

MODERNITY, MEDICINE, AND TECHNOLOGY IN MEXICAN HISTORY

Christina Ramos. *Bedlam and the New World: A Mexican Madhouse in the Age of Enlightenment*. Chapel Hill: University of North Carolina Press, 2022. Pp. 266. \$95.00 cloth; \$34.95 paper; \$26.99 e-book.

Elizabeth O'Brien. *Surgery and Salvation: The Roots of Reproductive Injustice*. Durham: University of North Carolina Press, 2022. Pp. 336. \$99.00 cloth; \$32.95 paper; \$27.99 e-book.

Diana J. Montaña. *Electrifying Mexico: Technology and the Transformation of a Modern City*. Austin: University of Texas Press, 2023. Pp. 392. \$34.95 paper; \$34.95 e-book.

Three superb recent monographs further complicate the already complex story of Mexican history and its intersection with the idea of modernity. These books range in coverage from the sixteenth to the twenty-first centuries, and they situate Mexico City within the historiographic discussion of a range of topics, including reproductive justice and electrical technology as well as the role of religious institutions and beliefs in the history of medicine. All three authors place Mexico within these global historical narratives. These scholars deserve praise for conveying challenging ideas in a way that is accessible to a broader readership. Their material is occasionally heartening and humorous, but it is also at times sad and shocking. Above all, they find ways to humanize those who participated in or were victims of fraught issues, many of which remain unresolved to the present day.

Christina Ramos's *Bedlam and the New World: A Mexican Madhouse in the Age of Enlightenment* (Chapel Hill: University of North Carolina Press, 2022) guides readers on a journey from European Renaissance understandings of charitable institutions to protect *pobres dementes* (poor demented ones) and *locos inocentes* (innocent insane) to the very gradual medicalization of mental illness in the eighteenth century. Because this process typically fits into narratives of modernization, readers may be surprised that Ramos focuses on two unlikely Catholic Church protagonists as people who forged the secularization of madness. These instigators were the mendicant brotherhood known as the *hipólitos* and, perhaps most surprising to non-specialists in the history of Iberian global empires, the tribunals of the Holy Office of the Spanish Inquisition. By writing "a history of madness that not only decenters Europe but decenters physicians," Ramos offers an unconventional narrative of medicalization (6).

Invoking Bedlam in the book's title actually contradicts the casual understanding that most of us have of the infamous London madhouse. Although, as with the better-known Bedlam, the San Hipólito hospital had cages and restraints to control *locos furiosos* (violently insane individuals), the Mexican madhouse also has a well-documented history beyond the positivist denial that either institution could achieve anything beyond imprisoning and torturing the mentally ill. Progress narratives related to the history of treating the mad require us to dismiss older approaches to insanity as inherently primitive and cruel to bolster the view of modern medicalized approaches as correct and compassionate (1, 2, 4, 65).

A deep dive into the hospital's surviving records backs up Ramos' social history approach to offer a fresh take on the Enlightenment and modernity. Although she finds compassion and care present in its history, from its foundation, the Mexican madhouse is intertwined with Spanish imperialism. Not long after the creation of the viceroyalty of New Spain, the San Hipólito hospital was built in Mexico City next to a church of the same name, just to the northwest of the Alameda Park. This location marks the *Noche Triste* flight of the Spanish during the conquest era. The name of the hospital and church derive from the fact that Tenochtitlán fell to Spanish invaders on August 13, 1521, the feast day of San Hipólito (the Roman Saint Hippolytus). The founder of the hospital, Bernadino Alvarez, had taken part in the early military conquest. Choosing a penitential path later in life, Alvarez sought to help those who found themselves mentally unstable and unable to care for themselves, pitifully resorting to wandering in the streets of Mexico City. For this foundational era, Ramos depends on official Church chronicles, which of course offer a pro-Catholic, Spanish vision of Alvarez's spiritual awakening. These hagiographic sources cannot contextualize why the founder noticed so many of his own countrymen living as urban vagrants so soon after the fall of Tenochtitlán. Did conquest-era violence affect their emotional health? Were they victims of conflicts among the Spanish and thus denied the benefits of royal grants? This context of Spanish vulnerability sets the tone for the history of the San Hipólito Hospital. Throughout its centuries of existence, San Hipólito mainly cared for Spaniards, suggesting that either Indigenous peoples did not generally view this institution as welcoming to them, they felt discouraged to seek help there, or they dealt with mentally ill individuals in ways that the Spanish commentators could not see and document.

