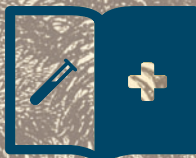

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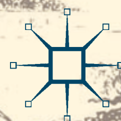
The Politics of Observation

NINA GERASSI-NAVARRO



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Nina Gerassi-Navarro

Women, Travel, and Science in Nineteenth-Century Americas

The Politics of Observation

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Para Ernesto, Nicolás y Natalia,
por el mejor viaje de todos

Praise for Women, Travel, and Science in Nineteenth-Century Americas

"This groundbreaking book remaps the field of American Studies as a hemispheric… endeavor, from the vantage of a distinguished Latin Americanist. This book models new ways of understanding cross-cultural exchange by exploring 19th century antecedents in the fascinating narratives of women travelers….Gerassi-Navarro's richly-layered interdisciplinary approach reveals how travel writing shaped the production of scientific knowledge, the literary and visual arts, and the complex meanings of race and gender."

—Amy Kaplan, Edward W. Kane *Professor of English, University of Pennsylvania, USA*

"This fascinating book follows two spirited women who accompanied their husbands from Boston to Mexico … and Brazil….Although their travel narratives are primarily known for their perceptive observations of daily life, Gerassi-Navarro shows that they are much more than that… Paying close attention to the contradictions and ambiguities of these texts as well as to the transnational historical contexts that framed them, she reveals how these women…used their writing to participate in the public debates of their day."

—Silvia Marina Arrom, *Professor Emerita of History, Brandeis University, USA*

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Travels and Observation: An Introduction

Among the fascinating cities imagined in Italo Calvino's travelogue, *Invisible Cities*, the reader encounters Despina, a city with two distinct features. When arriving from the desert, "the camel driver sees, at the horizon of the tableland, the pinnacles of the skyscrapers … he thinks of a ship; he knows it is a city, but he thinks of it as a vessel that will take him away from the desert." From the opposite vantage point, "the sailor discerns the form of a camel's withers, an embroidered saddle with glittering fringe between two spotted humps, advancing and swaying; he knows it is a city, but he thinks of it as a camel."[1] Both descriptions point to the intimate connection between seeing and knowing, and the tension that underlines this relationship, distinctly evident in travel writing. Both visitors *know* they are upon a city yet they cannot see beyond their own desires; the landlocked traveler envisions a ship, and the sailor thrusts his anchor into the sand. The narrator concludes his brief vignette explaining the discrepancy: "Each city receives its form from the desert it opposes; and so the camel driver and the sailor see Despina, a border city between two deserts."[2]

How we observe depends on our existing knowledge and the negotiations between our ways of seeing and those of others. Calvino's Janus-like description of Despina underscores the weight of the viewer's subjective imprint in what we see. Indeed, observation reveals just as much information about the observer as the observed. As Jonathan Crary succinctly articulates, the observer is "one who sees within a prescribed set of possibilities, one who is embedded in a system of

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conventions and limitations."[3] Initially, Despina, the vast desert that opens up to the traveler's gaze, embodies the unknown onto which the traveler imparts an image intimately linked to his/her experience. It is the traveler's way of relating to the foreign, of curbing the immensity of that unknown desert. But as we acquire new information and our gaze becomes accustomed to the foreign, what we see changes; in other words, as our limitations expand, the foreignness dissipates, and the desert is reshaped, molded. In this sense, observation is neither static nor permanent, but rather contingent. The Mexican author, Octavio Paz, highlights this relational quality when he states: "Nature is nothing more than a point of view, the eyes that contemplate her or the desire that shapes her."[4] The phenomena of the natural world, what we see, is not a fixed reality, but rather is determined by time and place, bound by the gaze. For Paz, representation entails an element of subjectivity—such is the power of the word. Thus, objectivity and subjectivity are deeply intertwined in any form of observation.

This view guides my approach in reading the two travel narratives analyzed in this book. The two travelers, Scottish-born Frances Calderón de la Barca and Boston Brahmin Elizabeth Cary Agassiz, traveled from the United States to Mexico and Brazil, respectively, at a time in which the map of the Americas was undergoing major political shifts. During the first half of the nineteenth century—considerably longer for Latin America—the United States and most Latin American countries were actively engaged in consolidating their national identity and territorial boundaries. The texts analyzed serve as a means to undertake, from an interdisciplinary perspective, a study of the cultural connections between the United States, Mexico, and Brazil, roughly between 1840 and 1870. These connections include political and scientific debates as well as a variety of cultural exchanges between countries. In their narratives, both authors exhibit the interests and concerns of the United States as it asserts its image within the continent and begins its territorial expansion west and south. However, as they extend their stay in their host country, both authors adjust their modes of observation. This is not to say that they are completely "at home," but after a prolonged stay abroad, it is apparent that their images of the foreign landscape begin to shift, highlighting significant cultural negotiations that are embedded in the process of observation.

