

Still turning toward a cartographic history of Latin America

Brian Bockelman¹  | Jeffrey A. Erbig Jr² 

¹Ripon College

²University of California, Santa Cruz

Correspondence

Brian Bockelman, Ripon College,
300 W. Seward Street, Ripon, WI 54971,
USA.

Email: bockelmanb@ripon.edu

Jeffrey A. Erbig, Jr, UC Santa Cruz, Merrill
Faculty Services, 1156 High Street, Santa
Cruz, CA 95064, USA.

Email: erbig@ucsc.edu

Abstract

Since the 1990s, scholars of Latin America have rediscovered maps as historical documents and mapping as a historically significant social practice. Inspired in part by theoretical developments in the broader history of cartography, particularly the notion of maps as cultural texts embedded in sociopolitical contexts that shape their production and meaning, cartographic histories of the region have flourished in recent decades, leading some to herald this development as a new direction in Latin American historiography. This essay examines the emergence and principal trends of this body of scholarship, assessing its contributions and limitations. Taking a broad approach that examines studies of both the colonial and modern periods from Patagonia to the Rio Grande, it argues that while critical map histories have transformed earlier notions of cartographic sources and deepened our understanding of traditional subjects such as colonialism and nation-building, they have yet to reach their full potential. More dialogue between scholars in this emerging subfield, more reflection on the spatial assumptions that undergird Latin American history as a whole, and more attention to the diversity of maps available for study are needed to enhance the conceptual contributions of Latin American cartographic history and to expand its visibility both inside and outside the region.

1 | INTRODUCTION

The new millennium got off to an auspicious start for historians and other scholars of Latin America who were intrigued by the new research possibilities presented by one of the oldest forms of human communication: maps. Thanks to earlier geographical influences stretching back to the Annales school, students of the region's past were long accustomed to using cartographic images as book and classroom illustrations. Now they discovered that maps were not merely "visual aids," as we once quaintly called them, but also informative primary sources, fascinating historical subjects, and useful tools of analysis in their own right. Pioneering monographs by Barbara Mundy and Raymond Craib, published on either side of 2000, laid down a marker for this new subfield in the United States.¹ Conferences and special publications flourished, including the first major congress on map and mapmaking history in Latin America, held in Buenos Aires in 2006 and repeated elsewhere every other year since.² By the end of that first innovative decade, practitioners were heralding the potential of cartographic study to open up new horizons in Latin American history. In *Mapping Latin America* (2011), one of three major collections released around 2010 to showcase this new research agenda, Jordana Dym and Karl Offen spoke assuredly of "the power of maps to help illuminate the relationship between space and society" in the region and even stressed the role cartography played in "the process of producing what we think of as Latin America."³

Several factors promoted this growing turn to the map as a lodestar for charting new paths in Latin American historical studies. One was the inherent interdisciplinarity of cartographic scholarship, which gave it the air of a collaborative adventure. Héctor Mendoza Vargas and Carla Lois celebrated working with "a heterogeneous group of professionals who, after being trained in diverse disciplines (geography, history, architecture, sociology, art history), had followed different paths before finally arriving at the field of the history of cartography, ready to exchange experiences, sources, and methods."⁴ Maps themselves are intriguing amalgams—part science, part graphic art, part text, and much else besides. As underexplored sources, they appealed to historians' increasing interest in visual representations of space, culture, and identity—a legacy of the powerful cultural turn in historiography that began in the late 1980s and the spatial and environmental turns that gathered momentum a decade later. And since land has forever been a site of struggle between social groups in Latin America, documents that visually fix or fabricate that base material of the region's history naturally commanded attention. Above all, however, the new enthusiasm for map study reflected the global influence of the sprawling History of Cartography project, launched by David Woodward and J. B. Harley in the 1980s and still ongoing.⁵ This project revolutionized cartographic studies by treating maps not as objective representations of geographic reality that increased in technical precision over time, but as spatialized expressions of the culture and ideology of their times, whenever and wherever they were made. Beyond this invitation to cross-cultural inquiry, Harley's emphasis on cartography as an enactment of power wielded to colonize and control space found a ready audience among scholars of a region deeply marked by colonialisms old and new.⁶

Now, two decades or more since the arrival of the new map history to the region, is it fair to say that Latin American history has taken a cartographic turn, or at least that we are still turning in that direction? Was 2010 the peak moment of enthusiasm for this novel approach to our field or, as its advocates hoped, just the beginning of a long-overdue transformation? Were we to gauge the period since that time simply in terms of monographs dedicated to cartographic subjects, we might be tempted to declare that the star has faded. However, another measure of influence is ubiquity: critical map studies now permeate articles, book chapters, and many other works on Latin America, including books ostensibly on other subjects.⁷ Meanwhile, scholars of the region are increasingly making maps of their own, as part of an ever-growing commitment to spatial investigation and an embrace of geographic information systems (GIS) as an analytic tool. Yet questions remain. Are these map studies just a new technique to address traditional historiographical issues, or are they raising new issues? Has a collective, critical conversation emerged within the Latin American cartographic history, and has it contributed conceptually beyond the region? While no one can yet answer all of these questions, a review of recent studies in light of the longer development of Latin American cartographic history can, by offering a field map of sorts, lead us closer to that destination.

2 | CARTOGRAPHY AND COLONIALISM

The study of historical maps and mapmaking is not a new phenomenon in Latin America. Prior to European arrival in the Americas, competing Indigenous polities used maps to tell community histories and to claim lands, and as the colonial enterprise grew, Iberian and Jesuit administrators referenced historical maps to assert their own territorial claims and historical narratives. These practices would persist after independence amid new disputes over international borders and community landholdings. By the late 19th century, professional historians and geographers emerged throughout Latin America, and through most of the 20th century, they assembled historical maps and transcribed colonial mapmakers' writings to tell patriotic, teleological narratives of nation formation and technological advancement. Much of their labor involved tracking down colonial-era maps, many of which had traveled to imperial archives in Europe or to the private collections of antiquarians, who frequently separated maps from accompanying documents. In country after country, monumental and often state-sponsored historical atlases cartographically connected pre-Columbian pasts to national presents, just as historians narrated the realization of national lands from primordial pasts.⁸

The rise of critical map histories in Latin America at the 20th century's close reflected broader paradigm shifts in the history of cartography on a global scale. Critiques of triumphalist positivism and nationalism severed colonial mapmaking from national frameworks and enabled researchers to question the rather narrow definition of maps as two-dimensional depictions of territory, liberating them to investigate a broader range of spatial representations. Scholars of Latin America took increased interest in Indigenous epistemologies and ontologies, contributing three important articles on Native cartography to the second volume of *The History of Cartography* (1998).⁹ While this book was overshadowed by the series' thorough, multi-volume examination of European mapmaking, and while it tended to flatten non-Western cartography by inserting it into Eurocentric temporal frameworks, the contributions on Latin America laid the foundation for a new body of work in the region. Meanwhile, the emergence of decolonial scholarship alongside protests around the quincentennial of Columbus's first American voyage produced pointed critiques of cartography's role in the "colonization of [Indigenous] literacy" and a renewed consideration of Indigenous spatial knowledge.¹⁰ Walter Mignolo's "Putting the Americas on the Map" (1992) and J. B. Harley's "Rereading the Maps of the Columbian Encounter" (Harley, 1992b) provided some of the earliest critical readings of early modern European maps of Latin America, relativizing their achievements next to those produced by Indigenous Americans.¹¹

The studies that appeared in the 1990s to address Indigenous mapmaking served as a vanguard of the new histories of cartography in Latin America and remain a cornerstone. Scholars drew upon the rich pictographic, visual traditions of Mesoamerica to narrate cultural and material histories of colonialism. Barbara Mundy's *The Mapping of New Spain* (1996), which examined cartographic responses to Spain's *relaciones geográficas* (royal questionnaires sent throughout its colonies at the end of the 16th century), is perhaps the most well-known work in this regard. Taking advantage of a vibrant archive of maps produced by Nahuatl-speaking painters, Mundy traced shifts in their form over time, noting how glyphs and alphabetic scripts merged to create new modes of geographical representation, which she read against Spanish imperial mapmaking efforts and aspirations. Drawing upon the burgeoning field of New Philology, she and others emphasized the hybrid nature of colonial-era Indigenous maps: they were palimpsests that overlaid multiple layers of meaning and modes of knowing.¹²