It is also not entirely clear how Alvarez's charitable dream and the brotherhood known as San Hipólito intersected. In the late sixteenth century, the *hipólitos* shared a mission with other mendicant orders in Mexico and focused on providing healthcare and religious education for the poor and vulnerable. Members of Hospitaler orders, including the *San Juaninos* and the *Antoninos*, took four vows: the standard promises to observe poverty, chastity, and obedience, as well as a fourth commitment to provide hospitality for those in need. In this context, hospitality meant caring for the sick, elderly, and mentally ill and

ensuring that those who died in their care had a church funeral and burial. Ramos makes clear that these missions had actually formed part of Spanish imperialism since the era of the Catholic Kings Ferdinand and Isabel. The Mexican brothers of Saint Hippolytus documented their task of caring for the mentally ill as early as 1569, although they did not receive official papal and royal approval to become a religious order until 1700. At this point, they managed 11 Novohispanic hospitals. In Mexico City, this included the Royal Indian Hospital, supported by the income of the viceregal court's most successful theater, as well as the San Hipólito madhouse, which lacked a dependable source of funding. Most of the brothers who served at the hospitals did not take priestly orders, but worked as nurses, pharmacists, and alms-collectors, and in other tasks related to the essential labor needed to maintain the institutions (32–36).¹

Both of the hospitals run by the San Hipólito brothers faced serious financial and infrastructural challenges in the eighteenth century. The Royal Indian Hospital's theater had to be reconstructed twice due to fire and the overall decline in its facilities. The resulting closures of the general hospital led to overcrowding at San Hipólito, which focused on mentally ill patients. The madhouse building was also falling apart. A new prior enforced better financial practices and forged alliances with the city government and reforming eighteenth-century viceroys, who were willing to allot small taxes charged on foodstuffs to fund important urban projects. Drawing from floorplans, lithographs, and eyewitness accounts, Ramos paints a picture of a well-organized, pleasant new building with patios, bright dining halls, and private rooms—what some observers described as a model of Enlightenment-era order and beauty.

Turning to the residents of the madhouse, decades of intake lists present the complexities of who the hospital served, including patients forced or recommended by the courts, family members, and parish priests to live enclosed as punishment or for their own safety. San Hipólito also sheltered violent criminals and rebels whose behavior went beyond what standard jails could handle. Some inmates stayed just a few weeks, but others many decades.

Through fascinating case studies, Ramos examines the leading role of the Mexico City Tribunal of the Holy Office in shaping the medicalization of mental illness over the course of the viceregal era. Inquisitorial investigations could take on a kind of early modern psychoanalytical tone as they probed individuals' family histories and delved into their fantasy worlds, often discussing sexual themes in relation to accusations of heresy (91–92). Typically court cases in this era called on as many witnesses as were available to testify to a person's behavior so that judicial officials could gather a sense of general public reputation to formulate their sentences. However, in investigations of individuals who ended up at San Hipólito, lay bystanders did not understand the nuances of heretical

1. Karen Melvin, *Building Colonial Cities of God: Mendicant Orders and Urban Culture in New Spain* (Stanford: Stanford University Press, 2012), 109–110.

statements and actions versus the ravings of the insane. As such, inquisitors carefully formulated their own understandings of madness on the basis of real-world observations. They also referred to behaviors observed when individuals were incarcerated within San Hipólito, as well as their knowledge of medical understandings of mental illness drawn from treatises written by physicians. Overall, *Bedlam in the New World* draws readers in and holds our attention with moving stories of individual cases. Ramos illustrates these accounts with bizarre and mysterious sketches done by the insane; readers will scratch their heads while trying to understand and analyze them. The book offers a new understanding of early modern insanity and the Mexican madhouse, as well as a valuable and nuanced perspective of Mexico City's daily life and infrastructure.

