

# Guest Editors' Introduction: Beneath the Surface of a Map

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The historian of cartography J. B. Harley proposed that maps functioned as multivalent, socially constituted, and inherently political images that do not simply reproduce but instead interpret topographic reality.<sup>1</sup> Moving away from positivistic readings where geometric accuracy and mathematical precision fulfilled the most salient qualities of a map, Harley argued that maps were instead indexes of knowledge and power.<sup>2</sup> A case in point: the collection of essays edited by David Buisseret in *Monarchs, Ministers, and Maps: The Emergence of Cartography as a Tool of Government in Early Modern Europe* identified the relationship between government and cartography, highlighting how maps are politically charged instruments in the consolidation of power.<sup>3</sup> The mapping practices of these early modern protonation-states also aids in understanding the concept of “cartographic silence,” a mapmaker’s purposeful omission of data.

For modern-day scholars of critical cartography, assessing a map’s graphic commentary is but one half of the equation. The other requires comprehension of how and why mapmakers intentionally suppress information, thus revealing a map’s “hidden rules.”<sup>4</sup> In *How to Lie with Maps*, Mark Monmonier reminds us of the paradox inherent in the practice of mapmaking: the distortion of reality.<sup>5</sup> For Monmonier, an accurate and useful map “must tell white lies,” an aperçu resembling Harley’s thesis of “silences and secrecy.”<sup>6</sup> Thus through the selection, organization, and codification of geographic information into a pictorial language, mapmakers have not only brought together an array of cartographic methods and techniques to interpret the physical world but, in doing so, have also made maps the locus of the production of knowledge. Embedded in the praxis of map-

making—the method of projection, the selection of color, or the orientation of a map—rests the authority to define the character of spatial relationships. Indeed, maps are never neutral, objective, or apolitical documents. Rather, as Christian Jacob has argued, they are “social artefacts” that reflect multiple layers of signification to visually communicate knowledge and to reinforce a “social and political order through their efficiency as symbols.”<sup>7</sup>

With these ideas in mind, we turn to the production of maps in the Viceroyalty of New Spain, a vast jurisdiction that stretched across present-day Mexico, the US Southwest, Central America, and the Philippines. The essays in this special issue scrutinize the ways that mapmakers informed, defined, and shaped the social, cultural, and political fabric of the viceroyalty. Consider, for example, the port city of Manila, the center of Spanish trade in the Pacific. Manila was one of a handful of cities imperial authorities protected with walls. Safeguarding port cities—those urban centers where trade and goods flowed—from European-style maritime warfare demanded that waterside settlements have permanent fortifications.<sup>8</sup> In “*Dentro y fuera de los muros: Manila, Ethnicity, and Colonial Cartography*,” art historian Dana Leibsohn examines social engagement within Manila’s *intramuros* (the district inside the city walls) and *extramuros* (the district outside the city walls). Leibsohn scrutinizes a 1671 map of Manila by the Dominican friar Ignacio Muñoz that, for all its detail of civic space, failed to describe the city’s rich ethnic tapestry. For mapmakers such as Muñoz, the interethnic violence and invasion by the Chinese leader Koxinga gave way to a “scientific representation” of the city underscored by the map’s compass and scale bar. Divorced from its local social context, Leibsohn argues, the Muñoz map “aligned the Philippine city with others in the extended Hispanic world.” By reading the map’s silences, in particular, the fact that beyond the walls lived the majority of the multiethnic population of Chinese, Japanese, and indigenous peoples who flowed across them regularly, Leibsohn demonstrates that “maps create—and do not merely record—the ideological and lived possibilities of civic space.”

The institutionalization of civic space represented a principal concern of Spanish colonization efforts in the Hispanic world. On the basis of urban planning principles first proposed by Vitruvius in antiquity and later codified in 1573 as “*Ordenanzas de descubrimiento, nueva población y pacificación de las Indias*,” authorities applied a uniform set of guidelines irrespective of the social and natural terrain in the New World.<sup>9</sup> Nearly all Spanish American settlements were founded on Renaissance theories of urban planning, comprising an orthogonal city plan, a central plaza, and rectilinear streets. Yet a city’s historical path of development did not always coincide with its idealized form. In “Indigenous Commentary on Sixteenth-Century Mexico

City,” John F. López examines the circa 1550 Uppsala Map, a native-made city view of the viceregal capital. In his analysis, López identifies a narrative figure who through his corporeal expressions—the gestures of his arms and hands and an optic interest in the world outside the two-dimensional frame of the map—presents the city for examination. He argues that the mapmaker’s graphic commentary suggests that Mexico City’s *traza*, or urban plan, was not “spatially unitary” since its inception, just as the “conquest” was not a single and definitive moment in time.” Considering this idea, López turns to a study of the *actas de cabildo*, or “municipal decrees,” identifying an anxiety over spatial irregularity and how these, according to the city council, endangered the city’s *policía*, or the practice of living in social and spatial order. In doing so, he proposes that “the most perceptive commentary on Mexico City’s urban form comes not from twentieth-century scholars but rather from the author of the Uppsala Map.” Ultimately, López situates the graphic commentary within the broader praxis of cartography in the Spanish Atlantic world through a comparative analysis of the Uppsala Map and Alonso de Santa Cruz’s 1542 world map.

