies, their discussions of cleanliness and morality targeted the local Mexican population. U.S. military doctors helped invent the "dirty Mexican." Surgeon S. P. Moore, for example, emphasized the uncleanliness of Mexican neighborhoods in Brownsville, which shaped how he conceptualized the health of the place and the people who inhabited it:

A majority of the inhabitants of Brownsville are Mexicans, living in miserable hovels, called "jacales"; the streets are not very cleanly, and but partially paved; the town contains about 3,500 inhabitants. There is no system of drainage in the town; the water runs off as well as it can, or remains on the ground. The Mexicans, without an exception, and many of the Americans, use the river-water for all purposes. The Mexicans are not particular; for it is not uncommon to see the women, after a rain, collecting it from the little puddles around their houses. . . . The men use the river-water. At those seasons when the river is low, the water is so extremely unpalatable as to render it almost impossible to drink it. . . . The Mexicans are a miserable race of beings—I speak more particularly of those in our neighborhood—existing in squalid wretchedness in their foul cabins, very ignorant and superstitious. 38

Perhaps Moore felt that the town's meager infrastructure proved the inability of Mexicans to govern themselves or that the Mexican race was too lazy to maintain clean living spaces. The structural reasons behind the spread of disease in Mexican neighborhoods, such as the effects of poverty on living conditions, only reinforced Moore's perceptions of residents as racial inferiors. In his description of Brownsville and its population, he underscored the medical dangers that these Mexican spaces, and by extension, Mexican peoples, posed to Anglo newcomers.³⁹

Even though Anglos framed images of unkempt Mexican homes as a threat to an American city, they still depended on Mexican labor to keep Anglo homes clean and healthy.⁴⁰ As south Texas's economy grew, ethnic

Mexicans generally were pushed from skilled occupations into unskilled, low-paying jobs, while Anglos generally benefited from the growth of commerce. Part of the reason for this shift had to do with Anglos' view of certain jobs—herding, domestic service, and laundry work, for example—as "Mexican work." In Laredo, half of the ethnic Mexican population worked in these positions. Historian Gilberto Hinojosa contends that Laredo's seamstresses, such as Dolores Pérez and Josefa Ramírez, and cooks, such as Isidora Camacho, did not see much upward mobility even though both positions required skill.⁴² Moreover, these positions were labor-intensive. Making tortillas, for example, involved "rubbing the corn to a fine paste on the stone [metate,] . . . flattening them out and laying them on what served as a griddle." The intensity of the work was not lost on every Anglo. Helen Chapman recognized that "a great portion of [Mexican] food consists of this pounded corn and the labor must be immense."43 Cleaning homes was also physically demanding, largely because of the heavy focus on hygiene. Women's health-related responsibilities in the home had shifted in the early nineteenth century; their roles as healers declined while their work in disease prevention increased.⁴⁴ Anglo Texans who hired ethnic Mexican domestic workers therefore made laundry a primary task in making the homes healthy. Homeowners spent quite a bit of money on cleaning supplies (buckets, scrub brushes, washboards, and soap) and work clothes (aprons and gloves).45 Laundering was also labor-intensive. After collecting soiled linens and clothing from around the house, servants scrubbed all of the dirty laundry on washboards with soap and brushes. They then hung each individual item out to dry. Domestic work was anything but idle.

Dominga Garza and Petra Rodríguez were part of the largely ethnic Mexican domestic servant class in the Brownsville-Matamoros area. ⁴⁶ The census does not tell us who their employers were, and the written record leaves few depictions of domestic workers' daily routines. If some sort of portrayal does appear, the servants remain anonymous. For example, while Helen Chapman referred to the individuals in her elite inner circle by last name and with the signifiers "Mr.," "Mrs.," "Don," or "Doña," domestic workers appeared in her letters simply as "servants," not even referred to by their first names. Still, we can get a glimpse of the domestics' arduous cleaning tasks from Chapman's letters.

When the Chapmans first arrived in Matamoros, they lived in a house owned by Juana Perello, a member of the Matamoros elite. The fifty-year-old Dominga Garza and twenty-year-old Petra Rodríguez may very well have worked for Perello; if they did, they had their work cut out for them.

What elites saw as symbols of status and prestige, domestic servants likely saw as symbols of a hard day's work. According to Chapman, Perello's two-story house was "one of the very best houses in the city, fronting the Grand Plaza." A high archway led from the foyer into an open piazza that was surrounded by pillars. Merely dusting the staircase bannister in the intense Texas heat and suffocating coastal humidity must have been strenuous work. The stairs led to second-floor apartments and a salon, and cleaning this upstairs living room was another serious undertaking, for Chapman remarked that it was "larger than any two parlors connected by folding doors that I know." What made the housework in this room especially labor-intensive, other than its size, were the three chandeliers and the ornamental work on the crown moldings, which required careful attention. Large pieces of dust-collecting mahogany furniture with vases, gilt ornaments, and French clocks outfitted the rooms, and windows most likely streaked with smudges surrounded the entire house. Wide balconies wrapped around the front end of the house that surely required routine sweeping to prevent the accumulation of harmful filth. Finally, at the end of the day, the servants could retire to their quarters or return to their own homes.⁴⁷ The time and physical energy that Dominga Garza, Petra Rodríguez, and other so-called dirty mexicanas spent on making and maintaining hygienic households was likely lost on their employers, as was the fact that these women belonged to a class of people who supposedly could not keep their own homes clean and tidy. Ethnic Mexican women who, because of nature, may never achieve the dominant American feminine ideal helped Anglo women perform healthy American womanhood.

Some Tejana/o elites held similar understandings of healthy living as their Anglo counterparts, reinforcing ethnic Mexican class divisions around the language of health. In *El Bejareño*, San Antonio's Spanishlanguage newspaper, for example, journalists' descriptions of the city's impoverished residents reflected Anglo characterizations of unhealthy Mexicans. The author of one article responded to a story about the city of Austin's dirtiness, exclaiming that "in terms of filthiness, San Antonio has no rival in the state." "Are we going to permit the underestimation of this honor that our city deserves?" he facetiously continued. "Never . . . never . . . never!" In the mid-nineteenth-century U.S. American mind, people linked filth with poverty and sickness. In another article, a *Bejareño* writer described a charitable group in Paris that developed a system of homes to care for the poor. The journalist then mused whether this kind of charity work would have as much success in San Antonio:

"more than anything, our poor want liberty, decline, dirtiness, and liquor; while in these homes [in Paris], they are obliged to work [and] stay clean and sober."50 Not only did the author describe San Antonio's poor disparagingly but the qualities he associated with them were those that people believed caused disease. By 1860, Anglos had wrested control of San Antonio politics and wealth from Tejana/os. The population was 35 percent Tejana/o and 64 percent Anglo. Ethnic Mexicans occupied the lower rungs of the socioeconomic ladder; about 60 percent of Mexican workers were cartmen.⁵¹ The Tejana/o reporters were referring to a growing class of impoverished Mexican peoples and their neighborhoods. As we have seen, this medical discourse was not limited to nonphysicians. It circulated within the U.S. military medical world as well as the Mexican medical profession. In the mid-nineteenth century, for example, Mexican doctors were also writing about the harmful effects of alcohol.⁵² There was a difference, however, in the ways in which Anglos and Tejana/o elites discussed health and culture. Anglos ascribed harmful behaviors to Mexican bodies, collapsing all ethnic Mexicans into an unhealthy Mexican race. For Tejana/os, on the other hand, Mexican unhealthiness fell along class lines.

It is possible that Tejana/o elites had adopted the Anglo language of healthy Americanness and the social differentiations embedded in U.S. medical discourse. This process of medical assimilation occurred at the turn of the twentieth century, for example, when middle-class Chinese Americans demonstrated their commitment to American norms of hygiene, respectability, and domesticity, resulting in newfound access to San Francisco's public health services. This political strategy produced a class-based cleavage within the city's ethnic Chinese community, for it resulted in the further exclusion of working-class Chinese immigrants and Chinese Americans, particularly male bachelors, who did not live up to the healthy American ideal.⁵³ It is also possible, however, that Tejana/ os were reproducing older forms of Mexican medical differentiation. In the Spanish and Mexican periods, state officials distanced themselves from Native peoples, female practitioners, and lower-class citizens based on notions of health. Tejana/o characterizations of poor, unhealthy Texas Mexicans could very well have been a legacy of older Mexican constructions of healthiness.

Beyond some shared notions of health, intermarriage bound together some Anglo and Tejana/o elites, which conflicted with Anglo images of unhealthy Mexicans; however, some Anglos framed interracial sex as a health hazard in their visions of a healthy moral American society in south Texas. Conversations about sex in the borderlands occurred at a moment when Anglo American men were traveling to the U.S. West and Latin America for commercial purposes or on their own filibustering expeditions. Many of these men published accounts of their visits, trafficking images of beautiful and available Latin American women. Anglo men gazed at Latinas, marveling over their bodies and expressing intense sexual desire. The men saw themselves as irresistible and painted pictures of promiscuous Latinas ready and willing to embrace Anglo men. Anglo Texans played their own part in this story, as they gazed at ethnic Mexican women. Their writings tended to focus on Mexican female sexuality, not male. Anglo men believed that Latinas' desire for them was a sign of Latinos' unmanliness; "inferior" Latinos therefore were not worth writing about. ⁵⁴ Notions of Mexican women's availability became a pretext for Anglo men to sexually cross racial lines. ⁵⁵

White perceptions of willing Mexican women undoubtedly formed a backdrop for instances of sexual violence; however, stories about interracial sexual violence in mid-nineteenth-century Texas are difficult to recover. Many Tejana victims did not file legal charges because of shame or fear of retribution, even as others took advantage of newfound opportunities to prosecute their assailants in U.S. courts.⁵⁶ In addition, Anglo depictions of mexicanas as sexually wanton and prostitutes historically have silenced instances of sexual violence. Attacks were not considered attacks when they involved "lascivious" women and "irresistible" men.⁵⁷ Because of their racialized and sexualized perceptions of Mexican women, then, Anglo men probably did not see themselves as violent or immoral, even in this moment when newcomers regularly commented on moral health and morality in general. While instances of sexual abuse have been buried in the historical record, they are an important part of this larger history about U.S. expansion and the Anglo constructions of race, health, sexuality, and Mexican womanhood that fed conquest.

Anglo Texan men dwelled on Tejana sexuality and sought to benefit from what they saw as disreputable behavior of Mexican women. Based on his own experience, for example, one writer for the newspaper *American Flag* urged others to take a

stroll down to the bridge in an afternoon and look upon the numerous bathing parties [of Mexicans] that skirt the margin of the upper lake. Hundreds may be seen at one view swimming and splashing in the water, and cutting up "such fantastic tricks before high Heaven," as make the vulgar *gaze*. They go in all together,

men, women and children, and seem entirely void of that female modesty and decency which characterize our own people. They will dress and undress in the presence of each other without seeming to be aware of or care about the differences of the sexes; but when one of our countrymen approaches them they generally jump into the water or hide themselves.⁵⁸

This author showed marked ambivalence; on the one hand, mixed-sex and mixed-age bathing was clearly immoral. Municipal governments wrote this view of bathing into law, limiting the use of riverbanks for bathing on both medical and moral grounds.⁵⁹ On the other hand, the Flag writer could not take his own eyes away, and he encouraged others to gaze at the bathing women and their children and menfolk. Indeed, Anglo men did not always disapprove of the presumed indecency of Mexican women, especially in situations where it gave men access to women's bodies. The journalist noted that the bathers covered themselves or hid when Anglo men appeared on the scene. The behavior that Anglos saw as indecent was perhaps the comfort of community in the eyes of ethnic Mexicans. When outsiders showed up, the ethnic Mexican women and their menfolk demonstrated the very "modesty and decency" that the story ascribed to Anglo women. The Tejanas likely had learned that their nudity could provoke sexual aggression from white men, so perhaps they were asserting ownership of their bodies as they shielded themselves from the Anglo male gaze.

Even though Anglo men saw Tejanas as sexually promiscuous, available, and immoral, sex with ethnic Mexican women did not shake their own moral fiber; however, it could threaten their health. Military surgeons, in particular, worried about the effects of ethnic Mexican women's so-called licentiousness on soldiers' health. Surgeon S. P. Moore assessed Mexican morality and declared that it was "in a very low state, with no sign of improvement" at Fort Brown and in the city of Brownsville.60 Surgeon Israel Moses wrote that everyone in the Mexican town of Camargo gambled, noting that Mexican women were "loose in morals, but far superior to the men."61 Physicians incorporated existing ideas about Mexican immorality into their diagnoses, further demonstrating how whites constructed racial ideas at the point of contact. Moses investigated the role of sexually transmitted disease around the Ringgold Barracks and identified Mexican women as the source. 62 He exclaimed, "The most extraordinary feature . . . is the complete absence of syphilitic disease; the single case of gonorrhea was contracted in the vicinity of

Laredo. Not a case exists in town, nor among the troops—a fact without precedent! That a Mexican town, in which there are about two hundred women, and mostly of Mexican morals, should exist without syphilis among them, is a wonder."63 Moses's assessment actually hinged on the absence of disease, but it revealed the connections that Anglos made among race, gender, morality, and health. He was astonished by the absence of sexually transmitted diseases in Mexican towns with a high population of Mexican women because the mere presence of ethnic Mexican women should have produced cases of syphilis. Moses essentially ignored the role of Anglo soldiers' sexual appetites for Mexican women in disease transmission and presented the women as the main cause of syphilis and gonorrhea. Nineteenth-century physicians linked morality and health in their evaluation of sexually transmitted diseases, but not all of the military doctors wrote extensively about sex. Among military surgeons, Israel Moses was the lone voice that elaborated on both Mexican morality and Mexican women in his assessment of sexually transmitted disease in south Texas.

Within the general military officer class, Moses echoed another U.S. Army officer who saw interracial sex as a health hazard. In the 1857 U.S.-Mexico boundary survey, Major William H. Emory called out Anglo soldiers who had sex with Native and Mexican women. Emory led the U.S. contingent of a binational team commissioned to map a fixed international border between Mexico and the United States. Emory explored the Río Grande in the summer of 1853. During the expedition, he assessed the intermingling of Anglos, Indians, and Mexicans in the borderlands and tried to make sense of what he saw by looking back to the history of the region. He tapped into a historical narrative that argued that Spaniards' commercial and military reliance on Indians and Spanish-Indian racial mixing caused Spain's downfall in the Americas. Emory's past attributed Spain's loosening grip on its colonies "and the return of the Indians to a savage life tenfold more ferocious than ever" to the wars for independence in which pro- and anti-Spanish forces "courted the co-operation of the Indians, and thus invited them to insubordination." Emory further argued that race mixing between Spaniards and Indians contributed to the decline of Spanish power, the "reemergence" of Indian savagery, and the growth of a "retrograde" mixed Mexican population. He continued with a scathing critique of sexual relations between white men and women of color, particularly out of wedlock. Emory asserted that white men sought only to satisfy their sexual desires with Indian and Mexican women, their sexual indiscretions "ending at

last in emasculation and disease, leaving no progeny at all; or if any, a very inferior syphilitic race."64

Emory's discussion of interracial intimacy in the borderlands highlighted Anglo concerns that immorality could cause health problems. Even though he framed his discussion in moral terms, Emory also did not write about sexual violence; he was mainly concerned with the medical and racial repercussions of interracial sex. Race mixing threatened the purity of the "white race" and its political power in the region; it also produced an unhealthy and unmanly offspring. Emory's construction of a syphilitic Mexican race reflected those Anglo racial anxieties about migration and seasoning, though this time they were spelled out in the idiom of health, sex, and gender. For him, sex between Anglo men and Mexican women caused sickness for Anglo men and their offspring. Westward migration forced Anglos to acclimate to new surroundings and already diluted Anglo strength, and according to Emory, race mixing further weakened white men. Emory also did not describe the role of Anglos in the spread of syphilis, for it was the Mexicans who were the "syphilitic race." Emory and Moses both marked Mexican women as the sources of syphilis, and they linked their conceptions of "loose" female Mexicans and the Mexican "race" with sickness. Both reports served the U.S. national project because medical topographies and Emory's boundary survey helped the United States incorporate the Texas borderlands. The annexation of Texas had a bearing on what kind of nation the United States was creating in a new and threatening place, where the intimate convergence of two political bodies paralleled the cozy physical contact among various peoples.

Emory and Moses crafted one-dimensional images of ethnic Mexican women as sexually promiscuous carriers of disease who threatened Anglo men and the broader white society. This took on national significance, since these were agents of the nation who sought to incorporate this newly American space, and very little about the place and its population resembled the United States that they knew. If we think about the women as actual actors in these sexual relationships, we can see various meanings behind Anglo-Mexican heterosexual intimacy in the midnineteenth century beyond Emory and Moses's myopic view. The narratives do not tell us what happened to any of the men or women. Surely some cases of sex between Anglo men and ethnic Mexican women were simply about desire, and some were instances of abuse. Maybe some of the men were courting some of the women. From the moment that Anglos began immigrating to Mexican Texas, Anglo men married



FIGURE 9. The U.S.-Mexico borderlands, 1857. This map was compiled from William H. Emory's surveys and a product of the joint U.S.-Mexican commission to map the border after the U.S.-Mexico War. Courtesy of the David Rumsey Historical Map Collection, www.davidrumsey.com.

Tejana women. Marriage often solidified business partnerships between families, opening up the borderlands economic world to include Anglos while giving Tejana/os access to U.S. commercial ventures. Initially, these interethnic marriages primarily occurred among elites, but over the course of the nineteenth century, nonelite Anglo men married Tejanas. ⁶⁶ It is quite possible that some of the women were sex workers, as Emory and Moses almost certainly assumed. Of course, they would have made no effort to understand the position of ethnic Mexican prostitutes in the local economy and society or the impact of postwar transformations on ethnic Mexican women, which may have helped push some women into prostitution. Whatever sex meant to ethnic Mexican women, female

sexuality proved to Anglo men that all Mexicans were immoral, dirty, unhealthy, and therefore worthy of conquest.

