

Entangled Fates: French-Trained Naturalists, the First Colombian Republic, and the Materiality of Geopolitical Practice, 1819–1830

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Abstract When recognition of independence lay tantalizingly out of reach, officials of the first Colombian republic devoted funds and expertise toward hiring French-trained naturalists for an expedition. These officials' plan to gain diplomatic recognition of Colombia through European scientific patronage networks initially seemed poised to work. As promises of Colombian platinum piqued British moneylenders' interest, French mapmakers etched the naturalists' early findings onto copperplates. But both the expedition and the Colombian republic emerged amid the transatlantic geopolitical changes and local economic and political crises of the 1820s. The illness and death of key actors compounded these uncertainties. Drawing on published and manuscript correspondence, memoirs, and the naturalists' findings, in addition to a close reading of changes made to French-printed maps, this essay explores the entangled fates of the expedition and the Colombian republic to reveal the materiality and spatiality of natural history knowledge production and the praxis of geopolitics.

After leading patriot troops to victory against the royalists at Boyacá in August 1819, Simón Bolívar journeyed back to Angostura, the provisional seat of Venezuela's independence government. During Bolívar's absence, tensions among patriot leaders ran high. Several Venezuelan generals detested Vice President Francisco Antonio Zea, a botanist from New Granada with little battlefield experience. They forced his resignation.¹ Bolívar arrived in Angostura in December and skillfully restored confidence among patriot generals. Zea resumed his leadership role and facilitated the passage of the foundational

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1. Manuel Torres to John Quincy Adams, Washington, DC, 10 Dec. 1819, in Manning, *Diplomatic Correspondence*, 2:1183.

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law creating the Colombian republic, which consolidated the international debts amassed by Venezuela and New Granada during the war.² Bolívar extricated Zea from prickly Angostura politics by appointing him minister plenipotentiary for Colombia before foreign powers, but saving Zea's political face in Angostura was not the primary goal. The stakes were existential. Zea would acquire the loans, supplies, and mercenaries needed to fight the war. Without diplomatic recognition, the war could drag on indefinitely. Of all the men present at Angostura, Zea was best connected to an elite network of scientific luminaries in Europe. Zea's social and professional capital could be most effectively deployed to win official diplomatic recognition of Colombia's independence from the Spanish monarchy.

France, Great Britain, and the United States watched the protracted war between Spain and Spanish America from the sidelines. They did not want to alienate Spain, yet all coveted Spanish America's valuable markets and resources.³ The resounding military victory at Boyacá allowed Bolívar to grant Zea a broad mandate, one modeled on the United States' appointment of Benjamin Franklin as minister plenipotentiary before European courts.⁴ Just as the inventor Franklin had captured French imaginaries about the United States in the late 1770s, Zea, the renowned botanist, would convince the world of the Colombian republic's value. The greatest asset that Zea had in his negotiating arsenal was Colombia's potential natural and mineral wealth. Zea hired in Paris a cadre of French-trained naturalists to explore Colombia and bring the new republic's wealth to its full, exploitable potential.

Like Zea, at least two of the naturalists whom he hired were born in Spanish America, yet, also like Zea, their criollo background did not mean that they saw themselves—nor were they treated—as coming from the margins. Zea and the expedition's members had formidable ties to French academicians, including prominent members of France's Natural History Museum. One of the many tasks of the expedition, after all, included founding Colombia's natural history museum in Bogotá.⁵ As originally conceived, Bogotá's museum would not only educate the Colombian public but also deepen the republic's cultural and scientific ties to France while displaying Colombia's contributions to world

2. Venezuelan Congress, "Ley fundamental de la República de Colombia," Angostura, 1819, Biblioteca Nacional de Colombia, Bogotá (hereafter cited as BNC), Fondo Pineda, no. 852, pieza 14.

3. Blaufarb, "Western Question."

4. "Jefferson's Commission as a Minister Plenipotentiary for Negotiating Peace, [8 January 1783]," in Boyd, *Papers of Thomas Jefferson*, 213–15.

5. Rodríguez Prada, *Le Musée National de Colombie*.

knowledge. Colombia would accrue international cultural capital that could translate into official recognition from France, the leading producer of scientific knowledge in the world. As Zea explained to Colombia's minister of external relations, "The enthusiasm that this Expedition has excited among the *sabios* [wise men] is incredible; they presage the high gains that sciences and civilization can expect from our independence."⁶ Zea sold the expense of the expedition to Colombian officials at home by intimating that when the Colombian-hired naturalists transmitted their career-making findings back to the Academy of Sciences, French recognition of Colombia would be achieved.

Another major goal of the expedition was to locate and extricate the mineral wealth underwriting fresh loans that Zea had contracted in London on Colombia's behalf. Great Britain would be increasingly hard-pressed to deny Colombia's independence given private British investments. Patriot leaders nevertheless worried that British recognition would come at a significant territorial price. They discussed at length Colombia's need to produce widely circulating maps to defend territorial claims against British incursions.⁷ The astronomical measurements and cartographic expertise of the naturalists would yield the scientific manuscripts, curiosities, and deluxe printed atlases that would circulate among ancien régime networks of patronage in defense of Colombian territorial claims. By hiring the experts and supporting their explorations, Colombia would forcefully demonstrate to the world how Spain no longer enjoyed political or military control over northern South America, and do so in ways that defended Colombia from British territorial desires.

Colombian officials together with the French-trained naturalists engaged in a careful political, economic, and scientific calculus. And yet both the expedition and the Colombian republic were founded on contingency. Geopolitical change, local economic and political crises, and the untimely illness and death of crucial actors would render both the expedition and the Colombian republic moot. This essay traces the circulation of natural history materials through a transatlantic network of officials, diplomats, naturalists, engineers, cartographers, investors, journalists, and military men. Drawing on available private and diplomatic correspondence, published findings by the naturalists, newspaper

6. Francisco Antonio Zea to Pedro Gual, Paris, 14 Nov. 1821, Archivo General de la Nación, Bogotá (hereafter cited as AGNC), Sección República (hereafter cited as SR), Fondo Secretaría Guerra y Marina (hereafter cited as GM), leg. 18, fol. 2.

7. José Manuel Restrepo to Francisco de Paula Santander, Rionegro, 5 July 1820, in *Boletín de Historia y Antigüedades* 3, no. 25 (January 1905): 181; José Rafael Revenga to Pedro Gual, London, 8 Oct. 1823, AGNC, SR, Fondo Ministerio Relaciones Exteriores (hereafter cited as MRE), Delegaciones, Transferencia (hereafter cited as DT) 2, tomo 299, fol. 219.

reports, and memoirs, the essay reveals how this community understood, imagined, and contributed to the local, national, and global rise and demise of the first Colombian republic. Doing so contributes to a broader, developed literature on the mobility of natural knowledge production and its role in cocreating imperial and national projects.⁸

The expedition's transatlantic developments reveal key structural contradictions threatening Colombia's existence. From the perspective of Venezuelan generals, Zea's contracts with London financiers were usurious, and his decision to hire the naturalists and purchase books and instrumentation seemed expensive, self-serving, and irrational given the urgent need for troops and supplies to fight the remaining Pacific royalist bloc.⁹ Zea came under scrutiny, as did expedition members when they first arrived at Venezuelan ports. Once the expedition was on the ground, some of its findings did produce favorable international attention, as expected. However, the expedition's confirmation that no platinum could be found in Colombian mountainsides spelled financial trouble. Zea's untimely death and the uncertainty surrounding his authority to contract loans on Colombia's behalf further shook British market confidence in the new republic. Colombian economic stability was undermined.

Colombia's territorial division law of 1824, to which the expedition contributed, compounded the problems created by a growing debt crisis. Expedition members helped carve out the department of Ecuador from Quito, marking the first time that the name *Ecuador* appeared on maps to designate an administrative body. Rather than strengthen Bogotá's centralized control over the Colombian territory, these new territorial divisions exacerbated existing tensions between Bogotá and cities like Quito, Guayaquil, Caracas, and Valencia. By the 1830s, Ecuador and Venezuela asserted their independence from not only Spain but also Bogotá. Meanwhile, geopolitical transformations across the Atlantic continued to work against the interests of the naturalists and the Colombian republic that had hired them. Bourbon France's invasion of a liberal Spain restored Fernando VII to the throne, throwing Colombians' and French-trained naturalists' calculations into disarray. French academicians, whose livelihood depended on loyalty to monarchy, no longer championed the work of naturalists who had been hired by a republic that the French monarchy could not recognize. By 1830 Colombia, and the expedition, unraveled.