In New Spain, indigenous peoples played significant roles in making maps, responding to the exigencies of Spanish rule. Attempts to administer New World domains generated surveys, expeditions, and measurements of ecology and culture that led to spatial realignments, the enactment of laws, and record-keeping practices designed to capture accounts of state. These efforts contributed to the commission and production of native maps, an activity that combined pictorial skills and geographic knowledge with a measure of cultural sensibility. Scholarship on this subject has contextualized the change and continuity of native pictorial expression.<sup>10</sup> But just how did native painters make their maps? What knowledge did they incorporate to produce the rich and vibrant colors that illustrated the features of local and regional landscapes? How did the introduction of European pigments, paper, and other products transform mapmaking practices in the viceroyalty? In “How to Map with Ink: Cartographic Materials from Colonial Oaxaca,” Alexander Hidalgo analyzes this area of indigenous cartography, focusing on the technical aspects of making substances to illustrate maps. Using ink as a case study, Hidalgo demonstrates that painters applied sophisticated botanical knowledge gained through generations of learning to manufacture the colorants and pigments that gave meaning to geographic and built features portrayed on maps. Drawing from an eclectic mix of sources including maps, chronicles, orthographies, and botanical histories, Hidalgo traces the selection of colorants available to painters in Oaxaca and discusses their incorporation of European materials such as iron-gall ink. Likewise, imperial officials who authenticated maps through

review and annotation transformed their physical aspect to make them legible to regional authorities. “While painters controlled geographic and pictorial knowledge as well as the tools needed to make maps,” he notes, “scribes and officials helped define their content to fit Spanish legal principles.” These characteristics contributed to a map’s distinct material condition, one that embodied indigenous identity.

As judicial records, maps played a significant, if not always successful, role in the petition, allocation, and defense of land in New Spain. Leibsohn has noted that the greatest number of maps authored by indigenous peoples aided native communities in the Spanish courts over any number of issues, largely (but not limited to) defending their claims to land and natural resources.<sup>11</sup> For scholars of the colonial period, the interpretation of indigenous maps is often complicated when they are separated from their accompanying text. In “Nahua Cartography in Historical Context: Searching for Sources on the Mapa de Otumba,” María Castañeda de la Paz confronts the case of one such map. The Mapa de Otumba, a native pictorial made on bark paper known as *amatl*, represents a Nahua community’s landholdings from central Mexico. Drawing on archival research as well as ethnographic fieldwork, Castañeda de la Paz proposes a new reading of this map, dating its production to the first half of the seventeenth century. While no written records directly tie this map to its commission, Castañeda de la Paz’s archival research uncovered a series of *legajos*, or “dockets,” as well as an eighteenth-century map of the same region that aids to contextualize land tenure in Otumba. The map, she argues, was likely commissioned by Otumba’s town council as a register to support the region’s complex land-use patterns that gradually shifted from the control of cacique families to town authorities. For Castañeda de la Paz, fieldwork proved an invaluable tool because it allowed her to trace geographic features represented on the map to the present-day landscape, revealing important continuities and changes in Otumba’s geography and tenancy of land.

Ethnographic fieldwork recalls the efforts of José Antonio Alzate, an eighteenth-century priest in Mexico City and one of New Spain’s leading Enlightenment intellectuals. In “Place-Names in Mexico-Tenochtitlan,” Barbara E. Mundy traces how late eighteenth-century indigenous naming practices allowed Alzate to cartographically reconstruct the Aztec capital. As Mundy notes, Alzate’s preparation of the 1789 “Plano de Tenochtitlan, corte de los emperadores mexicanos” relied not only on extensive knowledge of city parish organization but, equally as important, on Nahuatl nomenclature. Alzate’s efforts were informed by walking the city but also by his conversations with native parishioners. He argued that Nahuatl place-names represented a “storehouse of knowledge” that, compared to the then emerg-