Covering a long span of Mexico's history of medicine, Elizabeth O'Brien's *Surgery and Salvation: The Roots of Reproductive Injustice* takes readers down a very different path than Ramos' book. Although also engaging with how the Catholic Church influenced Mexican healthcare, O'Brien tells a much sadder story. She takes a feminist activist stance in presenting the history of "surgical politics and reproductive governance," which often led to horrific cases of obstetric violence (7, 9). Throughout the book, O'Brien vividly and compassionately narrates the brutal and dehumanizing treatment that individual women experienced when they sought medical help, or even when they did not seek it but still found themselves the victims of surgeons and doctors. Noting that she writes "history through the body," a clear theme emerges of the medical profession often making sweeping judgments that Mexican women's bone structure and reproductive organs were underdeveloped or otherwise defective (17). Tracing reproductive surgery from the mid-eighteenth century to the mid-twentieth century, O'Brien demonstrates a pervasive history of devaluing women, their bodies, and their capacity to bear children in ways that doctors found to be acceptable.

The first justification for devaluing pregnant women's lives came with the medico-theological works of several Enlightenment-era Spaniards based in Europe and the Americas who were in conversation with the Italian cleric Francesco Cangiamila's *Sacred Embryology*. This influential book argued for the "ensoulment" of the fetus at conception. Cangiamila's work led to a mandate by Spanish King Carlos IV ordering priests to perform caesareans even on dying or already deceased women to more effectively baptize fetuses—previously injecting baptismal water had sufficed. Because it seems that some Mexican priests objected to these usually fatal operations, Mexico City's premier periodical the *Gazeta de México* strongly advocated for caesareans in its editorials. A general sense of mothers' obligation to die for the souls of their unborn babies permeates colonial writings on this theme.

O'Brien turns from theologians to practitioners with an analysis of the baptismal records that survive from California missions. Scholars can attempt to discern how the birth of the baptized newborn took place using the name or descriptor listed in the record. "*No nacido*" (unborn) or forms of the name "Ramón [Roman-born]" signify that a priest

performed a caesarean. O'Brien interprets these operations as a form of Catholic proselytization against the parents' will. Some of the mothers had not been baptized before their deaths and may have resisted missionaries if they survived the birth.

Post-Independence, hospital orders such as the San Hipólitos were ejected from the new Mexican nation. But healthcare continued to have Catholic oversight. The nuns of the French Sisters of Charity order took over hospitals in the mid-nineteenth century. These women resembled the Hippolyte friars in their spiritually focused medical practices. The nuns perhaps had a more nuanced and empathetic bedside manner than male practitioners when dealing with pregnant women in distress. But the rise of Positivism, in an effort to carry out a late-nineteenth-century vision of modernity, displaced the sisters with doctors who seemed eager to turn to surgery for a range of reproductive issues, many of which realistically did not require any medical intervention whatsoever.

Modernity here means reproductive care shifted to academically trained male doctors who dehumanized and devalued the capacity of Indigenous women's anatomy to successfully reproduce. The medical establishment invented nonexistent physical defects and mental and emotional incapacities that affected women who could afford care in their home as well as those treated in hospitals. A new racialized field of study, *pelviología*, proposed that Mexican women inherited an incorrect tilt to their pelvis that negatively affected pregnancies and giving birth. Statistics from the late nineteenth century indicated that the use of chloroform and forceps by doctors actually led to maternal mortality as opposed to offering a helpful technology for facilitating healthy births for mother and child. The medical establishment addressed these self-created issues by assuming that women needed more caesareans due to their supposed physical incapacities. This focus on racialized embodiment served nationalist and positivist ideologies and also justified experimental surgeries performed on women sent to state hospitals. At the same time, more women were incarcerated in these hospitals under a sanitary regime of inspecting almost 100,000 alleged sex workers for venereal disease.