Travel literature has an extensive trajectory with a varied history of styles and purposes, ranging from voyages of discovery and exploration, eyewitness accounts, scientific and journalistic reports to more

introspective, adventurous, and fictional narratives like Calvino's imaginary cities. All reveal different interplays between the objective and subjective, as well as different types of knowledge (historical, geographical, religious, ethnographic, and social) conveyed about the places and people visited. It is a constantly evolving genre. Throughout its many facets, one of the most distinctive characteristics remains the interplay between the observer and the observed, or, as Casey Blanton notes, between the self and the world.[5] In other words, the richness of these narratives lies in the ways in which the writer mediates between the foreign and the familiar, opening up the world of their constructed otherness to his or her readers.

Traditionally, critical studies of women's travel narratives have centered on the authors as individuals, meaning their texts have been read primarily as autobiographical accounts. More recently, critics have focused on the ways in which women's narratives engage with colonialist discourse.[6] Social pressures and class privilege demanded that women use a particular kind of language and write only about certain types of experiences, which in turn led them to be faulted for their limited scope. Sara Mills calls this double bind a "circular logic" that left women travel writers torn between discourses of imperialism and femininity.[7] My intention is to pull women's travel writing out of this narrow categorization by connecting their writing with the dominant transnational debates at the time.

My book emphasizes the political, historical, and cultural dimensions of women's travel narratives. Both Frances Calderón and Cary Agassiz traveled as spouses accompanying their husbands on trips, which were important political events in themselves. As first Spanish Ambassador to Mexico, Angel Calderón de la Barca's trip ended the former colony's long-awaited official recognition of independence from Spain. His arrival was a national celebration for Mexico. In turn, Spain hoped that Calderón de la Barca would be able to smooth the bitter frictions between peninsulars and Mexicans especially regarding property claims. In the second case, until Louis Rodolphe Agassiz's trip across the Amazon, no other foreign scientific expedition had been authorized by Brazil to explore the region. The acclaimed Harvard scientist not only led his own scientific expedition but also obtained partial sponsorship from the Brazilian government, securing the collaboration of local authorities and ensuring that his collections would arrive safely to port. In addition to collecting hundreds of tropical species for his newly

founded Museum of Comparative Zoology (MCZ) at Harvard, Agassiz was instrumental in expediting the opening of the Amazon River to merchant ships of all nations.[8] Both Calderón and Cary Agassiz were aware of the political relevance of their husbands' endeavors and carefully registered their significance; yet despite their subordinate position and significantly "less authoritarian stance" than their male counterparts, they also affirmed the importance of their own presence and viewpoint during their travels.[9] When the United States went to war with Mexico five years after the Calderóns left the country, two texts, among several, were recommended reading for the marching soldiers: New England historian William Hickling Prescott's *History of the Conquest of Mexico* (1843) and Frances Calderón de la Barca's *Life in Mexico* (1843).[10] While Agassiz's voyage was not known for its scientific assessment, it was valued for its portrayal of Brazilian lifestyle and nature, which was Elizabeth Cary Agassiz's contribution to *A Journey in Brazil* (1868).

My reading of these two texts demonstrates how personal forms of writing (diaries, journals, and travel narratives) engage with and even question broader political and cultural worldviews. Women's narratives, often deemed intimate and much less political, can be illustrative of public sentiment, attending to political, social, cultural, and even geographic issues. I am less concerned with the gendered discourse of their travel narratives and the construction of their own personal selves—although these important traits are also evident in their texts. Instead, I analyze their writings within the broader intellectual dialogues that insert their views within the transnational public sphere. I am interested in the ways in which these two women step out of their traditional roles of spouse to position themselves as intellectuals through their textual strategies.[11] What do their multifaceted observations tell us about the political, social, and cultural views the United States had regarding Mexico and Brazil? In what ways did their travels question US cultural and political values? How did the ideas that circulated in their host countries affect their own perceptions of the United States? My reading of their texts not only sheds light on many of the cultural and political shifts taking place during this time in the Americas but also helps uncover the different ways in which women participated in public debates and voiced their opinions through travel writing. In their narratives, Frances Calderón and Cary Agassiz consider the benefits and disadvantages of progress; how an independent nation should deal with territorial expansion; how racial differences permeate societies; they reflect on governmental policies toward indigenous communities

and the importance of women's education. I focus not only on what the narrators observe but also on the images they construct in their writing and the implied references related to those observations. I am interested in the discussions concerning those "prescribed set of possibilities" of the observer that Jonathan Crary mentions and the ways in which both women question, reinforce, or transform those views.

Drawing on political essays, scientific discussions, and religious debates that circulated in periodicals, professional societies, and social clubs, as well as personal correspondence, photographs, and museum collections, I examine how ideas and debates regarding nation building were interconnected and reformulated in each travel narrative. If print culture helped build a sense of national unity internally, travel narratives in particular expanded and reaffirmed that imagined community, as the nation confronted new boundaries.[12] In this way, I expand the scope of the authors' observations and insert their reflections within a more comprehensive cultural analysis of the United States and its relations with Mexico and Brazil, which includes how these two countries perceived the United States. In addition, I argue that while women may not have actively participated in public discourse in the same way men did during this period, they were certainly not unaware of the debates.[13] Hence, beyond the rich societal portrayals the authors offer, their narratives illustrate how women engaged with nation building debates, both at the national and international levels, through their observations.