Colombian leaders tapped into ancien régime social networks to persuade an elite, transatlantic Republic of Letters that Colombian independence would

8. See Raj, "Colonial Encounters"; Raj, *Relocating Modern Science*; Porter and Teich, *Scientific Revolution*; Golinski, *Making Natural Knowledge*.

9. Echeverri, *Indian and Slave Royalists*, 191–93.

make natural resources available to the world.¹⁰ This essay necessarily goes beyond the power-laden relations embedded in the composition and content of maps to show how cartography, together with other scientific practices like geology, mineralogy, and botany, were produced, deployed, circulated, and consumed.¹¹ The Colombian-hired expedition helped produce the recognizable, if short-lived, national space of the Colombian republic, only to prove that no platinum existed within its mountainsides. The expedition also contributed to the creation of an Ecuador that seceded from the Colombia that the naturalists had been hired to help invent and consolidate.¹² By following the circulation and reception of the expedition's work, we can therefore better understand the practice of transatlantic geopolitics during an especially tumultuous period. Patronage politics, uncertainty, and instability forced those who originally championed the endeavor to disavow the expedition. Those disavowals, in turn, contributed to Colombia's dissolution. The circulation of natural history knowledge was at the core of the complex diplomatic, economic, and local political practices that produced (and undermined) the first Colombian republic as an independent republican space.

The "Franklin of Colombia"

By the 1820s, Zea had seen time and again how scientific knowledge offered access to social and cultural prestige and, through that prestige, control over territory and resources. His training, family connections, and reputation allowed Zea to work closely with José Celestino Mutis in the Royal Botanical Expedition to New Granada.¹³ Despite his criollo origins and despite having served a sentence for youthful dabbling in subversion against the Spanish

10. Goodman, *Republic of Letters*; Winterer, "Where Is America."

11. For studies that examine land surveying, map making, and map printing in the process of nation-state formation, see Winichakul, *Siam Mapped*; Anderson, *Imagined Communities*; Harley, *New Nature of Maps*; Akerman, *Imperial Map*; Akerman, *Decolonizing the Map*; Appelbaum, *Mapping the Country of Regions*; Dym and Offen, *Mapping Latin America*; Carrera, *Traveling from New Spain to Mexico*; Craib, *Cartographic Mexico*; Harley et al., *History of Cartography*; Capello, *City at the Center*, 24–60; Brückner, *Early American Cartographies*; Furtado, "Indies of Knowledge."

12. For the relations of power behind the invention of places and spaces, see Lefebvre, *Production of Space*; Foucault, "Questions on Geography"; Cosgrove, "Prospect"; Harvey, *Condition of Postmodernity*; Edgerton, *Renaissance Rediscovery*; Carter, *Lie of the Land*; Craib, *Cartographic Mexico*; O'Gorman, *Invention of America*; Massey, *Space, Place, and Gender*.

13. Francisco Antonio Zea, "Luminoso plan reorgánico de la Real Expedición Botánica . . ." 1802, in Hernández de Alba, *Documentos para la historia*, 88–133.

monarchy, Zea acquired the scientific expertise and social and professional connections in New Granada, Madrid, and Paris that justified his appointment as director of Madrid's botanical gardens.¹⁴ Zea's support of Napoléon's 1808 invasion of Spain allowed him to continue as the gardens' director under the Bonaparte regime. He worked with José María de Lanz in the newly created Ministry of the Interior.¹⁵ Lanz was a Campeche-born military engineer trained in France and Spain who had famously published with Agustín de Betancourt a foundational text in industrial kinematics, the *Essai sur la composition des machines*, in 1808.¹⁶ While Zea directed the botanical gardens, Lanz's duties included organizing a corps of civil engineers, creating a new territorial division for Spain based on prefectures, preparing a new general map of Spain, and directing the office of hydrographic surveys.¹⁷ Both Zea and Lanz, then, were criollos born in Spanish America, but as talented men of science, origins did not matter.¹⁸

Fernando VII's return to the Spanish throne in 1814 meant that Zea and Lanz became dangerous "afrancesados." Both tried their luck in republican Spanish America.¹⁹ Lanz made his way to the Río de la Plata, where he directed the mathematics academy in 1816.²⁰ Instability forced Lanz and his French wife to return to Paris the following year, but Lanz continued serving the pro-independence Río de la Plata regime as its secret agent in Europe.²¹ Zea, for his part, left his family in Paris, seeking better fortunes in London with an eye toward returning to Spanish America. By 1815, Zea met Simón Bolívar in Haiti.²² Zea's access to a deep and broad network of leading cultural and scientific figures in Europe appealed to Bolívar.

After Venezuelan generals challenged Zea's authority in Angostura in 1819, the New Granada botanist believed that he could be "more useful to the Patria,

14. Soto Arango, *Francisco Antonio Zea*, 202.

15. Lucena Giraldo, *Historia de un cosmopolita*, 128–42; Soto Arango, *Francisco Antonio Zea*, 270–71.

16. Lanz and Betancourt, *Essai sur la composition*; Goicolea Zala, "Mexican Scientist," 151.

17. Lucena Giraldo, *Historia de un cosmopolita*, 126.

18. Villacorta Baños, *Burguesía y cultura*, 227–31.

19. Artola, *Los afrancesados*.

20. "Rivadavia a García desde París recomienda al profesor José Lanz," 4 Feb. 1816, in Ravignani, *Comisión de Bernardino Rivadavia*, 176.

21. Heredia, "José de Lanz," 505–12.

22. "Llega a Haití D. Francisco Antonio Zea . . . 4 noviembre 1816," in *Papel Periódico Ilustrado: Bellas Artes, Literatura, Biografías, Ciencias, Cuadros de Costumbres, Historia, Etc.* 4, no. 73 (1884): 15.

and to all of America, in the Parisian theater. . . . where I hope to ensure a favorable outcome for our Independence.”²³ Although no Spanish American republic had gained official recognition by appealing to French scientific networks, Benjamin Franklin offered an intriguing example to follow.²⁴ The Colombian government’s instructions to Zea could not be clearer: “Fortune destines Your Excellency to be the Franklin of Colombia.”²⁵ Venezuelan officials still remained suspicious of Zea, but New Granada patriot leaders familiar with his background were pleased to learn of his return to Europe.²⁶

Serendipity initially smiled on the “Franklin of Colombia.” While in the Caribbean island of Saint Thomas, Zea learned from Manuel Torres, Colombia’s representative in the United States, that President James Monroe would officially recognize Colombia by meeting with Zea in Philadelphia.²⁷ Zea also learned that on January 1, 1820, Spanish general Rafael del Riego and his troops refused deployment. Rather than fight independence patriots, Riego called for the reinstatement of the Cádiz Constitution of 1812. Municipality after municipality repeated Riego’s *pronunciamiento*.²⁸ By March 1820, Fernando VII caved in and swore to defend the constitution. The impact of this relatively bloodless political transformation reverberated throughout Spanish America.²⁹ The immediate implications were nevertheless unclear. Royalist strongholds rejecting constitutional monarchy might turn to independence.³⁰ Then again, a liberal Spanish constitutional monarchy could restore legitimacy to the crown, undermining republicanism. A confederated monarchy that recognized Spanish American autonomy might become more appealing than independence.³¹ With the blessing of Bolívar, Zea delegated to Manuel Torres the duty of obtaining official recognition for Colombia from the United

23. “Zea a varios: Representación al Congreso,” Angostura, 8 Sept. 1819, in O’Leary, *Memorias*, 9:260.

24. Brands, *First American*; Delbourgo, *Most Amazing Scene*.

25. Instructions to Francisco Antonio Zea, 24 Dec. 1819, AGN, SR, MRE, DT 2, tomo 242, fol. 315. See also Bassi, “Franklins of Colombia.”

26. Francisco de Paula Santander to Simón Bolívar, Santa Fé de Bogotá, 22 Nov. 1819, in O’Leary, *Memorias*, 3:45–46.

27. William Duane to Juan Germán Roscio, Philadelphia, 8 Apr. 1820, AGN, SR, GM, tomo 1, part 2, fols. 722r–25v. For the favorable reception of Spanish American independence in the United States, see Fitz, *Our Sister Republics*.

28. Moreno Gutiérrez, “Memory and Representation.”

29. Fowler, “Rafael del Riego.”

30. Moreno Gutiérrez, “Memory and Representation”; Sagás, *Race and Politics*, 29.

31. Zea favored this outcome. See Navas Sierra, *Utopía y atopía*.

States.³² Zea arrived in London in June 1820, ready to put his scientific reputation to work for Colombia.