After the Mexican Revolution, concerns over pelvic tilt inspired a regime of sterilization. Doctors sacralized sterilizing poor women overburdened by many children by describing it as a sacred duty to serve the state and to help women who, from the perspective of the medical establishment, could not make good reproductive decisions. An extremely dangerous experimental surgery, vaginal bifurcation, allowed sexual access but theoretically prevented pregnancy and continued to foster the vision of doctors as saviors of women and advocates for a eugenically healthy nation. It is not surprising that these often illegal and always risky surgeries led to protests from women stuck in the hospitals. Even some doctors criticized this deathly obstetric regime, which resulted in an almost 20% mortality rate for women treated at the General Hospital. Overall, readers come away with a gendered vision of misogynistic medical history, well supported by research. This story does not support a progress narrative of improving maternal care

through technological advances. O'Brien concludes her book by reminding readers that reproductive rights activism continues across Latin America, but unfortunately the violence against women also persists, following many of the same patterns she traced for earlier decades.

Addressing another multifaceted development of Mexican modernity, Diana J. Montañó's *Electrifying Mexico: Technology and the Transformation of a Modern City* provides a broad cultural and technological history of electricity over the course of a century. With a focus on the day-to-day user, Montañó invites readers to viscerally feel how Mexico City residents reacted to this lifechanging new source of light, heat, and power. At the same time, *Electrifying Mexico* presents the economic forces and political angles that shaped how the populace experienced the growth of electrical power and the machines, gadgets, and trolleys run by electricity.

Popular contestation of technological and infrastructural changes in Mexico City has a long history. Almost three centuries ago, residents negotiated the gradual development of public lighting. This first official attempt to illuminate New Spain's viceregal capital was an unsuccessful attempt to colonize the night. Similar to urban projects in Europe, decades' efforts to install streetlights in Mexico City were "uneven, contested . . . multi-sided" and frequently violent. Over the course of the second half of the eighteenth century, Novohispanic enlightened reformers tried many methods of establishing public lighting as part of the civilizing process of their imperial subjects.²

Before any government-organized lanterns were installed, streets remained almost completely dark for all nocturnal hours. Accounts from the era observed that respectable inhabitants avoided going outside at night, or if they did, they carried their own torches, traveled safely in their carriages, and enjoyed the protection of their servants. Observers noted that the middle classes only dared to go out holding their personal lanterns. But even with this effort at individualized protection, when darkness reigned, the authorities perceived that *malhechores* (evil-doers) controlled urban space for a significant amount of time every night. On October 23, 1789, three Spaniards raided the mansion and warehouse of a wealthy businessman and brutally murdered all 11 occupants. This house stood just a block or two away from streets illuminated by lanterns purchased and maintained by homeowners. Who can know whether streetlights would have deterred the fatal home invasion.³

Motivated by a vision of the night as dangerous and unconquered, by the eighteenth century, the Spanish Bourbon dynasty combined with a desire to "secure" city streets in both the Old and New World for respectable bourgeois activities. Nocturnal illumination

2. Craig Koslofsky, *Evening's Empire: A History of the Night in Early Modern Europe* (Cambridge: Cambridge University Press, 2011), 158–160.