Since that beginning, numerous studies have examined specific Indigenous maps; their role in Native histories, ethnic identity formation, and local land disputes; the materials and tools used to create them; and the precise meanings of specific map features. Others have shown the influence of Indigenous visual cultures and spatial knowledge upon colonial Mexican mapmakers broadly, by examining Native renderings of Tenochtitlan/Mexico City or the persistence and expansion of Nahuatl toponymical nomenclature throughout the colonial period.¹³ Given its attentiveness to maps as texts, scholarship on Indigenous mapping in Mesoamerica has been heavily weighted toward 16th- and early-17th-century manuscripts and has maintained closer dialogue with Indigenous mapping in North America, where Native maps also proliferated, than in Central or South America, where they did not.¹⁴ Studies of Indigenous mapping and spatial practices in other parts of Latin America have thus emerged separately from those in

Mesoamerica and, while attentive to Indigenous authorship, have focused more attention on Native spatial practices and engagement with colonial mapmakers, or on the ethnographic information embedded in colonial maps.¹⁵

Alongside the ever-growing body of scholarship on Indigenous mapmaking and spatial imaginaries, many historians of colonial-era cartography have provided new readings and alternative periodizations of European mapping traditions employed to represent Latin American spaces. This is unsurprising, given the breadth and accessibility of such canonical cartographic corpuses and the possibility of dialogue with new histories of science that situate knowledge production in broader geopolitical contexts. Studies of Renaissance-era Iberian cartography have countered “Black Legend” tropes that diminish or discount Iberian knowledge production. Ricardo Padrón's *The Spacious Word* (2004) demonstrated how a 16th-century shift from linear to geometric spatiality dovetailed with Iberian cultures of expansionism and the conceptual invention of the Americas. María Portuondo's *Secret Science* (2009) showed how a rapidly expanding Spanish empire simultaneously sought out navigational maps while trying to prevent its rivals from acquiring the same information.¹⁶ In the same way, the Iberian arrival in the Americas led to a transformation in imperial cosmography whereby, with several notable exceptions, it became a more mathematical practice that left descriptive accounts to chroniclers. Nevertheless, Surekha Davies's recent *Renaissance Ethnography and the Invention of the Human* (2016) argues that the profuse iconography of Renaissance-era maps of the Americas was also integral to humanistic debates and emergent racial frameworks espoused by European scientists and travelers.¹⁷

Although initially receiving less attention, Enlightenment-era mapmaking has become a focal point over the past decade, as scholars have analyzed the changing sociopolitical contexts that shaped late-colonial cartography. Rather than restricting the flow of cartographic knowledge to preserve state secrets, 18th-century Iberian and Ibero-American mapmakers sought to publish their works to reinforce royal claims overseas. Moreover, a changing juridical landscape that privileged on-the-ground mapmaking, collaboration, empiricism, and direct observation in resolving inter-imperial border disputes led to a proliferation of mapping expeditions and cartographic works. Historians have been particularly interested in the massive Luso-Hispanic boundary commissions sent to South America under the treaties of Madrid (1750) and San Ildefonso (1777) to partition Spanish and Portuguese claims to the continent, as the intensive cartographic production of that period established spatial contours and imaginaries that persist to this day. This recent focus on mapping imperial borders can best be seen in Júnia Ferreira Furtado's *O mapa que inventou o Brasil* (2013), which argues that a map produced by French royal geographer Jean Baptiste Bourguignon d'Anville “invented Brazil” by drawing an imaginary border that had little to do with on-the-ground spatial realities. The book further shows that this map was central to the negotiation of the borderline that resulted from the Treaty of Madrid, subsequently shifting enormous swaths of land from Spanish to Portuguese dominion.¹⁸ Other South American scholars have taken advantage of the boundary commissions' voluminous textual accounts to craft bottom-up analyses of the social, cultural, and political ramifications of the expeditions themselves.¹⁹

Wedged between studies of the 16th-century *relaciones geográficas* and those assessing late 18th-century boundary demarcations are efforts to understand the role of non-Iberian agents in Latin American mapmaking in the 17th and early 18th centuries. Drawing upon the vast body of maps from Patagonia to California produced by Jesuits affiliated with the Spanish crown, some scholars have shown that German-speaking missionaries were the order's most prolific mapmakers, that Jesuit maps aimed to reinforce the order's land claims and political role, and that these works were imbued with Indigenous spatial knowledge.²⁰ Other scholars have demonstrated Italian Jesuits' participation in Portuguese mapping projects, most notably the *Novo Atlas da América Portuguesa*, an early 18th-century effort to map Brazil's coastlines and contested areas.²¹ But Jesuits were not the only third parties collaborating with the Iberian crowns to map the Americas, as Ibero-American mapping was increasingly connected to wider scientific networks by the 18th century. Neil Safier's *Measuring the New World* (2008) followed French geographer Charles Marie de La Condamine from a geodesic expedition to the Andes to measure the circumference of the world to his subsequent attempt to travel the entirety of the Amazon to his eventual return to France—identifying in the process the multiple hands involved in the production of cartographic texts, from on-the-ground informants and

collaborators, to metropolitan engravers, to global audiences.²² Other scholars have focused on how northern European mapmakers and travelers sought to claim control over northern South America. Whether studying British expeditions to find and claim El Dorado or the Dutch production and circulation of maps of northern Brazil, these works have connected mapmaking to mercantilist, capitalist enterprises that constructed spatial imaginaries of the Americas, including the notion that Brazil was an island apart from the rest of South America.²³

While widely circulated maps published in the context of inter-imperial land disputes continue to receive the most scholarly attention, studies of manuscript maps have shown their utilitarian importance for colonial governance and the production of particular spatial imaginaries within a given empire's jurisdiction. Vera Candiani's *Dreaming of Dry Land* (2014) analyzes Mexica and Spanish engineers, who each drew up plans to drain Tenochtitlan/Mexico City, to show that their schematics protected the city at the expense of neighboring villages.²⁴ Other scholars have likewise examined urban and rural maps drawn largely by military engineers, which enabled the creation and management of colonial cities, including capital cities such as Lima, coastal forts such as Havana and Santiago de Cuba, and frontier outposts in northern New Spain and in eastern Bolivia.²⁵ Meanwhile, a new body of scholarship has emerged to show how mapmaking stretched to subterranean spaces, as 18th-century Portuguese and Spanish reformers, officials, and entrepreneurs sought to extract as much wealth as possible from mines. In these contexts, theories of alchemy and other sciences were challenged via mapmaking and imaginative geographic renderings, while the exact locations of mines often remained ambiguous.²⁶ Studies of such phenomena have followed broader trends in the history of cartography to consider a wider range of documents as cartographic content, focusing their attention on city plans, subterranean charts, and travelers' accounts alike. Literary scholars in particular have been attentive to the ways in which such sources produced spatial imaginaries, from the proscriptive claiming of Indigenous lands in the 16th century to the creation of Peru as a fixed spatial entity in the 18th century.²⁷ These works have shown how mapping did not simply capture extant realities; it imagined new ones.

3 | MAPPING THE NATION-STATE

It is no surprise that the interest in maps and mapmakers came later to students of modern Latin American history than it did to their colonial counterparts. The field of cartographic history long tilted toward old European maps, especially those of the Renaissance and Enlightenment eras—chronological categories preserved by the History of Cartography project despite its many other conceptual and methodological innovations. This fact gave colonial specialists a clear corpus of maps and map studies to reevaluate, contest, and augment through new critical and contextual approaches. By comparison, historians of 19th- and 20th-century Latin America had little in the way of preexisting cartographic subjects to address, save the boundary disputes and even wars that escalated after independence, and many of the maps they have since come to study were largely unknown two decades ago. Ironically, maps were always around them, whether in atlases, censuses, development plans, property surveys, estate records, land reform case files, scientific studies, schoolbooks, newspapers, popular magazines, advertisements, tourist brochures, or just about anywhere else one looked for historical documents—but they were not yet seen as sources with their own stories to tell. Nor were most of them likely to appear in the “national” map compendiums assembled in the 20th century, which emphasized political geography and featured abundant colonial materials in order to give relatively new nations much deeper histories. Specialists of modern Latin America have therefore faced a somewhat different challenge: figuring out what lines of cartographic study to pursue among a multitude of possibilities and deciding whether map analysis ought to enrich existing interpretive frameworks or break new historiographical ground.