Worried about the effects of seasoning on the health of white citizens, Anglos wrote about moral and physical health and were attentive to Mexican customs and behaviors—however influenced by racist and sexist tropes—since U.S. expansion necessitated a healthy Anglo population. Anglo representations of Mexican peoples as lazy and immoral preceded the war and emerged in the debates over the U.S. annexation of Texas.⁶⁷ In addition to racial preconceptions crafted outside the region, ideas about whiteness and Mexicanness grew from Anglo migrants' interactions with locals, shaped by health concerns upon arrival in south Texas. Notions of Anglo and ethnic Mexican health surfaced in physicians' reports, in Helen Chapman's letters, and in newspaper articles, highlighting the health-related aspects of U.S. conquest. Race and gender shaped Anglo settler relations with ethnic Mexican locals and influenced migrants' views of local health, helping lay the groundwork for Anglo settlement. The Boundary Survey and physicians' narratives were part and parcel of U.S. westward expansion, moreover, because Anglos believed that health conditions (or conditions that could be rendered healthy) would allow them to spread their civilization to the Mexican and Indian periphery.

Medical Practice and the Military Frontier in South Texas

Even though Anglos saw ethnic Mexicans as unhealthy, they still looked to their Mexican neighbors' medical knowledge when grappling with sickness in their new surroundings. When hundreds of Texas soldiers were sick with scurvy, the military physicians' initial treatment of choice rest and the consumption of vegetables and lime juice—was unavailable.⁶⁸ Like northern Mexican physicians during the 1833 cholera epidemic, U.S. military medical practitioners at midcentury exhausted their therapeutic toolkit, so they had to look elsewhere for scurvy cures. Physicians—and by extension, the national governments that employed them—sought healing knowledge among locals. What occurred was an Anglo-Mexican medical exchange that allowed for U.S. military physicians to treat sick soldiers with a remedy using maguey, a succulent found in the area. The history of cross-cultural encounters in the region had set the stage for the military physicians' appropriation of ethnic Mexican healing knowledge; however, a hybrid medical culture would have clashed with U.S. officials' visions of expansion, which involved pushing aside local cultures and establishing

the dominance of middle-class Anglo-Saxon practices, including medicine and healthy living. In the borderlands, people constantly moved across international and ethnic boundaries, defying the idea of bounded nations and pure cultures.⁶⁹ State officials responded by repackaging medical therapies they incorporated that may have raised red flags and appeared culturally problematic. We saw this at work when Mexican physicians appropriated a Native peyote remedy to treat cholera in 1833. They distanced themselves culturally from the cure's Indian sources and remade it for a Mexican medical and political audience. Native and female healers appeared in the physician Ignacio Sendejas's peyote prescription as a counterpoint to Sendejas's scientific "Mexican" method of healing. Because of Native peoples' position in the northern political economy, Mexican officials were still forced to recognize the Native source, even if they did so begrudgingly and in a discriminatory manner. Times had changed by the time U.S. soldiers fell ill with scurvy at midcentury, but the military doctor Glover Perin's descriptions of the maguey exchange likewise offer a window into the multiracial social and cultural world of south Texas after the U.S. annexation.

In the 1850s, military surgeons contributed to the diversity of therapeutic forms that existed in Texas. Many physicians were abandoning aggressive, heroic therapies like bleeding and purging, but military doctors regularly practiced heroic medicine.⁷⁰ Ethnic Mexicans continued to look to curandera/os, and Mexican and Native healers often used cactus plants, succulents, and herbs for cures. Discussions of Texas's therapeutic diversity appeared in military medical reports. For example, Assistant Surgeon Ebenezer Swift reported that a Comanche afflicted with "smallpox, measles, or any contagious disease, . . . leaves, or is sent out of camp." Swift thought this meant that Comanches had no medical response to such diseases.⁷¹ Perhaps what Swift called a "lack of treatment" was actually the practice of quarantine, isolation, or letting nature take its course.⁷² Healers, including orthodox doctors, sometimes avoided drugs or botanical agents altogether and relied on the healing mechanisms of the human body and the environment.⁷³ Or maybe there was a spiritual element to the Comanche response to disease. Either way, Swift's narrative shows that Native peoples approached sickness in a variety of ways, and Swift demonstrated his awareness of diverse therapies in the region. After relocating to Texas forts, military physicians contributed to the variety of therapies. It was common for U.S. doctors to use botanical agents for healing, but success with these kinds of therapies often required local knowledge.

Since military surgeons were newcomers to the region, they would have to rely on local populations for that plant knowledge when their patients became sick with scurvy. Between 1849 and 1854, about ten to twelve thousand soldiers were stationed at forts in western and southern Texas, and in that time, close to one thousand troops fell victim to scurvy, which constituted about 42 percent of the scurvy cases reported armywide.74 In the United States, nineteenth-century physicians prescribed vegetables to treat scurvy; however, frontier surgeons could not procure enough vegetables in parts of Texas, mainly because they had trouble gardening in arid areas. U.S. doctors also prescribed lime juice for scurvy, but Texas military surgeons found that they could not obtain sufficient amounts of lime juice either. The arrival of lime juice to the frontier hinged on military mail transportation, which was unpredictable out west. This need for an unknown alternative therapy is what pushed Assistant Surgeon Glover Perin to leave Fort McIntosh in search of information on potential scurvy treatments.

Perin did not have to travel to far-off terrains to find a potential new remedy. He went just east to Laredo and met the ethnic Mexican Catholic curate of the town, José Trinidad García, who had developed an efficacious anti-scurvy remedy from agave juice. To García had awakened one morning feeling lethargic, so tired that he decided to stay in bed. He probably had other symptoms like dehydration, indigestion, fever, or swollen gums, because he soon realized that he had fallen ill with scurvy. Like the U.S. military doctors, the curate did not have ample vegetables. He made a remedy from maguey juice, and several days later he was able to leave his bed. A few days after that, he resumed his parochial duties. Perin was intrigued.

Ultimately, maguey juice became Perin's chosen therapy to treat scurvy. He did not immediately use the cure, but he did collect the succulent and strain its juices for medicine, just in case. On March 25, 1851, a Private Turby was admitted to Fort McIntosh's hospital. Perin first tried the little bit of lime juice that he had, and he also altered the soldier's overall diet. By April 11 Turby's condition had not improved. Perin then turned to maguey juice and applied it in a professionally medical manner: small diluted doses, three times a day, while continuing the same diet. Six days later he saw Turby's "general state very much improved; countenance no longer dejected, but bright and cheerful; . . . arose from his bed and walked across the hospital unassisted; medicine continued." After a few weeks, Turby returned to his unit. Perin then used maguey to treat a few more U.S. soldiers. Those patients recovered, and Perin wrote:

"So convinced was I of the great superiority of the maguey over either of the other remedies employed, that I determined to place all the patients upon that medicine. The result has proved exceedingly gratifying; every case has improved rapidly from that date." He suggested planting agave throughout Texas so that others could benefit from the plant's healing properties. "As it delights in a dry sandy soil," the surgeon wrote, "it can be cultivated where nothing but cactus will grow; for this reason, it will be found invaluable to the army at many of the western posts." Perin used maguey for twelve more cases of scurvy that month, and all of the patients improved. "From observing the effects of the maguey in the cases which have occurred in this command," he wrote, "I am compelled to place [maguey] far above that remedy which, till now, has stood above every other—the lime-juice."

Glover Perin successfully employed a practice that had deep roots in Mexico and merged it with his own therapeutic method. Historically, maguey offered medicine, food, and drink to many people throughout Mexico. In the colonial period, two Spanish doctors, Francisco Balmís and Nicolas Viana, treated patients with agave and reported to physicians in Spain on the succulent's efficacy.80 In addition, pulque, an alcoholic beverage derived from agave, had been popular in Mexico since ancient times.81 Many Native communities in the countryside cultivated and consumed maguey, and Mexican landowners had been marketing the plant for centuries. 82 In the nineteenth century, the drink generated great demand, mainly in urban centers.⁸³ About fifteen years before Perin met García, a hacienda owner, José Mariano Sánchez Mora, published a guide on the cultivation of maguey that described the history and popularity of the plant in Mexico. A successful businessman, Sánchez Mora detailed the process of raising maguey and transporting it to markets in Mexico City. The cultivation of the plant necessitated certain skills, so hacienda owners hired tlachiqueros, who specialized in growing the plant and extracting its juices.⁸⁴ The complicated process required extensive understanding of the plant and its properties as well as much maintenance; as one observer put it, the "tlachiquero makes a daily pilgrimage to the [maguey] fields."85 People throughout Mexico had a long-standing knowledge of maguey.

Mexican men and women used maguey to heal wounds and a variety of ailments, including headaches, sore throats, fevers, coughs, and bladder infections. Women used maguey to "facilitate menstruation by drinking a sip [of mescal] one hour before eating, uninterrupted for six to eight days." Mexican peoples made the alcoholic beverage mescal



FIGURE 10. Lithograph of a tlachiquero collecting agua miel from an agave plant, by Claudio Linati. This work appeared in a collection of Linati's work that documented a series of cultural practices and fashions in Mexico. Claudio Linati, *Costumes civiles, militaires et religieux du Mexique* (Brussels: C. Sattanino; imprimés à la Lithographie royale de Jobard, 1828). Courtesy of the Bancroft Library, University of California, Berkeley.

with maguey sap, or *agua miel*, and some women drank mescal after delivering babies to soothe their discomfort. The plant could also treat symptoms associated with scurvy, such as digestive illnesses and toothaches. The sick would sip mescal before eating or at the onset of stomach cramps. Healers targeted the blood for all stomach problems. They offered pulque and agua miel to improve blood flow and restore the patient's healthy balance. According to Sánchez Mora, agua miel "restores and purifies the blood, tempers and cools the liver and blood vessels, undoes hydropsy and obstructions of the stomach, blood vessels, liver, intestines, as it breaks up and causes continuous excretion of all phlegm and choleras through the urine." Individuals also treated mouth maladies with maguey. When applied to the teeth, small pieces of maguey gum soothed toothaches. Perhaps people also targeted another symptom of scurvy—swollen or bleeding gums—with the succulent. Agave's healing power extended to a number of conditions.

It was common for Mexican peoples to use medicinal plants to combat epidemic disease as well, beyond the 1833 cholera epidemic. Mexican physicians, local officials, and lay citizens again employed plant healing during the 1849-50 cholera epidemic. In July 1850 José F. Gómez of the city of Guerrero wrote to his friend Mariano Riva Palacio, governor of the state of México, to update him on the epidemic in the northern city. Thirty people had died in Guerrero, which had a population of 6,000. Gómez's father-in-law contracted cholera and suffered from unceasing pain in his stomach and vomiting, which also obstructed his breathing. All of the doctors and even the curanderas had left the city, and there was only a single curandero in town that tended to the sick patient, who most likely used botanical medicine. Gómez himself administered the distribution of medicinal plants as part of his municipal service. He prescribed raíz del indio to the people of Guerrero, and he also sent some samples of the plant to Palacio for personal use. One of the times that the municipality distributed the medicine, Native peoples around Guerrero, who Gómez described as "indios bárbaros," stole the samples. According to Gómez, the Indians "believe that the *gente de razón* [people of reason] want to kill them with the medicines," echoing the earlier physicians who framed any sort of refusal of public medicinal programs as ignorance. Gómez further argued that by taking the medicines, the Indians were "letting [the citizens] die like dogs."90 Perhaps this was an act of resistance by nomadic Indians, who regularly raided settlements and who had been under attack by the state and its agents dating back to the colonial period. It is possible, though, that the Indians were stealing

medicines to consume and distribute to their community or to trade. Whatever the reasoning behind the raids, what is clear is that people in Mexico continued to practice botanical healing, regardless of ethnic, class, or occupational background, and to treat everyday illnesses and epidemic disease. They also continued to culturally construct *indios bárbaros* and could not imagine that the Indians' practices could resemble "Mexican" medicine in any way.

In the early 1850s, Glover Perin and José Trinidad García tapped into popular Mexican healing customs that dated back centuries. Perin's new maguey remedy had an impact on U.S. military medicine as it spread throughout Texas. He first passed his cure on to other military surgeons in south Texas, who began to treat scurvy patients with maguey. In June 1854, for example, Assistant Surgeon J. Frazier Head faced numerous cases of scurvy. Like other military doctors, Head had not received the anti-scurvy supplies that he had requested by the time he confronted the sick soldiers. He had heard that fresh agave juice provided "the most decided benefit" in the treatment of scurvy. So he turned to maguey.91 At the Ringgold Barracks, Israel Moses used maguey for two of the fifteen cases of scurvy he encountered in 1854. He found that his patients suffered negative side effects, however, so he stopped using the plant.92 All in all, three of the five doctors stationed in south Texas described using maguey for scurvy, even if only sparingly. The other two did not report any cases among their soldiers. News of Perin's success with maguey reached forts in west Texas, influencing doctors there to scour their local environments for efficacious plants. For example, Assistant Surgeon Crawford used prickly pear to treat scurvy. Since agave did not grow in his immediate surroundings, Crawford "came to the conclusion, that as the maguey plant had been highly spoken of, the same virtues might be found in a greater or less degree in the whole family of the cacti; and he was therefore induced to try the common prickly pear, which was abundant near the fort." He concluded that the "result was highly satisfactory."93 Thus Perin's appropriation of the Laredo curate's healing knowledge facilitated other successful medical treatments that extended far beyond the Río Grande valley.

The success of the maguey remedy may have influenced other medical appropriations in Texas. It also had the potential to make waves in the U.S. professional medical world at the national level. Assistant Surgeon Ebenezer Swift confronted numerous cases of scurvy and "recommended . . . cleanliness and a vegetable diet—prickly pear and poke-weed." Unlike Surgeon Crawford, Swift did not cite Perin's use

of maguey for scurvy. Perhaps he had learned about prickly pear's healing capacity a different way. Some species of prickly pear grew in the U.S. Northeast, so the cactus may not have been entirely unfamiliar to the Massachusetts-born Swift.95 But the idea to consume the plant may have. As part of the research for his medical report, Swift observed Comanche food habits, and he noted that Comanches ate prickly pear as part of their diet.96 Swift also included a list of diseases from which the Comanches suffered, including lung problems, fevers, digestive illnesses, syphilis, and gonorrhea. But he did not describe a single case of scurvy among the Comanches. Through his local research, he learned that prickly pear was an edible plant that grew abundantly in the area. In Comanchería, Comanche women held medicinal knowledge of plants and herbs through agricultural work and through their roles as medicine women.⁹⁷ Swift may have learned from them that prickly pear was an effective therapy. Glover Perin also looked to influence medicine outside of the military establishment, as he published a paper on his hybrid agave remedy for scurvy in the New York Journal of Medicine and Collateral Sciences and the Edinburgh Medical and Surgical Journal.98 Although it is difficult to trace the use of maguey among U.S. physicians following the publication of the article, he did not limit his findings to the military medical world.

Like a good researcher, Glover Perin credited José Trinidad García's therapy, but he drew a professional line between himself, a physician, and García, a priest. Over time, this line became a shadow that concealed García's contribution to U.S. medical practice. Even though military physicians stationed in south Texas referred to ethnic Mexicans as ignorant and superstitious and decried their so-called unhealthy living, they never disparaged Mexican medicine in their reports. When he wrote about García's agave remedy, however, Perin followed a different set of rules than when doctors cited a fellow physician's work. Perin casually referred to the ethnic Mexican practitioner as the "curate" and "an intelligent Catholic priest," but he did not disclose his name, which was essential to how physicians credited fellow doctors in medical publications.⁹⁹ Perin's informal citation method shows that he saw the curate's practice as unorthodox and unprofessional. His failure to accord the same credit to the curate that physicians accorded to fellow doctors would affect how military physicians remembered this moment twenty years later.

Because physicians built upon existing medical research by citing earlier studies, U.S. military officials in the 1870s reproduced Glover Perin's division between orthodox medicine and José Trinidad García's remedy,

clouding the priest's contribution. It is unclear whether the agave remedy caught on among civilian doctors, but it definitely had staying power in military medical circles. In 1874, about eleven thousand soldiers in Texas again suffered bouts with scurvy. Unable to procure vegetables, a doctor from the Western Río Grande District suggested maguey to treat the patients. General Godfrey Weitzel "sent out scouting parties to find groves of [the agave], and fortunately found one about one hundred miles to the eastward of Brownsville." The men begrudgingly drank the smelly juice, which produced great results. After relaying the story to General W. T. Sherman in Washington, who later published General Weitzel's story, Weitzel discovered Glover Perin's remedy and sent Sherman a copy. Weitzel felt "it only right, in justice to Dr. Perin, that this should receive, through the columns of the Army and Navy Journal, the same publicity which my letter of October 10th received, for his discovery saved many lives in my command." The episode demonstrates the influence of Mexican medical practice in Texas; however, Weitzel never attributed Perin's "discovery" to García. The oversight traces back to Perin's original publication. Weitzel drew from Perin's earlier piece, which did not fully credit the curate, and he took it a step further by leaving out the priest entirely. He may also have felt that the priest did not deserve the same reference as a physician. Twelve years after Weitzel's publication came out, Glover Perin was serving as the assistant surgeon general of the United States, and he republished his 1851 remedy along with Generals Weitzel and Sherman's correspondence. In the introduction to the new 1880s publication, Perin did acknowledge the Mexican source of this medical knowledge in his pamphlet.¹⁰⁰ But again García remained nameless.