Zea's first task: addressing Colombia's poor financial standing before British creditors. Until then, Venezuela and New Granada representatives negotiated separately with private "commission merchants" who charged astronomically high interest rates.³³ Promises of platinum first made by members of Charles-Marie de La Condamine's expedition became Zea's ticket for convincing more reputable London financiers to send their money Colombia's way.³⁴ When Pedro Vicente Maldonado, as part of La Condamine's expedition, first identified platinum mines in Quito during the mid-eighteenth century, the world did not pay too much attention.³⁵ Commercial applications had yet to be developed. Justus Erich Bollmann and a few other chemists changed that.³⁶ Bollmann's ability to produce malleable platinum prompted the chemist to propose that the British government use platinum as coin. As the idea began to gain favor, Bollmann paid a high price for the few hundred pounds of ore that his Jamaican smugglers supplied. Bollmann was intrigued by Zea's then-credible estimation that Colombia's mountainsides held 40,000 pounds of the mineral.

Before his conversations with Bollmann, Zea had tried to convince British lending house Baring Brothers and Company to take on Colombia's debt to no avail.³⁷ Zea knew that these reputable moneylenders had stabilized French finances in the wake of the Napoleonic era.³⁸ Bollmann's expertise together with Zea's authoritative assurances convinced Baring Brothers to grant Colombia a 20,000-pound loan in exchange for the promise of 40,000 pounds

32. "Commission of Manuel Torres as Chargé d'Affaires . . .," Angostura, 14 Aug. 1819, in Manning, *Diplomatic Correspondence*, 2:1177-78. See also Francisco Antonio Zea to Manuel Torres, 2 Feb. 1820, AGN, SR, MRE, DT 2, tomo 123, fol. 11; Francisco Antonio Zea to Manuel Torres, 26 Apr. 1820, AGN, SR, MRE, DT 2, tomo 123, fol. 16; Francisco Antonio Zea to Simón Bolívar, Saint Thomas, 30 Mar. 1820, in O'Leary, *Memorias*, 9:254-56.

33. Gutiérrez Ardila, *El reconocimiento*, 94.

34. Barriga Villalba, *El empréstito de Zea*.

35. See "Several Papers concerning a New Semi-metal, Called Platina; Communicated to the Royal Society by Mr. Wm. Watson F.R.S.," *Philosophical Transactions of the Royal Society* 46 (1749-50), cited in Safier, *Measuring the New World*, 303n13.

36. Chaldecott, "Justus Erich Bollmann."

37. Francisco Antonio Zea to Colombia's minister of external relations, London, 18 Mar. 1821, AGNC, SR, MRE, DT 2, tomo 242, Correspondencia FA Zea, fols. 171r-72v.

38. Francisco Antonio Zea to Colombia's minister of external relations, Calais, 1 Apr. 1821, AGNC, SR, MRE, DT 2, tomo 242, Correspondencia FA Zea, fol. 182.

of platinum.³⁹ Zea paid off Colombia's existing debts, clearing the slate for the larger loan of up to 5 million pounds that Bolívar had ordered.⁴⁰ Colombia could then rebuild its economy and finance the new unpredictable phase of the war unleashed by Riego's coup.

Zea reported back to Bolívar, emphasizing the significance of Bollmann's trip: "I insist on the need to offer to this traveler [Bollmann] the means through which he can know our country and learn about us, especially with respect to everything related to Government and public morality."⁴¹ Bolívar easily recognized the value of cultivating relationships with luminaries like Bollmann for the purposes of independence. By the time that Bollmann set sail for Colombia, dozens of traveling savants from Europe had already reported on the wealth of natural resources to be found in South America.⁴² From Zea's perspective, Bollmann's trip was unlike any other. The loan that Zea had negotiated with the British hinged on Bollmann's interest in Colombian platinum. To ensure that the loan deal did not fall through, Zea also had to hire naturalists who could locate and extract the metal.

These high stakes explain why, only weeks after Bollmann agreed to go to Colombia in April 1821, Zea scrambled to get a scientific expedition off the ground. To Zea's good fortune, his old friend José María de Lanz was in Paris. Lanz's experiences with mapping out coastlines and territorial divisions under the Bonaparte regime and his work for Río de la Plata republicans made him an ideal candidate to lead the expedition. Lanz would also help Colombian officials fend off British incursions on national territory by drawing an accurate map of the republic.⁴³ Zea reported back to the Colombian government about how European sabios championed Lanz's leadership of the expedition: "The enlightened friends of our cause have effusively celebrated that we give this proof to Europe that we are not barbarians incapable of self-government as the Spanish and their supporters have tried so hard to argue. Instead, we know the price and merit of enlightenment, and we are contributing our part to the progress of human talent."⁴⁴ Lanz purchased scientific instruments, packed his bags, and bid farewell to his wife, who received half of Lanz's 2,000-peso annual

39. Chaldecott, "Justus Erich Bollmann."

40. Dawson, *First Latin American Debt Crisis*, 22–23.

41. Francisco Antonio Zea to Simón Bolívar, Bourdeaux, 28 May 1821, in O'Leary, *Memorias*, 9:257.

42. Pratt, *Imperial Eyes*.

43. Restrepo to Santander, Rionegro, 5 July 1820, in *Boletín de Historia y Antigüedades* 3, no. 25 (January 1905): 181.

44. Zea to Gual, 14 Nov. 1821, AGN, SR, GM, leg. 18, part 2, fol. 225.

salary during his absence.⁴⁵ At the end of November, Lanz set sail from Le Havre with Agustín Laperrière, an assistant also hired by Zea.⁴⁶ By then, Bollmann had already arrived in Colombia. He was disappointed.

Bollmann's shining dreams of platinum wealth had transformed into pillars of salt. No platinum awaited Bollmann in Bogotá.⁴⁷ No one, after all, had yet identified the precise location of the ore. Colombia's vice president, Francisco de Paula Santander, offered Baring Brothers, through Bollmann, an alternative to platinum: control over production at the salt mines of Zipaquirá for 20 years. Bollmann made due with salt, but he and Baring Brothers still wanted platinum. On his way back to London, Bollmann stopped in Jamaica to connect with his platinum providers. He died in Jamaica in December 1821.

The Colombian congress was outraged by Zea's transactions with Bollmann. Despite Zea's letters to Bolívar notifying him of Bollmann's trip, Colombia's congress seemed to be completely taken by surprise by Bollmann's arrival. Venezuelan generals were especially frustrated. Writing from Maracaibo to officials in Bogotá, General Pedro Briceño Méndez excoriated Zea, arguing that "the contract with Doctor Bollemann [*sic*] is an embarrassing document that confirms our discredit in London. . . . The usury of this contract is so obvious and scandalous that it is rescindable for just that reason."⁴⁸ Congress agreed and revoked Zea's powers as minister plenipotentiary on October 21, 1821. Questions remain as to when, if ever, Zea formally received this news.

Expanding the Expedition

The Venezuelan generals projected the dislike that they had for Zea directly onto Lanz and his companion Laperrière once they reached Venezuela in February 1822.⁴⁹ General Carlos Soubllette initially considered the high salaries of Lanz and Laperrière, together with the expensive instrumentation that they had brought, to be extravagant expenditures evidencing the outlandish

45. Receipt signed by José María de Lanz, Paris, 7 Nov. 1821, AGNC, Sección Colecciones, Colección Enrique Ortega Ricaurte (hereafter cited as SC, EOR), caja 220.

46. José Tiburcio Echeverría to Colombia's minister of external relations, Paris, 20 Nov. 1821, in Echeverría, "La misión diplomática."

47. Barriga Villalba, *El empréstito de Zea*.

48. Pedro Briceño Méndez to minister of external relations, Maracaibo, 1 Sept. 1821, in O'Leary, *Memorias*, 18:482.

49. Heredia, "José de Lanz," 28–32; Lucena Giraldo, *Historia de un cosmopolita*, 169–70.

terms upon which Zea contracted loans for Colombia.⁵⁰ Soubllette refused to pay Lanz's full salary. Astonished that the Venezuelan general would dare to unilaterally change the terms of his contract, Lanz demanded full payment or enough funds to return to Paris.⁵¹ Animosity threatened to undermine the expedition. Despite these tensions, Lanz offered his services to Caracas. By early June, Soubllette relented, ordered that Lanz receive his contractual salary, and tried convincing Lanz to stay in Caracas a bit longer—perhaps indefinitely—as a mathematics instructor.⁵² Bogotá officials refused more delays. Santander ordered Lanz and Laperrière to Bogotá immediately. On the trip from Venezuela to Cartagena, Laperrière fell ill. Lanz continued without him to Honda, arriving overland to Bogotá on October 12, 1822. In letters to Zea, Lanz furiously described his frustrating interactions with Venezuelan generals.