As occurred with the study of Indigenous mapping in Mesoamerica, Mexico was an early focal point for the turn to critical cartographic histories of post-colonial Latin America. Robert Holden's *Mexico and the Survey of Public Lands* (1994) and the multi-author *México a través de los mapas* (2000), edited by Héctor Mendoza Vargas, brought

modern mapmaking more fully into the cartographic history of Mexico for the first time, establishing its links with broader projects of state formation, boundary creation, and national development.²⁸ Although Mendoza Vargas did include dedicated one chapter to scientific cartography in the 20th century, the volume as a whole anticipated a pattern soon to become characteristic of the field: an emphasis on the many ways maps and mapmakers helped constitute independent Latin American nations in the 1800s. Such a focus not only fit the prevailing historiographical interest in nation-building after independence as a complex, contingent, and conflict-ridden enterprise, but it also allowed historians to make use of maps that had been generated by officials eager to establish territorial borders or to take stock of the heterogeneous natural and human resources that made up the new republics. As an added bonus, the stories behind the creation of these documents, which involved some of the first professional surveyors to chart national interiors and frontiers, as well as the many plebeian assistants and locals who shaped and sometimes opposed the expeditions, were yet to be told.

The territorial fragility of post-colonial Mexico made it an especially rich subject for thinking about the role of maps in the consolidation of the modern nation-state. Two North American participants in *México a través de los mapas*, Paula Rebert and Raymond Craib, each followed with a major monograph seeking to show the centrality of cartography and associated place-fixing practices to national history. Rebert's *La Gran Línea* (2001) explored the contested process of mapping the United States–Mexico border following the Treaty of Guadalupe Hidalgo (1848), which ended the Mexican–American War.²⁹ Unlike previous studies, it examined in great detail the surveying techniques and resulting maps of the nominally collaborative but often divided Mexican and U.S. boundary commissions, giving equal weight to their efforts and revealing the significance of the project for a Mexico still uncertain about its national integrity. Craib's more ambitious *Cartographic Mexico* (2004) looked at how official projects to survey and cement territorial knowledge and spatial relationships within the nation's borders came up against customary local understandings and uses of space that subverted such centralized visions. Combining theoretical sophistication and fine-grained archival study, it retold familiar Mexican stories of liberal state-making and Native land dispossession up to and through the Porfiriato (1876–1910) from an entirely new angle: that of the geographical societies and agencies that historians had long overlooked but the 19th-century state considered key to national development, in particular the Comisión Geográfico-Exploradora.³⁰

While several other monographs on modern Latin American cartographic history appeared in the first decade of the 21st century, these paled next to the precocious manufacture of articles, book chapters, and edited collections offering useful surveys of post-colonial mapping projects and showing the wide applicability of map analysis to the study of nation-building and national identity.³¹ Iris Kantor and Lina del Castillo each connected cartography and the struggle for independence, wherein maps helped advance the cause of sovereignty in the court of international relations and projected possible territorial futures for New World republics, confederations, and empires of uncertain shape.³² Colombia, which wrestled with widely divergent political–territorial forms after independence, attracted newfound interest among historians adopting cartographic methods and questions; this occurred for Central America as well, albeit to a lesser degree.³³ Scholars of Brazil and Argentina produced many studies examining how frontier regions were gradually incorporated into the cartographic understanding of national space, often at the expense of Indigenous geographic traditions. One well-received investigation by Fernando Williams illustrated how Welsh immigrants manipulated maps and toponyms as part of their effort to establish an agricultural colony in a corner of Patagonia.³⁴ Other historians examined new state-sponsored scientific missions, where mapping remote regions and searching for natural resources that could fuel national economic development often went hand in hand.³⁵ Finally, scholars took an interest in tracing the activities of military institutes that by the end of the 19th century were tasked with developing and maintaining precise topographical knowledge of national territories and boundaries.³⁶

Riding the wave of this enthusiasm and experimentation, Dym's and Offen's *Mapping Latin America* offered a primer for integrating critical cartography into modern Latin American historiography, even as it showcased many of the trends in colonial scholarship discussed above. The diversity of maps and map subjects included far surpassed anything seen in the field before, in some sense enacting for national-era specialists the kind of revolution in

cartographic study that the History of Cartography project had been promoting elsewhere for decades. The volume displayed a whole host of modern map types familiar to scholars trained in that broader specialty, such as transportation maps, thematic maps, large-scale topographical survey maps, propaganda maps, tourist maps, satirical maps, and more. The anthology thus seemed to portend new directions in post-colonial Latin American cartographic history, and to some degree this diversification has occurred, as a continued output of articles and book chapters has stretched into new realms and periods. For instance, historians have now investigated turn-of-the-century maps that eased the rise of U.S. imperialism in the Caribbean basin and cheap mass-produced maps that promoted everything from geographic literacy in mid-century Central America to cut flower sales in Ecuador during the 1990s and early 2000s.³⁷ Several studies have explored the roles Latin American nations played in international scientific mapping efforts of the early 1900s, while others have looked at the place of maps in the region's national centennial celebrations circa 1910.³⁸ Increasing attention has also been paid to urban cartography and the relationship between maps, urban planning, and metropolitan identities in the modern era.³⁹

Yet when it comes to new books, the paradigms of nation-building and state formation remain foundational, even if historians are approaching the subject in novel ways. Influential Argentine scholar Carla Lois, who has called for more focus on maps as visual artifacts, has nevertheless titled a recent collection of her historical and theoretical essays *Mapas para la nación* (2014).⁴⁰ Two notable monographs following in the footsteps of Craib likewise demonstrate the persistent appeal of studies on 19th-century official cartographic projects. Magali Carrera's *Traveling from New Spain to Mexico* (2011) treats 19th-century Mexican mapmaking efforts, and particularly the 1858 and 1885 atlases of Antonio García Cubas, as a part of a larger visual culture, both domestic and international, of representing the young Mexican nation in everything from popular prints to photographs to travel literature. Where Craib saw cartography as a site of political struggle over geographical knowledge and social relations, Carrera reimagines it as part of a culturally contested display of Mexican identity.⁴¹ More recently, Nancy Appelbaum's *Mapping the Country of Regions* (2016) follows this visual culture approach while focusing on another state-sponsored geographic expedition, the Comisión Corográfica, which the government of New Granada (today Colombia) charged with surveying its diverse peoples and places in the 1850s. Finding that maps participated in the construction and judgment of distinctive national regions, each with its own racial, gender, environmental, and economic profile, Appelbaum also acknowledges that this visual and discursive fashioning is what really interests her, not cartography per se; her book is "therefore as much or more about complementary materials—pictures, travelogues, correspondence, and official reports—as it is about maps."⁴²

It remains to be seen whether these developments—the discovery of new types of maps to analyze, the continued emphasis on the nation-state as the primary cartographic context, and the conceptual turn to visual culture—will help consolidate map study as an approach to modern Latin American history and eventually, when brought back into conversation with the social relations of mapmaking that Craib emphasized, forge a distinctive regional contribution to the history of cartography. What is clear is that this ongoing diversification and reconceptualization complements another important trend among recent studies of modern Latin America: a tendency to integrate the analysis of maps and mapmaking into histories of other subjects, where the cartographic enterprise constitutes but one piece of the historical process of exploring and transforming space. So, for instance, we find Rachel St. John revisiting the mapping of the United States–Mexican border in the opening chapter of *Line in the Sand* (2011), but then promptly moving on to the political, military, economic, and social forces that created its lived existence as both a barrier and conduit between neighboring nations.⁴³ Similarly, while cartography is central to Lina del Castillo's *Crafting a Republic for the World* (2018), which tells the multi-layered story of republican state formation in post-colonial New Granada and then Colombia, so too are history, constitutional law, natural science, political economy, ethnography, and other forms of print culture.⁴⁴ But no book captures the simultaneous adoption and assimilation of cartographic history better than Susanna Hecht's sprawling *The Scramble for the Amazon and the Lost Paradise of Euclides da Cunha* (2013), which recovers the famous author's professional work as a surveyor alongside a capacious literary, environmental, and imperial history of the vast Brazilian rainforest around 1900.⁴⁵

4 | RISE AND STALL? STICK OR TWIST?