In the years after Glover Perin learned about maguey's medicinal properties, Anglos framed Mexican medical practice as a threat to white Americans. Perhaps it is no surprise, then, that U.S. military officials undervalued Mexican medical knowledge in the 1870s and 1880s. The perception of Mexican medicine as a health threat came to the fore in 1878, when a yellow fever epidemic sent shockwaves through the Gulf Coast and Mississippi River valley. President Rutherford B. Hayes organized a national response, and Congress formed the National Board of Health (NBH). The NBH appointed Dr. John Hunter Pope to assess the situation in Texas. A former president of the Texas State Medical Association and board member of the Texas state medical journal, Pope was familiar with the lay of the land. Like his predecessors, Pope's approach to surveying the health of the region included the evaluation of Mexican

health. Reflecting the 1850s images of "unhealthy Mexicans," Pope wrote that ethnic Mexicans were "indolent and thriftless," "intemperate," "careless about the cleanliness of their premises," and "very uncleanly in their dress." He also argued that Mexican approaches to health facilitated the spread of disease. Pope claimed that ethnic Mexicans were indifferent about "exposing themselves to a disease" and when they got sick, they "neglected" treatment. He recognized that many Mexicans understood health in religious terms, which shaped his overall conception of them as unhealthy and medically threatening: "Another reason for the so constant existence of [disease] is the fact that they regard all epidemics as specially sent by God." According to Pope, they refused smallpox vaccination because they found it ineffective against a disease caused by God. He wrote that others refused it "not because they oppose it" but because of the trouble involved; in other words, because they were lazy. Finally he criticized their refusal to isolate or quarantine sick family members "because they prefer to care for their own sick." 102 For Pope, Texas Mexicans threatened the health of the region because they were medically backward.

John Pope's medical attacks on ethnic Mexicans' spiritual approach to sickness and health echoed an existing antagonistic view of Mexican Catholicism in the mid-nineteenth-century borderlands. When Anglos moved into what was now the U.S. Southwest, they took issue with border Mexicans' form of Catholicism. This included fellow Catholics, who were sent by the American Catholic Church to the newly ceded regions. Catholic bishops were concerned that Mexican Catholicism would sway Anglo settlers away from the Church, and so they differentiated their Catholic observance from ethnic Mexican religious practice, which they labeled "superstition." Attacks on curanderismo found their way into those critiques. In California, for example, the bishop Thaddeus Amat tried to discourage people from visiting curandera/os, and he suspended Mexican Franciscans from the diocese for practicing "corrupt" Catholicism, which included devotional healing. Ethnic Mexicans were not the only population to explain health in religious terms or to seek out curandera/os, but discussions of Mexican religious medical practice were racially tinged.¹⁰³

By midcentury, Anglos had expanded beyond east and central Texas and entrenched themselves in south Texas, as they took political, social, and economic control of the region. Military physicians, soldiers, and civilians entered the Texas borderlands as representatives of the U.S. nation and assessed the healthiness of the region for continued Anglo

settlement. Like other Anglo perceptions of their new homes, the medical readings of south Texas lands and its inhabitants emerged from newcomers' interactions with locals and from the nineteenth-century American racial lexicon, more broadly. Colonizing the newly annexed region, Anglo migrants articulated what behaviors made people sick and constructed healthy white Americans and unhealthy Mexicans in south Texas. U.S. military use of maguey healing filtered into this colonial apparatus. In this moment when Anglos were encountering and constructing racial others around health and medical practice, it is hardly surprising that the Mexican contribution to U.S. medicine was erased over time. Despite Anglo-Mexican interdependency, Anglos saw Mexicans and many of their practices as uncivilized, inferior, and medically threatening. The maguey scurvy cure was rooted in relatively peaceful relations between Anglos and Mexicans, but it enhanced the U.S. Army's ability to maintain a healthy military frontier and implement the national government's imperial project. Unwittingly, ethnic Mexican and Comanche women's healing practices returned U.S. soldiers to health, allowing them to be martial men, and reinforced U.S. imperialism, an engine powered by white supremacy.

As in west Texas, Anglo Americans sought to civilize south Texas, a place that they saw as Mexican and backwards. Politically for Anglos, this meant incorporating Texas into the U.S. governmental and legal structure, which placed whites in positions of power. Culturally, conquest meant bringing Anglo civilization to the frontier. When U.S. officials debated the nation's future in south Texas and when Anglo migrants transplanted their lives in the border region, they sought to bring a healthy form of living to what they deemed an unhealthy and uncivilized population. In evaluating local habits, Anglos constructed healthy and unhealthy racial bodies in postwar south Texas. Anglo migrants and military surgeons characterized Mexican peoples and places as dirty, immoral, and unhealthy. The familiar Anglo trope of Mexican laziness merged with medical discourse that described indolence as a cause of illness. Moreover, many Anglos emphasized poor drainage systems and dirty Mexican homes. This representation of place in medico-racial terms confirmed that the framing of disease was tied to the larger goals of U.S. westward expansion, and it perpetuated anti-Mexican sentiment. Anglos linked moral and physical health and characterized ethnic Mexican women as having "loose morals" and causing sickness among white soldiers. Anglo men's conquest of Mexican women was a health hazard.

The construction of ethnic Mexicans as unhealthy and inferior emerged from Anglo efforts to create healthy and productive U.S. societies in these new U.S. lands, but it did not prevent doctors from appropriating Mexican healing knowledge to cure sick soldiers. Despite images of a salubrious environment, chronic and epidemic disease swept through the Río Grande Valley. In their medical topographies, military surgeons often expressed unease about their inability to cure disease and heal their patients. When they exhausted their own medical knowledge of scurvy therapies, they sought out healing practices that required familiarity with the local environment. Anglo physicians' appropriation of maguey healing was one of the ways in which residents and newcomers negotiated the U.S. conquest of the West. A healing custom that was common in Mexico and in some cases dated back centuries (and resulted from histories of cultural exchange and appropriation) became enveloped in Anglo-Mexican relations in Texas. While the maguey exchange occurred as part of the accommodationist structure between Anglos and ethnic Mexicans in south Texas, it fueled U.S. expansion. Encounters among diverse medical cultures affected the course of conquest under the umbrella of U.S. hegemony. By connecting the Texas economy to the national economy and by sending armed soldiers to protect Anglo citizens and land claims, the United States was incorporating south Texas into the nation, along with west Texas. And Mexican healing actually strengthened the Anglo hold on the region. Anglo reliance on Mexican medical knowledge demonstrates what scholars Frederick Cooper and Ann Stoler call a "tension of empire." 104 The racial superiors served the nation using the healing knowledge of their racially inferior neighbors, and Anglo appropriation of Mexican medicine helped migrants establish hegemony. 105 By applying the maguey scurvy cure, physicians kept boots on the ground and strengthened colonial power. Like the medical topographies, then, the doctors' borrowed healing practices became a tool of empire. The transnational interaction that occurred between doctors, who sought healing knowledge, and locals, who possessed that knowledge, served the nation and its imperial project.

Cultural practices continued to blend into one another in the border-lands, but U.S. imperialism and the drawing of the U.S.-Mexico border transformed cultural mixing. About forty years after annexation, after decades of Anglo-Mexican violence and ethnic Mexican displacement, military surgeons again used maguey to treat soldiers with scurvy. When General Weitzel introduced Glover Perin's story in the 1880s account, he completely wrote the Mexican curate José Trinidad García out of the

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story. 106 As Anglos marginalized ethnic Mexicans in south Texas, they erased long histories of hybridization. By the late nineteenth century, the already nameless Mexican source of the 1850s agave cure became even less than a name; García had fully disappeared from the Anglo-crafted narrative.

Epilogue

The borderlands history of health and healing is a story about naming: naming land, culture, disease, and people. When military doctors appropriated Mexican maguey healing to treat U.S. soldiers, they laid a claim on territories that they now had the power to name. They silenced the history of a medical remedy that tied Mexicans to the land and to their communities, stripping it of its Mexican identity and renaming it as their own. From the moment I started this project, I often thought about my family's medical remedies and our own naming processes. I always came back to my paternal grandmother, whom I called "Bobe," the Spanish-language version of bubbe, the Yiddish word for grandmother.¹ For as long as I can remember, Bobe insisted that ham cured indigestion, a practice that evidently was a product of cultural exchange. Way before she became Bobe, my grandmother primarily went by Shoshana Solotki. She immigrated with her family to Mexico in 1929, forced south after the United States passed the Immigration Act of 1924, which set quotas on immigrants from southern and eastern Europe. Upon arrival, Shoshana was given her first new name, and she became Susana, signifying her new life in an unfamiliar place. As with her name, she adopted Mexican customs that she practiced alongside eastern European Jewish traditions, including the strict observance of kosher laws in the home, a tradition that Susana maintained her entire life. Bobe's adherence to kashrut begs a question: how did a Jewish immigrant who kept kosher come to treat stomachaches with ham? My grandmother passed away about six years

ago, and no one had ever asked her about the source of this therapy. Since Susana belonged to a family that kept kosher in a predominantly Jewish town in Poland, she likely learned about the ham-for-indigestion treatment after immigrating to Mexico. Like many of the remedies in this book, Bobe's cure had its own transnational, multicultural history, and it was used alongside other medical treatments; however, its multifaceted, cross-cultural past is not the only reason I felt my grandmother's presence throughout this project. The meaning that my family has infused into this particular therapy, the way we named it and made it ours, is also significant. My parents, aunts and uncles, and I have told the story about this remedy countless times. For us, it is a story about our family history, about racial violence, and about how refugees fled their homes and adapted to new surroundings. It is a story about how wonderfully stubborn my grandparents could be, about how difficult things used to be, and about our roots as Jewish Mexicans. This remedy grounded us simultaneously in our European past and Mexican present. We gave this seemingly ordinary thing—a home medical treatment based on an item that could be purchased at any grocery store—an identity, which made it anything but ordinary.

Conquering Sickness offers a similar story about how individuals dealt with the most human of things—their health—which linked them to other people, to places, and to politics. It has shown that between the late colonial Spanish period and the first decades after the United States annexed northern Mexico, health shaped cross-cultural encounters and Spanish, Mexican, and Anglo-American colonial projects. While the Spanish envisioned healthy, orderly societies privileging whites, they relied on Native peoples for medical knowledge. These medical boundary crossings were not without consequence. Spanish appropriation of Indian knowledge paralleled their violent conquest of Native territory throughout New Spain. In the 1780s, however, Spaniards in the North had to enter into an interdependent relationship with Indians that revolved around trade and security, destabilizing the Europeans' racial hierarchy. A Spanish-Karankawa alliance also undermined Spanish colonial visions, as Karankawas incorporated Catholic missions into their subsistence and religious practices, obstructing missionary efforts to transform Indians into "healthy" Spanish subjects on the priest's terms. Native-Spanish relations in colonial Nuevo Santander paved the way for Indian healing to influence Mexican public health and national medicine during the 1833 cholera epidemic at the same time that state officials were rebuilding the nation and marking Native medical practices

as non-Mexican. Later in the nineteenth century, U.S. military medicine became a site for new, Anglo-Mexican medical exchanges. Healing practices moved along the economic and political networks that bound diverse populations together, crossing ethnic and national boundaries in the process.

During the U.S. period, however, Anglos were able to do something that Spaniards and Mexicans could not: impose a more stable racial hierarchy. Helping to open up "new" lands for U.S. settlement, Anglo military physicians and civilians framed Comanches and Mexicans as health threats, which assisted the case for Indian reservations in west Texas and influenced Anglo marginalization of ethnic Mexicans in south Texas towns. Cross-cultural interactions continued to occur, but they reinforced Anglo hegemony. Decades after the U.S.-Mexico War, Anglo physicians erased Mexican medical contributions to U.S. military medicine while making former Native, Spanish, and Mexican lands "American." U.S. medical culture became part of the broader colonization process in Texas, which also included Indian and ethnic Mexican displacement, political and economic marginalization, and racial violence. Mexican Americans obtained legal citizenship after the war, but cities criminalized Mexican practices, including healing, and Tejana/os found their U.S. citizenship in question.²

In south Texas, ethnic Mexicans faced a new border that divided their communities, which gave their healing customs new meaning while connecting the medical past with their medical present. In 1881, for example, the curandero Pedro Jaramillo moved from Jalisco, Mexico, to Brooks County in south Texas, after the boom in the border cities had sparked major railroad construction and further linked Mexico and the United States. Don Pedrito, as he became known, quickly built up a clientele on both sides of the U.S.-Mexico border, and people from all over the area came to see him. By the time Jaramillo became a healer, the practice of curanderismo had evolved over generations.³ Don Pedrito and his patients drew from Catholicism, popular healing customs, and medical science in their approach to health and healing. There were doctors in the nearby cities of Laredo and Corpus Christi, but many people, Anglo and Mexican, preferred Don Pedrito's care.4 Even though Jaramillo had a large and ethnically diverse patient base, however, the medical establishments in Mexico and the United States took issue with his work. In Mexico, he was arrested and charged with being a brujo, or witch. The charges show that medical law in late nineteenth-century Mexico was an outgrowth of colonial and early national policy. Don Pedrito's curanderismo fell outside the overlapping legal and cultural boundaries of the nation-state. He was never sentenced, but the arrest alone demonstrates that this form of medical practice had not gained full legitimacy in the eyes of the state or the medical profession, despite its popularity. U.S. practitioners similarly marked Jaramillo's practice. On one of Don Pedrito's trips to San Antonio, for example, he was met by hordes of supporters, and local doctors tried to get the police to investigate and detain him. They were unsuccessful, but their actions also show that the U.S. physicians saw curanderismo as unofficial.⁵ Part of this had to do with physicians' attempts to monopolize the profession, something they had been trying to achieve in Mexico and the United States for a long time.⁶ But it is hard to imagine that race had nothing to do with these doctors' responses in light of the history of health and healing in the borderlands. In the Spanish colonial and early national Mexican period, curanderismo fell under the "heathen" umbrella. And in the post-1848 United States, it was a practice associated with the inferior "Mexican race." The doctors' characterizations of Don Pedrito in both countries were legacies of past forms of racialization and colonization.

Don Pedrito Jaramillo's popularity in the face of rejection demonstrates that medical cultures did not conform to the racial lines and geopolitical boundaries that elites drew over the course of the late eighteenth and nineteenth centuries. Still, international borders had a direct bearing on race and healing. As markers of national territory, borders affected how nations imagined their own cultures, and race shaped people's conceptions of which practices were "Mexican" and "American" and which were not.⁷ Late nineteenth-century Texas was still an imperial site, and Anglos had racialized ethnic Mexicans and Native peoples, marking their practices as foreign.⁸ Ethnic Mexican and Native identities re-formed in dialogue with U.S. imperialism, never fully breaking from the pre-U.S. past, since identities did not neatly conform to changes in political rule.

While healing practices may have appeared the same, their meanings transformed. A popular *corrido*, or Mexican border ballad, about Don Pedrito Jaramillo tells us where ethnic Mexicans felt they stood in the early twentieth-century U.S.-Mexico borderlands:

El día cuatro de Julio, presente lo tengo yo, que Pedrito Jaramillo ese día se retiró, ese día se retiró.

Adiós, hermano Pedrito, échanos tu bendición a todos estos hermanos que estamos en la reunión, que estamos en la reunión.

Adiós, hermano Pedrito, de la ciencia espiritual, aquí nos quedamos tristes, sabe Dios si volverás, sabe Dios si volverás.

No se te olvido, Pedrito, déjanos recomendado a todos estos hermanos que se encuentran a tu lado, que se encuentran a tu lado.

Cuando viene amaneciendo el corazón nos avisa del hermanito que era, el que ya se retiraba, el que ya se retiraba.

No nos dejes, hermanito, no nos dejes padecer, ponnos en el corazón lo que debemos de hacer, lo que debemos de hacer.

A las tres de la mañana, quedándome yo dormido, oí una voz que decía: —Adiós, hermanos queridos, adiós, hermanos queridos.—

Pues ya te vas, hermanito, a los aires extranjeros, ya te vas a retirar, a los reinos de los cielos, a los reinos de los cielos. On the fourth day of July, I remember it well, Pedrito Jaramillo on that day went away.

Farewell, brother Pedrito, give your blessing to all these brothers and sisters who are at the meeting.

Farewell, brother Pedrito of the spiritual science; saddened we remain; God knows if you will return.

Don't you forget, Pedrito, be sure to commend us to all those brothers and sisters who are by your side.

When the day begins to dawn, our hearts remind us of the dear brother we had and who has now gone.

Do not leave us, dear brother, do not leave us to suffer; show us in our hearts the things that we have to do.

At three o'clock in the morning, I happened to fall asleep, and I heard a voice that said, "Farewell, beloved brothers and sisters."

Now you leave us, dear brother, for other climes; now you are going away to the Kingdom of Heaven.⁹

The corrido's opening twist on U.S. Independence Day frames this ode to the curandero. The lyric marks the date of Jaramillo's death as July 4, but he actually died on July 3.¹⁰ By purposefully changing the date to the 4th, the songwriter and audience were making a political statement. In this nation that questioned Mexican American loyalty and erased Mexican cultural contributions, the death date of an admired community healer, who served Mexicans on both sides of the border, was arguably more significant to ethnic Mexicans in the United States than the birthdate of the nation that rejected them and their health customs. The song "Don Pedrito Jaramillo" used a story about a form of healing that had been popular in the Texas borderlands well before states began to draw lines around territories, as a way to critique cultural and political exclusion. The ballad's tone and structure tied it to other border corridos, which had become a space for ethnic Mexicans to criticize U.S. imperialism in the borderlands.¹¹

The corrido "Don Pedrito Jaramillo" and Mexican and U.S. doctors' reactions to the curandero show that medicine, race, and politics continued to be intertwined at the border. But ideas about health and race changed at the end of the nineteenth century. Scientists discovered

that specific microbes caused disease, shifting medical discussions from patients' local environments and individual backgrounds to germs. In the early twentieth century, people began to incorporate germ theory into their daily lives, emphasizing cleanliness in a new germ-centered way and purchasing products that helped ensure a germ-free environment, such as porcelain sinks and toilets. 12 Over time, state-sanctioned medical practices, such as public health and immigrant screening, adopted this view of health. Germ theory, therefore, reshaped discussions about race and health in the borderlands. Practices seen as facilitating the spread of individual germs became the new markers of unhealthiness, and physicians now marked people of color and immigrants as germ carriers as they moved through U.S. cities, crossed the U.S.-Mexico border, or entered through U.S. ports, reinforcing images of nonwhites as unhealthy. Public health officials perpetuated such forms of racialization, marking ethnic Mexicans, Japanese peoples, and Chinese populations as diseased and their communities in the U.S. West as breeding grounds for germs. Images of nonwhite health hazards fueled immigration restrictions, border policing, and sanitary management, and led to intrusive public health measures, such as surveillance, fumigation, and quarantines.¹³ Medicalized racialization also merged with new ideas about genetics, feeding a eugenics movement in the twentieth-century United States and shaping U.S. imperial activity outside of the continental United States. 14 The discourse around race, health, and nation shifted its focus to microbes but maintained its construction of people of color as unhealthy and unfit miscreants. Issues of health, then, continued to influence imperialism, nation building, and cross-cultural interactions in the late nineteenth-century and early twentieth-century U.S. borderlands. Yet significant changes in geopolitics, social relations, and medical science after 1880 transformed imperial spaces, Native-settler relations, and healing in Texas, reshaping the role that race played in the borderlands.