Meanwhile, back in Europe, Zea remained ignorant of (or ignored) the news that the Colombian congress had revoked his plenipotentiary powers. It also seems that Zea did not hear about Colombian dealings with Bollmann or of Bollmann's death, at least not by March 13, 1822, when Zea leveraged the 20,000-pound loan from Baring Brothers to sign off on a 2,000,000-pound loan with Herring, Graham and Powles.⁵³ With significant British investments in hand, Zea took decisive diplomatic action. On April 8, 1822, before an audience of ministers and diplomats in Paris, Zea declared that Colombia would only communicate with, have commerce with, or admit immigrants from those countries that recognized Colombia's existence as an independent, sovereign republic.⁵⁴ Zea's bold statement made headlines.⁵⁵ France seemed as unlikely as ever to recognize Colombian independence. The ultraroyalist *Drapeau Blanc* was openly derisive of Zea's statement.⁵⁶ The same newspaper was nevertheless respectful of Zea's scientific expertise.⁵⁷ The *Journal des Débats* agreed. As historian William Spence Robertson later noted, that newspaper described Zea as a person not "versed in diplomacy and [who] hence sometimes used

50. Soto Arango, *Francisco Antonio Zea*, 89–90.

51. José María de Lanz to Carlos Soubllette, Caracas, 8 Apr. 1822, Archivo General de la Nación, Caracas (hereafter cited as AGNV), Intendencia de Venezuela, tomo 7, fols. 164–65.

52. Heredia, "José de Lanz," 31; Lucena Giraldo, *Historia de un cosmopolita*, 171.

53. Pettis, *Volatility Machine*; Barriga Villalba, *El empréstito de Zea*.

54. Francisco Antonio Zea to French minister for foreign affairs and the ambassadors and foreign ministers, Paris, 8 Apr. 1822, in Walker, *Colombia*, 1:xxvii–xxx.

55. For political leanings of French newspapers, see Bertier de Sauvigny, *Bourbon Restoration*, 141–46.

56. Lucena Giraldo, *Historia de un cosmopolita*, 171. See also Boussingault, *Memorias*, 3:103.

57. Walker, *Colombia*, 1:xxxii.

language that was inexact and unseasonable,” yet the newspaper’s editors considered it undeniable that he was an excellent botanist.⁵⁸

Zea’s diplomatic faux pas forced him to draw on his cultural capital as an established botanist. He focused on the French Academy of Sciences to sway French opinion in Colombia’s favor. Zea contacted France’s master of scientific patronage, Baron Georges Cuvier.⁵⁹ Zea understood that Paris’s museum assembled the most diverse and notable names in science, and Cuvier’s brilliant star would shine brightly on Colombia’s enterprise. Zea’s letter, sent on May 1, 1822, expressed Colombia’s need for a natural history museum modeled on that of France.⁶⁰ Before the end of May, Cuvier met with former and future museum directors and several associated professors who suggested candidates for Zea’s mission.⁶¹ Within weeks, Zea had the name of the most promising rising star: Peruvian-born Mariano Eduardo de Rivero y Ustariz.

Rivero y Ustariz would join Lanz in Colombia and deepen the academy’s stake in both the expedition and the Colombian republic by establishing a natural history museum modeled on the one in Paris. In the wake of the horrible reception that Lanz initially received in Venezuela, Zea penned letters of introduction describing Rivero y Ustariz’s background and value to Colombia, including a letter to General Soublette. Zea, knowing how Lanz had won over Soublette, explained to the general how, “very soon, young men will be trained in [Colombia’s] Museum who can then explore the provinces to discover the treasures that they hold.”⁶² Furthermore, the Bourbon Restoration’s support for the French Academy and the Paris museum meant that an expedition of naturalists closely associated with these French institutions would win Colombia respect from the French monarchy.⁶³ The young naturalists would tap into critical channels of monarchical and scientific patronage as they reported on Colombia’s natural wealth, thereby facilitating French recognition of Colombia’s independent existence in the world.

Zea placed a high value on Rivero y Ustariz’s future work for Colombia as reflected in his salary: 4,000 *pesos fuertes*, twice that of the expedition’s named

58. Robertson, *France and Latin-American Independence*, 213.

59. Outram, *Georges Cuvier*.

60. Rodríguez Prada, *Le Musée National de Colombie*, 272.

61. The museum directors and associates included botanist René Louiche Desfontaines, mineralogist Pierre Louis Antoine Cordier, naturalist Étienne Geoffroy Saint-Hilaire, and chemist André Laugier. An Italian physician, Mr. Carron, was suggested but did not join the group. Rodríguez Prada, *Le Musée National de Colombie*, 276.

62. Francisco Antonio Zea to Carlos Soublette, London, 13 Aug. 1822, AGNV, Guerra y Marina, tomo 30, fol.1.

63. Crosland, *Science under Control*.

leader, Lanz, and the equivalent of that received by Colombia's vice president.⁶⁴ A clear logic justified this high salary. Rivero y Ustariz had demonstrated talent, but more importantly he had deep contacts with the highest echelons of the French Academy. Alexander von Humboldt himself, together with the chemist Alexandre Brongniart, launched the young man's meteoric rise among French academicians.⁶⁵ By bringing on Rivero y Ustariz and his enviable ties, Zea enhanced the expedition's ability to leverage French scientific luminaries for French recognition of Colombia. Given Rivero y Ustariz's talent, connections, and desire to return to his Arequipa home, the 24-year-old mineralogist was uniquely positioned to accept Zea's enticing offer.

Zea's failing health and diplomatic duties forced him to leave Paris shortly after hiring Rivero y Ustariz, who completed the task of selecting the rest of the mission's members. They included the agricultural chemist Jean-Baptiste Boussingault, who became Rivero y Ustariz's overland travel companion from the port of La Guaira to Bogotá. Physiologist and illustrator François Désiré Roulin was hired on at the same rank and salary (1,800 pesos) as Boussingault. Justin-Marie Goudot and entomologist Jacques Bourdon, both of whom had worked in France's Natural History Museum, were hired as technicians to help collect specimens and organize Colombia's new museum.⁶⁶ Spanish lithographer Carlos Casar de Molina also came on board, bringing to Colombia its first lithograph and thereby underscoring the visual, print-culture dimension intended for this enterprise.⁶⁷

Even before Rivero y Ustariz and the rest of the group set sail from Europe, significant obstacles challenged the expedition. Consider the question of platinum. While still in France, Rivero y Ustariz had gotten word of Zea's extravagant promises of platinum to British lenders. Rivero y Ustariz had yet to conduct a systematic scientific study on the presence of platinum ore, and he pleaded with the aging naturalist to clarify.⁶⁸ Even more frustrating were delays in payment. Rivero y Ustariz needed to cover the cost of compiling

64. Contract between Mariano Eduardo de Rivero y Ustariz and Francisco Antonio Zea, 1 May 1822, AGNC, SC, EOR, Generales y Civiles, 1819-25, box 98, folder 86, fol. 25.

65. Rivero y Ustariz, "Note sur une combinaison"; Rivero y Ustariz, "Note sur le cuivre"; Rivero y Ustariz, "Note sur le nitrate."

66. Vezga, *La expedición botánica*, 178-82.

67. Contract between Carlos Casar de Molina and Francisco Antonio Zea, Paris, 1822, AGNC, SR, MRE, DT 2, Legación en Europa, vol. 242, 1819-22. The Colombian government rejected the contract that Zea signed with Casar de Molina. See Ortega Ricaurte, *Acuerdos*, 348.