3. Nicole von Germeten, *Death in Old Mexico: How the 1789 Dongo Murders Shaped the History of a Nation* (New York: Cambridge University Press, 2023).

also meant that certain businesses could stay open for longer hours. This included establishments such as taverns that provided taxed income on alcohol sales for the benefit of the crown. Therefore, well-lighted streets actually increased the spending of the poor to the benefit of the powerful. In addition to economic goals, in the Bourbon plans for street lighting, European ideas regarding urban beautification and order combined with an elite vision of appropriate public behavior and use of the cityscape. Historians of Mexico interpret these reforms as an effort to control the lower classes, especially in terms of perceptions of their work ethic, which presumably stood in the way of imperial prosperity.⁴

After prolonged debates and experimentation with a variety of implementation methods in the second half of the eighteenth century, Mexico City residents finally proved to their leaders once and for all that they would not maintain privately owned lanterns to brighten the streets outside of their homes. When he arrived just a few days after the Dongo massacre, Juan de Güemes, the second count of Revillagigedo appointed as the viceroy of New Spain, decreed the establishment of a corps of fulltime lantern lighters. Revillagigedo determined that a small tax on flour would cover the costs of the lanterns and the lantern guards. In proposing this tax, he argued that “the wealthy and those of middle rank” would happily pay much more for “the imponderable benefits that lighting offers, which interests everyone, because they count on it for the security of their persons and the wealth represented by their families and houses.”⁵

As of 1790, Mexico City had publicly funded urban lighting and paid nightwatchmen to maintain streetlights. However, the populace regularly rejected the authority of these new street patrols and their small beacons of light. Mexico City residents showed their disdain in many ways, including insults, mockery, sarcastic comments, resisting arrest, tearing their capes and shirts, physically beating the guards, and, most frequently, breaking the glass of their handheld lanterns. These attacks accelerated in the Insurgency era and even resulted in fatalities. The lantern guards also often lacked the oil that fueled their assigned lanterns. With any fuel shortage or absentee guard, the streets returned to almost complete darkness. These deficiencies provoked the anger of homeowners, who felt that the individual night watchmen failed in their most basic task. In sum, the contested and destructive reaction to eighteenth- and early-nineteenth-century street lighting fits into the trajectory of disputed urban technologies as well as Montaña’s argument that the populace shaped how these technologies would function within their own lives. Ultimately, the Spanish viceroys did not succeed in conquering the night—Mexico City night watchmen lost their nocturnal skirmishes with city denizens who viewed themselves as free to enjoy the night however they wished.

4. Germeten, *The Enlightened Patrolman: Early Law Enforcement in Mexico City* (Lincoln: University of Nebraska Press, 2022), 29–60.

5. Germeten, *The Enlightened Patrolman*, 159–160.

Fueled only by turnip seed oil, the viceregal lanterns had always only symbolically relieved the city from darkness as intermittent beacons illuminating isolated pools surrounded by murky shadows. Each individually ignited lantern depended on human labor, while a gas or electrical grid seems to operate on its own. If the oil quality degraded or the guards skipped their assigned task of lighting them, the city quickly returned to its unlightened past state. The gentle quality of colonial light sources offers a great contrast with the overwhelming electric arc lights, which in the late nineteenth century brightened their surroundings in a way that created distorting and even horrifying shadows. From the last decades of the nineteenth century, Mexico City's lighting depended on foreign companies. But individuals still found ways to negotiate, challenge, and even steal new sources of power as they had for the previous century.

Through a multitude of examples and anecdotes, *Electrifying Mexico* explains how electricity accentuated social, class, and racial differences within Mexico City, as well as different forms of foreign imperialism. Most modern street lighting remained in the historic center, the locations for newly electrified theaters, department stores, and displays of intriguing new technologies such as electric incubators. As one moved outside of the urban center, older forms of light gradually appeared, as if the observer were traveling back in time. The Mexican government's experimentation in new technologies drew in foreigners eager to profit from electricity. These outside observers commented on what they found to be the shocking contrast between the modernizing city and, from the foreign point of view, the primitive countryside.