As they drew lines between themselves and so-called unhealthy populations, colonial powers created racial groups and named their and their counterparts' health practices, crafting new identities and asserting claims on contested space. The Don Pedrito corrido shows how ethnic Mexicans used their own language of health and medicine—rooted in the U.S.-Mexico border—to push against the medical racialization of Mexicans as "dirty" and "un-American." The history of my grandmother's indigestion remedy reveals how European antisemitism merged with the health-driven U.S. immigration restrictions to force my ancestors

to redirect their desired destination from the United States to Mexico, which ultimately produced new hybrid medical practices, names, and identities. Her cure, moreover, uncovers my family's ties to place. Bobe's adoption of her stomach treatment was part of her acculturation process in her new home, a way to call herself "Mexican," grounding a family, which has spent multiple generations crossing borders, in multiple places. Highlighting the links between health and race exposes the power of naming and the depth of cross-border connections. It can help uncover those meaningful stories of cross-cultural exchange that have been silenced by narratives that fall in line with geopolitical borders and their corresponding images of frozen, impermeable cultural boundaries.

NOTES

Abbreviations

- Asp Ashbel Smith Papers, 1823–1926. Dolph Briscoe Center for American History, University of Texas at Austin.
- BA Béxar Archives. Dolph Briscoe Center for American History, University of Texas at Austin.
- BAT Béxar Archives Translations. Dolph Briscoe Center for American History, University of Texas at Austin.
- FC Fondo Colonial. Archivo General del Estado de Coahuila, Ramos Arizpe, Coahuila.
- FJPB Fondo Jefatura Política de Béjar. Archivo General del Estado de Coahuila, Ramos Arizpe, Coahuila.
- FSXIX Fondo Siglo XIX. Archivo General del Estado de Coahuila, Ramos Arizpe, Coahuila.
- JSPP The James F. and Stephen S. Perry papers, 1785–1942. Dolph Briscoe Center for American History, University of Texas at Austin.
- JZLP John Zirvas Leyendecker Papers, 1842–1979. Dolph Briscoe Center for American History, University of Texas at Austin.
- MHTC Medical History of Texas Collection. Dolph Briscoe Center for American History, University of Texas at Austin.
- MRPC Mariano Riva Palacio Collection, 1716–1880. Nattie Lee Benson Latin American Collection, University of Texas at Austin.
- PHC Power and Hewetson Collection, 1824–35. Dolph Briscoe Center for American History, University of Texas at Austin.
- RSC Records of the Spanish Collection. Texas General Land Office, Archives and Records Division, Austin.

- SA Spanish Archives. Béxar County Clerk, San Antonio, Texas.
- SMMC Spanish and Mexican Manuscript Collection. Catholic Archives of Texas, Austin.
- SMVS Spanish Material from Various Sources, 1600–1921. Dolph Briscoe Center for American History, University of Texas at Austin.
- SNFP Sánchez Navarro Family Papers. Nattie Lee Benson Latin American Collection, University of Texas at Austin.
- SPE Spanish Proclamations and Edicts. Dolph Briscoe Center for American History (BCAH), University of Texas at Austin.

A Note on Racial and Ethnic Terminology

- 1. Nash, "The Hidden History of Mestizo America," 941-64.
- 2. Taylor, In Search of the Racial Frontier, 30.
- 3. Ramos, Beyond the Alamo, 7.
- 4. Ramos, Beyond the Alamo, 111-31.
- 5. I borrow the term "ethnic Mexicans" from David Gutiérrez, who uses it to refer to all peoples of Mexican descent, including Mexican immigrants, Mexican Americans, and (in the twentieth century) self-identified Chicana/os. See Gutiérrez, *Walls and Mirrors*, 1, 218n3.
 - 6. Horsman, Race and Manifest Destiny.
 - 7. Ramos, Beyond the Alamo, 81-107.
 - 8. For more on whiteness in Texas, see Foley, The White Scourge.
- 9. See, for example, Gomez, Exchanging Our Country Marks; Hall, Slavery and African Ethnicities in the Americas; Sweet, Recreating Africa; and Thornton, Africa and Africans.
 - 10. Nash, "Hidden History," 950-55.
 - 11. Foley, White Scourge, 9.

Introduction

- 1. Vial and Chaves, "Inside the Comanchería," 27-37. Quote on 36.
- 2. Vial and Chaves, "Inside the Comanchería," 37-38.
- 3. For an example of rich studies that explore such forms of cross-cultural interdependency in the North American West and borderlands, see Barr, Peace Came in the Form of a Woman; Blackhawk, Violence over the Land; Brooks, Captives and Cousins; Chávez-García, Negotiating Conquest; DeLay, War of a Thousand Deserts; DuVal, The Native Ground; González, Refusing the Favor; Hämäläinen, The Comanche Empire; John, Storms Brewed in Other Men's Worlds; Montejano, Anglos and Mexicans; Ramos, Beyond the Alamo; Reséndez, Changing National Identities at the Frontier; Valerio-Jiménez, River of Hope; and White, The Middle Ground.
- 4. Earle, *The Body of the Conquistador*; Nash, *Inescapable Ecologies*; Seltz, "Embodying Nature"; and Valenčius, *The Health of the Country.*
- 5. For more on race and racialization in the Americas, see Lewis, *Hall of Mirrors*; Martínez, *Genealogical Fictions*; Mitchell, *Coyote Nation*; Molina, *How Race Is Made in America*; O'Toole, *Bound Lives*; and Omi and Winant, *Racial Formation in the United States*.
- 6. Mckiernan-González, Fevered Measures; Molina, Fit to Be Citizens?; Shah, Contagious Divides; and Stern, Eugenic Nation.

- 7. For two influential works that take a similar approach to periodizing the history of race and conquest in the borderlands, see Valerio-Jiménez, *River of Hope*, and Torres-Rouff, *Before L.A.* On tying together narratives in borderlands history, see Hämäläinen and Truett, "On Borderlands," 338–61.
 - 8. Ramos, "Chicana/o Challenges to Nineteenth-Century History," 566-80.
- 9. Natalia Molina's work on studying race relationally has influenced my arguments here. See Molina, *How Race Is Made in America*.
 - 10. Fenn, Pox Americana; and Kelton, Cherokee Medicine, Colonial Germs.
 - 11. Guidotti-Hernández, Unspeakable Violence; and Smith, Conquest.
 - 12. Smolenski, "Introduction," 1-16.
 - 13. Guidotti-Hernández, Unspeakable Violence, 35-80.
 - 14. Valerio-Jiménez, River of Hope, 41-46; and Alonso, Thread of Blood, 13-111.
- 15. Barrera-Osorio, $Experiencing\ Nature$; and Cañizares-Esguerra, Nature, Empire, and Nation.
- 16. Lewis, *Hall of Mirrors*; Few, *Women Who Live Evil Lives*; and Hernández Sáenz, *Learning to Heal*.
 - 17. Hernández Sáenz, Learning to Heal.
 - 18. Reséndez, Changing National Identities at the Frontier, 106–10.
- 19. "Loose morals" quoted in Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 358.
 - 20. De Solís, "Diary," 55.
- 21. For more on Anglo men and indigenous women during conquest, see Greenberg, *Manifest Manhood*.
 - 22. Vial and Chaves, "Inside the Comanchería," 27-29.

1 / Medicine and Spanish Conquest

- 1. Kagan, "Projecting Order," 47.
- 2. For more on mapmaking in New Spain, see Mundy, *The Mapping of New Spain*. For more on maps and empire building, see Akerman, *The Imperial Map*.
- 3. For more on early Spanish conquest, see Weber, *Spanish Frontier in North America*, 60–91.
- 4. Barr, "Geographies of Power," 5–46; and Hämäläinen, *The Comanche Empire*, 181–238.
- 5. The population numbers can be found in Gerhard, *The North Frontier of New Spain*, 341.
- 6. See Lindemann, *Medicine and Society*; Conrad, Neve, Nutton, Porter, and Wear, *The Western Medical Tradition*, 215–361; and Cañizares-Esguerra, *Nature, Empire, and Nation*.
 - 7. Earle, *The Body of the Conquistador*, 90–91.
- 8. Petition from Fray Manuel de Silva for a transfer, November 23, 1774, in Apóstolico Colegio de Nuestra Señora de Guadalupe, *The Zacatecan Missionaries in Texas*, 22–23.
 - 9. De Solís, "Diary," 55.
 - 10. Petition for the removal of Federico Zerbán, April 24, 1806, MHTC, box 2R344, vol. 1.
 - 11. Pedro Lartigue's report on patient, September 23, 1810, MHTC, box 2R344, vol. 3.
- 12. Miguel Músquiz to Governor Francisco Xavier de Uranga, October 7, 1802, MHTC, box 2R344, vol. 1. The governors of Texas formally extended their rule to

include the neighboring province of Coahuila, but each province had its own government and was technically administered separately.

- 13. For more on the Freeman-Custis expedition, see Weber, *Spanish Frontier in North America*, 213–16.
- 14. Nemesio Salcedo to Governor Manuel Antonio Cordero, October 2, 1806, MHTC, box 2R344, vol. 1.
 - 15. Salcedo to Cordero, June 30, 1807, MHTC, box 2R344, vol. 2.
 - 16. Cortés, Views from the Apache Frontier, 82; Barr, "Geographies of Power," 42.
- 17. Fray Manuel de Silva to Governor Manuel Muñoz, September 12, 1796, MHTC, box 2R344, vol. 1.
- 18. Petition from Fray Manuel de Silva for a transfer, November 23, 1774, in Apóstolico Colegio de Nuestra Señora de Guadalupe, *The Zacatecan Missionaries in Texas*, 22–23.
- 19. All of the following documents are excerpts from the Zacatecan missionary college's libros de los decretos, or the books of minutes of the meetings of the college's Father Guardian and his council, in Apóstolico Colegio de Nuestra Señora de Guadalupe, The Zacatecan Missionaries in Texas. See Fray Joachin Maria Manzano, Guardian, and Fray Ignacio Maria Jose Lanuza, Secretary of the Council Board, Permission to Fray Rafael Oliva to take the mineral baths, March 24, 1779, p. 30; Fray Ignacio Maria Laba, Vicar President, and Fray Anastacio de Jesus Romero, Secretary of the Council Board, Permission to Fray Mariano Rojo and Fray Joaquin Maria Gallardo to take the mineral baths, August 22, 1782, p. 39; Council's permission to Fray Jose Escovar, Fray Pedro Aldrete, Fray Jose Maria Garcia, Fray Bernardino Vallejo, Fray Francisco Eschasco, and Brother Venancio Silva to take the mineral baths, June 5, 1784, p. 47; Council's permission to Fray Joseph Maria Garcia to take the mineral baths, April 29, 1796, p. 92; Council's permission to Fray Alcozer to take the mineral baths, April 8, 1797, p. 93; Council's order to Master Fray Ramon Texada to go as a missionary to the coast and for this reason to take the baths at sea, June 24, 1797, p. 93; Fray Juan Larrondo, Vicar, and Fray Josef Antonio Alcozer, Secretary of the Council Board, Permission to Fray Joseph Rafael de Oliva to take the mineral baths, July 3, 1797, p. 93; Council's permission to Fray Roman Texada to take the mineral baths, October 8, 1799, p. 94; Council's permission to Fray Gamarra to take the mineral baths, July 14, 1800, p. 94; Council's permission to Fray Vicar Mariano Velasco to take the mineral baths, June 25, 1803, p. 96.
- 20. For more on missionaries and hospitals in Spanish America, see Warren, *Medicine and Politics in Colonial Peru*, 16–17, and Risse, "Medicine in New Spain," 19–21, 37–42.
- 21. Juan Gutierrez de la Cueva to Governor Manuel Muñoz, February 8, 1784, MHTC, box 2R344, vol. 1.
- 22. Nemesio Salcedo to Governor Juan Baustista Elguézabal, March 20, 1805, MHTC, box 2R344, vol. 1.
- 23. Nixon, *The Medical Story of Early Texas*, 68–78. Nurses were not considered part of the medical profession, so they were not subject to the protomedicato. For more on nurses in New Spain, see Hernández Sáenz and Foster, "Curers and Their Cures in Colonial New Spain and Guatemala," 39–40.
 - 24. Barr, "Geographies of Power."
 - 25. Pearcy, "The Smallpox Outbreak of 1779-1782," 26-37.

- 26. For smallpox in La Bahía and in Lipan Apache communities, see Domingo Cabello to Teodoro de Croix, October 20, 1780, and November 20, 1780, MHTC, box 2R344, vol. 1. For smallpox and the Comanches, see Vial and Chaves, "Inside the Comanchería," 38, 49. Vial and Chaves counted approximately 2,000 Comanche warriors during their interactions after smallpox devastated Comanche communities. Elizabeth Fenn points out that these numbers suggest that about 4,000 warriors had died of the disease. It is possible that the Comanche leaders miscounted or exaggerated the number in their negotiations with the Spanish envoys. Nevertheless, the statistic does not include women, children, and the elderly, which would certainly increase the overall mortality rate. See Fenn, *Pox Americana*, 270.
 - 27. Ramírez, "Enlightened Publics for Public Health," 3-12.
- 28. Jacobo de Ugarte y Loyola to Domingo Cabello, September 15, 1786, мнтс, box 2R344, vol. 1.
- 29. Paul Ramírez shows that ordinary individuals shaped public health, as the state responded to organized resistance against these public health initiatives in Oaxaca and stopped practicing quarantine. See Ramírez, "'Like Herod's Massacre,'" 203–35.
- 30. Domingo Cabello to Jacobo Ugarte Loyola, November 5, 1786, MHTC, box 2R344, vol. 1.
 - 31. Ramírez, "Enlightened Publics for Public Health," 4.
 - 32. Fenn, Pox Americana, 31-32.
- 33. Ramírez, "Enlightened Publics for Public Health," 7–10. For Guatemala, see Few, "Circulating Smallpox Knowledge," 519–37.
 - 34. Fenn, Pox Americana, 139, 155.
 - 35. Few, "Circulating Smallpox Knowledge," 532.
- 36. For more on the Royal Expedition, see Few, "Circulating Smallpox Knowledge," 532–37; Warren, *Medicine and Politics in Colonial Peru*, 79–103; Lanning, *The Royal Protomedicato*, 378–86; Smith, "The 'Real Expedición Marítima de la Vacuna' in New Spain and Guatemala," 1–74; and Rigau-Pérez, "The Introduction of Smallpox Vaccine in 1803," 393–423.
- 37. Joseph Antonio Cavallero to Governor Elguézabal, November 21, 1804, MHTC, box 2R344, vol. 1.
 - 38. Few, "Circulating Smallpox Knowledge," 534-35.
- 39. Bartolomé Rivera, Justicia de Candela, to Governor Antonio Cordero, March 11, 1805, FC, ficha 965.
- 40. Bartolomé Rivera to Governor Cordero, March 31, 1805, FC, ficha 965. In 1807 the provincial government of Coahuila did order the vaccination of all children. It included a provision that ordered local governments to submit documentation of vaccination to the state. Francisco Antonio Farias to Juan Ignacio de Arizpe, July 7, 1807, FC, ficha 1121.
 - 41. Ramírez, "Like Herod's Massacre," 203-35.
- 42. For Guatemala, see Few, "Circulating Smallpox Knowledge," 535–36. For Peru, see Warren, *Medicine and Politics in Colonial Peru*, 79–103.
 - 43. Nemesio Salcedo to Governor Cordero, February 25, 1806, FC, ficha 1030.
- 44. Nemesio Salcedo to Governor Cordero, March 11, 1806, мнтс, box 2R344, vol. 1.
 - 45. Governor Cordero to Nemesio Salcedo, April 8, 1806, MHTC, box 2R344, vol. 1.