68. Mariano Eduardo de Rivero y Ustariz to José María de Lanz, Paris, 22 June 1822, AGNC, SC, EOR, caja 220, fol. 30.

instrumentation, buying mineralogical samples for Colombia's natural history museum, and paying per diems as the group awaited passage to South America. Zea eventually did get funds to the naturalists. In the meantime, Rivero y Ustariz and Boussingault welcomed the generous support that Humboldt offered them.⁶⁹ Humboldt, excited by the prospect that Colombia's expedition could take accurate equatorial barometric measurements at sea level in Colombia, gave sensitive instruments calibrated in Paris as presents to the young men.⁷⁰ Humboldt enthusiastically trained them on the instruments and sent caring notes with funds to help the naturalists cope with uncertainty as they waited to leave for Colombia.⁷¹ Zea, for his part, could do little more than delegate payments to the naturalists and write letters of introduction so that Venezuelan generals would treat the young men with respect. On November 28, 1822, as the second deployment of the expedition arrived in Colombia, Zea breathed his last breath in Bath, Great Britain.

The Naturalists' Work in Colombia

Upon arrival on Venezuelan shores in November 1822, the naturalists received a warm welcome. Perhaps Lanz had made a lasting impression on Soublette, or perhaps the letters of introduction had worked. Bogotá officials, including Santander and Minister of the Interior José Manuel Restrepo, also lobbied in support of the newly arriving naturalists to spare them the ire of Venezuelan generals. The second cadre of French-trained naturalists soon joined Lanz in Bogotá in 1823. Their collections of minerals and sensitive scientific instruments formed the core of Colombia's natural history museum. A growing community of naturalists, engineers, and geographers collaborated with the new arrivals in Bogotá.⁷²

By the time that Colombia approved the contracts that the men had signed with Zea in July 1823, Restrepo already had been working with José María de Lanz and Colombia's cabinet of cartographers to draw a map of the

69. Mariano de Rivero y Ustariz to Francisco Antonio Zea, Paris, 1822, AGNC, SC, EOR, caja 220, fols. 22r, 29r.

70. Boussingault, *Memorias*, 1:107–9; Alexander von Humboldt to Jean-Baptiste Boussingault, Paris, 31 July 1822, in Humboldt, *Cartas americanas*, 197.

71. Mariano Eduardo de Rivero y Ustariz to Francisco Antonio Zea, 5 June 1822, AGNC, SR, DT 2, box 220.

72. An older generation including Juan María Céspedes and Francisco Javier Matís from the Royal Botanical Expedition was joined by younger men, such as Joaquín Acosta, Gabriel Ambrosio de la Roche, and Rafael Arboleda. See Lucena Giraldo, *Historia de un cosmopolita*, 167–68; Acosta de Samper, *Biografía*, 138; Restrepo, *Historia*.

republic. Restrepo's plan was to publish the map with his multivolume history of Colombia's revolution.⁷³ The purpose of the map had gone far beyond Restrepo's original desire to defend claimed Colombian territory from British incursions.⁷⁴ Colombia had absorbed Quito and Guayaquil by 1823. The republic needed a reorganization of its territorial order to ensure that it could function effectively. Lanz's experiences with territorial divisions in Madrid under the Napoleonic regime bolstered his credibility with the Colombians for just this task.⁷⁵ Lanz took over directorship of Bogotá's astronomical observatory and had on hand the books, manuscripts, maps, and instruments that survived the ransacking by the Spanish *reconquista* armies.⁷⁶ Restrepo and Santander aided Lanz by requiring provincial governors to send in all available reports, manuscripts, maps, and geographic information.⁷⁷ Lanz then drew the base map for the *Carta corográfica de la República de Colombia* that, in turn, informed the 1827 atlas of the Colombian republic printed in Paris as a companion to Restrepo's historical account of Colombia's war for independence.⁷⁸

Connecting Lanz's experiences crafting territorial divisions for Napoleonic Spain to his charge to map out the Colombian republic also suggests a plausible yet little-known national origin story: Lanz may have been instrumental in putting Ecuador on the map. Restrepo and his cabinet of cartographers would have known that Quito in European circles was called *l'Equateur*, the name that La Condamine had given it in the early eighteenth century. And yet before Colombia's law of 1824, *l'Equateur* had not been used as a name for any administrative unit in South America. Colombia's territorial law of June 1824 baptized the Ecuador department, and the *Carta corográfica* placed it. The newly created department broke up old territorial hierarchies near Quito to favor Bogotá as the centralizing national authority. Lanz's map, once published in Europe, would announce to the world the clear territorial control that the Colombian republic had established over the northwest corner of South America. Restrepo and his cabinet of cartographers did not foresee, however, how Bogotá's efforts to implement the new territorial law on the ground would help trigger the republic's eventual unraveling.

73. Del Castillo, "Cartography," 127.

74. Restrepo to Santander, Rionegro, 5 July 1820, in *Boletín de Historia y Antigüedades* 3, no. 25 (January 1905): 181.

75. Cebreiro Núñez, *Los orígenes*.

76. Lucena Giraldo, *Historia de un cosmopolita*, 179.

77. "Decreto 29 de noviembre de 1823 sobre la formación de mapas provinciales," in *Codificación nacional de todas las leyes*, 181.

78. AGNC, Archivo Histórico Restrepo, fondo 12.2, vol. 17, fols. 11a–11b; Restrepo, *Historia*; Del Castillo, "Cartography."

As Federica Morelli has argued, the territorial division law of 1824 failed to break the long-standing control that dominant cities had over their hinterlands.⁷⁹ Opposition to the 1824 law was widespread among Quiteño elites. The law granted municipal government to townships that these elites believed did not yet deserve it. Even worse, the law placed some *pueblos* under the authority of rival cities, which threatened the explosion of violent tensions. Quiteños refused to implement the law immediately, arguing that “reforms cannot be made instantly; they need to follow the march of circumstances and needs.”⁸⁰ Although the new territorial division law as displayed on the *Carta corográfica* was intended to neutralize urban aristocracies and centralize power in Bogotá, resistance to the measure was resolute.

Reception in France

Bogotá’s scientific community grew increasingly impressed by the work of the naturalists and published initial findings by Rivero y Ustariz and Boussingault.⁸¹ France was equally, if not more, impressed. The connections that Rivero y Ustariz and Boussingault forged with Humboldt and other scientific luminaries translated into the quick transmission of their South American findings. The barometric readings that the two took in Venezuela after landing in La Guaira in November 1822 exemplify this dynamic.⁸² Despite rough waters and attempted mutiny, all the instruments, including Humboldt’s gift of two Fortin barometers, arrived in good condition to Venezuela.⁸³ With instruments in hand and with the mountain known as La Silla de Caracas in their sights, Rivero y Ustariz and Boussingault ascended the peak on January 12, 1823. This 2,441-meter-tall mountain had been scaled by Humboldt and Aimé Bonpland but was, until the Colombian expedition’s ascent, inaccurately believed to be a volcano.⁸⁴ The naturalists sent letters back to Humboldt with their findings.

79. Morelli, *Territorio o nación*, 250.

80. “Oficio del intendente de Quito al secretario de estado del despacho del interior con motivo de las dos representaciones de las municipalidades de Quito y de Ambato contra la ley de división territorial de 25 de junio de 1824,” Quito, 6 Dec. 1824, Archivo Metropolitano de Historia de Quito, Miscelanea, tomo 4, fols. 95–96.

81. Rivero y Ustariz and Boussingault, *Memoria sobre diferentes masas* (a copy is available at BNC, Fondo Pineda, no. 174, pieza 4); Rivero y Ustariz and Boussingault, *Memoria sobre el Urrao* (a copy is available at BNC, Fondo Pineda, no. 382, pieza 3).

82. Boussingault and Rivero y Ustariz, “Résultats des observations barométriques.”

83. Boussingault, *Memorias*, 106.

84. *Ibid.*, 123.