The Travelers

Born in Edinburgh, Scotland in 1804, Frances Erskine Inglis, first Marquise of Calderón de la Barca, better known as Fanny Calderón de la Barca, was one of ten children of a wealthy landowning family. After her father William Inglis went bankrupt in 1828 and died two years later, her mother moved to Boston with several of her daughters and grandchildren, where they started a school for the daughters of the elite. A few years later, she met her husband, Ángel Calderón de la Barca, who would become the first Spanish Ambassador to Mexico, where the couple lived from 1839 to 1841. Ángel Calderón de la Barca was a career diplomat stationed in the United States. He married Fanny shortly before they left for Mexico. While in the United States, the couple became friends with many prominent intellectuals, among them Harvard Hispanist George Ticknor and poet Henry Wadsworth Longfellow. Historian William Hickling Prescott,

author of the acclaimed *History of the Conquest of Mexico*, was a close friend of Fanny's and is credited with having introduced her to her future husband. While the Calderóns were in Mexico, Prescott requested their help in obtaining original documents, books, memorabilia, and asked Angel to help him contact several prominent Mexican intellectuals. He would specifically request of Fanny not only visual descriptions of the countryside and capital, which he never visited, but also her opinions of prominent political leaders and social events in Mexico, in addition to her reflections on how the country's lifestyle and political ways compared with those of the United States. Fanny became Prescott's eyes in Mexico. Prescott enjoyed Fanny's witty and incisive remarks about Mexican society, and constantly prompted her for more reflections in his letters. In turn, her travel narrative, entitled *Life in Mexico*, is informed by her own perspective of a displaced Scottish émigré and her roles as the wife of a Spanish diplomat and, an unofficial researcher for Prescott. Consequently, her observations of Mexico are framed by the mounting political concerns the United States had regarding its neighbor (the Mexican-American War would take place only a few years later), and by her role as a Spanish diplomat's wife. My reading of her text highlights the diverging political and economic interests endorsed by Spain and the United States, which she ably intertwines with her own views, offering a complex discussion of independence, Mexican historiography, the dangers of modernization, and the difficulty of understanding a foreign culture.

Elizabeth Cary Agassiz was also from a prominent family and was a distinguished educator as well. She ran a successful school for young girls from her home and later became the founding president of Radcliffe, Harvard's sister institution for women. Born in Boston in 1822, Elizabeth Cabot Cary grew up among the Harvard elite and a close-knit family. In 1850, she married famed Swiss-born scientist, Louis Rodolphe Agassiz, who redesigned the teaching of science at Harvard and helped professionalize scientific research in the United States. He was a complex figure who was, on the one hand, extremely progressive in the teaching of science and strongly endorsed women's education in the field. However, a proponent of polygenesis, he was also an ardent creationist who fiercely debated Darwin's evolutionary theory, and while he opposed slavery, he strongly advocated for racial segregation. Cary Agassiz's narrative focuses on her husband's scientific expedition to Brazil in search of specimens for his newly created Museum of Comparative Zoology, as well as his search for glaciers in the tropics with the hope of acquiring proof to invalidate

Darwin's theory. *A Journey in Brazil* (1868) is a joint narrative, written by husband and wife, chronicling the journey. Cary Agassiz describes different aspects of Brazilian nature and lifestyles, from plants and landscape to the customs and traditions of the different indigenous communities they encounter in the Amazon region. Throughout her descriptions, she highlights many of her husband's scientific findings. Louis Agassiz's voice appears in long fragments of his lectures and general observations, which are introduced by quotes or prefaced by an introductory phrase announcing his comments, and six appendices that close the book. In addition, included in the main text are several of his letters to local authorities written in French with their corresponding translation in the footnotes. But Agassiz, caught up in his scientific quest, is unable to observe Brazil beyond his specific interests; he cares little about the people they encounter, their customs, values, and lifestyles—that kind of observation was left to his wife.

Cary Agassiz's goal was to promote her husband's research; her narrative not only follows Agassiz through the Amazon for a year observing his collecting and research but also contains valuable information based on her own observations of what interests her. She pays special attention to Brazil's unique racial landscape and repeatedly reflects on the differences with the United States. Her observations reveal an implicit negotiation between her husband's theories and her own views, which are less dogmatic than his and respond to changes developing within the scientific field. Read as a joint narrative rather than as a text authored solely by Louis Agassiz (which is how it has traditionally been read until recently), *A Journey in Brazil* reveals a skillful handling of Cary Agassiz's role as spouse and intellectual. By teasing out both their voices and focusing on discussions of science, race and art, we can see that Cary Agassiz's observations of Brazil offer a rich depiction of the country—particularly of the Amazon, a region not well known in the United States—while presenting a subtle review of the perspectives of her husband, a leading scientific authority consulted even by the US government.[14]