- 46. Governor Cordero, report on vaccination, June 16, 1807; Jaime Gurza to Governor Cordero, April 22, 1808; and Nemesio Salcedo to Governor Cordero, July 25, 1808, MHTC, box 2R344, vol. 2.
 - 47. Statement of victims of smallpox, January 23, 1809, MHTC, box 2R344, vol. 3.
- 48. Likewise, the vaccination expedition received a mixed response among physicians and other locals in Guatemala and Peru. For Guatemala, see Few, "Circulating Smallpox Knowledge," 535–36. For Peru, see Warren, *Medicine and Politics in Colonial Peru*, 81–87.
 - 49. Cordero, Order on Vaccination, April 19, 1806, MHTC, box 2R344, vol. 1.
 - 50. Hendrickson, Border Medicine, 21.
- 51. As the castaways journeyed throughout the region, their reputation as healers preceded them, which helped them navigate through Native territories. Cabeza de Vaca, *The Account*, 62–63. For more on Cabeza de Vaca and medicine, see Hendrickson, *Border Medicine*, 22–24, and Reséndez, *A Land So Strange*, 167–78.
- 52. Petition for the removal of Federico Zerbán, April 24, 1806, MHTC, box 2R344, vol. 1.
- 53. Trial of Ramón and Bernardo Dortolan, February 13–April 2, 1808, мнтс, box 2R344, vol. 2.
- 54. For more on the crusade against unlicensed healers in Spanish America and the popularity of those healers, see Hernández Sáenz, *Learning to Heal*, 227–63; Megged, "Magic, Popular Medicine, and Gender," 189–207; Lewis, *Hall of Mirrors*; and Few, *Women Who Live Evil Lives*.
- 55. Hernández Sáenz, Learning to Heal; Palmer, From Popular Medicine to Medical Populism; and Sowell, The Tale of Healer Miguel Perdomo Neira.
 - 56. Bálmis, Demostracion de las Eficaces Virtudes, 5, 294, 303-4.
 - 57. Barrera-Osorio, Experiencing Nature.
- 58. Concerned about spending, the state considered this recklessly excessive, which is probably why this discussion made it into political correspondence. The letters, however, do not elaborate on the hospital's response to the state's budget concerns. Manuel María de Salcedo to Manuel Antonio Cordero, August 9, 1808, MHTC, box 2R344, vol. 2.
- 59. See Coe and Coe, *The True History of Chocolate*. In addition to the colonial-era examples that follow, the French naturalist Jean Berlandier noted that some Texas Indians in the nineteenth century used healing remedies with chocolate. Berlandier, *Journey to Mexico*, 2: 311.
 - 60. Fernández de Oviedo, Historia general y natural de las Indias, 1: 271.
- 61. "Cacao" derives from the Nahuatl cacáhoatl. For more on Francisco Hernández's discussion of the remedy, see Varey, *The Mexican Treasury*, 108–9.
 - 62. Jamieson, "The Essence of Commodification."
 - 63. Cañizares-Esguerra, Nature, Empire, and Nation.
 - 64. Barrera-Osorio, Experiencing Nature, 121.
 - 65. Cañizares-Esguerra, Nature, Empire, and Nation, 8.
- 66. When sixteenth-century Spanish merchants and imperial officials utilized naturalists' firsthand, practical observations in their efforts to identify and market New World resources, they broke enterprising Europeans' dependency on classic scientific texts when preparing to sail the seas and pursue their economic ventures, ushering in a change in scientific inquiry. Barrera-Osorio, *Experiencing Nature*, 1–12.

- 67. Varey, The Mexican Treasury, 108.
- 68. See, for example, Cañizares-Esguerra, *Nature, Empire, and Nation*, 64–95; Earle, *The Body of the Conquistador*; Chaplin, *Subject Matter*; and Marks, "What Is Colonial about Colonial Medicine?" 205–19.
 - 69. Varey, The Mexican Treasury, 73.
- 70. For more on hot/cold in early modern European concepts of health, see Lindemann, *Medicine and Society*, 12–13.
- 71. For more on Nahua medicine, see Viesca, "Medicine in Ancient Mesoamerica"; and Viesca Treviño, Aranda C., and Ramos de Viesca, "Antecedentes para el Estudio de la Clasificación de las Enfermedades," 183–201.
 - 72. Hendrickson, Border Medicine, 21.
- 73. For more on Spanish incorporation of Native medicine in New Spain, see Risse, "Medicine in New Spain," 43-52.
 - 74. For more on the protomedicato, see Lanning, *The Royal Protomedicato*.
 - 75. Warren, Medicine and Politics in Colonial Peru, 78–117.
- 76. The Spaniards' use of hospital care as a tool for conversion began in Spain during the Inquisition. For more on hospitals in Spain and New Spain, see Risse, "Medicine in New Spain," 37–42.
 - 77. Tortorici, "'Heran Todos Putos," 53-54; Sigal, "Queer Nahuatl," 16.
 - 78. De Solís, "Diary," 70.
 - 79. De Solís, "Diary," 44.
- 80. For more on gender and honor in colonial Latin America, see Chambers, *From Subjects to Citizens*; Martínez, *Genealogical Fictions*; Stern, *The Secret History of Gender*; and Twinam, *Public Lives, Private Secrets*.
 - 81. Lewis, "From Sodomy to Superstition," 129-57.
- 82. José Antonio Aguilar to Manuel de Salcedo, September 2, 1810, MHTC, box 2R344, vol. 3.
- 83. Trial of Juan Jose Hernandez, August 16–21, 1794, MHTC, box 2R344, vol. 1. In the murder case, Spaniards had thrown Hernández into jail for killing a Tehuacano man, probably to appease their Native allies. For more on Spanish punishments for crimes committed against their Indian allies, see Blackhawk, *Violence over the Land*, 66.

2 / The Health of the Missions

- 1. De Solís, "Diary," 38, 55.
- 2. Tennis, *Archaeological Investigations at the Last Spanish Colonial Mission Established on the Texas Frontier* 1: 5; and De Silva to Muñoz, September 3, 1793, BA.
- 3. Spaniards did not avoid coasts, and commercial opportunities compelled them to settle in areas that some colonists avoided. For more on climate and Spanish American settlement, see Earle, *The Body of the Conquistador*, 90–91; and Knaut, "Yellow Fever," 621.
 - 4. De Solís, "Diary," 55.
- 5. Only a few historians have explored the history of Karankawa-speaking peoples. See, for example, John, *Storms Brewed in Other Men's Worlds*, 633–41; Weber, *The Spanish Frontier in North America*, 152–54, 161; Barr, "Geographies of Power," 11–21; and Smith, *From Dominance to Disappearance*, 72–73, 130–32, 144–46. Social scientists have produced more of the work on the Karankawas. See Ricklis, *The Karankawa*

Indians of Texas; Gatschet, The Karankawa Indians; Himmel, The Conquest of the Karankawas and the Tonkawas; Newcombe, The Indians of Texas, 53, 59–65, 335, 341–43; and Schaedel, "The Karankawas of the Texas Gulf Coast," 117–37.

- 6. For health, Spanish and Native bodies, and missionization in California, see Reid, "Medics of the Soul and the Body."
- 7. Governor Muñoz to Fray José Francisco López, January 20, 1791, sa, mission records, vol. 1.
 - 8. De Solís, "Diary," 40.
 - 9. Barr, Peace Came in the Form of a Woman, 119-58.
- 10. Ballejo, de la Campa Cos, Marmolejo, Solis, Dominguez, Chacón, "Memorial to the King, 1750," 61.
- 11. For more on the establishment of the *villas del norte*, see Valerio-Jiménez, *River of Hope*, 20–27.
 - 12. Ricklis, The Karankawa Indians of Texas, 111-24, 144.
- 13. For more on Indian-Spanish relations and Spanish missions in the borderlands, see Barr, Peace Came in the Form of a Woman, 109–96; John, Storms Brewed in Other Men's Worlds; Weber, The Spanish Frontier in North America; Gutiérrez, When Jesus Came, the Corn Mothers Went Away; Haas, Conquests and Historical Identities of California; Hackel, Children of Coyote, Missionaries of Saint Francis; Hurtado, Intimate Frontiers, 1–19; Reyes, Private Women, Public Lives; and Sandos, Converting California.
 - 14. Earle, The Body of the Conquistador, 172.
 - 15. Lewis, "From Sodomy to Superstition," 129-57.
 - 16. Espinosa, El peregrino septentrional atlante, 301.
 - 17. Ballejo et al., "Memorial to the King, 1750," 51.
 - 18. De Solís, "Diary," 44.
- 19. These guidelines refer to the Nuestra Señora de la Púrisima Concepción de Acuña Mission in San Antonio. In 1787, when these guidelines were written, one Franciscan missionary college, the College of Nuestra Señora de Guadalupe de Zacatecas, oversaw all of the Texas missions. The rules for the other missions under the college's care likely had similar, if not the same, guidelines. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 9.
- 20. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 5–9, 14–15, 46–47; De Solís, "Diary," 39–40, 45–46.
- 21. For food as a recruitment tool in California missions, see Hackel, *Children of Coyote, Missionaries of Saint Francis*, 89, 127.
 - 22. Ballejo et al., "Memorial to the King, 1750," 55.
- 23. Fray José Francisco Mariano Garza to Manuel Muñoz, February 24, 1793, BA; and Fray Antonio de Jesús Garavito to Juan Baustista Elguezabal, March 25, 1798, BA.
- 24. Proceedings in the investigation of Frazada Pinta's disturbances at Refugio, October 25, 1794, BA.
- 25. Most of the food guidelines above can be found in Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 18–23. For Rosario and Espíritu Santo missions, see De Solís, "Diary," 43, 46.
 - 26. Earle, The Body of the Conquistador, 26-30.
 - 27. De Solís, "Diary," 70.
 - 28. De Solís, "Diary," 40.

- 29. Earle, The Body of the Conquistador, 19-83, 167-77.
- 30. I borrow the phrases "anti-wheat" and "un-wheat" from Rebecca Earle's work on food, the body, and Spanish conquest. For more on Spanish views of Indian diets, see Earle, *The Body of the Conquistador*, 127–29, 140–53.
 - 31. De Solís, "Diary," 43.
- 32. For more on odor in the eighteenth century, see Brown, Foul Bodies, 177–180; Corbin, The Foul and the Fragrant; and Dobson, Contours of Death and Disease in Early Modern England, 10–17.
- 33. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 27–30; and Barr, *Peace Came in the Form of a Woman*, 150.
- 34. Benoist and Flores, Documents Relating to the Old Spanish Missions of Texas, 1: 29.
- 35. Earle, "Luxury, Clothing, and Race in Colonial Spanish America," 219–27; Katzew, *Casta Painting*, 106–9; Loren, "Corporeal Concerns," 23–36.
- 36. John and Jean Comaroff's work on fashion and colonialism in South Africa has influenced my arguments here. See Comaroff and Comaroff, *Of Revelation and Revolution*, 2: 218–73.
 - 37. Berlandier, The Indians of Texas in 1830, 161, 162.
 - 38. Fray Garza to Muñoz, May 17, 1793, BA.
 - 39. Ballejo et al., "Memorial to the King, 1750," 51.
- 40. De Solís, "Diary," 40, 42. The point of Fray de Solís's discussion of marriage here is to highlight the Indians' savagery, but the prospect of sexual abuse for Native women at the hands of Native men was very real, as we will see in chapter 4.
 - 41. Fray Garza to Muñoz, May 17, 1793, BA.
- 42. For more on dress in the Texas missions as a cover, see Barr, *Peace Came in the Form of a Woman*, 149–50. For more on Spanish definitions of Indian sexuality, see Hurtado, *Intimate Frontiers*, 1–19.
- 43. For more on Native sexuality as contagion, see Lewis, "From Sodomy to Superstition."
- 44. For syphilis in Texas missions, see Fray José Francisco López, Report, SMVS, box 2Q237; and Tennis, *Archaeological Investigations*, 1: 320. For California missions, see Reyes, *Private Women, Public Lives*, 72; and Sandos, *Converting California*, 111–27. For the enforcement of Spanish marital and sexual norms in California missions, see Reyes, *Private Women, Public Lives*; Hackel, *Children of Coyote, Missionaries of Saint Francis*, 182–227; and Sandos, *Converting California*, 120–21.
 - 45. Lewis, Hall of Mirrors, 60-63.
- 46. Court case against Juan José Hernández for the rape of María Martínez, August 16–21, 1794, BA.
- 47. Men were also responsible for defending their female family members' sexual virtue and restoring their family's honor lost as the result of a daughter, sister, mother, or wife's illicit sexual activity. For the colonial borderlands, see Gutiérrez, When Jesus Came, the Corn Mothers Went Away, 207–26; and Chávez-García, Negotiating Conquest, 27.
- 48. Benoist and Flores, Documents Relating to the Old Spanish Missions of Texas,
- 49. Fray Garza to Muñoz, June 17, 1793, BA; and Juan Cortés to Muñoz, July 13, 1793, BA.

- 50. De Solís, "Diary," 40.
- 51. Ricklis, The Karankawa Indians of Texas, 115, 116, 117.
- 52. For gender and labor in the Texas missions, see Barr, *Peace Came in the Form of a Woman*, 135–46.
- 53. Fray Joseph Mariano Reyes to Governor Muñoz, January 19, 1791, sa, mission records, vol. 1.
- 54. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 19–34. Quote on 19–20.
- 55. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 38–43. Quote on 38.
- 56. Fray Juan Agustín de Morfi, Excerpts from the Memorias for the History of the Province of Texas, 26.
 - 57. Hernández Sáenz, Learning to Heal, 243-44.
- 58. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 36–37.
- 59. Domingo Cabello to Teodoro de Croix, November 20, 1780, MHTC, box 2R344, vol. 1; and Proceedings concerning de Croix's instructions, November 25, 1782, BAT, box 2C47, vol. 114.
- 60. Benoist and Flores, *Documents Relating to the Old Spanish Missions of Texas*, 1: 34. For more on bleeding in New Spain, see Hernández Sáenz, *Learning to Heal*, 181–203.
- 61. Court case against Juan José Hernández for the rape of María Martínez, August 16–21, 1794, BA; and court case against José de Jesús Manzolo for the rape of his daughter María Antonio Manzolo, June 37–July 10, 1799, BA.
 - 62. Hernández Sáenz, Learning to Heal, 204.
- 63. For Texas, see Nemesio Salcedo to La Bahía, Parras, and Nacogdoches, August 13, 1804, BA; Dionisio Valle to Elguezabal, September 21, 1804, BA; and Francisco Amangual to Elguezabal, September 22, 1804, BA. For the history of the decree, see Rigau-Pérez, "Surgery at the Service of Theology," 377–404.
 - 64. Francisco Javier de Trujillo, Chihuahua, Royal Decree, April 13, 1804, BA.
- 65. Decree quoted in Rosemary Keupper Valle, "The Cesarean Operation in Alta California," 274.
 - 66. Hernández Sáenz, Learning to Heal, 204-12.
 - 67. Rigau-Pérez, "Surgery at the Service of Theology," 378.
- 68. For Puerto Rico, see Rigau-Pérez, "Surgery at the Service of Theology," 399–400. For California, see Reid, "Medics of the Soul and the Body," 87–114; and Valle, "The Cesarean Operation," 275.
- 69. Mission Nuestra Senora del Refugio de la Bahia, 1807–1825, smvs, box 2Q237, libro II; and Tennis, *Archaeological Investigations*, 1: appendix.
 - 70. Ricklis, The Karankawa Indians of Texas, 134, 149, 162.
 - 71. Fray Garza to Muñoz, February 24, 1793, BA.
 - 72. Fray Garza to Muñoz, April 19, 1793, BA.
 - 73. Fray Garza to Muñoz, June 17, 1793, BA.
- 74. Fray Manuel de Silva to Muñoz, December 19, 1793, BA; Juan Cortés to Muñoz, December 20, 1793, BA; de Silva to Muñoz, January 3, 1794, BA; Corporal Becerra to Cortés, January 28, 1794, BA; and Cortés to Muñoz, March 28, 1794, BA.
 - 75. José Antonio Cadena to Cortés, June 8, 1794, BA.

- 76. Fray Garavito to Elguezabal, March 25, 1798, BA.
- 77. Fray Garavito to José Miguel del Moral, October 27, 1798, BA.
- 78. Fray de Silva to Muñoz, January 12, 1795, BA.
- 79. Ricklis, The Karankawa Indians of Texas, 111–24; and Tennis, Archaeological Investigations at the Last Spanish Colonial Mission Established on the Texas Frontier, 2: 154.
- 80. Census report of Indians at Refugio, October 23, 1795, BA; Fray Garavito to Elguezabal, June 30, 1797, BA; Tennis, *Archaeological Investigations*, 1: 43–44.
 - 81. Fray Garza to Muñoz, July 21, 1793, BA.
- 82. See, for example, Fray Garza to Muñoz, July 17, 1793, BA; Miguel Becerra to Cortés, January 28, 1794, BA; proceedings in the investigation of Frazada Pinta's disturbances at Refugio, October 25, 1794, BA; Fray de Silva to Muñoz, October 23, 1795, BA; and Fray Garavito to Elguezabal, March 25, 1798, BA.
 - 83. Ricklis, The Karankawa Indians of Texas, 131-34.
 - 84. Fenn, Pox Americana, 204-23.
- 85. Domingo Cabello to Teodoro de Croix, October 20, 1780, and November 20, 1780, MHTC, box 2R344, vol. 1. For more on the 1780 smallpox epidemic in San Antonio and among Texas Comanches, see Fenn, *Pox Americana*, 212–13.
- 86. For more on the removal of Native captives from northern Mexico to Cuba, see Conrad, "Captive Fates."
- 87. Proceedings concerning de Croix's instructions, November 25, 1782, BAT, box 2C47, vol. 114.
- 88. For smallpox, see del Moral to Muñoz, November 21, 1798, BA. For Spanish-Karankawa conflict, see del Moral to Muñoz, October 1, 1798, BA; Fray Garavito to del Moral, October 12, 1798, BA; and del Moral to Muñoz, November 13, 1798, BA.
 - 89. Del Moral to Muñoz, November 21, 1798, BA.
- 90. Fray José Francisco López, report, smvs, box 2Q237; and Tennis, *Archaeological Investigations*, 1: 320.
- 91. Todd Savitt's work on slavery and slave health has influenced my argument here. The story of slave health in the antebellum United States is one of hard labor, malnutrition, and poor living conditions. See Savitt, *Medicine and Slavery*.
- 92. Proceedings concerning Teodoro de Croix's instructions on method of warfare against the Karankawa Indians, November 25, 1782, BA.
 - 93. Antonio Treviño's diary, December 12, 1789, BA.
 - 94. Himmel, Conquest of the Karankawas, 16.
- 95. Governor Rafael Martínez Pacheco to Lieutenant Manuel Espadas, December 16, 1789, BA.
- 96. Martínez Pacheco to Espadas, January 4, 1790, BA, and Espadas to Martínez Pacheco, January 29, 1790, BA.
 - 97. Fray Garavito to Elguézabal, March 25, 1798, BA.
 - 98. Del Moral to Muñoz, October 1, 1798, BA.
- 99. Fray Garavito to del Moral, October 12, 1798, BA, and del Moral to Muñoz, November 13, 1798, BA.
 - 100. Smolenski, "Introduction," 1-16; and Alonso, Thread of Blood, 15-110.
 - 101. Weber, The Spanish Frontier in North America, 306.
 - 102. José Francisco López, "Report on the San Antonio Missions in 1792," 486–98.
- 103. Weber, Spanish Frontier in North America, 306; Chipman, Spanish Texas, 202; and de la Teja, San Antonio de Béxar, 23, 86.