Given the ever-growing scholarship outlined above, it is safe to say that critical map studies have become commonplace within the field of Latin American history. These works have demonstrated that mapping was a ubiquitous element of colonization, state-formation, and nation-building; they have deepened our knowledge of specific cartographers and map circulation, especially among social and political elites; they have broadened earlier notions of what constituted a map and who could be considered a mapmaker; and they have identified innumerable cartographic sources that had been long overlooked (though in the modern field many remain). These efforts have dovetailed with those of scholars who are increasingly responding to the limited corpus of cartographic materials by making maps of their own. Notably, the past decade has seen historians and other researchers draw upon geographic information systems (GIS) to create digital maps that aim to visualize Indigenous territorialities, colonial jurisdictions, ever-changing cityscapes, and other spatial phenomena.⁴⁶ Digital mapmaking, which grew out of an earlier tradition of historical mapmaking, has especially sought to envision the spatial aspects of non-cartographic sources.⁴⁷ This digital scholarship has been accompanied by other efforts to think beyond the traditional cartographic corpus in imagining Latin America's spatial past, including collaborative ethnocartographic projects between scholars and communities.⁴⁸

The proliferation of maps and map study in recent scholarship might not yet be enough, however, to suggest that Latin American historiography has taken a cartographic turn, or that a specifically regional contribution to the global history of cartography has been made. For one thing, nearly a decade after Dym and Offen called for greater incorporation of map analysis in the Latin American history curriculum, little evidence exists to suggest that such a change has occurred.⁴⁹ For another, it is still too common in Latin American scholarship to begin with brief references to early foundational works—Harley (1992a), Monmonier (1996), Jacob (1996), Mundy (1996), Craib (2004)—and then quickly turn to the particular cartographic case at hand, without significantly engaging other map studies from across or beyond the region.⁵⁰ Fortunately, there are signs that historians of cartography elsewhere are ready to pay more attention to Latin American developments and frameworks. Over half of James Akerman's recent collection *Decolonizing the Map* (2017), which emerged from the influential Kenneth Nebenzahl, Jr. Lectures in the History of Cartography, was written by Latin America experts.⁵¹ Scholars of the region also played a leading role in the 2019 creation of H-Maps, a digital forum that is poised to shape future conversations and collaborations in the wider field.⁵² But more must be done to seize this opportunity.

If recent decades have started a cartographic turn in Latin American history, then, it is now time for some new twists. First, increased conceptual dialogue within and outside the region would move us beyond the imperial and national paradigms inherited from Latin America's cartographic past to embrace other spatial frames, including the Atlantic and Pacific worlds, the global, and the hemispheric. Second, more engagement with critical spatial theory would enable new lines of inquiry regarding race, ethnicity, gender, and sexuality, while challenging the epistemological and ontological underpinnings of Cartesian mapping. Contemporary countermapping initiatives—including participatory mapping, affective mapping, sound mapping, map art, and speculative cartography—beg the question of similar practices in the past and highlight the processual and contested nature of mapmaking itself. Third, histories of cartography would benefit from a renewed focus on the material relations underlying the spatial visions presented in maps. Discursive readings of maps are important, but we should not therefore treat regional or local notions of space as mere context, especially since the spatial practices were often more historically significant than the resulting map artifact. Fourth, greater attention should be paid to maps as archival materials, namely how their collection and curation shape our ability to understand them. This is crucial given the growing efforts to digitize and publish historical maps online, as such initiatives have augmented access and opportunities for intertextual readings while simultaneously deepening the divorce between maps and their accompanying documents and contexts of production. Fifth, the lessons learned from critical map histories should be applied to the maps that we ourselves produce. As historians harness the powers of online archival platforms or GIS-mapping projects, it is imperative that we consider the contextual forces, power relations, and visual cultures that shape our own works.

ORCID

Brian Bockelman  <https://orcid.org/0000-0002-8148-7361>

Jeffrey A. Erbig Jr  <https://orcid.org/0000-0002-9755-5015>

ENDNOTES

- ¹ Mundy, *The Mapping of New Spain*; Craib, *Cartographic Mexico*.
- ² Subsequent meetings of the Simposio Iberoamericano de Historia de la Cartografía took place in Mexico City (2008), São Paulo (2010), Lisbon (2012), Bogotá (2014), Santiago (2016), and Quito (2018). The “Mapping Latin America” panel at the 2006 Latin American Studies Association meeting in San Juan, Puerto Rico, had a similar effect for scholars based in North America; it too was followed by many other increasingly pan-American gatherings, such as the 2010 “Seeing the Nation: Cartography and Politics in Spanish America” workshop at the Universidad de los Andes (Bogotá) and the “Mapping Latin American Geographies” special session at the 2014 Conference of Latin American Geography in Panama City. Equally of note, the 27th International Conference on the History of Cartography was held in Belo Horizonte, Brazil in 2017, the first time that a Latin American country played host to this major biennial meeting of cartographic historians since its inception in 1964. More recently, the 2020 symposium of the International Society for the History of the Map was held in São Paulo, Brazil.
- ³ Dym and Offen, eds., *Mapping Latin America*, 1, 3. The other two showcase collections from this period are Mendoza Vargas and Lois, eds., *Historias d la cartografía de Iberoamérica*; and the 2010 “monograph” in *Araucaria* introduced by Dym, ed., “Mapeando patrias chicas y patrias grandes.” Also significant, though somewhat earlier, is the *Terra Brasilis* special issue “Cartografias Ibero-americanas.”
- ⁴ Mendoza Vargas and Lois, eds., *Historias de la cartografía de Iberoamérica*, 13.
- ⁵ For a brief overview, see Edney, “History of Cartography Project.”
- ⁶ Particularly influential for scholars of Latin America was the posthumous publication of Harley’s major essays, which appeared first in 2001 as Harley, *The New Nature of Maps*. A Spanish translation soon followed: Harley, *La nueva naturaleza de mapas*.
- ⁷ The extensive bibliographies of *Imago Mundi*, the flagship journal of the history of cartography, record over 150 publications on Latin American topics from 2010 to 2019.
- ⁸ Examples include Fúrlong Cárdiff, *Cartografía jesuítica del Rio de la Plata*; Machuca Martínez, *Mapas históricos del Paraguay Gigante*; Cortesão, *História do Brasil nos velhos mapas*; Sampedro V., *Atlas histórico-geográfico del Ecuador*.
- ⁹ Mundy, “Mesoamerican Cartography”; Gartner, “Mapmaking in the Central Andes”; Whitehead, “Indigenous Cartography in Lowland South America and the Caribbean.” See also, from this early period, Gruzinski, “Colonial Indian Maps in Sixteenth-Century Mexico.”
- ¹⁰ Mignolo, *The Darker Side of the Renaissance*, 309. See also Boone and Mignolo, *Writing without Words*; Verdesio, “Hacia la descolonización de la mirada geográfica.”
- ¹¹ Mignolo, “Putting the Americas on the Map”; Harley, “Rereading the Maps of the Columbian Encounter.”
- ¹² Mundy, *The Mapping of New Spain*; Leibsohn, “Colony and Cartography.”
- ¹³ 1992, “Addendum: Three Indigenous Maps”; Russo, *El realismo circular*; Carrasco and Sessions, *Cave, City, and Eagle’s Nest*; Asselbergs, *Conquered Conquistadors*; 2014, “The Ethnohistorical Map in New Spain”; León-Portilla and Aguilera, *Mapa de México-Tenochtitlan*; León Villalobos, et al., “Mapping political space and local knowledge”; Hidalgo, *Trail of Footprints*.
- ¹⁴ Examples of Mesoamerican-focused contributions to North American histories of cartography include Boone, “Maps of Territory, History, and Community”; Mundy, “National Cartography and Indigenous Space.”
- ¹⁵ Offen, “Creating Mosquitia”; Scott, *Contested Territory*, 49–74; Costa, “Viajes en la frontera”; Barcelos, “A cartografia indígena no Rio da Prata”; Chauca Tapia, “Contribución indígena a la cartografía”; 2016, “Borderline Offerings”; Enrique and Pensa, “Mapas sobre el Cono Sur americano.”
- ¹⁶ Padrón, *The Spacious Word*; Portuondo, *Secret Science*. See also Kagan, “Arcana Imperii”; and Sandman, “Controlling Knowledge.” For a critique of the notion of imperial secrecy, see Edney, “Knowledge and Cartography,” 96–97.
- ¹⁷ Davies, *Renaissance Ethnography*.
- ¹⁸ Furtado, *O mapa que inventou o Brasil*. See also Guerreiro, *Os tratados de delimitação*; Ferreira, *O Tratado de Madrid*; Magalhães, “Mundos em miniatura.”