Calderón and Cary Agassiz's observations of the regions and people they visit as well as their writing styles are pointedly different from each other, yet read together, the two texts reveal a complex map of key debates that circulated in the United States as the country began to carve its place within the Americas. Despite their privileged yet dissimilar upbringings and past, both women belonged to Boston's intellectual elite, and it is this prism, "this prescribed set of possibilities" as Crary has stated, that

shapes their views. At the time, only a few US American travel accounts to Mexico and Brazil had been published.[15] Perhaps because there were few textual models or because, unlike their spouses, they were unbound by any official mandate as to what or how to observe, both women made an effort to read their surroundings beyond what their own cultural imprint would typically allow. In part, it is because they remained in their host country for an extended period of time—Calderón stayed a little over two years in Mexico, while Cary Agassiz spent a year and a half in Brazil, mostly in the Amazon. In her narrative, Frances Calderón learns to adjust her "European eyes," hoping to shed her foreign gaze as she travels through Mexico. She recognizes that her perceptions change with time, proven by her original disgust of the foul-smelling *pulque* drink, for example, traditionally drunk by men, which at the end of her stay becomes "delightful." When making scientific observations, Cary Agassiz carefully notes her own limitations, often prefacing her assertions with comments that relativize what she sees: The phrase "so far as we can learn" often reinforces the idea that observation is a process not a one-time instance. Furthermore, like Calderón, she too will qualify her first impressions by adding a footnote to note her change of opinion.

Factual observations in travel narratives are often enveloped in a web of metaphors. These visual imaginings reveal how each traveler negotiates the familiar and the foreign; as the subject's position changes within the landscape, so do the metaphors used to describe the outside world. This fluctuation ironically opens the narratives to criticism for what might be considered inconsistencies. Such was the case with reviews of Frances Calderón and Elizabeth Cary Agassiz's texts. I contend that those inconsistencies are in fact quite revealing and important, for they couch the internal cultural negotiations of the traveler.

By focusing on the different images these two authors construct, my goal is to disentangle the historical, political, and cultural narratives that inform their gaze. Specifically, I examine how both women weave into their texts discussions of science, politics, and aesthetics because they reflect the values and knowledge privileged in the process of nation building, not only in the United States but also in Mexico and Brazil as well. By fleshing out how these debates were shaped and articulated across the continent, I analyze the political and cultural interconnections between the United States and Latin America, and I demonstrate how these two women participated through their narratives, in a more concealed way, in the production of knowledge.

Unlike the two travelers arriving at Calvino's Despina, both women approach their travels firmly rooted in the elite culture and politics of Boston. By the early nineteenth century, despite its relatively small size, Boston had become a cosmopolitan center and a wealthy international trading port, exporting rum, fish, salt, and tobacco. It was one of the largest manufacturing centers of the country with a notable garment and leather industry, and a profitable railroad industry. The wealthy Brahmin elite, closely linked to Harvard University, ensured that Boston and by extension Cambridge secured their place as one of the main political, economic, and cultural centers of the country during the mid-century. Prescott, Agassiz, Ticknor, and Longfellow, along with many other intellectuals (Henry David Thoreau and Ralph Waldo Emerson) and leading political figures (Charles Sumner), all socialized in the same circles. Through family relations, social connections, and education, these men as well as their spouses (Fanny Appleton Longfellow, Susan Amory Prescott, and Julia Ward Howe) forged a tight-knit community. Professional women also formed part of this community, many as educators and writers such as Elizabeth Palmer Peabody, Margaret Fuller, and Lydia Maria Child, among others. Together, these men and women shared an ambition and sense of duty as public intellectuals whose goals were to promote and secure a strong democratic US American political and cultural identity.[16]

After emigrating from Scotland years before meeting Angel Calderón de la Barca, Fanny had already become part of this network through her role as an educator of elite young ladies in the private schools her mother and sisters ran. Once married, Angel Calderón de la Barca would in turn anchor his wife's social connections within his international political and cultural network. Lizzie Cabot Cary was also part of the Harvard network through her family's connections, in particular, her brother-in-law Cornelius Felton, Eliot Professor of Greek at Harvard, and later, President of Harvard (1860–1862).[17] She would anchor her husband within the social network of Boston and Cambridge beyond his Harvard connections. Both women belonged to privileged circles, and through their marriages consolidated and expanded their political and social networks far beyond their local context.

Calderón's and Cary Agassiz's observations echo the values of a privileged class of US Americans as they began studying their southern neighbors. Initially, as might well be expected, the authors were very critical, for everything was perceived as inferior to the United States. However, as they

adjust to their new environment and their gaze settles, their observations subtly question many of their initial readings, often unintentionally. I am interested in those initial observations that dominate their narratives as well as in the shifts that take place as the authors begin to view their surroundings differently. This is the complexity and richness of travel writing: a blending of perspectives as the subject negotiates her or his place, when the foreign ceases to be solely observed as unfamiliar. It is the moment in which Despina, Calvino's fabled city, is no longer viewed solely through contrasts or projections of the self or one's culture, but instead commences to be defined by the multiple characteristics it actually possesses.