- 104. Castillo Crimm, De León, 36, 50.
- 05. Weber, The Mexican Frontier, 47.
- 106. For more on the weakening of the Catholic Church in northern Mexico, see Weber, *The Mexican Frontier*, 69–82.
- 107. For more on the idea of private property in the North, see Alonso, *Thread of Blood*, 61, 106. For the Mexican interior, see Ducey, "Indian Communities and Ayuntamientos in the Mexican Huasteca," 534–35.
 - 108. Weber, The Mexican Frontier, 56.
- 109. Fray José Antonio Díaz de León to Commandant General Ahumada, August 21, 1825, RSC, box 122, folder 15.
- 110. Fray Díaz de León also petitioned to expand Refugio lands. See Fray de León to Ahumada, August 21, 1825, RSC, box 122, folder 15.
- 111. Fray Jose Antonio Diaz de Leon to José Antonio Saucedo, September 10, 1825, SMMC, box 57, folder 8.
- 112. José Antonio Saucedo to Governor Rafael Gonzales, October 30, 1825, SMMC, box 57, folder 8.
 - 113. Saucedo to Gonzales, February 19, 1826, SMMC, box 57, folder 8.
 - 114. Castillo Crimm, De León, 76-79.
- 115. Governor José María Viesca to Ramón Músquiz, March 6, 1829, RSC, box 122, folder 15. For more on the missions during the Mexican era, see Weber, *The Mexican Frontier*, 43–68.
 - 116. Músquiz to Viesca, April 27, 1829, RSC, box 122, folder 15.
- 117. Secretary of War J. A. Facio to the Secretary of the Office of Relations, August 9, 1831, PHC, box 3P150, folder 13.
 - 118. José Miguel Aldrete to Músquiz, April 23, 1830, BA.
 - 119. José María de la Garza's diary on the capture of Indians, February 14, 1830, BA.
- 120. José Valentín García and Martín de León's reports of Carancahuases depredations, December 9, 1830, BA, and Martín de León to Músquiz, December 10, 1830, BA.
 - 121. Mariano Cosío to Antonio Elozúa, December 22, 1830, BA.
 - 122. De León to Elozúa, February 24, 1830, BA.
- 123. Act celebrated at the defunct Mission of Refugio, April 29, 1831, PHC, box 3P150, folder 12.
- 124. For instances of Karankawa ritual during the late colonial period, see De Solís, "Diary," 41–47; and Morfi, *Excerpts from the Memorias for the History of the Province of Texas*, 51.
 - 125. Mariano Cosío to Manuel Mier y Terán, May 2, 1831, PHC, box 3P150, folder 12.
 - 126. Davis, Land! 80.
 - 127. For more on the Law of April 6, 1830, see Weber, *The Mexican Frontier*, 166–70.
 - 128. Castillo Crimm, De León, 101.
 - 129. Davis, Land! 81.

3 / Cholera and Nation

- 1. For more on the spread of cholera in Europe and other parts of the United States, see Rosenberg, *Cholera Years*, 13–14.
- 2. After Mexican independence, the federal government merged Coahuila and Texas into one state to create a demographic balance between large states in the North and smaller states in the interior. See Weber, *The Mexican Frontier*, 22–24.

- 3. Hendrickson, Border Medicine, 19-31.
- 4. For more on the connection between medicine and the nation in nineteenth-century Latin America, see Cházaro, "Introducción," 17–37; Palmer, From Popular Medicine to Medical Populism; Peard, Race, Place, and Medicine; Reséndez, Changing National Identities at the Frontier, 106–17, and "Getting Cured and Getting Drunk," 77–103; and Sowell, The Tale of Healer Miguel Perdomo Neira.
- 5. Ramos, *Beyond the Alamo*, 55–58. For more on race formation in colonial Nuevo Santander, see Valerio-Jiménez, *River of Hope*, 17–50.
 - 6. Ramos, Beyond the Alamo, 58.
- 7. For more on Indian influence in the Spanish borderlands, see, for example, Barr, Peace Came in the Form of a Woman; Brooks, Captives and Cousins, 45–207; Hämäläinen, The Comanche Empire, 18–180; John, Storms Brewed in Other Men's Worlds; and Weber, The Spanish Frontier in North America, 204–35.
- 8. Ruíz, *Report on the Indian Tribes of Texas in 1828*, 6–7. For more on Comanche-Tejana/o relations, see Ramos, *Beyond the Alamo*, 61–63; Hämäläinen, *Comanche Empire*, 181–201; and Weber, *The Mexican Frontier*, 89.
- 9. López de la Cámara Alta, Descripción General de la Colonia de Nuevo Santander, 131–32; and Santa María, Relación Historica de la Colonia del Nuevo Santander, 128.
 - 10. Calleja, "Nuevo Santander in 1795," 494-95.
 - 11. Santa María, Relación Historica, 151-53.
 - 12. Weber, The Spanish Frontier in North America, 177, 315.
 - 13. López de la Cámara Alta, Descripción General, 183.
- 14. For more on sex, marriage, and mestizaje in the northern Mexico borderlands, see Ramos, *Beyond the Alamo*, 55–56, 94–95; Valerio-Jiménez, *River of Hope*, 76–91; Chávez-García, *Negotiating Conquest*, 25–51; and González, *Refusing the Favor*, 17–78.
 - 15. Padilla, "Report on the Barbarous Indians of the Province of Texas," 47.
 - 16. Ramos, Beyond the Alamo, 73, and "Finding the Balance," 58.
 - 17. Padilla, "Report on the Barbarous Indians of the Province of Texas," 48.
 - 18. Berlandier, The Indians of Texas in 1830, 55, 84-87. Quotes on 55 and 86.
 - 19. Hendrickson, Border Medicine, 29-30.
 - 20. Voekel, Alone before God, 143-45.
 - 21. Megged, "Magic, Popular Medicine, and Gender," 194.
- 22. Janet Moore Lindman's work has influenced my arguments here. See Lindman, "The Body Baptist," 177–90, and *Bodies of Belief.*
- 23. Stewart, *Peyote Religion*, 20–21. For more on peyote in colonial Mexico, see Aguirre Beltrán, *Medicina y Magia*, 135–54; Stewart, *Peyote Religion*, 17–30; and Anderson, *Peyote*, 3–24.
 - 24. Megged, "Magic, Popular Medicine, and Gender," 194-204.
 - 25. Aguirre Beltrán, Medicina y Magia, 141-42.
 - 26. Stewart, Peyote Religion, 26-27.
- 27. Sendejas was originally from Coahuila, and he practiced medicine and also sat on the municipal council in Saltillo. In the early 1830s, he went to Monterrey, Nuevo Leon, to oversee a seminary hospital. Mártinez Sánchez, "Juan Martín de Veramendi," personal copy from author.
- 28. Fray Francisco Hidalgo to the Viceroy, November 4, 1716, in Hatcher, "Descriptions of the Tejas," 55–56.
 - 29. Troike, "The Origins of Plains Mescalism," 950.

- 30. Fray Antonio Olivares to the Viceroy, n.d., 1709, in Pichardo, *Pichardo's Treatise on the Limits of Louisiana and Texas*, 2: 397.
- 31. Fray Vicente Santa María's narrative in Prieto, *Historia, geografía y estadística*, 123–24.
 - 32. For more on the symptoms of cholera, see Hamlin, Cholera, 2-3.
- 33. For more on the social, cultural, and political responses to cholera in Europe, Asia, and the United States, see Hamlin, *Cholera*, and Rosenberg, *Cholera Years*.
- 34. Ramón Muzquiz to the ayuntamiento of Béxar, December 19, 1832, BA, and MHTC, box 2R344, vol. 4. Not my translation. The ayuntamientos first formed the *juntas* during a smallpox epidemic in 1831. See Ramón Muzquiz, January 23, 1831, MHTC, box 2R344, vol. 4.
- 35. Múzquiz to the ayuntamientos of Texas, February 19, 1833, BA. German doctors suggested the amulet, and the state governor then transmitted the preventive cure to local officials. Haggard, "Epidemic Cholera in Texas, 1833–1834," 218.
 - 36. Martín de León to Erasmo Seguín, April 18, 1833, BA.
 - 37. Stephen F. Austin to Manuel Jiménez, May 3, 1833, BA.
- 38. It is unclear what the author meant when he wrote that this was the first cholera outbreak in Mexico, for earlier that year, the government had reported that the disease struck the southern state of Chiapas. Perhaps he thought this was a new epidemic strain. This report nevertheless demonstrated the slow movement of mail throughout the nation as well as the distance between the North and Mexico City and the southern states. José Nicolás Elizondo to the ayuntamiento of Guerrero, July 19, 1833, FSXIX.
 - 39. Voekel, Alone before God, 191.
 - 40. Ayuntamiento of Béxar's proclamation, March 17, 1833, BA.
 - 41. José Nicolás Elizondo to the ayuntamiento of Gigedo, August 26, 1833, FSXIX.
 - 42. Jesús Estrada to ayuntamiento of Guerrero, August 7, 1833, FSXIX.
- 43. *Nejayote* was the water in which *nixtamal*, or dried maize, was boiled. Haggard, "Epidemic Cholera in Texas," 220.
 - 44. De Aranda, "Curative Method," MHTC, box 2R344, vol. 3. Not my translation.
- 45. Over the last few decades, the scholarship has begun to shift from focusing entirely on professional practitioners to analyzing the diverse range of healers that practiced alongside one another in a particular locale. For an overview of the medical marketplace literature, see Jenner and Wallis, "The Medical Marketplace."
- 46. The author, Arciniega, used the Spanish word *censillez*, or simplicity, when describing the peyote prescription, which is described below in detail. The prescription was not simple in its concoction, for it involved many ingredients and steps. The "simplicity" of the prescription possibly referred to the relative accessibility of peyote in the region.
- 47. Miguel Arciniega to Béxar ayuntamiento, September 8, 1833, ва and fjpb, ficha 2417.
 - 48. Ramírez, "Enlightened Publics for Public Health," 3-12.
- 49. Report on the formation of a committee to combat cholera, September 9, 1833, BA.
- 50. List of contributors, September 8, 1833, BA; and Erasmo Seguín to *ayuntamiento* of Béxar, October 3, 1833, BA.
- 51. Report on the formation of a committee to combat cholera, September 9, 1833, BA.

- 52. Jacobo and Carlos Sánchez Navarro y Beráin to María Apolonia Beráin de Sánchez, August 28, 1833, SNFP.
 - 53. Agustín Benaben to José Melchor Sánchez Navarro, October 5, 1833, SNFP.
- 54. Simona Mendoza de Rojas to José Melchor Sánchez Navarro, October 12, 1833, SNFP. Not my translation.
 - 55. José Nicolás Elizondo to the ayuntamiento of Morelos, October 13, 1833, FSXIX.
- 56. Miguel Arciniega to Superior Secretary of the Office of the Supreme Government of the State of Coahuila y Texas, August 26, 1833, BA; MHTC, box 2R344, vol. 4; and FJPB, ficha 2409.
 - 57. Haggard, "Epidemic Cholera in Texas," 223-24.
 - 58. Luke Lessier to Miguel Arciniega, September 2, 1833, BA.
- 59. López de la Cámara Alta, *Descripción General de la Colonia de Nuevo Santander*, 131–32, 183; Santa María, *Relación Historica de la Colonia del Nuevo Santander*, 128; and Calleja, "Nuevo Santander in 1795," 494–95.
 - 60. López de la Cámara Alta, Descripción General, 129, 132, 137.
- 61. Ocaranza, "Fundacion de Nuevas Misiones Franciscanas en el año de 1803," 453-55.
- 62. *Nejayote* was the alkaline solution produced during the processing of maize. It is unclear where mission Indians obtained limewater. It is possible that at Forlón, similar to the Texas missions, missionaries received medical supplies with which to administer care, and perhaps the supplies included limewater.
- 63. Sendejas, "Metodo Curativo," August 13, 1833, SPE, box 2J140, and MHTC, box 2R344, vol. 5. Not my translation, except for bracketed words.
 - 64. Sendejas, "Metodo Curativo."
- 65. Sendejas, "Metodo Curativo." Not my translation, except for the bracketed words. In the archival collection, the original Spanish words "remedios aquellos que llaman de viejas" were translated into English as "household remedies." Though Sendejas probably was referring to household remedies when he wrote the prescription, the use of the word "viejas," rather than "viejos," indicates that the remedies were associated with elderly women, demonstrating that gender shaped his description of his prescription.
- 66. Megged, "Magic, Popular Medicine, and Gender," 194–204; Lewis, Hall of Mirrors.
 - 67. Behar, "Sexual Witchcraft, Colonialism, and Women's Powers," 178-206.
 - 68. Hernández Sáenz, Learning to Heal, 227-57.
 - 69. Sendejas, "Metodo Curativo." Not my translation.
- 70. Sharla Fett's work on female slave doctoring in the antebellum United States has influenced my arguments here. See Fett, *Working Cures*, 45–47.
- 71. For more on the relationship among science, medicine, and the Spanish and Mexican state, see Hernández Sáenz, *Learning to Heal*, 21–73; Barrera-Osorio, *Experiencing Nature*; and Lanning, *The Royal Protomedicato*.
- 72. José Miguel Aldrete to Miguel Arciniega, December 6, 1833, BA; and Adolphus Sterne to Miguel Arciniega, December 15, 1833, BA.
- 73. Manuel Jiménez report on formation of junta de sanidad, September 16, 1833, BA.
- 74. Miguel Arciniega to Governor of Coahuila y Tejas, October 9, 1833, BA, and FJPB, Ficha 2428.

- 75. Ramón Múzquiz to the ayuntamiento of Goliad, June 25, 1834, BA.
- 76. Juan Nepomuceno Seguín, "Instructions for the prevention of spread," June 26, 1834, BA.
 - 77. Plácido Benavides to Múzquiz, July 4, 1834, BA.
 - 78. Béxar ayuntamiento to Seguín, July 7, 1834, BA.
 - 79. Múzquiz to the governor, July 7, 1834, BA.
 - 80. Luciano Navarro to Ignacio Chávez, July 12, 1834, BA.
 - 81. Haggard, "Epidemic Cholera in Texas," 229.
 - 82. Benavides to Múzquiz, July 10, 1834, BA.
 - 83. Benavides to Seguín, July 20, 1834. BA.
 - 84. Antonio Salinas to Manuel Martinez, August 10, 1834, BA.
 - 85. Benavides to Seguín, July 20, 1834, BA.
 - 86. Múzquiz to the ayuntamiento of Béxar, March 3, 1833, BA.
- 87. Guardino, Peasants, Politics, and the Formation of Mexico's National State, 83-88.
- 88. Distance from political centers even played out at the state level, as some Texas inhabitants advocated for separation from Coahuila as early as 1828 and in early 1833, due to the distance between Saltillo, the state capital, and Texas settlements. Weber, *The Mexican Frontier.* 26.
 - 89. Reséndez, Changing National Identities, 73-74.
- 90. Ramos, *Beyond the Alamo*, 136–43; Reséndez, *Changing National Identities*, 146–50; and Valerio-Jiménez, *River of Hope*, 105–28.
 - 91. Reséndez, Changing National Identities, 160-61.
- 92. Miguel Arciniega to Superior Secretary of the Office of the Supreme Government of the State of Coahuila y Texas, August 26, 1833, BA; MHTC, box 2R344, vol. 4; and FJPB, ficha 2409.
 - 93. Duffy, The Sanitarians.
- 94. See, for example, Voekel, *Alone before God*, 171–89; Warren, *Medicine and Politics in Colonial Peru*; and Weber, *Bárbaros*, 2–3.
 - 95. Cházaro, "Introducción," 21.
- 96. For more on the history of the protomedicato, see Lanning, *The Royal Protomedicato*.
 - 97. Gomez, "Historical Synthesis of Medical Education in Mexico," 94.
- 98. Penyak, "Obstetrics and the Emergence of Women in Mexico's Medical Establishment," 61–62.
 - 99. Blaquiere, "Prospecto," 7.
 - 100. Schiede, "Observaciones Sobre Objetos de Materia Medica," 11.
 - 101. Gerard, "Concluye, el articulo sobre la enfermedad en general," 304.
 - 102. Blaquiere, "Prospecto," 3-8. Quote on 4. Emphasis not mine.
- 103. Warner, *The Therapeutic Perspective*, 83-161, and "From Specificity to Universalism in Medical Therapeutics," 91-92.
 - 104. Rio de la Loza "Almejas," 158-59.
- 105. The practice of sweating to return the body to its natural balance was another common therapy in the United States. For more on therapeutics in the nineteenth-century U.S., see Warner, *The Therapeutic Perspective*; Duffy, "Medical Practice in the Ante Bellum South," 55, 63; and Sullivan, "Sanguine Practices."
 - 106. Rio de la Loza and Lucio, "Terapeutica," 94.