- ¹⁹ 1991, *Viagens de exploração geográfica*; Lucena Giraldo, *Laboratorio tropical*; Siquiera Bueno and Kantor, "A outra face das expedições." Most other Spanish- and Portuguese-language scholarship on the boundary commissions have been biographical studies of individual mapmakers.
- ²⁰ Dias, "Jesuit Maps and Political Discourse"; Buisseret, "Jesuit Cartography"; Asúa, *Science in the Vanished Arcadia*, 164–210.
- ²¹ 2001, *A formação do espaço brasileiro*.
- ²² Safier, *Measuring the New World*.
- ²³ Burnett, *Masters of All They Surveyed*; Sutton, *Capitalism and Cartography*. On Brazil as an island, see Costa, "De Xarayes ao Pantanal"; Kantor, "Usos diplomáticos da ilha-Brasil."
- ²⁴ Candiani, *Dreaming of Dry Land*.
- ²⁵ Hardoy, *Cartografía urbana colonial*; Kagan, *Urban Images of the Hispanic World*; Reinhartz and Saxon, eds., *Mapping and Empire*; Moncada Maya, "La cartografía española en América"; Oliveira, *Cartógrafos para toda a Terra*, 2: 551–692; Scott, "At the Center of Everything."
- ²⁶ 2009, "The Indies of Knowledge"; Scott, "Taking the Enlightenment Underground"; Valverde Pérez, "Underground Knowledge."
- ²⁷ 2011, *Un país malsano*; Arias and Meléndez, *Mapping Colonial Spanish America*.
- ²⁸ Holden, *Mexico and the Survey of Public Lands*; Mendoza Vargas, ed., *México a través de los mapas*.
- ²⁹ Rebert, *La Gran Línea*. See also Rebert, "Trabajos desconocidos, ingenieros olvidados."
- ³⁰ Craib, *Cartographic Mexico*, 55–192. See also 2002, "A Nationalist Metaphysics"
- ³¹ See, among many others, Moncada Maya, "La construcción del territorio"; Capello, "Mapas, obras y representaciones sobre la nación y el territorio"; González Leiva, "Primeros levantamientos cartográficos generales de Chile con base científica"; and Venegas Fornias, "La isla sobre el papel."
- ³² 2010, "Mapas em transito"; Del Castillo, "La Gran Colombia de la Gran Bretaña."
- ³³ Díaz Ángel, et al., *Ensamblando la nación*; Duque Muñoz, "Territorio nacional, cartografía y poder en la Nueva Granada (Colombia) a mediados del siglo XIX"; Nieto Olarte, et al., *La obra cartográfica de Francisco José de Caldas*; 2007, eds., *Cuatro siglos de expresiones geográficas del istmo centroamericano*, 1500–1900.
- ³⁴ Williams, "La exploración de La Patagonia Central y los mapas de Llwyd Ap Iwan." See also Andermann, *The Optic of the State*, 119–184; and Lois, "La Patagonia en el mapa de la Argentina moderna."
- ³⁵ Mendoza Vargas and Figueirôa, "El mapa geológico de México y Brasil, 1850–1900"; Figueirôa and Figueirôa (2007)
- ³⁶ Mazzitelli Masticchio, "La cartografía militar en la Argentina"; Capello, "Mapas, obras y representaciones sobre la nación y el territorio."
- ³⁷ Martin, "Mapping an Empire"; Lasso, "A Canal without a Zone"; Dym, "'Mapitas,' *Geografías visualizadas*, and the Editorial *Piedra Santa*"; Knapp, "Mapping Flower Plantations in the Equatorial High Andes."
- ³⁸ Pearson and Heffernan, "The American Geographical Society's Map of Hispanic America"; Pearson and Heffernan, "Revealing the 'Lost World'"; Lois, "Reescrituras de una misma geografía"; Lois, "El mapa del Centenario."
- ³⁹ Examples include Gallini and Castro Osorio, "Modernity and the Silencing of Nature in Nineteenth-Century Maps of Bogotá" and many of the contributions to Vega Palma, ed., *Del mundo al mapa y del mapa al mundo*. None of this is to deny the continued innovation taking place within such "traditional" areas of Latin American map study. On states and boundaries, for example, see Ferretti, "A New Map of the Franco-Brazilian Border Dispute (1900)"; and Newcomer, "Delineating the Peace."
- ⁴⁰ Lois, *Mapas para la nación*. See also Mazzitelli Masticchio, *Imaginar, medir, representar y reproducir el territorio*.
- ⁴¹ Carrera, *Traveling from New Spain to Mexico*. See also García Rojas, *Historia de la visión territorial del Estado mexicano*.
- ⁴² Appelbaum, *Mapping the Country of Regions*, 8.
- ⁴³ St. John, *Line in the Sand*.
- ⁴⁴ Del Castillo, *Crafting a Republic for the World*.
- ⁴⁵ Hecht, *Scramble for the Amazon*.
- ⁴⁶ Examples include the Spatial History Project (Stanford University); the Atlas Digital da América Lusa (Universidade Nacional de Brasília); Domains (Florida International University); HGIS de las Indias (University of Graz); ImagineRio (Rice

- University); Native Land (Native Land Digital); Erbig, "Borderline Offerings"; and Mikecz, "Peering beyond the Imperial Gaze."
- ⁴⁷ Earlier efforts at historical mapmaking include Gerhard et al., *Geografía histórica de la Nueva España*; Maeder and Gutiérrez, *Atlas territorial y urbano de las misiones*.
- ⁴⁸ See, for example, Salisbury, "GIS Maps and the Amazon Borderlands"; Stocks and Taber, "Ironies of Conservation Mapping"; and Sletto, "Inclusions, erasures and emergences."
- ⁴⁹ Dym and Offen, "Maps and the Teaching of Latin American History."
- ⁵⁰ One important exception is chapter 3 of Lois, *Mapas de la nación*, which situates Latin American scholarship in relation to theoretical developments in the history of cartography more broadly.
- ⁵¹ See the essays by Raymond Craib, Magali Carrera, Lina del Castillo, and Jordana Dym in Akerman, ed., *Decolonizing the Map*. The Nebenzahl Lectures, which have been held at the Newberry Library in Chicago every few years since their founding in 1966, are widely attended by scholars interested in new directions in the history of cartography.
- ⁵² See <https://networks.h-net.org/h-maps>.