Travel in the Americas[18]

There is an abundance of critical studies of British nineteenth-century travelers to Latin America as a consequence of British expansionism as well as numerous critical studies on US Americans exploring their own territory.[19] However, less systematic work has been done to explore and analyze the body of travel narratives of US Americans within the Americas that go beyond reaffirming the stereotyped "imperial gaze."[20] Among the critical studies that focus on US Americans traveling to exotic places, few include Latin America.[21] Latin America shared with the United States a common separateness from Europe, but as a continental neighbor in the early part of the century, it was still unclear what kind of connection the new republics would sustain with the United States. Travel narratives reflected this ambiguity. It is precisely because of their hybridity and loosely structured form that these texts can offer a great deal of insight into the cultural and political shifts taking place throughout the continent.

In recent years, there has been a conscientious effort within American Studies to revisit representations of US national ideologies by paying close attention to the intricate contradictions embedded within US culture. Influenced in part by multicultural and postcolonial critiques, migration and diasporic studies, as well as by global developments in international trade, new conceptual frameworks have been introduced to expand comparative approaches.[22] In *The Anarchy of Empire*, Amy Kaplan proposes re-examining US imperialism by focusing on the reciprocal connection between the domestic and the foreign. Rather than read US imperialism as an extension of domestic ideologies, Kaplan highlights the interdependency of both, through a variety of cultural texts

(periodicals, films, novels, and travelogues) opening up new understandings of the construction of empire and revisiting the notion of US exceptionalism.[23] John Carlos Rowe also engages in close readings of a variety of texts in order to examine "the complex relation between US imperialism as it worked to expand national territory and functioned within its territory to consolidate ideas of the nation."[24] Along the same lines, Bruce Harvey analyzes a series of US antebellum narratives about non-European peoples and spaces to scrutinize the "interplay between US national self-thinking" and its incursions into foreign domains.[25] Harvey focuses on the construction of space and travel narratives to examine the circulation and interchanges of US national ideologies embodied in what he terms "the traveler-citizen." These studies have made an important effort to reach beyond traditional paradigms of US imperialism to reformulate the study of US imperial culture by revisiting canonical texts, including new texts, and interrogating power dynamics.

Similar trends are evident in studies of British imperialism with regard to Latin America. Matthew Brown's edited volume on Britain's informal empire advocates an interdisciplinary approach and the inclusion of a wider range of archival sources so as not to privilege one perspective over the other. To broaden our understanding of the diversity of power systems, he asserts that it is imperative to take a "broad-angled and eclectic vision."[26] Brown's introduction recognizes the importance of including literary texts as a historical set of documents, in particular travel narratives, as well as reassessing other historical documents to enhance an eclectic multi-disciplinary approach. Yet, he insists that despite recent shifts, the Latin American experience continues to be overlooked, in part due to scholars lacking the necessary language skills to access Spanish and Portuguese materials as well as a reigning insularity and methodological conservatism.[27]

Several critics suggest that travel writing offers a particularly valuable perspective because it is a genre that crosses borders, even if the traveler's view is limited, and bridges multiple disciplines. As Peter Hulme and Tim Youngs assert in the introduction to their edited volume, travel writing has become "a key theme" for the humanities as well as for the social sciences.[28] The primary reason is that a variety of disciplines have approached this vast body of work to uncover valuable information regarding science, politics, geography, ethnography, history, and literature, which have consequently led to major shifts in how we approach this eclectic genre.[29] Although their volume focuses on British travel writing,

several critical studies have begun expanding and complicating the study of US national ideologies in travel literature both domestically and abroad. Susan Castillo and David Seed's edited volume *American Travel and Empire* (2009) as well as Alfred Bendixen and Judith Hamera's *The Cambridge Companion to American Travel Writing* are just two examples of how critics are examining travel writing for its significant bearing on understanding US imperialism and the production of knowledge.[30]

While these studies present new shifts in the readings of US cultural ideologies, their efforts remain largely determined by US paradigms. In other words, most studies of US travel literature to Latin America continue to be self-referential, focusing primarily on what the narratives reveal about the construction of US identity.[31] Few studies engage with the internal politics and culture of the regions visited. For instance, Ricardo Salvatore's study on North American travelers to South America between 1810 and 1860 highlights US perspectives of Latin America but offers little information about Latin America or how the United States was viewed in Latin America.[32] Many narratives may not address these aspects directly, but they are embedded within the texts and are worth uncovering. Miguel Cabañas' book repeats a similar pattern, even though the author explicitly claims to address the two-way road of cultural exchanges between regions.[33] This may be due to the fact that Cabañas confines his reading to the particular perspective of individual texts, which hinders a broader study of the interconnections between south and north.[34] Nevertheless, these studies are valuable for broadening the body of travel narratives, even if they do not focus specifically on Latin America nor insert the travelers' observations within broader local contexts.

My goal is to open up the dialogues embedded in travel narratives by bringing together different critical perspectives in Latin American studies, US studies of Empire, as well as cultural theories of travel literature to reframe the political and cultural map between regions. I emphasize the construction of a horizontal landscape (one that is not conditioned by political hierarchy) by focusing on the hemispheric connections during the process of nation building. This does not mean that in terms of hemispheric power relations, all countries in the Americas are equal, for the Unites States had already issued the Monroe Doctrine and was wielding its growing power over the Americas. But I do not let the transnational economic inequalities be the sole defining traits that determine the parameters of exchange between countries. Instead, I focus on the shared concerns and debates that circulated in Mexico, Brazil, and the United States

during this time period. In so doing, I place Calderón and Cary Agassiz's contributions within that landscape of cultural production.