- 107. Blaquiere, "Prospecto," 7.
- 108. Braconnot, "Traduccion," 371-72.
- 109. Andrade, "Breve Noticia de los hospitales y hospicios de Paris," 129-43, 161-71.
- 110. Weber, "Sobre el Uso del Calomel en las afecciones tifiodes," 96.
- 111. Schiede, "Observaciones sobre Objetos de Materia Medica," 13.
- 112. Robredo, "Investigaciones sobre los caracteres quimicos de la saliva," 265-67.
- 113. González Urueña, "Medicina Legal," 274-80.
- 114. Schiede, "Observaciones Sobre Objetos de Materia Medica," 11.
- 115. The United States, by comparison, did not have a permanent public health department until 1866.
 - 116. Thompson, "To Save the Children," 431-55.
 - 117. Miguel Arciniega to Manuel Jiménez, September 9, 1833, BA.
 - 118. Robiedo, "Memoria del año de 1844," 146.
 - 119. Hernández Sáenz, Learning to Heal, 227-63.
- 120. Lanning, The Royal Protomedicato, 175–200; and Hernández Sáenz, Learning to Heal, 22–24.

4 / Making Healthy American Settlements

- 1. For more on Texas independence as a secession movement, see Ramos, *Beyond the Alamo*, 160–211.
- 2. For more on Native geographic visions in early nineteenth-century Texas, see Reséndez, *Changing National Identities at the Frontier*, 15–55.
- 3. For more on manhood and race in British America, see Brown, *Good Wives*, *Nasty Wenches, and Anxious Patriarchs*, 42–74, 137–86.
 - 4. Jefferson, Notes on the State of Virginia, 176.
 - 5. Takaki, Iron Cages, 36-79.
 - 6. Ramos, Beyond the Alamo, 90-93.
- 7. For more on the position of nonslave holding men in slave societies, see McCurry, $Masters\ of\ Small\ Worlds.$
- 8. All populations statistics are from 1835 or 1836, the end of the Mexican era in Texas. The Anglo and slave population numbers can be found in Weber, *The Mexican Frontier*, 177. The Tejana/o numbers are located in Tijerina, *Tejanos and Texas under the Mexican Flag*, 19–20. The Native population in east Texas consisted of Alabamas, Coushattas, Biloxis, Choctaws, Shawnees, Anadarkos, Delawares, Kickapoos, Caddos, and Cherokees. For the Native population at this time, see Anderson, *The Conquest of Texas*, 120.
 - 9. Valenčius, The Health of the Country, 5.
- 10. Mary Austin Holley to Stephen F. Austin, December 1831, letter 6, in Holley, *Texas: Observations*, 65–66. Quote on 65.
 - 11. Edward, The History of Texas, 82.
 - 12. Edward, The History of Texas, 82.
 - 13. Holley to Austin, December, 1831, Letter 11, in Holley, Texas: Observations, 121.
 - 14. Holley, Texas: Observations, 43.
 - 15. Olmstead, A Journey through Texas, 244.
- 16. J. Frazier Head quoted in Moses, "Medical Topography and Diseases of Fort Merrill," *Statistical Report*, 353.
- 17. Moore, "Medical Topography and Diseases of Fort Brown," Statistical Report, 355–56. Moore argued that the miasma coming from vegetable and animal

composition caused yellow fever epidemics, and he refuted claims that linked yellow fever to mosquitoes and flies. After germ theory became established science, doctors identified the insects as transmitters of yellow fever.

- 18. Moses, "Medical Topography and Diseases of Fort Merrill," *Statistical Report*, 353.
- 19. Holley to Austin, December, 1831, Letter 11, in Holley, Texas: Observations, 123.
- 20. Edward, The History of Texas, 77.
- 21. Thomas Lawson circular, in Statistical Report, 3-4.
- 22. Edward, The History of Texas, 77-78.
- 23. Ashbel Smith, January 9, 1849, journal, Ashbel Smith Papers, 1823–1926, box 2G234, ASP.
 - 24. Holley to Austin, December 1831, letter 12, in Holley, Texas: Observations, 131.
- 25. For more on moral reform in the nineteenth-century United States, see Dorsey, Reforming Men and Women; Ginzberg, Women and the Work of Benevolence; Martin, Devil of the Domestic Sphere; and Pascoe, Relations of Rescue.
- 26. Moore, "Medical Topography and Diseases of Fort Brown," *Statistical Report*, 357.
- 27. Anderson, "Medical Topography and Diseases of Fort Terrett," *Statistical Report*, 396–97.
- 28. Harrison Cole interview, in Rawick, *The American Slave*, 2(3): 771. Quotations from the WPA slave narratives appear as they do in the original written version. These quotations are white interviewers' renderings of African American speech in the 1930s, and white interviewers often misrepresented and stereotyped former slaves' speech. This presents a problem with the narratives that we should consider when using this source and when reading quotes from the interviews. I believe the WPA narratives are still an incredibly rich source for the study of African American slavery, while keeping an eye toward the problems of memory and social context that informed these interviews. For a discussion of the WPA slave narratives as a window into the everyday lives of slaves and of the problems associated with the narratives, see White, *Ar'n't I a Woman*? 22–25.
 - 29. Joe Oliver interview, in Rawick, 2(8): 2986.
 - 30. Burke Simpson interview, in Rawick, 2(9): 3557.
 - 31. Valenčius, Health of the Country, 235.
- 32. For more on how ideas of race tied together U.S. westward expansion in the minds of Anglo Americans, see Takaki, *Iron Cages*, 147–93; and Horsman, *Race and Manifest Destiny*.
 - 33. Numbers and Savitt, "Introduction to Part I," 6.
- 34. People on opposing political sides oftentimes used the same theory to argue against one another. For example, the idea of human unity was central to abolitionist attacks on slavery. Proslavery advocates, on the other hand, called on racial science to validate white superiority and chattel slavery. For more on these scientific theories of race in the nineteenth-century United States, see Kidd, *The Forging of Races*; Livingstone, *Adam's Ancestors*; and Smedley, *Race in North America*, 235–58.
 - 35. Valenčius, The Health of the Country, 235.
 - 36. Edward, The History of Texas, 96.
- 37. For more on race, medical environmentalism, and settler colonialism, see Valenčius, *The Health of the Country*, 229–264, and "Histories of Medical Geography," 3–28; Nash, *Inescapable Ecologies*, 49–81; Harrison, "Differences of Degree";

and Anderson, *The Cultivation of Whiteness*, 11–94, and *Colonial Pathologies*, 13–42. Quote from Anderson, *Cultivation of Whiteness*, 31.

- 38. Thomas Lawson circular, in Coolidge, Statistical Report, 3-4.
- 39. For more on the colonial implications of medical topographies, see Valençius, *The Health of the Country*, 159–90, and "Histories of Medical Geography," 15–16; and Harrison, "Differences of Degree."
- 40. Goetzmann, Exploration and Empire; and Ronda, Lewis and Clark among the Indians.
- 41. Crawford, "Medical Topography and Diseases of Fort McKavett," *Statistical Report*, 392.
- 42. Sánchez, "A Trip to Texas in 1828," 262; Lee, *Three Years among the Comanches*, 111. Part of this account of Comanche food preparation comes from the Anglo Texan Nelson Lee's narrative about his captivity. Captivity narratives present a set of problems for historians. Literary critics have demonstrated that nineteenth-century captivity narratives dramatized certain events in order to promote a particular political agenda. The stories also reflected contemporary cultural values. In many, for example, Anglo women fell victim to Native men, reinforcing Anglo ideas about race and gender in the nineteenth-century United States. Nevertheless, historians must rely on these narratives since they provide firsthand accounts of Native practices, so we must read them with a critical eye and include them in a broad source base. For more on literary criticism of nineteenth-century captivity narratives, see Burnham, *Captivity and Sentiment*; and Castiglia, *Bound and Determined*.
 - 43. Lee, Three Years among the Comanches, 97-98.
- 44. Waldo Rudolph Wedel's interview with Howard White Wolf, August 1, 1933, in Kavanagh, *Comanche Ethnography*, 315.
- 45. Wedel's interview with Post Oak Jim, July 26, 1933, in Kavanagh, *Comanche Ethnography*, 264; and Hoebel, Wedel, Carlson, and Lowie's interview with Herman Asenap, June 30-July 1, 1933, in Kavanagh, *Comanche Ethnography*, 37. For more on Comanche foodways, see Wallace and Hoebel, *The Comanches*, 67–91.
 - 46. Hämäläinen, The Comanche Empire, 262.
 - 47. Sánchez, "A Trip to Texas," 262.
- 48. Gregg, *Commerce of the Prairies*, 316–17. For more on captives' experiences, see Rivaya-Martínez, "Captivity and Adoption among the Comanche Indians, 1700–1875," 162–78, 190–243.
 - 49. Rister, Comanche Bondage, 156-57.
- 50. For more on Comanche manhood before the hide trade boom, see DeLay, *War of a Thousand Deserts*, 120–22; and Collier, *Marriage and Inequality in Classless Societies*, 15–70. For more on the period after the trade boom, see Hämäläinen, *The Comanche Empire*, 259–69.
- 51. Ebenezer Swift, "Medical Topography and Diseases of Camp J. E. Johnston," *Statistical Report*, 384–85.
- 52. Nineteenth-century physicians saw exposure to severe cold or heat as a cause of illness. They worked to balance cold with heat, and vice versa. For an example of how a physician in the mid-nineteenth century wrote about exposure, see Carpenter, "On the Supposed Value of Alcoholic Liquors," 510–17.
- 53. Hasson, "Medical Topography and Diseases of Post on Clear Fork of Brazos River, (Phantom Hill.)," *Statistical Report*, 377. In the nineteenth century, consumption

referred to tubercular phthisis, or tuberculosis. See Forbes, Tweedie, Conolly, and Dunglison, *Cyclopaedia of Practical Medicine* 4: 489.

- 54. Hasson, "Medical Topography and Diseases of Post on Clear Fork of Brazos River (Phantom Hill)," *Statistical Report*, 377.
- 55. For more on gender roles in the mid-nineteenth-century U.S. South and West, see, for example, McCurry, Masters of Small Worlds; Greenberg, Manifest Manhood; and Johnson, Roaring Camp.
- 56. Hämäläinen, *The Comanche Empire*, 305–9; and Prucha, *The Great Father*, 122–24.
- 57. Prucha, *The Great Father*, 122–35. For assimilationist reservation policy in the late nineteenth and early twentieth century, see Cahill, *Federal Fathers and Mothers*.
 - 58. Anderson, *The Conquest of Texas*, 246–47.
- 59. Report of R. B. Marcy and R. S. Neighbors to P. H. Bell, September 30, 1854, in Winfrey, *Texas Indian Papers*, 3: 189.
- 60. For more on gender, sex, and colonialism, see, for example, Greenberg, Manifest Manhood; Gutiérrez, When Jesus Came, the Corn Mothers Went Away; Hurtado, Intimate Frontiers; Anne McClintock, Imperial Leather; Stoler, Race and the Education of Desire, Carnal Knowledge and Imperial Power, and Haunted by Empire; Valerio-Jiménez, River of Hope.
- 61. Parker, "Manners, Customs, and History," March 14, 1855, in Winfrey, *Texas Indian Papers*, 3: 212–13.
- 62. Greenberg, *Manifest Manhood*, 123–34. For more on marriage and power in the nineteenth-century United States, see Basch, *In the Eyes of the Law*; and Stanley, *From Bondage to Contract*.
- 63. Parker, "Manners, Customs, and History," March 14, 1855, in Winfrey, *Texas Indian Papers*, 3: 212–14. Emphasis not mine.
- 64. For more on restrained manhood in the mid-nineteenth-century United States, see Greenberg, *Manifest Manhood*.
- 65. Swift, "Medical Topography and Diseases of Camp J. E. Johnston," *Statistical Report*, 385.
- 66. For the colonial period, see for example, Alonso, *Thread of Blood*, 80–81; and Castañeda, "Sexual Violence in the Politics and Policies of Conquest," 15–33.
- 67. Deming, "Miscegenation in Popular Western History and Fiction," 94–97. Quote on 97. For more on marriage between white men and Native women in the North America West, see Hyde, *Empires, Nations, and Families*; and Van Kirk, *Many Tender Ties*.
 - 68. Deming, "Miscegenation in Popular Western History and Fiction," 97.
 - 69. Parker, "Manners, Customs, and History," 213.
- 70. I did not find many sources from the eighteenth and nineteenth century that discuss Comanche sexual violence. Historian James Brooks argues that the reason why there are so few accounts of sexually abuse can be traced to a Comanche incest taboo that protected captive women adopted into the community. Also, Howard White Wolf recalled that captive women who married Comanche men enjoyed the same rights as "full bloods." See Brooks, *Captives and Cousins*, 187–190; and Wedel's interview with Howard White Wolf, August 2, 1933, in Kavanagh, *Comanche Ethnography*, 327.
 - 71. Serrano, "Report of the Reverend Father Provincial," 487.
 - 72. Hämäläinen, The Comanche Empire, 45.

- 73. For more on captive adoption, see Rivaya-Martínez, "Captivity and Adoption," 190–315.
 - 74. Gregg, Commerce of the Prairies, 43-44.
- 75. This story shows that from a woman's perspective, there may not have been a difference between how a captive and adopted captive experienced life in Comanchería. For more on gender in colonial Mexico, see Stern, *The Secret History of Gender*.
 - 76. Hämäläinen, The Comanche Empire, 308.
 - 77. Hämäläinen, The Comanche Empire, 308-9.
- 78. Neighbors to Manypenny, September 18, 1856, in U.S. Office of Indian Affairs, *Report*, 173.
- 79. Mitchell, Coyote Nation, 26–51; Child, Boarding School Seasons; and Lomawaima, They Called It Prairie Light.
- 80. John R. Baylor to R.S. Neighbors, September 12, 1856, in U.S. Office of Indian Affairs, *Report*, 177.
- 81. Report of R. B. Marcy and R. S. Neighbors to P. H. Bell, September 30, 1854, in Winfrey, *Texas Indian Papers*, 3: 189.
- 82. L. Lea to John H. Rollins, John A. Rogers, and Jesse Stem, November 25, 1850, in U.S. Office of Indian Affairs, *Annual Report*, 254.
- 83. Isenberg, *The Destruction of the Bison*; Hämäläinen, *The Comanche Empire*, 292–320, and "The Politics of Grass."
 - 84. Clarissa Scales interview, in Rawick, 2(9): 3460.
 - 85. Joe Oliver interview, in Rawick, 2(8): 2984-2985.
 - 86. John Crawford interview, in Rawick, 2(4): 999.
- 87. David S. Jones similarly describes the U.S. government's approach to tuberculosis among Plains Indians on the Dakota reservations in the late nineteenth century. Federal officials recognized that their policies contributed to Indian sickness even as they remained committed to improving Indian health. See Jones, *Rationalizing Epidemics*, 145–68.
 - 88. El Bejareño, "Los Indios de Tejas," March 31, 1855.
 - 89. Anderson, The Conquest of Texas, 260.
- 90. Robert Neighbors to George W. Manypenny, September 18, 1856, in U.S. Office of Indian Affairs, *Report*, 174. Emphasis not mine.
 - 91. Hämäläinen, The Comanche Empire, 309-10.
- 92. J. J. Sturm to S. P. Ross, December 28, 1858, in U.S. Office of Indian Affairs, Report of the Commissioner, 1859, 220–21; and Robert Neighbors to J. W. Denver, January 10, 1859, in U.S. Office of Indian Affairs, Report of the Commissioner, 1859, 220.
- 93. Peter Garland, Daniel Thornton, J. Hightower, E. Fireash, T. Wilie, W. E. Motheral, W. W. McNeal, Robert Duval, J. P. Harris, W. Fitzgerald, A.L. Braw, R. Dupuy, W.J.F. Lowder, W. Wood, J. Barnes, H. Highsaw, J. R. Waller, Mr. Dalton, George Harden, Joint statement, January 4, 1859, in U.S. Office of Indian Affairs, *Report of the Commissioner*, 1859, 238–41.
- 94. Robert Neighbors to J.W. Denver, February 22, 1859, in U.S. Office of Indian Affairs, *Report of the Commissioner*, 1859, 252–253; and Robert Neighbors to Charles E. Mix, May 12, 1859, in U.S. Office of Indian Affairs, *Report of the Commissioner*, 1859, 269–271.
- 95. Charles E. Mix to Robert Neighbors, March 30, 1859, in U.S. Office of Indian Affairs, *Report of the Commissioner*, 1859, 263–264.

- 96. Elias Rector to A.B. Greenwood, July 2, 1859, in U.S. Office of Indian Affairs, Report of the Commissioner, 1859, 305–314. Quote on 313.
 - 97. Meinig, Imperial Texas, 38-62.
- 98. For an overview of black chattel slavery during the Spanish and Mexican periods in North America, see Taylor, *In Search of the Racial Frontier*, 27–52.
- 99. The dramatic, calculated increase during the three-year period could attest to an incomplete census in 1837. Nonetheless, the number of slaves increased immensely in the years following Texas independence. The statistics are based on Randolph Campbell's examination of county tax rolls. See Campbell, *An Empire for Slavery*, 264–67.
- 100. These statistics can be found in Campbell, *An Empire for Slavery*, 264–66; and Lowe and Campbell, *Planters and Plain Folk*, 30–34. For more on the slavery boom in Texas, see Campbell, *Empire for Slavery*, 67–95; and Taylor, *In Search of the Racial Frontier*, 53–62.
 - 101. Fett, Working Cures, 15-35; and Johnson, Soul by Soul.
- 102. Watts, *Epidemics and History*, 213–56; and Humphreys, *Yellow Fever and the South*, 6–7.
 - 103. Valenčius, The Health of the Country, 88-89.
 - 104. Valenčius, The Health of the Country, 73-74.
- 105. For an overview of slave health in colonial America and the United States, see, for example, Byrd and Clayton, *An American Health Dilemma*, 1: 231–35, 279–89; Kiple and King, *Another Dimension to the Black Diaspora*; and Savitt, *Medicine and Slavery*. For more on African American health during the Civil War and after emancipation, see Downs, *Sick from Freedom*.
- 106. For excellent discussions of religious and spiritual healing and conjure in the antebellum United States, see Fett, *Working Cures*, 36–59, 84–108. For more on spiritual causality in the African diaspora, see, for example, Gomez, *Exchanging Our Country Marks*, 244–90; Raboteau, "The Afro-American Traditions," 541–45; Sweet, *Recreating Africa*, 139–60; and Thornton, *Africa and Africans*, 235–71.
- 107. Fett, Working Cures; and Bankole, Slavery and Medicine. For more on African American efforts to secure medical care during and after slavery, see Long, Doctoring Freedom.
 - 108. Fett, Working Cures, 82.
- 109. Mary Gaffney interview, in Rawick, 2(5): 1449–1450; Andy McAdams interview, in Rawick, 2(7): 2452; and John McAdams interview, in Rawick, 2(7): 2471.
 - 110. Martha Jones interview, in Rawick, 2(5): 2134.
 - 111. Carter J. Jackson interview, in Rawick, 2(5): 1886.
 - 112. Millie Ann Smith interview, in Rawick, 2(9): 3654.
- 113. For more on ordinary Anglo Americans' use of botanics, see Blake, "From Buchan to Fishbein," 11–30; Murphy, *The Transformation of Domestic Medicine*; Rosenberg, "Health in the Home," 1–20; and Stowe, "Conflict and Self-Sufficiency," 147–69.
 - 114. Parilee Daniels interview, in Rawick, 2(4): 1038.
 - 115. Lizzie Atkins interview, in Rawick, 2(2): 99.
 - 116. Charlie Sandles interview, in Rawick, 2(9): 3448.
 - 117. Janey Landrum interview, in Rawick, 2(6): 2266.
 - 118. Fett, Working Cures, 69-72.
- 119. For more on women's responsibilities on southern plantations, see White, Ar'n't I a Woman? 91–118.