REFERENCES

- Akerman, J. R. (Ed.) (2017). *Decolonizing the map: Cartography from colony to nation*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226422817.001.0001>
- Almeida, A. F. de. (2001). *A formação do espaço brasileiro e o projeto do Novo Atlas da América Portuguesa (1713–1748)*. Lisbon: Comissão Nacional Para as Comemorações dos Descobrimentos Portugueses.
- Andermann, J. (2007). *The optic of the state: Visuality and power in Brazil and Argentina*. Pittsburgh: University of Pittsburgh Press. <https://doi.org/10.2307/j.ctv10tq44x>
- Appelbaum, N. (2016). *Mapping the country of regions: The Chorographic Commission of nineteenth-century Colombia*. Chapel Hill: University of North Carolina Press. <https://doi.org/10.5149/northcarolina/9781469627441.001.0001>
- Arias, S., & Meléndez, M. (Eds.) (2002). *Mapping colonial Spanish America: Places and commonplaces of identity, culture, and experience*. Lewisburg: Bucknell University Press.
- Asselbergs, F. G. L. (2008). *Conquered conquistadors: The Lienzo de Quauhquechollan, A Nahua vision of the conquest of Guatemala*. Boulder: University Press of Colorado.
- Asúa, M. (2014). *Science in the vanished Arcadia: Knowledge of nature in the Jesuit missions of Paraguay and Río de la Plata*. Leiden: Brill. <https://doi.org/10.1163/9789004256774>
- Barcelos, A. H. F. (2010). A cartografia indígena no Rio da Prata colonial. *X Encontro Estadual de História*, 1–15.
- Boone, E. H. (1998). Maps of territory, history, and community in Aztec Mexico. In G. M. Lewis (Ed.), *Cartographic encounters: Perspectives on Native American mapmaking and map use* (pp. 111–131). Chicago: University of Chicago Press.
- Boone, E. H., & Mignolo, W. (Eds.) (1994). *Writing without words: Alternative literacies in Mesoamerica and the Andes*. Durham: Duke University Press. <https://doi.org/10.1215/9780822379263>
- Bornholt, J. P., & Hempstead, W. H. (Eds.) (2007). *Cuatro siglos de expresiones geográficas del istmo centroamericano, 1500–1900*. Guatemala City: Universidad Francisco Morroquín.
- Buisseret, D. (1997). Jesuit cartography in Central and South America. In J. A. Gagliano & C. E. Ronan (Eds.), *Jesuit encounters in the new world: Jesuit chroniclers, geographers, educators, and missionaries in the Americas, 1549–1767* (pp. 113–162). Rome: Bibliotheca Instituti Historici.
- Burnett, D. G. (2000). *Masters of all they surveyed: Exploration, geography, and a British El Dorado*. Chicago: University of Chicago Press.
- Butzer, K., & Williams, B. (1992). Addendum: Three indigenous maps from New Spain dated ca. 1580. *Annals of the Association of American Geographers*, 82(3), 536–542.
- Candiani, V. S. (2014). *Dreaming of dry land: Environmental transformation in colonial Mexico City*. Stanford: Stanford University Press.
- Capello, E. (2010). Mapas, obras y representaciones sobre la nación y el territorio. De la corografía al Instituto Geográfico Militar. In V. Coronel & M. Prieto (Eds.), *Celebraciones centenarias y negociaciones por la nación ecuatoriana* (pp. 77–121). Quito: FLASCO, Sede de Ecuador, Ministerio de Cultura.
- Carrasco, D., & Sessions, S. (Eds.) (2007). *Cave, city, and eagle's nest: An interpretive journey through the Mapa de Cuauhtinchan no. 2*. Albuquerque: University of New Mexico Press.
- Carrera, M. M. (2011). *Traveling from New Spain to Mexico: Mapping practices of nineteenth-century Mexico*. Durham: Duke University Press. <https://doi.org/10.1215/9780822394105>
- Cartografías Ibero-americanas. (2005–2007). *Terra Brasilis: Revista de História do Pensamento Geográfico no Brasil* 7–8–9 (2005–2006–2007).

- Chauca Tapia, R. (2015). Contribución indígena a la cartografía del Alto Ucayali a fines del siglo XVII. *Bulletin de l'Institut français d'études andines*, 44(1), 117–138.
- Cortêsão, J. (1971). *História do Brasil nos velhos mapas*, 2 vols. Rio de Janeiro: Ministério das Relações Exteriores, Instituto Rio Branco.
- Costa, M. d. F. (2007). De Xarayes ao Pantanal: a cartografia de um mito geográfico. *Revista do Instituto de Estudos Brasileiros*, (45), 21–36.
- Costa, M. d. F. (2009). Viajes en la frontera colonial: Historias de una expedición de límites en la América Meridional (1753-1754). *Anales del Museo de América*, 16, 113–126.
- Craib, R. B. (2002). A nationalist metaphysics: State fixations, national maps, and the geo-historical imagination in nineteenth-century Mexico. *Hispanic American Historical Review*, 82(1), 33–68.
- Craib, R. B. (2004). *Cartographic Mexico: A history of state fixations and fugitive landscapes*. Durham: Duke University Press. <https://doi.org/10.1215/9780822385943>
- Davies, S. (2016). *Renaissance ethnography and the invention of the human: New worlds, maps, and monsters*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139568128>
- Del Castillo, L. (2010). La Gran Colombia de la Gran Bretaña: La importancia del lugar en la producción de imágenes nacionales. *Araucaria*, 12(24), 124–149.
- Del Castillo, L. (2018). *Crafting a republic for the world: Scientific, geographic, and historiographic inventions of Colombia*. Lincoln: University of Nebraska Press. <https://doi.org/10.2307/j.ctvgd1ts>
- Dias, C. L. (2012). Jesuit maps and political discourse: The Amazon River of Father Samuel Fritz. *The Americas*, 69(1), 95–116.
- Díaz Ángel, S., Muñoz Arbeláez, S., & Nieto Olarte, M. (2010). *Ensamblando la nación: Cartografía y política en la historia de Colombia*. Ediciones Uniandes: Bogotá.
- Domingues, Â. (1991). *Viagens de exploração geográfica na amazônia em finais do século XVIII: Política, ciência e aventura*. Série Atlântica Lisbon: Instituto de Historia de Além-Mar.
- Duque Muñoz, L. (2008). Territorio nacional, cartografía y poder en la Nueva Granada a mediados del siglo XIX. *Les Cahiers ALHIM*, 15, 119–137.
- Dym, J. (2010). Mapeando patrias chicas y patrias grandes: Cartografía e historia Iberoamericana, siglos XVIII–XX. *Araucaria: Revista Iberoamericana de Filosofía, Política Y Humanidades*, 12(24), 99–217.
- Dym, J. (2015). “Mapitas,” Geografías Visualizadas and the Editorial Piedra Santa: A Mission to Democratize Cartographic Literacy in Guatemala. *Journal of Latin American Geography*, 14(3), 245–272. <https://doi.org/10.1353/lag.2015.0047>
- Dym, J., & Offen, K. (Eds.) (2011). *Mapping Latin America: A cartographic reader*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226921815.001.0001>
- Dym, J., & Offen, K. (2012). Maps and the teaching of Latin American history. *Hispanic American Historical Review*, 92(2), 213–244.
- Edney, M. H. (2011). Knowledge and cartography in the early Atlantic. In N. Canny & P. D. Morgan (Eds.), *The Oxford handbook of the Atlantic World: 1450–1850* (pp. 87–112). Oxford: Oxford University Press.
- Edney, M. H. (2015). History of cartography project. In M. Monmonier (Ed.), *The history of cartography* (Vol. 6) (pp. 614–616). Chicago: University of Chicago Press.
- El Jaber, L. (2011). *Un país malsano: La conquista del espacio en las crónicas del Río de la Plata, siglos XVI y XVII*. Buenos Aires: Beatriz Viterbo Editora.
- Enrique, L. A., & Pensa, M. L. (2018). Mapas sobre el Cono Sur americano. In L. R. Nacuzzi (Ed.), *Entre los datos y los formatos: indicios para la historia indígena de las fronteras en los archivos coloniales* (pp. 116–136). Buenos Aires: Centro de Antropología Social IDES.
- Erbig Jr., J. A. (2016). Borderline Offerings: Tolderías and Mapmakers in the Eighteenth-Century Río de la Plata. *Hispanic American Historical Review*, 96(3), 445–480.
- Ferreira, M. O. C. (2001). *O Tratado de Madrid e o Brasil meridional: Os trabalhos demarcadores das partidas do sul e a sua produção cartográfica (1749-1761)*. Lisbon: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses.
- Ferretti, F. (2015). A new map of the Franco-Brazilian border dispute (1900). *Imago Mundi*, 67(2), 229–241. <https://doi.org/10.1080/03085694.2015.1027554>
- Figueirôa, S., & Figueirôa, S. F. d. M. (2007). Geological surveys in the tropics: The Brazilian experience (1875–1934). *Earth Sciences History*, 26(1), 151–171. <https://doi.org/10.17704/eshi.26.1.18hx2723w881380r>
- Fúrlong Cárdiff, G. (1936). *Cartografía jesuítica del Río de la Plata*, vols. 1–2. Talleres S. A. Casa Jacobo Peuser: Buenos Aires.
- Furtado, J. F. (2009). The Indies of knowledge, or the imaginary geography of the discoveries of gold in Brazil. In D. Bleichmar, P. de Vos, K. Huffine, & K. Sheehan (Eds.), *Science in the Spanish and Portuguese Empires, 1500–1800*, (pp. 178–197). Stanford: Stanford University Press.
- Furtado, J. F. (2013). *O mapa que inventou o Brasil*. Rio de Janeiro: Versal.