From a Latin American perspective, the expansion of American studies to encompass a broader view of continental relations is often perceived as one more imperialist gesture. Latin American academics in the United States and Europe are more inclined to embrace this effort, but this rarely holds true for scholars within Latin America. Comparing different critical approaches between north and south, George Yúdice points out that in Latin America cultural studies as a field focuses more on politics and civil society than in the United States, where it is predominantly concerned with artistic and literary productions.[35] Even the discussion of transatlantic studies, which has been quite popular among US American scholars, has endured significant criticism within Latin American studies.[36]

Scholars in Latin America have for the most part preferred to focus on the interconnections within their own region, south of the Rio Grande. Comparative studies that focus on the southern cone or the Andean region are just a few of the numerous reconfigurations of cultural studies in Latin America. Even studies that focus on North America hesitantly include Mexico or Canada.[37] Yet contradictions or distinctive links, however we choose to define them, abound. In 1891, promoting Cuban independence, José Martí eloquently reminded his compatriots in "Nuestra América" ("Our America"), to be wary of the United States, for the "tiger lurks against every tree, lying in wait at every turn."[38] Martí's seminal essay was originally published in the United States, in *La Revista Ilustrada de Nueva York*. Another of the many crossovers between North and South is Latin America's first historical novel, *Jicoténcatl*, which was anonymously published in Philadelphia in 1826.[39] These connections, both positive and negative, are valuable contributions that remind us of the complex history of the Americas and encourage us to move beyond our limited cultural divisions.

Reading Calderón de la Barca or Cary Agassiz's narratives without understanding the contexts of Mexico, Brazil, as well as of the United States limits our understanding of what the authors actually encountered, and how they framed that reality within their "prescribed set of possibilities." Furthermore, it curbs our understanding of how US American culture was received and discussed across the continent, and the effects these debates abroad had on domestic and international policies. Taking into account shared national debates in the United States and in Latin America may offer a way of developing new conceptual frameworks to understand

the complexities and interconnections of the different cultures as well as the ideological chasm that developed with the United States's invasion of Mexico and its forceful political and geographic expansion. Uncovering the ideological debates embedded in these travel narratives enables us to understand how ideas circulated and how politics reframed ideological debates on both sides of the Rio Grande.

While travel narratives can offer a great deal of information, the material is woven through a subjective prism that also misinterprets, exaggerates, or misrepresents. This does not necessarily disqualify the narrative as a historical source, but it warrants an understanding of the individual as well as of the broader national and global contexts.

The debates I analyze are not always clearly articulated within the narratives, but to the extent that they circulated broadly in the public sphere, they are present in the narratives as a subtext that informs how the subjects observe. In distinguishing travel narratives from guide books, Paul Fussell highlights the autobiographical component: "Travel books are a sub-species of memoir in which the autobiographical narrative arises from the speaker's encounter with distant or unfamiliar data, and in which the narrative—unlike that in a novel or a romance—claims literal validity by constant reference to actuality."[40] By including the autobiographical element in their subjective view and inserting each travel narrative within broader national discussions, I hope to illustrate what an interdisciplinary approach toward travel literature might offer and as such expand and enrich the cultural dialogue regarding the Americas during the nineteenth century.

The Context

The political setting that frames my study is the entangled process of nation building in the Americas. By 1838, when Angel and Fanny Calderón de la Barca headed off to Mexico, the United States, an independent republic since 1776, was firmly immersed in its territorial quest. It had already doubled its territory with the Louisiana Purchase of 1803.[41] While continuing to pursue its expansion, it still needed to resolve many important issues regarding its national consolidation. The Indian Removal Act of 1830 had driven Indian tribes west of the Mississippi, but the "Indian Problem" was far from settled. Neither had the United States solved the pressing issue of slavery. In 1838, the United States was the only independent American republic where slavery continued to flourish.

Slavery also existed in Brazil and Cuba, but they were not independent republics. Brazil was an empire, and Cuba still a Spanish colony.[42] Although the US Northern states had abolished slavery and the US Congress had outlawed the African slave trade in 1808, the domestic slave trade continued to flourish and was key for the economy of the southern slave states.[43]

The process of independence in Spanish America was far more complex and prolonged than that of the United States. By 1824, Spanish colonies had successfully overthrown most of Spain's American control of the continent with the exception of Cuba and Puerto Rico. But political emancipation of the new republics marked only the beginning of an extended process of nation building, which continued roughly until 1880. Throughout most of the century, the new republics would fight over forms of government and institutions, the role of the State, the Church, slavery, education, and how they would incorporate three centuries of colonial Spanish legacy.[44]

Brazil was a different case. In 1808, shortly before Napoleon's armies reached Lisbon, the royal family of Braganza and the court escaped Portugal protected by an English fleet and sought refuge in Rio de Janeiro, the colonial capital since 1763.[45] For the following thirteen years, Rio de Janeiro was the capital of the Kingdom of Portugal. After Napoleon's defeat, the Portuguese Royal family returned to Portugal, leaving an heir in Brazil. In 1822, he declared the independence of Brazil and became Emperor Dom Pedro I. He ruled Brazil until 1831, when he returned to Portugal, leaving his only heir to become emperor. Dom Pedro II remained in power until 1889, when Brazil became a republic.