- 120. Susan Smith interview, in Rawick, 2(9): 3669.
- 121. Receipt from R Mills and Co., January 1, 1839, JSSP, series A, vol. 5. The receipt included over \$300 spent on indigo.
 - 122. Lu Lee interview, in Rawick, 2(6): 2299.
 - 123. Nap McQueen interview, in Rawick, 2(7): 2512.
 - 124. Charlotte Beverly interview, in Rawick, 2(2): 283.
 - 125. Amos Clark interview, in Rawick, 2(2): 727.
 - 126. Fett, Working Cures, 72-74.
 - 127. Adeline Waldon interview, in Rawick, 2(9): 3916.
 - 128. Vinnie Brunson interview, in Rawick, 2(2): 513.
 - 129. Covey, African American Slave Medicine, 11, 155-56.
 - 130. Eli Davison interview, in Rawick, 2(4): 1103.
- 131. Lizzie Atkins interview, in Rawick, 2(2): 99; Andy McAdams interview, in Rawick, 2(7): 2452-2453; and John Mosley interview, in Rawick, 2(7): 2805.
- 132. John McAdams interview, in Rawick, 2(7): 2472; Charlie Sandles interview, in Rawick, 2(9): 3448.
- 133. Polly Shine interview, in Rawick, 2(9): 3523; Parilee Daniels interview, in Rawick, 2(4): 1038; and Alice Cole interview, in Rawick, 2(3): 757.
 - 134. Covey, African American Slave Medicine, 87.
 - 135. Vinnie Brunson interview, in Rawick, 2(2): 513.
 - 136. Harriett Barrett interview, in Rawick, 2(2): 201-202.
 - 137. Fett, Working Cures, 65-67.
 - 138. Fett, Working Cures, 63-64; and Fontenot, Secret Doctors, 128-33.
- 139. Harriett Collins interview, in Rawick, 2(3): 893; and Mellon, Bullwhip Days, 94.
- 140. Richard Coke was appointed to the commission that made the official decision to relocate the Texas reserves. He became governor of Texas in 1873.
- 141. Lucendy Griffen interview, in Rawick, 2(5): 1611. For Comanche uses of prickly pear, see Swift, "Medical Topography and Diseases of Camp J. E. Johnston," *Statistical Report*, 381.
 - 142. Fett, Working Cures, 50.

5 / Health Anglos, Unhealthy Mexicans

- 1. Telegraph and Texas Register, "The Cholera," November 30, 1848.
- 2. Jarvis, Report on the Rise, Progress, and Decline, 442, 448.
- 3. The Anglo population numbers date to 1850 and are from Montejano, Anglos and Mexicans, 31.
- 4. The 1850 ethnic Mexican population numbers are also from Montejano, *Anglos and Mexicans*, 31.
- 5. For more on sex and U.S. conquest during the Manifest Destiny era, see Greenberg, *Manifest Manhood*, 88–134.
- 6. Rosenberg, "Introduction," xv-xvi; and Marks, "What Is Colonial about Colonial Medicine?" 210.
- 7. For "diseased" Mexicans, public health, and immigration at the turn of the twentieth century, see Mckiernan-González, *Fevered Measures*; Molina, *Fit to Be Citizens?* and Stern, *Eugenic Nation*.
 - 8. Rodríguez, Rodríguez Memoirs of Early Texas, 75.

- 9. Sociologist David Montejano refers to the postwar structure as the "peace structure." See Montejano, *Anglos and Mexicans*, 24–49. For more on the peace structure and Tejana/os during this transition period, also see Ramos, *Beyond the Alamo*, 203–4; and Valerio-Jiménez, *River of Hope*, 148–51.
 - 10. Weber, The Mexican Frontier, 274.
- 11. Laredo was situated in the newly created Webb County, and in 1860, 86 percent of Webb County was Mexican, a number that probably had declined since 1848. See de León and Stewart, *Tejanos and the Numbers Game*, 12.
 - 12. Valerio-Jiménez, River of Hope, 139-47.
 - 13. Hinojosa, A Borderlands Town in Transition, 68-71.
- 14. Helen Blair Chapman to Emily Welles Blair, July 14, 1849, in Coker, *News from Brownsville*, 128.
- 15. Edward, *The History of Texas*, 12; and Mary Austin Holley to Stephen F. Austin, December 1831, letter 11, in Holley, *Texas: Observations*, 123.
 - 16. Chapman to Blair, August 3, 1849, in Coker, News from Brownsville, 139-40.
 - 17. Perin, "Medical Topography and Diseases of Fort McIntosh," Statistical Report, 361.
 - 18. Moore, "Medical Topography and Diseases of Fort Brown," Statistical Report, 353.
- 19. Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 358.
 - 20. Moore, "Medical Topography and Diseases of Fort Brown," Statistical Report, 355.
- 21. Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 358–59.
 - 22. Moore, "Medical Topography and Diseases of Fort Brown," Statistical Report, 355.
- 23. Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 358.
 - 24. Jarvis, Report on the Rise, Progress, and Decline of Epidemic Cholera, 438, 442.
 - 25. Hendrickson, Border Medicine, 30-31.
- 26. Dorsey, Reforming Men and Women; Ginzberg, Women and the Work of Benevolence; Martin, Devil of the Domestic Sphere; and Rosenberg, Cholera Years, 133–50.
- 27. For more on race, civilization, and morality in the mid-nineteenth-century U.S. West, see Johnson, *Roaring Camp*, 275–313; Miller, *Prophetic Worlds*; and Takaki, *Iron Cages*, 80–107.
 - 28. Chapman to Blair, August 3, 1849, in Coker, News from Brownsville, 140.
- 29. Moore, "Medical Topography and Diseases of Fort Brown," and W. W. Anderson, "Medical Topography and Diseases of Fort Terrett," *Statistical Report* 357, 396–97.
 - 30. Chapman to Blair, August 26, 1848, in Coker, News from Brownsville, 67.
- 31. Wright, "Report on the Topography of San Antonio," 1:422. For more on morality and the 1849 cholera epidemic, see Rosenberg, *Cholera Years*, 121–50.
- 32. For more on Anglo perceptions of Mexican morality, see de León, *They Called Them Greasers*, 36–48.
- 33. Pittsfield Sun, "Mexico—Its Population—The Character of Its People," September 4, 1845.
 - 34. Pittsfield Sun, "The Massachusetts Volunteers at Matamoras," May 27, 1847.
 - 35. Chapman to Blair, August 20, 1849, in Coker, News from Brownsville, 144.
- 36. For more on health and Anglo constructions of "dirty Mexicans" in the early twentieth century, see Mckiernan-González, *Fevered Measures*; Molina, *Fit to Be Citizens*? 119–26; and Stern, *Eugenic Nation*, 57–81.

- 37. Brown, Foul Bodies, 291-355.
- 38. Moore, "Medical Topography and Diseases of Fort Brown," Statistical Report 354.
- 39. Around the same time, San Francisco officials and residents described Chinatown as a dirty space and Chinese immigrants as health hazards and a threat to white San Franciscans. See Shah, *Contagious Divides*.
- 40. For the early twentieth century, see Mckiernan-González, Fevered Measures, 163–97.
 - 41. Valerio-Jiménez, *River of Hope*, 181–82.
- 42. U.S. Census Bureau, *Population of the United States in 1860*, Brownsville, Cameron County, Texas, 109, 110; and Laredo, Webb County, Texas, 1174; and Hinojosa, *A Borderlands Town*, 78.
 - 43. Chapman to Blair, January 14, 1849, in Coker, News from Brownsville, 108.
 - 44. Brown, "Body Work in the Antebellum United States," 213-39.
- 45. John Zirvas Leyendecker, Invoices from the Laredo Store, May 29, 1855, Aug. 31, 1855, and Nov. 12, 1855, JZLP, box 2M316, folder 6.
- 46. U.S. Census Bureau, *Population of the United States in 1860*, Brownsville, Cameron County, 28.
- 47. Chapman to Blair, January 23, 1848, and Chapman to Blair, August 25, 1850, in Coker, *News from Brownsville*, 10–12, 179.
 - 48. El Bejareño, no title, March 22, 1856.
 - 49. Rosenberg, Cholera Years, 133-50.
 - 50. El Bejareño, "Extraemos de una carta de Strasburgo (Francia)," March 8, 1856.
- 51. Montejano, Anglos and Mexicans, 28-29; and Ramos, Beyond the Alamo, 191-208, 222-24.
 - 52. Jimenez, "Observacion."
 - 53. Shah, Contagious Divides, 204-50.
 - 54. Greenberg, Manifest Manhood, 112-34.
 - 55. De León, They Called Them Greasers, 42-44.
 - 56. Valerio-Jiménez, River of Hope, 190-91.
 - 57. Guidotti-Hernández, Unspeakable Violence, 35-80.
 - 58. American Flag, "Bathing," July 16, 1846.
 - 59. Valerio-Jiménez, River of Hope, 153-54.
- 60. Moore, "Medical Topography and Diseases of Fort Brown," Statistical Report, 354.
- 61. Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 358.
- 62. For more on the intersections of race, intimacy, and empire in North America, see Stoler, *Haunted by Empire*. For more on studying race-making in North America and on race and sex in multiracial spaces, see Hodes, *Sex, Love, Race*.
- 63. Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 360.
 - 64. Emory, Report on the United States and Mexican Boundary Survey, 1: 69.
- 65. For more on race and sex in the North American West, see Boag, Same-Sex Affairs; Carroll, Homesteads Ungovernable; Hurtado, Intimate Frontiers; Mitchell, Coyote Nation, 52–80, and West of Sex; Pascoe, What Comes Naturally; and Shah, Stranger Intimacy.

- 66. Ramos, Beyond the Alamo, 95; and Valerio-Jiménez, River of Hope, 201-5.
- 67. Horsman, Race and Manifest Destiny, 233-34.
- 68. Breeden, "Health of Early Texas," 385. For more on the history of lime juice as a treatment for scurvy, see Carpenter, "A Short History of Nutritional Science," 643–44. Carpenter argues that while the Scottish physician James Lind's mid-eighteenth-century scurvy trials may have popularized citrus fruits as a cure for scurvy, the treatment had already been known for about two hundred years by the time Lind conducted his influential study.
- 69. For a discussion on borderlands scholarship that explores processes of cultural exchange in transnational spaces, see Gutiérrez and Young, "Transnationalizing Borderlands History," 27–53.
- 70. For more on heroic therapies in Texas forts, see Breeden, "Health of Early Texas," 379, 394.
 - 71. Swift, "Medical Topography and Diseases of Camp J. E. Johnston," 385.
- 72. For more on Native responses to smallpox, see Kelton, Cherokee Medicine, Colonial Germs.
 - 73. Warner, The Therapeutic Perspective, 267-68.
- 74. The statistics for Texas can be found in *Statistical Report*, 404–11. The comparison of scurvy cases in Texas forts to cases armywide can be found in Breeden, "Health of Early Texas," 382.
- 75. I would like to thank Omar Valerio-Jiménez for directing me to José Trinidad García's presence in Laredo in 1851. For more on García, see Valerio-Jiménez, *River of Hope*, 199.
- 76. Glover Perin to U.S. Army Surgeon General Thomas Lawson, May 7, 1851, in *Statistical Report*, 361–62, and Perin, "Maguey, or Agave Americana; a Remedy for Scorbutus," 179–83.
 - 77. Perin to Lawson, May 7, 1851, in Statistical Report, 361–62.
 - 78. Perin, "Maguey," 181-82.
 - 79. Perin to Lawson, May 7, 1851, in Statistical Report, 363.
 - 80. Bálmis, Demostracion de las Eficaces Virtudes, 5, 294, 303-4.
 - 81. Jennings et al., "'Drinking Beer in a Blissful Mood."
- 82. Colonial records show that in 1791, for example, people in Mexico consumed about 295,000 *cargas*, or loads, of pulque. See Macgillivray, *The travels and researches of Alexander von Humboldt*, 313–14, 335.
 - 83. Ramírez Rancaño, Ignacio Torres Adalid y la industria pulquera, 10.
 - 84. Sánchez Mora, Memoria Instructiva, 13.
 - 85. Bishop, Old Mexico and Her Lost Provinces, 250.
 - 86. Sánchez Mora, Memoria Instructiva, 25–33. Quote on 25.
- 87. Perin to Lawson, May 7, 1851, Statistical Report, 362; Swift, "Medical Topography and Diseases of Camp J. E. Johnston," Statistical Report, 381.
 - 88. Sánchez Mora, Memoria Instructiva, 30-31.
- 89. At Fort McIntosh, soldiers with scurvy experienced swollen and bleeding gums. Perin to Lawson, May 7, 1851, *Statistical Report*, 362.
 - 90. José F. Gómez to Mariano Riva Palacio, July 16, 1850, MRPC.
 - 91. Head, "Medical Topography and Diseases of Fort Ewell," Statistical Report, 351.
- 92. Moses, "Medical Topography and Diseases of Ringgold Barracks," *Statistical Report*, 360.

- 93. "Scorbutus," Statistical Report, 401.
- 94. Swift, "Medical Topography and Diseases of Camp J. E. Johnston," *Statistical Report*, 381.
 - 95. Coker and Humphrey, "The Texas Frontier in 1850," 395-96.
 - 96. Swift, "Medical Topography and Diseases of Camp J. E. Johnston," 384.
 - 97. Wallace and Hoebel, The Comanches, 121, 159.
 - 98. Perin, "Maguey," 181; and Perin, "Maguey, or Agave Americana," 486-88.
- 99. For the United States, for example, see the *New York Journal of Medicine and Collateral Sciences* 4–10 (1844–53). For Mexico, see the *Periódico de la Academia de Medicine de Mégico* 1–10 (1836–37), and the *Periódico de la Sociedad Filoiátrica de México* (1844).
 - 100. Perin, The Use of Agave Americana as a Remedy for the Scurvy, 3-8.
 - 101. Mckiernan-González, Fevered Measures, 33-39.
 - 102. Pope, "The Condition of the Mexican Population," 158-64.
- 103. Hendrickson, *Border Medicine*, 31–32. For more on the popularity of curanderismo among ethnic Mexicans and Anglos in the early twentieth century, see pp. 61–85.
 - 104. Cooper and Stoler, "Introduction: Tensions of Empire," 612.
- 105. Ronald Takaki borrows the phrase "cultural hegemony" from the works of Antonio Gramsci to analyze race in the nineteenth-century United States. Takaki uses the idea to describe the process by which certain lifestyles and beliefs became dominant and diffused through local institutions, social relations, and everyday life in the United States. Though a negotiation, hegemony is a process that occurs along a hierarchy of power. For more on cultural hegemony in the nineteenth-century United States, see Takaki, *Iron Cages*.
 - 106. Perin, The Use of Agave Americana, 3-8.

Epilogue

- 1. The word *bobe* served two functions: it became my grandmother's nickname, and it was synonymous with the word *abuela*, or grandmother.
 - 2. Valerio-Jiménez, River of Hope, 280-81.
 - 3. Trotter and Chavira, Curanderismo.
- 4. For more on Don Pedrito Jaramillo and his relationship with Anglo-American medicine, see Hendrickson, *Border Medicine*, 61–69, and Seman, "'How do I know . . . prayers don't do more good than . . . pills?'" 15–28.
 - 5. Hudson, The Healer of Los Olmos and Other Mexican Lore, 11–16.
- 6. Hernández Sáenz, Learning to Heal; Starr, The Social Transformation of American Medicine.
 - 7. Takaki, Iron Cages.
 - 8. For more on U.S. culture and imperialism, see Kaplan, *The Anarchy of Empire*.
 - 9. "Don Pedrito Jaramillo," in Paredes, A Texas-Mexican Cancionero, 121.
 - 10. Paredes, A Texas-Mexican Cancionero, 114.
 - 11. Paredes, "With His Pistol in His Hand," 36-56.
 - 12. Tomes, Gospel of Germs.
- 13. Kraut, Silent Travelers; Mckiernan-González, Fevered Measures; Shah, Contagious Divides; and Stern, Eugenic Nation, 57–81.
- 14. Stern, *Eugenic Nation*, 82–181; Anderson, *Colonial Pathologies*; and Sutter, "Tropical Conquest and the Rise of the Environmental Management State," 317–26.

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Nattie Lee Benson Latin American Collection (BLAC), University of Texas at Austin

Mariano Riva Palacio Collection, 1716-1880

Sánchez Navarro Family Papers

Texas General Land Office (GLO), Archives and Records Division, Austin Records of the Spanish Collection

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