- Gallini, S., & Osorio, C. C. (2015). Modernity and the silencing of nature in nineteenth-century Bogotá. *Journal of Latin American Geography*, 14(3), 91–125. <https://doi.org/10.1353/lag.2015.0028>
- García Rojas, I. B. (2012). *Historia de la visión territorial del Estado mexicano: Representaciones político-culturales del territorio*. Guadalajara: Universidad de Guadalajara.
- Gartner, W. G. (1998). Mapmaking in the Central Andes. In D. Woodward & G. M. Lewis (Eds.), *The history of cartography: Cartography in the traditional Africa, America, Arctic, Australian, and Pacific societies* (pp. 257–300). Chicago: University of Chicago Press.
- Gerhard, P., Mastrangelo, S., & Piggott, R. (1986). *Geografía histórica de la Nueva España, 1519–1821*. Mexico City: Universidad Nacional Autónoma de México.
- González Leiva, J. I. (2007). Primeros levantamientos cartográficos generales de Chile con base científica: Los mapas de Claudio Gay y Amado Pissis. *Revista Geográfica Norte Grande*, 38, 21–44.
- Gruzinski, S. (1987). Colonial Indian maps in sixteenth-century Mexico: An essay in mixed cartography. *Res: Anthropology and Aesthetics*, 13, 46–61.
- Guerreiro, I. (1999). *Os tratados de delimitação do Brasil e a cartografia da época*. Lisbon: Chaves Ferreira-Publicações.
- Hardoy, J. E. (1991). *Cartografía urbana colonial de América Latina y el Caribe*. Buenos Aires: Instituto Internacional de Medio Ambiente y Desarrollo-IIED-América Latina: Grupo Editor Latinoamericano.
- Harley, J. B. (1992a). Deconstructing the Map. In T. J. Barnes & J. S. Duncan (Eds.), *Writing worlds: Discourse, text and metaphor in the representation of landscape* (pp. 277–289). London: Routledge.
- Harley, J. B. (1992b). Rereading the maps of the Columbian encounter. *Annals of the Association of American Geographers*, 82(3), 522–542. <https://doi.org/10.1111/j.1467-8306.1992.tb01973.x>
- Harley, J. B. (2001). *The new nature of maps: Essays in the history of cartography*. Baltimore: Johns Hopkins University Press.
- Harley, J. B. (2005). *La nueva naturaleza de mapas. Ensayos sobre la historia de la cartografía*. Mexico City: Fondo de Cultura Económica.
- Hecht, S. B. (2013). *The scramble for the Amazon and the lost paradise of Euclides da Cunha*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226322834.001.0001>
- Hidalgo, A. (2019). *Trail of footprints: A history of indigenous maps from viceregal Mexico*. Austin: University of Texas Press.
- Hidalgo, A., & López, J. F. (2014). The ethnohistorical map in New Spain. *Ethnohistory*, 61(2), 223–360.
- Holden, R. H. (1994). *Mexico and the survey of public lands: The management of modernization, 1876–1911*. DeKalb: Northern Illinois Press.
- Jacob, C. (1996). Toward a cultural history of cartography. *Imago Mundi*, 48, 191–198. <https://doi.org/10.1080/03085699608592842>
- Kagan, R. (2000). *Urban images of the Hispanic world, 1493–1793*. New Haven: Yale University Press.
- Kagan, R. (2001). Arcana Imperii: Mapas, ciencia y poder en la corte de Felipe II. In F. Pereda & F. Marias (Eds.), *El Atlas del Rey Planeta: La "Descripción de España y de las costas y puertos de sus reinos" de Pedro Texeira (1634)* (pp. 49–70). Madrid: Nerea.
- Kantor, I. (2010). Mapas em trânsito: Projeções cartográficas e processo de emancipação política do Brasil (1779–1822). *Araucaria*, 12(24), 110–123.
- Kantor, I. (2007). Usos diplomáticos da ilha-Brasil: Polêmicas cartográficas e historiográficas. *Varia História*, 23(37), 70–80.
- Knapp, G. (October 2015). Mapping flower plantations in the equatorial high Andes. *Journal of Latin American Geography*, 14(3), 229–244. <https://doi.org/10.1353/lag.2015.0044>
- Lasso, M. (October 2015). A canal without a zone: Conflicting representations of the Panama Canal. *Journal of Latin American Geography*, 14(3), 157–174. <https://doi.org/10.1353/lag.2015.0035>
- Leibsohn, D. (1995). Colony and cartography: Shifting signs on indigenous maps of New Spain. In C. J. Farago (Ed.), *Reframing the renaissance: Visual culture in Europe and Latin America, 1450–1650* (pp. 265–281). New Haven: Yale University Press.
- León Villalobos, J. M., Trejo, E. O., García, V. V., McCall, M. K., Galarza, G. A., & Olguin, M. O. (2018). Mapping political space and local knowledge: Power and boundaries in a Hñahñu (Otomi) territory in Valle del Mezquital, Mexico, 1521–1574. *Journal of Historical Geography*, 60, 64–76. <https://doi.org/10.1016/j.jhg.2018.01.003>
- León-Portilla, M., & Aguilera, C. (2016). *Mapa de México-Tenochtitlan y sus contornos hacia 1550*. Mexico City: Ediciones Era.
- Lois, C. (2007). La Patagonia en el mapa de la Argentina moderna: Política y 'deseo territorial' en la cartografía oficial Argentina en la segunda mitad del siglo XIX. In P. N. Floria (Ed.), *Paisajes del progreso: La resignificación de la Patagonia Norte, 1880–1916* (pp. 107–134). Neuquén: EDUCO, Universidad Nacional de Comahue.
- Lois, C. (2010). El mapa del Centenario o un espectáculo de la modernidad argentina en 1910. *Araucaria*, 12(24), 176–196.
- Lois, C. (2014). *Mapas para la nación: Episodios en la historia de la cartografía argentina*. Buenos Aires: Editorial Biblos.
- Lois, C. (2015). Reescrituras de una misma geografía: Tensiones entre el Instituto Geográfico Militar (Buenos Aires), el Map of Hispanic America (Nueva York) y la Carte du Monde au millionième (Paris-Londres). *Journal of Latin American Geography*, 14(3), 201–227. <https://doi.org/10.1353/lag.2015.0041>
- Lucena Giraldo, M. (1993). *Laboratorio tropical: La expedición de límites al Orinoco, 1750–1767*. CSIC-España: Caracas.