During the Porfiriato, elite residents of the capital city, as well as Church and state leaders, embraced lavish public electrical displays for patriotic and pious purposes. This kind of lightshow actually harkens back to Baroque era processions for Catholic holidays and viceregal entries, albeit in earlier centuries illuminated only by candles. The city also built miles of electrical tram lines, which created new subject matter for the already popular *nota roja* style of journalism, known for explicitly describing and illustrating gruesome injuries done to the human body for eager readers. Not surprising, given the *nota roja* tradition, a fascination developed for narrating dismemberments and deaths caused by the new streetcars.

Electrical technologies affected Mexican culture as well as exacerbating internal cultural and economic differences. For example, public transit changed social norms because of the efficiency required for passengers to step off or on the trolley, speeding up the standard courtesies of greeting friends in public. A perception existed that working-class drivers did not show deference to middle- and upper-class riders or pedestrians. Class bias also led to the opinion that only the ignorant poor walked the streets in such a way that they endangered their lives in the face of oncoming trolleys. Harkening back to viceregal elite commentaries expressing disgust toward the rags and physicality of plebeian urban residents, this narrative viewed poor pedestrians as lacking the civility to stay alert to their surroundings and control their public movements. To explain the frequent accidents, it

was assumed that streetcar drivers, as plebeian men often from the countryside, fit age-old stereotypes of peasant drunkenness and ignorance. Overall, class antagonism led to the opinion that electricity brought an era of modernity, but only the educated populace knew how to properly behave within these changes. In contrast, the poor held back this vision of Mexican progress.

External and internal tensions also come to light in Ramos's exploration of *Ladrones de Luz* (light thieves), one of the best examples of users setting the terms for their consumption of technology. Gender and class conflicts emerge here but in the sense that suspected illegal users of the power grid resisted the presence of inspectors in their houses by having maids or the *señoras* of the house deny them entry. These women effectively used classic honor rhetoric to force the male inspectors to leave or wait because their patriarchal husbands or bosses would not approve if strange men came into their domestic space. Mexico City residents as well as small and large business and manufactories tapped into their technical ingenuity by creating *diablitos*, devices which facilitated the theft of power, along with a number of other clever techniques and ruses for bilking the power company.

Along with public transit and power theft, Ramos explores how new domestic gadgets created opportunities for racialized and gendered commentary in the print media. Electrical lighting, refrigerators, mechanized washing machines, and electrical mixers all contributed to marketers dreaming up a new kind of idealized housewife: whiter, slimmer, sanitary, technologically savvy, and more disciplined than the Indigenous maids who did this work in the past. The leading cooking instructor across the nation, Josefina Velázquez de León, promoted this paragon of modern household consumption by giving classes and writing cookbooks that explained how to cook the traditional foods that Mexican husbands wanted by using electrical devices. These new practices were viewed as more hygienic than depending on maids, and avoided the so-called servant problem—a mythology designed to make buying gadgets a more attractive option than hiring a poor or working-class woman. Even laundry invoked gendered class and race differences, as the age-old practice of sending out one's clothes to a washerwoman risked her contaminating it in her allegedly dirty hovel, washing in a stream or lake, or worst of all, a filthy public fountain. Meanwhile, advertisements portrayed sleek, almost androgynous women in stylish stilettos relaxing while their in-home machines did this task more effectively and cheaply.

Across these three books, the authors critique top-down visions of modernity while bringing to life the complex panorama of technological change at a grassroots level. Through their evocative stories, readers enter alleyways where women faced death by trusting doctors to deliver their babies and kitchens where tall, svelte women frowned on their shorter, traditionally attired Indigenous maids. All three books note that global scholarship on certain facets of the history of medicine, science, and technology leaves Mexico out of progress narratives. At the same time, modernizing visions from within

Mexico reject the insights that Catholic institutions and commentators provided in regards to mental or reproductive health. How users experienced electricity and the many ways that people negotiated, used, stole, and protested it also add our understandings of technological change. With an emphasis on non-elite voices and perspectives, these books foreground Mexico's place within the global context of scientific change.

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