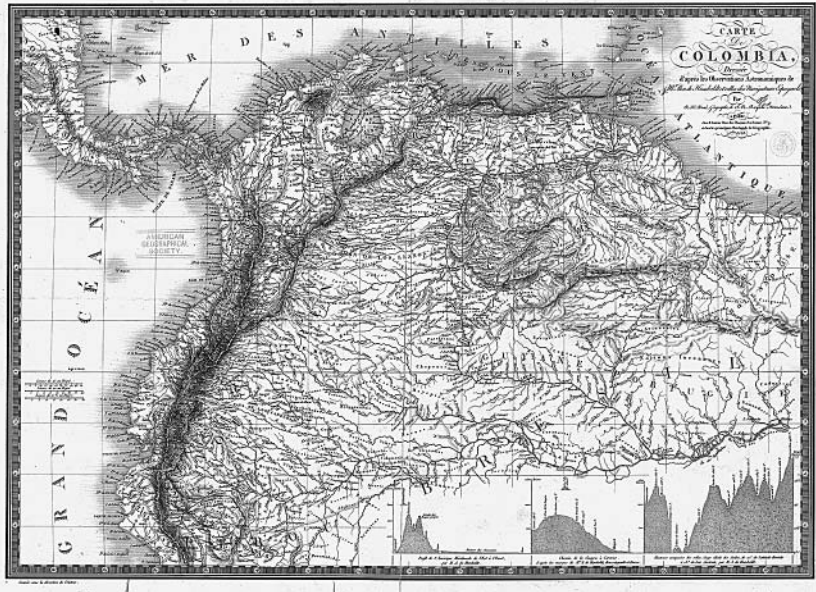


Figure 1. Adrien-Hubert Brué, *Carte de Colombia, dressée d'après les observations astronomiques de Mr. Alex de Humboldt et elle des navigateurs espagnoles*, 1823. From the American Geographical Society Library, University of Wisconsin-Milwaukee Libraries

As soon as July 1823 one of the most widely read French newspapers, *Le Constitutionnel*, learned of Rivero y Ustariz and Boussingault's scientific explorations. Boussingault's sister proudly cited the article in a letter to her brother, underscoring how his chemical analysis with Rivero y Ustariz of the milk of the cow tree represented "the most extraordinary vegetable product that the fertile soil of the Republic of Colombia has to offer."⁸⁵ *Le Constitutionnel*, France's leading anti-Bourbon Restoration newspaper, saw its opportunity to criticize monarchy by not only praising the naturalists but also acknowledging the Colombian republic itself.⁸⁶ The newspaper also noted how Boussingault's astronomical measurements had the potential to yield needed corrections on French maps. *Le Constitutionnel's* reporting was spot-on.

The early maps of Colombia by Adrien-Hubert Brué clearly display how French cartographers positively received Rivero y Ustariz and Boussingault's findings. Consider Brué's first edition of his *Atlas universel*, which included the

85. "La señora Vaudet a su hermano," Paris, 27 July 1823, in Boussingault, *Memorias*, 627–29.

86. Adamowicz-Hariasz, "From Opinion to Information," 167–68.

Carte de Colombia (figure 1).⁸⁷ Given the time that it took for information to traverse the Atlantic and how time consuming the process of copperplate engraving was, the speed with which Brué included work by Rivero y Ustariz and Boussingault in his *Atlas universel* is nothing short of astounding. Their findings are expressed as one of three Humboldtian elevation schemata that line the bottom of Brué's map. Printing Boussingault's barometric readings of elevation may have been useful for map readers interested in traveling to Caracas via La Guaira. But the scale of the rest of the map's topographic image suggests that only with difficulty would a traveler to Colombia be able to use this map as a navigation tool. Brué's 1823 printing of Rivero y Ustariz and Boussingault's findings served a different purpose. As *Le Constitutionnel* predicted, Brué made visible the initial results of the Colombian-hired naturalists on French-printed maps. Brué displayed a "Republic of Colombia" rich in natural resources, but this was not necessarily the independent republic that had been championed by the anti-Bourbon Restoration newspaper.

The word *republic* cannot be found anywhere on Brué's 1823 chart. Not even through scientific notation does republicanism emerge. Although Boussingault's memoirs noted height above sea level in meters, a unit of measurement inspired by the French Revolution, Brué painstakingly translated Boussingault's meters to toises, the unit for length preferred in prerevolutionary France.⁸⁸ To understand Brué's curious cartographic choices, it is worth remembering that in the early 1820s independence for Spanish America did not necessarily mean republicanism. Not only Brazil but also Mexico had gained independence as empires, not republics.⁸⁹ Bourbon Restoration France believed that it could best challenge unfettered British access to Spanish American markets if the region's independence was secured through monarchy.⁹⁰ Adrien-Hubert Brué's antirepublican cartographic choices need to be considered in light of the position that he held vis-à-vis his patron, Charles Philippe, Count of Artois and heir to the Bourbon Restoration throne.

Transatlantic Geopolitical Transformations, 1823–1826

French heir apparent Charles Philippe wanted a monarchy-friendly Spanish America, especially after his eldest son, the Duke of Angoulême, led invading French forces through Spain in January 1823. Their goal: topple the liberal

87. Brué, *Atlas universel*.

88. Boussingault, *Memorias*, 119–21.

89. Sanders, *Vanguard of the Atlantic World*.

90. Blaufarb, "Western Question."

constitutional regime launched by Riego's 1820 rebellion. Months later, the Spanish liberal forces surrendered their last stronghold in Cádiz, liberating Fernando VII.⁹¹ With a strengthened, consolidated monarchy at home and with a significant French military presence in Spain, France believed that the time was ripe for enhancing its position vis-à-vis Spanish America. The French Bourbons understood Spanish American independence as a de facto reality and tried coaxing Spain into recognizing independence de jure.⁹² But republicanism was anathema to France; monarchy was what the ultraroyalists wanted for Spanish America.⁹³ Unstable, tumultuous republics would need to cede to a more legitimate succession of leadership emanating from the Bourbon royal family. If successful, France's trading position would seriously challenge Britain, the current dominant trading partner with the region.⁹⁴ These changing circumstances meant that the material knowledge produced by naturalists hired by the Colombian republic would be received and processed by their patrons in Paris in ways that were sensitive to French, Spanish, and Colombian relations.

News of France's 1823 invasion of Spain reached the naturalists by June of that year. Boussingault's brother-in-law, Sylvestre Vaudet, offered an interpretation of the changing geopolitical landscape: "Nothing indicates to us which side will triumph . . . England seems to come to the aid of constitutional Spain . . . France supports the army of The Faith, which has trouble recruiting and would be disbanded in an instant if not for the presence of the French."⁹⁵ Vaudet then asked questions regarding the platinum that Boussingault and Rivero y Ustariz were destined to find in Colombia: "Not long ago a businessman begged that I write you to allow him to store and then sell the platinum that you plan to send to France. This arrangement could benefit myself as well as him."⁹⁶ Vaudet proposed to act as a commissioning agent, granting all the advances that the Colombian government needed by taking the platinum as a deposit. Alternatively, he could buy the platinum outright since he could secure a loan of over 1,000,000 francs to do so.⁹⁷

91. Bertier de Sauvigny, *Bourbon Restoration*, 186–93.

92. French minister Maxence de Damas's doctrine developed the de facto / de jure distinction. Robertson, *France and Latin-American Independence*, 352–53.

93. "Embajador en Paris conferencia con secretario de estado," Paris, 25–27 May 1822, Archivo General de Indias, Seville, Estado 90, no. 57.

94. Parra-Pérez, *La monarquía en la Gran Colombia*; Villanueva, *La monarquía en América*.

95. Sylvestre Vaudet to Jean-Baptiste Boussingault, Paris, 8 June 1823, in Boussingault, *Memorias*, 624–26.

96. Ibid.

97. Ibid.

Rivero y Ustariz finished his platinum study in 1824. Much to the dismay of the British lenders, Colombian officials, and Boussingault's brother-in-law, Rivero y Ustariz's samples yielded little platinum.⁹⁸ Rivero y Ustariz resigned his post with the Colombian government in 1825 and headed to his native Peru.⁹⁹ He left behind a sobering reality: platinum would not buy Colombia out of its debt. The good news for Colombia was that by then Great Britain already had recognized Colombian independence. Deep financial investments by British investors, the United States' diplomatic recognition of Spanish American independence in 1822, and France's enhanced position after its 1823 invasion of Spain had tipped Great Britain's diplomatic scales. The bad news was that Colombia would have trouble making good on its debts. Rivero y Ustariz's negative platinum findings compounded the speculative loan problems, culminating in Great Britain's 1825 stock market crash.¹⁰⁰

Winning diplomatic recognition from France through the Colombian-hired naturalists' ties to scientific patronage networks would take time that the republic no longer had in the wake of France's invasion of Spain and Colombia's crumbling finances. The republic changed strategy. The individual naturalists would instead work to win recognition for Colombia from France directly, as diplomats. José María de Lanz accepted this new role.¹⁰¹ By November 1824, Colombia put its trust in Lanz, believing that his intimate knowledge of the country's newly created territorial divisions would ensure that he could represent the stability of the republic before the French. By 1826, Lanz's negotiations with France on behalf of Colombia bore some fruit. That year, acting president Santander's speech to congress noted the discretion and firmness with which Lanz pleaded Colombia's case and concluded that "the French Government, supported by national opinion, will finally recognize our sovereignty in imitation of other great powers and will be inclined to establish relations friendly and useful to both nations."¹⁰²

Just as Santander optimistically announced Lanz's diplomatic negotiations with France in 1826, a crisis was brewing within Colombia. In April of that year Venezuelan generals, inspired in part by Riego's successful rebellion, frustrated

98. Mariano Eduardo de Rivero y Ustariz to minister of the treasury, Bogotá, 26 May 1824, AGNC, SR 75, Peticiones Solicitudes, leg. 5, D. 19, fol. 455r.