- Machuca Martínez, M. (1951). *Mapas históricos del Paraguay Gigante*. Asunción: Tallers Gráficos "El Arte" de Vazquez e Hijo.
- Maeder, E. J. A., & Gutiérrez, R. (2009). *Atlas territorial y urbano de las misiones jesuíticas de guaraníes. Argentina, Paraguay e Brasil*. Seville: Consejería de Cultura.
- Magalhães, J. R. (2009). Mundos em miniatura: aproximação a alguns aspectos da cartografia portuguesa do Brasil (séculos XVI a XVIII). *Anais do Museu Paulista*, 17(1), 69–94.
- Martin, J. W. (2011). Mapping an empire: Tourist cartographies of the Caribbean in the early twentieth century. *Early Popular Visual Culture*, 9(1), 1–14.
- Moncada Maya, J. O. (2002). La construcción del territorio: La cartografía de México independiente, 1821–1910. In H. Mendoza Vargas, E. Ribera Carbó & P. Sunyer Martín (Eds.), *La integración del territorio en una idea de Estado: México y España (1820–1940)* (pp. 118–132). Mexico City: Universidad Autónoma de México, Instituto de Geografía.
- Moncada Maya, J. O. (2011). La cartografía española en América durante el siglo XVIII: la actuación de los ingenieros militares. *Navigator*, 7(14), 20–31.
- Mazzitelli Masticchio, M. (2008). La cartografía militar en la Argentina: Hacia la especialización topográfica (1865–1912). *Boletín del Centro Argentino de Topografía*, 44(2), 27–33.
- Mazzitelli Masticchio, M. (2017). *Imaginar, medir, representar y reproducir el territorio: Una historia de las prácticas y las políticas cartográficas del Estado Argentino (1904–1941)*. Buenos Aires: Facultad de Filosofía y Letras, Universidad de Buenos Aires.
- Mendoza Vargas, H. (Ed.) (2000). *México a través de los mapas*. Plaza y Valdés Editores: Mexico City.
- Mendoza Vargas, H. & Lois, C. (Eds.) (2009). *Historias de la cartografía de Iberoamérica: Nuevos caminos, viejos problemas*. Mexico City: Sección Editorial del Instituto Geográfico de la Universidad Autónoma de México.
- Mendoza Vargas, H., & Figueirôa, S. F. d. M. (2009). El mapa geológico de México y Brasil, 1850–1900. In H. Mendoza Vargas & C. Lois (Eds.), *Historias de la cartografía de Iberoamérica: Nuevos caminos, viejos problemas* (pp. 467–494). Mexico City: Sección Editorial del Instituto Geográfico de la Universidad Autónoma de México.
- Mignolo, W. (1992). Putting the Americas on the map (geography and the colonization of space). *Colonial Latin American Review*, 1(1–2), 25–63. <https://doi.org/10.1080/10609169208569788>
- Mignolo, W. (1995). *The darker side of the renaissance: Literacy, territoriality, and colonization*. Ann Arbor: University of Michigan Press.
- Mikecz, J. M. (2017). Peering beyond the imperial gaze: Using digital tools to construct a spatial history of conquest. *International Journal of Humanities and Arts Computing*, 11(1), 39–54.
- Monmonier, M. S. (1996). *How to Lie with Maps* (2nd ed.). Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226029009.001.0001>
- Mundy, B. E. (1996). *The mapping of New Spain: Indigenous cartography and the maps of the Relaciones Geográficas*. Chicago: University of Chicago Press.
- Mundy, B. E. (1998). Mesoamerican cartography. In D. Woodward & G. M. Lewis (Eds.), *The history of cartography: Cartography in the traditional Africa, America, Arctic, Australian, and Pacific societies* (pp. 183–256). Chicago: The University of Chicago Press.
- Mundy, B. E. (2011). National cartography and indigenous space in Mexico. In M. Brückner (Ed.), *Early American cartographies*. Chapel Hill: University of North Carolina Press.
- Newcomer, D. (2018). Delineating the peace: Making Oaxaca's state boundaries, 1856–1912. *Journal of Latin American Studies*, 50(2), 291–321. <https://doi.org/10.1017/S0022216X17000426>
- Nieto Olarte, M., Muñoz Arbelaz, S., Díaz Piedrahita, S., & de Arias Greiff, J. (2006). *La obra cartográfica de Francisco José de Caldas*. Bogotá: Ediciones Uniandes.
- Offen, K. (2007). Creating Mosquitia: Mapping Amerindian spatial practices in eastern Central America, 1629–1779. *Journal of Historical Geography*, 33, 254–282. <https://doi.org/10.1016/j.jhg.2006.05.003>
- Oliveira, F. R. d. (Ed.) (2015). *Cartógrafos para toda a Terra: Produção e circulação do saber cartográfico ibero-americano. Agentes e contextos*. Lisboa: Biblioteca Nacional de Portugal.
- Padrón, R. (2004). *The spacious world: Cartography, literature, and empire in early modern Spain*. Chicago: University of Chicago Press.
- Pearson, A., & Heffernan, M. (2009). The American geographical society's map of Hispanic America: Million-scale mapping between the wars. *Imago Mundi*, 61(2), 215–243. <https://doi.org/10.1080/03085690902923630>
- Pearson, A., & Heffernan, M. (2015). Revealing the 'lost world': The American Geographical Society and the mapping of Roraima during the 1930s. *Journal of Latin American Geography*, 14(3), 175–200. <https://doi.org/10.1353/lag.2015.0038>
- Portuondo, M. M. (2009). *Secret science: Spanish cosmography and the New World*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226675374.001.0001>
- Rebert, P. (2001). *La gran línea: Mapping the United States–Mexico boundary, 1849–1857*. Austin: University of Texas Press.
- Rebert, P. (2005). Trabajos desconocidos, ingenieros olvidados: Unknown works and forgotten engineers of the Mexican Boundary Commission. In D. Reinhartz & G. D. Saxon (Eds.), *Mapping and empire: Soldier-engineers on the Southwestern Frontier* (pp. 156–184). Austin: University of Texas Press.

- Reinhartz, D., & Saxon, G. D. (Eds.) (2005). *Mapping and empire: Soldier-engineers on the southwestern frontier*. Austin: University of Texas Press.
- Russo, A. (2004). *El realismo circular: Tierras, espacios y paisajes de la cartografía novohispana, siglos XVI y XVII*. Mexico City: Universidad Nacional Autónoma de México; Instituto de Investigaciones Estéticas.
- Safier, N. (2008). *Measuring the new world: Enlightenment science and South America*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226733562.001.0001>
- Sampedro V. F. (1990). *Atlas histórico-geográfico del Ecuador: Con 26 mapas cromografiados y 120 fotografías a color*. P. Bustos: Quito.
- Sandman, A. (2008). Controlling knowledge: Navigation, cartography, and secrecy in the early modern Spanish Atlantic. In J. Delbourgo & N. Dew (Eds.), *Science and Empire in the Atlantic World* (pp. 31–51). New York: Routledge.
- Scott, H. V. (2009). *Contested territory: Mapping Peru in the sixteenth and seventeenth centuries*. South Bend: University of Notre Dame Press.
- Scott, H. V. (2015a). At the center of everything: Regional rivalries, imperial politics, and the mapping of the Mosestenes frontier in late colonial Bolivia. *Hispanic American Historical Review*, 95(3), 395–426.
- Scott, H. V. (2015b). Taking the enlightenment underground: Mining spaces and cartographic representation in the late colonial Andes. *Journal of Latin American Geography*, 14(3), 7–34.
- Siquiera Bueno, B. P., & Kantor, I. (2015). A outra face das expedições científico-demarcatórias na Amazônia: o coronel Francisco Requena y Herrera e a comitiva castelhana. In F. R. de Oliveira (Ed.), *Cartógrafos para toda a Terra: Produção e circulação do saber cartográfico ibero-americano. Agentes e contextos* (pp. 243–264). Lisbon: Biblioteca Nacional de Portugal.
- Sletto, B. (2015). Inclusions, erasures and emergences in an indigenous landscape: Participatory cartographies and the makings of affective place in the Sierra de Perijá, Venezuela. *Environment and Planning D: Society and Space*, 33(5), 925–944. <https://doi.org/10.1177/0263775815604927>
- St. John, R. (2011). *Line in the sand: A history of the Western U.S.–Mexico border*. Princeton University Press: Princeton.
- Sutton, E. A. (2015). *Capitalism and cartography in the Dutch golden age*. Chicago: The University of Chicago Press. <https://doi.org/10.7208/chicago/9780226254814.001.0001>
- Vega Palma, A. (Ed.) (2017). *Del mundo al mapa y del mapa al mundo: Objetos, escalas e imaginarios del territorio*. Santiago: Universidad de Chile and Pontificia Universidad Católica de Chile.
- Venegas Fornias, C. (2007). La isla sobre el papel: Dos mapas monumentales de Cuba en el siglo XIX. *Terra Brasilis: Revista de História do Pensamiento Geográfico no Brasil*, 7–8–9, 200–221.
- Verdesio, G. (1999). Hacia la descolonización de la mirada geográfica: Las prácticas territoriales indígenas en la "prehistoria" de la ribera norte del Río de la Plata. *Revista Iberoamericana*, 65(186), 59–80.
- Whitehead, N. L. (1998). Indigenous cartography in lowland South America and the Caribbean. In D. Woodward & G. M. Lewis (Eds.), *The history of cartography: Cartography in the traditional Africa, America, Arctic, Australian, and Pacific societies* (pp. 301–326). Chicago: The University of Chicago Press.
- Williams, F. (2009). La exploración de La Patagonia Central y los mapas de Llwyd Ap Iwan. In H. Mendoza Vargas & C. Lois (Eds.), *Historias d la cartografía de Iberoamérica: Nuevos caminos, viejos problemas* (pp. 211–227). Mexico City: Sección Editorial del Instituto Geográfico de la Universidad Autonoma de México.

AUTHOR BIOGRAPHIES

Brian Bockelman is Associate Professor of History at Ripon College in Ripon, Wisconsin.

Jeffrey A. Erbig, Jr., is Assistant Professor of Latin American and Latino Studies at the University of California, Santa Cruz.

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