Consequently, by 1838, all independent American republics, including the Brazilian empire, were immersed in the consolidation and expansion of their national territories. This new hemispheric landscape opened up numerous possibilities as well as challenges for both south and north, not only in the fields of diplomacy, politics, and economics but also in culture and science as well. What kind of relations would these countries sustain with one another? What kind of identity, if any, beyond a common geography separate from Europe would unite the vast and diverse Americas? What were the anxieties each country had toward the other? What kind of collaborative endeavor, if any, could exist between regions?

The two authors in this study, Frances Calderón de la Barca and Elizabeth Cary Agassiz, began their trips south from Boston, at the time, one of the main financial, political, and educational centers of the United States. However, Boston must have seemed rather provincial to the travelers

when they saw the urban sprawl of both Mexico and Rio de Janeiro, which at the time surpassed in size any US city. As the former capital of the Aztec Empire and seat of the Viceroyalty of New Spain for three centuries, Mexico City loomed large among all cities in the Americas not only for its historic, political, economic, and cultural legacy but also for its impressive architecture and artistic splendor. In fact, in 1811, Mexico City had become the largest and one of the most important intellectual centers in the Americas.[46]

By 1820, Rio de Janeiro, with its booming coffee industry and the arrival of European foreign investors, had become a major intellectual and economic metropolis, with approximately 113,000 inhabitants, which made Boston with its 46,000 inhabitants look comparatively small. Both Latin American cities were major political and cultural centers. The interconnections between these three influential cities illustrate many of the developments—urban, scientific, political, and aesthetic—that shaped the continent during the nineteenth century.

Given its long history with the Americas, Europe is undoubtedly a significant point of reference in this study. Although the United States was firm in its break with England, it never really discarded England as a major point of reference.[47] While Spain continued to be a key referent for the Spanish American republics in nation building debates, they also turned to England and France (and later to the United States) depending on their particular interests. As England and France were also interested in expanding their trade with the new nations, they too sought to affirm and develop their connections with the Americas. Consequently, my study works within a triangular axis that connects the development of ideas and debates as they circulated up and down the continent and across the Atlantic. The Atlantic thus serves as a shared foundational space for the Americas, a fluid spatial landscape that defies compartmentalizing. I am thinking specifically of the Black Atlantic in which Paul Gilroy emphasizes the fluid definitions of race through transatlantic mobilities.[48] By privileging US relations with Great Britain, as Gilroy does, the fluid space is appropriated by an Anglo-American perspective, which leaves the rest of the Atlantic to be determined as other (in addition to the Black Atlantic, we then have the Hispanic Atlantic, for example). Rather than compartmentalize regions, a collaborative perspective would not only enhance the notion of a shared yet different form of mobility across the Atlantic but also provide important insights on the

US experience with Latin America, highlighting different constructions of race throughout the Americas. One has only to look at the maps of the transatlantic slave trade to see how relatively small the slave trade in the United States was in comparison to that of Cuba or Brazil.[49]

Building on the Atlantic connection, another thread that informs my analysis is the transition in scientific research introduced by Charles Darwin's evolutionary theory. Evolutionary ideas had circulated since the eighteenth century, but it was Darwin who articulated them most comprehensively, spurred in part by Alfred Russell Wallace's timely observations. This important shift in observation can be circumscribed at one end by the work of Alexander von Humboldt, Prussian geographer and explorer, whose influential travels and research in Latin America sparked a renewed European interest in the region. Humboldt endorsed a harmonious view between religion and science highlighting a unified view of nature. His study of the Americas affirmed a continental historical past and unique geographic identity separate from Europe, which the United States and its politics of Manifest Destiny sought to appropriate as it consolidated its continental image.[50] For Latin Americans, Humboldt's view of South America, the American tropics, presented a global recognition and value of the region on which local scientists, intellectuals, and artists would also capitalize. At the other end of the spectrum, Darwin's evolutionary theory introduced a new lens for observation, which unsettled Humboldt's harmonious world vision, throwing into question not only scientific tenets but also profound religious beliefs. The public debate over evolution had a groundbreaking effect not only in the natural sciences and religion but also in the realm of politics, ethnography, and art in Europe as well as in the Americas. By 1870, the theory of evolution had gained a much broader global acceptance, and although it continues to be debated even today, it was recognized as plausible and could no longer be readily dismissed.[51]