ing Linnaean system of classification, was better suited to describe the botanical or topographical features of the New World. Indeed, as Mundy aptly shows, place-names offer an opportunity to understand “how residents of the city identified themselves within the hierarchies of the urban system.” At the heart of her study are the themes of effacement and recovery. While individuals such as Juan Gómez de Trasmonte erased all traces of Tenochtitlan in his 1628 bird’s-eye view of Mexico City to emphasize its civic and religious architecture, others such as Alzate sought to reconstruct the pre-Hispanic capital. Yet for Alzate, contemporary Nahuatl nomenclature was only valuable if it could be applied to Tenochtitlan, a city unencumbered by the presence of the Spanish. By scrutinizing Alzate’s fanciful reconstruction of the Aztec capital, Mundy demonstrates how Nahuatl place-names in the eighteenth century represented an unproblematic mirror of the pre-Columbian city, bypassing two centuries of cultural change.

The Viceroyalty of New Spain represents a fascinating case study for analyzing maps. Embedded within the “silences and secrecy,” “white lies,” and “hidden rules” of a map is the authority to define spatial and political relationships at the local, regional, and imperial levels. How was this authority manifested cartographically? And more important, how does ethnicity shape the social, political, and urban contours of the Hispanic world? As will become evident in the pages that follow, the five essays in this special issue scrutinize the expressions of ethnicity from an array of perspectives, embodied by the way that different historical actors across time and space interpreted colonization efforts and cultural and social interaction. Indeed, cartographic knowledge is never neutral.

## Notes

We would like to extend our deepest appreciation to Matthew Restall for his careful guidance as this special issue moved from an idea, to the Editors’ Session at the American Society for Ethnohistory’s annual meeting in 2011, to print. J. Michael Francis deserves many thanks for his support of this project in its earliest stage. We would also like to thank Rebekah Kati and Brendan Sutherland at Duke University Press and Scott Cave at *Ethnohistory* for their tireless efforts. We are especially indebted to Dana Leibsohn, Barbara E. Mundy, and María Castañeda de la Paz for their insightful contributions and to Thomas B. F. Cummins for his concluding remarks.

- 1 For an anthology of Harley’s theoretical work, see J. B. Harley, *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore, MD, 2002).
- 2 *Ibid.*, 45.
- 3 David Buisseret, ed., *Monarchs, Ministers, and Maps: The Emergence of Cartography as a Tool of Government in Early Modern Europe* (Chicago, 1992).

- 4 Harley, *New Nature of Maps*, 84–85.
- 5 Mark Monmonier, *How to Lie with Maps*, 2nd ed. (Chicago, 1996).
- 6 *Ibid.*, 1; Harley, *New Nature of Maps*, 83–107.
- 7 Christian Jacob, “Toward a Cultural History of Cartography,” *Imago Mundi* 48 (1996): 194–95.
- 8 Spanish inland settlements in the Hispanic world lacked city walls. See George Kubler, *Mexican Architecture of the Sixteenth Century* (New Haven, CT, 1948), 1:11, 81. The nature of warfare in the New World is at the crux of this architectural difference. For example, whereas the Spanish believed that the concept of “spiritual walls” would keep indigenous attacks at bay, port cities had to withstand attack by sea from European warships. See Richard L. Kagan, “A World without Walls: City and Town in Colonial Spanish America,” in *City Walls: The Urban Enceinte in Global Perspective*, ed. James D. Tracy (Cambridge, UK, 2000), 117.
- 9 For a Spanish transcription of these laws, see Zelia Nuttall, “Royal Ordinances concerning the Laying Out of New Towns,” *Hispanic American Historical Review* 4, no. 4 (1921): 743–53. An English translation is available in Nuttall’s follow-up essay, “Royal Ordinances concerning the Laying Out of New Towns,” *Hispanic American Historical Review* 5, no. 2 (1922): 249–54.
- 10 Dana Leibsohn, “Primers for Memory: Cartographic Histories and Nahua Identity,” in *Writing without Words: Alternative Literacies in Mesoamerica and the Andes*, ed. Elizabeth Hill Boone and Walter D. Mignolo (Durham, NC, 1994), 161–87; Leibsohn, “Colony and Cartography: Shifting Signs on Indigenous Maps of New Spain,” in *Reframing the Renaissance: Visual Culture in Europe and Latin America, 1450–1650*, ed. Claire Farago (New Haven, CT, 1995), 265–81; Barbara E. Mundy, *The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas* (Chicago, 1996); and Alessandra Russo, *El realismo circular: Tierras, espacios y paisajes de la cartografía indígena novohispana, siglos XVI y XVII* (Mexico City, 2005).
- 11 Leibsohn, “Colony and Cartography,” 267–68.