99. Rivero y Ustariz is usually remembered for his work in Peru. Gänger, *Relics of the Past*, 125–26.

100. Dawson, *First Latin American Debt Crisis*.

101. José María de Lanz to Pedro Briceño Méndez, Cartagena, 20 Nov. 1824, AGNC, SR, GM, tomo 394.

102. Quoted in Robertson, *France and Latin-American Independence*, 350.

by Bogotá's demanding draft of Venezuelan troops, and incensed by the impossible loans that Zea had contracted, issued *pronunciamientos* in municipality after municipality calling for constitutional reform in Colombia. Quiteño elites, resentful of the new territorial division law and upset by rising foreign debt, also clamored for reform. By then, royalist troops no longer posed a threat to Colombia. To appease Venezuelan and Quiteño leaders, the central government called for a new constitutional convention.¹⁰³ Santander's rosy prediction about Lanz's diplomatic work with France was likely meant to forestall the national fragmentation that loomed: Valencia, Caracas, Quito, and Guayaquil, along with the hinterlands that these cities dominated, all were pulling away from Bogotá.

Santander's speech did not mention that the only way that France would recognize Colombia was if Spain acknowledged Colombian independence first. Once this occurred, the French monarchy would meet Colombian officials openly and directly.¹⁰⁴ Brazil's embrace of monarchy served as an example to follow. By 1825 Portugal, France, and Great Britain had all recognized Brazilian independence.¹⁰⁵ Bolívar's closest confidants and aides were willing to contemplate making Bolívar the king of Colombia. A centralized monarchical government located in Bogotá would rein in fragmenting tendencies and guarantee international recognition. Manuela Sáenz, Bolívar's staunchest personal ally, lover, and keen diplomat, held parties in honor of Charles Bresson, King Charles's personal envoy to Colombia.¹⁰⁶ As Boussingault recalled in his memoirs, although the parties that Sáenz held may have informally aided monarchical plots, Bolívar was not involved.¹⁰⁷ The problem was that, as long as Colombia officially refused monarchy, Bourbon Restoration France withheld recognition of independence.

Meanwhile, Great Britain could anticipate how a Bourbon king in Colombia would harm British commercial interests. This in part explains why the British recognized the independence of several Spanish American republics in December 1824, starting with Colombia, Mexico, and Argentina. The Dutch followed Great Britain's example. The United States had already recognized Colombia, in June 1822. French diplomats and journalists admonished Great Britain yet grew exasperated by Spain's adamant refusal to recognize Spanish

103. Constitución de Cúcuta, 6 Oct. 1821, article 191, title 10.

104. Robertson, *France and Latin-American Independence*, 349, 382.

105. James Brown to Henry Clay, Paris, 12 Mar. 1826, in Manning, *Diplomatic Correspondence*, 2:1421.

106. Murray, *For Glory and Bolívar*, 71; Slatta and De Grummond, *Simón Bolívar's Quest*, 286.

107. Boussingault, *Memorias*, 293–95.

American independence.¹⁰⁸ After Charles Philippe, Count of Artois, ascended to the throne as Charles X, he articulated his exasperation with Fernando VII's refusal to adjust to the de facto reality of Spanish American independence. He intimated that "the time was not distant" when France would be compelled to consider the interests of its own subjects.¹⁰⁹ France needed a clear way to display what those interests were.

As Maurice Crosland has shown, Brué and other French academicians in Bourbon Restoration France understood that if they were to continue in their careers they needed to support the French monarchy.¹¹⁰ This is why, in 1826, Adrien-Hubert Brué offered a clear cartographic record that represented French interests by displaying de facto realities on the ground while erasing any trace of the French government's direct dealings with pro-independence Spanish American governments (figure 2).¹¹¹ Those calculated erasures included obliterating any trace of direct dealings between Brué and the French naturalists hired by the Colombian government. Brué thereby continued to access the most recent and relevant information produced by the Colombian-hired naturalists without putting himself, or France, in an untenable diplomatic position vis-à-vis Spain. The result is that Brué's 1826 map leaves no trace of the Colombian-hired agents who provided Brué with the vital information that made his two editions of the *Carte de Colombia* possible in the first place.

A careful reading of Brué's 1826 map in comparison with the earlier 1823 edition reveals the delicate diplomatic interests of the French Bourbons. Let us begin with the title. Unlike the 1823 map reproduced above, the 1826 edition translated Colombia's name into French, calling it "Colombie."¹¹² Brué then enhanced the geographic coverage to include the British, Dutch, and French Guianas in the title of his 1826 version. The topographic image correspondingly expands out to include French claims on Martinique and Guadeloupe.

108. Robertson, *France and Latin-American Independence*, 355–60.

109. George Canning to George IV, Paris, 1 Oct. 1826, in Aspinall, *Letters of King George IV*, 3:167.

110. Crosland, *Science under Control*, 314–16.

111. Adrien-Hubert Brué, "Carte générale de Colombie, de la Guyane Française, Hollandaise, et Anglaise . . .," 1826, Biblioteca Nacional de Colombia, accessed 18 Dec. 2017, http://catalogoenlinea.bibliotecanacional.gov.co/custom/web/content/mapoteca/fmapoteca_153_fnavas_45/fmapoteca_153_fnavas_45.htm.

112. There nevertheless are editions of the 1823 map by Brué that use *Colombie* in the title. See Adrien-Hubert Brué, *Carte de Colombie . . .*, Paris, 1823, BNC, Fondo Mapoteca 23, Fondo Restrepo 5. This version is available online at "Carte de Colombie, 1823," Biblioteca Nacional de Colombia, accessed 9 Feb. 2018, http://catalogoenlinea.bibliotecanacional.gov.co/custom/web/content/mapoteca/fmapoteca_23_frestrepo_5/fmapoteca_23_frestrepo_5.htm.

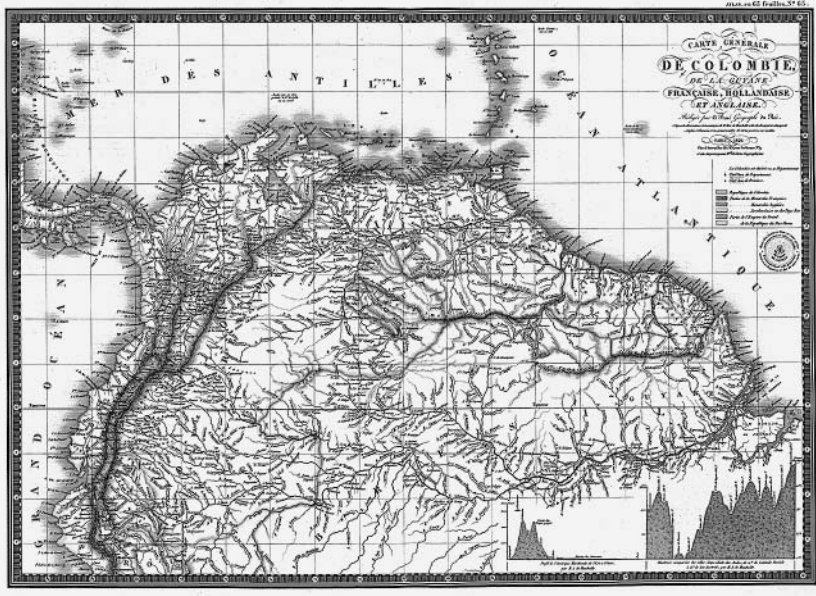


Figure 2. Adrien-Hubert Brué, *Carte générale de Colombie, de la Guyane Française, Hollandaise et Anglaise . . .*, 1826. Source: David Rumsey Map Collection, www.davidrumsey.com

The key on the 1826 map also distinguished between French, English, and Dutch monarchical possessions and made a bold assertion: while Brazil was a recognized, independent empire, Colombia and Peru were republics. Despite Brué's open acknowledgment of de facto independent Colombian republicanism, he erased any trace of the agents hired by the Colombian government who had provided the French cartographer with the information needed to complete this edition of the map. Notice, for instance, how the Humboldtian schemata at the bottom excised the young naturalists' barometric readings of La Silla and other mountain ranges near Caracas. Elevation and scientific authority nevertheless still mattered; otherwise, Humboldt's measurements would have been cut as well. The political divisions that Brué drew for Colombia's interior in 1826 also changed. Rather than maintain the territorial divisions that he had drawn in 1823, this 1826 map includes remarkably accurate depictions of Colombia's new territorial division law of 1824. There was only one map existing in the world that could have allowed Brué to depict Colombia's divisions in this way: the *Carta corográfica de la República de Colombia*, whose base version José María de Lanz had drawn.

By the time that Brué's map was printed in 1826, Lanz was in Paris unofficially representing Colombia before French officials. Lanz had left Bogotá in 1824, leaving the *Carta corográfica* unfinished.¹¹³ Restrepo's cabinet of cartographers continued working on the map, and on October 11, 1825, the young military engineer Joaquín Acosta left for France with the final version.¹¹⁴ Acosta had developed a close friendship in Bogotá with Humboldt's protégés Bousingault and Roulin, and Acosta's own father had hosted Humboldt when the explorer had made his way through Cundinamarca.¹¹⁵ Upon arrival, one of the first people whom Acosta met with was Humboldt.¹¹⁶ Acosta and Humboldt's exchange allowed the 1825 *Carta corográfica* to circulate to Brué, who then printed Colombia's new territorial divisions a full year prior to the map's publication as an atlas illustrating Restrepo's history of the Colombian revolution.¹¹⁷ Brué did not acknowledge the Colombian agents or Colombian maps that gave him privileged access to this cartographic vision. The only people that received open acknowledgment were Humboldt and navigators sailing under the flags of the Spanish, English, and French empires. Brué's map highlighted French interests in de facto Colombian independence while still allowing the French Bourbons to claim that their country had yet to recognize this independence de jure before the Spanish monarchy did so, since the map did not show any evidence that French officials had formally received Colombian agents. By August 1826, rumors that Lanz entertained a monarchical solution for Colombia culminated in the Colombian government refusing to pay Lanz's salary. In 1829, Bolívar divested the Colombian government from any association with Lanz.¹¹⁸ Lanz died impoverished despite, or perhaps because of, his work for Colombia.

Conclusion

The entangled relationship between the rise and demise of the Colombian republic and the Colombian-hired expedition of French-trained naturalists

113. Restrepo, *Historia*, 1.

114. Acosta de Samper, *Biografía*, 108.

115. *Ibid.*, 107–9.

116. Alexander von Humboldt to Joaquín Acosta, 20 July 1826, in Acosta de Samper, *Biografía*, 109–10.

117. Restrepo, *Historia*. The map is available online: José Manuel Restrepo, "Colombia," 1827, David Rumsey Map Collection, last accessed 18 Dec. 2017, <http://www.davidrumsey.com/luna/servlet/s/kek5z2>.

118. Estanislao Vergara (minister of external relations) to minister of war, Bogotá, 25 June 1829, AGNC, SR, GM, tomo 1041.

reveals an underappreciated dimension of the rapidly changing transatlantic world of the 1820s: the relationship between the materiality and spatiality of natural history knowledge production and the praxis of geopolitics. Zea, the naturalists whom he hired, the savants who promoted the naturalists' work, investors, journalists, formal and informal diplomats, and officials in Caracas, Quito, and Bogotá were all engaged in an array of practices geared toward producing knowledge about and profiting from Spanish American independence. Zea and his cohort had reason to believe that the circulation of expensive objects, rare manuscripts, and correspondence within an elite transatlantic Republic of Letters was critical for winning recognition of Colombian independence. Naturalists became the preferred diplomatic agents before France because, as well-connected scientific elites, they could plug into the upper echelons of French cultural and political institutions. The naturalists would also ensure Colombia's financial stability by locating the supposed mineral wealth that underwrote British loans. From Zea's perspective, the choice to invest in an expedition was more than justified. Zea did not live to see how the naturalists' valuable findings were displayed prominently in printed atlases and articles, nor how the findings informed Colombia's national territorial order. Perhaps this was just as well. Rather than consolidate Colombia before national and international audiences, the naturalists' findings and diplomatic work accelerated that republic's dissolution.

Unpredictable events outside the control of these actors yielded unintended results. The expedition was hired to create a needed inventory of material abundance and territorial integrity to gain international recognition and secure foreign loans. Dissemination of the expedition's findings nevertheless brought into sharp focus the contradictions within the ideological and material project that was the first Colombian republic. The most obvious example came in regard to platinum. Sent to confirm and publicize the abundance of platinum ore within Colombian mountainsides, the expedition could only prove that there was none. British stock market confidence in Spanish America, already teetering, crashed. Other unintended consequences are less obvious yet significant. José María de Lanz experienced firsthand the growing frustration of Venezuelan generals with what they initially believed were uselessly expensive diplomatic decisions by Zea, a man whom they despised. Spending priorities needed to support the war effort against an enemy that still had powerful military and political support within the continent. The Colombian congress agreed. Zea's powers were rescinded. For months Lanz worked in Caracas to convince Venezuelan generals that his service was worth the high salary promised by the republic. Venezuelan authorities finally authorized Lanz and

subsequent expedition members to collect samples and perform astronomical measurements from Venezuela to Bogotá, where the naturalists established Colombia's natural history museum. Venezuelan generals nevertheless had reason to be suspicious of the expedition. Lanz's measured cartographic assessments, after all, produced new territorial units that served the needs of Bogotá officials seeking greater centralization. Venezuelans and Quiteños rightly understood that Bogotá's new divisions would work to undermine their claimed political and economic influence over the hinterlands. The 1824 territorial division law, produced in part from Lanz's findings, sparked the beginning of Colombia's dissolution.

Meanwhile, diplomatic negotiations suggested that the only form of sovereignty that Bourbon Restoration France would accept for an independent Colombia was monarchy. Bolívar's closest allies were willing to contemplate this form of government—one already adopted by Mexico and Brazil—and tacitly invited expedition members to help. The expedition's findings, after all, were already doing diplomatic work with French academicians, quickly shaping how French cartography represented Colombia. Rather than republicanism, the maps reflected a French monarchical project for the region. France's push to promote monarchy as the path to recognition aroused widespread suspicion in Colombia, and the French naturalists had to tread carefully lest they be charged with espionage. Expedition members sided with republicanism, underscoring in their memoirs how Bolívar had no realistic plans to adopt monarchy for Colombia.

By 1826, as French Bourbons grew increasingly exasperated with Spanish refusal to recognize Spanish America's *de facto* independence, republicanism emerged as a cartographic and spatial reality for Colombia. But by then, the only official act left for France to recognize Colombian independence *de jure* was to announce that it had met with Colombian representatives in a diplomatic capacity. Brué erased all printed traces on his maps for the French monarch that identified the individual identities of the naturalists hired by Colombia, providing plausible deniability before Spain and the world that France had engaged in any direct, official meetings with Colombian representatives.

By the end of the decade Colombia fragmented, and no one was willing to own the expedition. The naturalists received no acknowledgment as forgers of Colombia's territorial integrity and divisions within deluxe, handsome atlases that circulated as gifts among the most influential actors of the day. In the wake of their Colombian experiences, expedition members sought notoriety, but none did so by compiling, editing, and publishing a unified, multivolume illustrated natural history that put the Colombian republic on the mental maps of world leaders. No one was willing to memorialize the expedition. No one

comprehensively curated and compiled its archives.¹¹⁹ The historiographical fate suffered by the expedition until now teaches us that memorialization cannot be artificially severed from the creation of archives. Already by the 1830s the expedition was rendered largely invisible to memory and historiography. Consider how France officially recognized Ecuador in 1836, after Ecuador seceded from Colombia. French diplomat Jean-Baptiste Washington de Mendeville ordered La Condamine's pyramids reconstructed, highlighting a historical moment when French science identified Ecuador's namesake: the equatorial line. The materiality of scientific knowledge production and commemoration continued to be the primary way that France engaged diplomatically with the region. Only the French empire and Ecuador received honors, however. The expedition of French-trained naturalists hired by the Colombian republic, an expedition whose work first allowed Ecuador to appear on French-printed maps, did not make it into this official scientific and diplomatic commemoration.

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119. Acosta's compilation brings together findings by French luminaries but excludes José María de Lanz and makes no mention of the Colombian republic's commissioning of the expedition. See Acosta, *Viajes científicos*.

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