My book spans the time frame bound between this major shift in modes of observation, from Humboldt to Darwin. It consists of three chapters, each divided into several sections. In the first chapter, I address the ideological shifts introduced in travel writing with the work of Alexander von Humboldt, who was a model not only for scientists and travel writers as they ventured through the Americas but also for artists. Both Calderón de la Barca and Cary Agassiz refer to him on numerous occasions, as he was an influential model on how to observe. Between 1799 and 1804, Humboldt traveled extensively throughout

the continent, exploring, measuring, drawing, and describing it in great detail, and endowing his work with a scientific imprint. Humboldt was one of the first prestigious figures to map and describe the continent in such a way that he encouraged artists, scientists, and independent travelers alike to undertake explorations. In fact, numerous US artists like Frederic Edwin Church and Martin Johnson Heade traveled to South America inspired by his writings, as did the German painter Johann Moritz Rugendas. Hence, Humboldt's role went far beyond the limits of travel writing. In fact, his scientific focus of pre-Columbian sculptures in Mexico legitimized the reclaiming of that nation's indigenous past in very public ways. At his request, the statue of the goddess Coatlicue was unearthed so he could properly inspect it. Subsequently, the monument was exhibited in an enclosed wooden structure in the courtyard of the University of Mexico, within eyesight of the celebrated sculpture to Charles IV. This event instilled creoles and peninsulars to reassess the prehispanic past.[52] Focusing on several of his illustrations, the significance of his travels for the Americas, and his specific work on Mexico (where he spent a year), I analyze the ways in which Humboldt reshaped the concept of travel and became an important model for those who thereafter traveled to Latin America. I highlight specific aspects of his work that Calderón de la Barca and Cary Agassiz address in their narratives.

The second chapter focuses on Mexico through the analysis of Fanny Calderón's narrative, *Life in Mexico*, parsing out the political negotiations that took place with Spain and the United States during post-independence. Mexico's political landscape after independence was extremely volatile, exemplified by the numerous civil wars and tense foreign alliances.[53] The chapter is divided into several sections that analyze Calderón's cultural alliances (US, Scottish, and Spanish) embedded in her gaze, especially through her research for Prescott and her role as wife of a Spanish diplomat. Calderón's observations create a unique mosaic of Mexican politics and culture, which not only reflect what she witnessed but also address the underlying debates of nation building circulating both in Mexico as well as in the United States and Spain. Throughout the chapter, I offer several close readings of her narrative in comparison with Prescott's *History of the Conquest of Mexico*, published the same year.

The third chapter analyzes the scientific debates regarding creationism and evolution (in Europe, the United States, and Brazil) to ground Louis Agassiz's role in the United States and especially at Harvard.

Determined to refute Darwin, Agassiz traveled to the Amazon to find geological traces of glaciers to prove that, despite similarities, the flora and fauna of the past had no connection with the present. In the Amazon, Agassiz encountered an extremely diverse racial population, which exacerbated his anxieties about racial miscegenation. Elizabeth Cary Agassiz was not only Agassiz's spouse but also his close collaborator and companion, who participated in his major scientific expeditions. Together, they wrote *A Journey in Brazil* (1868) in which Agassiz relayed his major discoveries in the Amazon. The bulk of the narrative, however, was written by Elizabeth Cary Agassiz, who describes Agassiz's scientific work as well as many other aspects of Brazil, from its landscape, flora, and fauna to the social habits and complex race relations. Through close textual analysis, I demonstrate how Cary Agassiz inserts her husband's "scientific" observations within her own less directed observations, which are nevertheless much more complex and rich. As she engages with the populations in the Amazonian villages they visit, she articulates her own conclusions about race, science, and aesthetics that subtly undermine her husband's.

Whether it is discussing the political and cultural boundaries between the United States and Mexico, the backwardness of religion, or the role of race and science in Brazil and the United States, both women observe their surroundings framed by the debates circulating within the United States with which they were well acquainted. Although Frances Calderón and Cary Agassiz were aware of the few other travel narratives that preceded them in their journeys, none of those texts provided a true model for their writing. Humboldt's narrative is the only real model they embrace, but his text does not take into account what travel might have meant for women at the time. Furthermore, their gaze is not geared at developing a systematic analysis as Humboldt intended. Hence, they set out in their own narratives to carve a space for themselves as insightful observers. Their views reflect the process of learning to adjust their gaze beyond their cultural imprint. This might explain why their texts display numerous oscillations and complexities that do not always compose a homogenous narrative of their observations. These unsettling perspectives are, in my view, one of the most interesting aspects of their texts. They reveal the ideological negotiations and views of otherness debated in the United States as the country began exploring the Americas, the impact Latin America had in the development of these debates, and the importance of women as participants in these debates.

Notes

1. Italo Calvino, *Invisible Cities*, trans. William Weaver (San Diego: Harcourt Brace & Company, 1974), 17.
2. Ibid., 18.
3. Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1991), 6.
4. "La naturaleza no es sino un punto de vista, los ojos que la contemplan o la voluntad que la cambia." Octavio Paz, "La literatura de fundación," *Puertas al campo* (Barcelona: Seix Barral, 1972), 19 (my translation).
5. Casey Blanton, *Travel Writing: The Self and the World* (New York: Twayne Publishers, 1997), 19.
6. Edward Said's study of Europe's construction and domestication of the Orient tellingly demonstrates the force of the ethnocentric gaze, despite direct observation. Women travelers were not exempt from this gaze. Edward Said, *Orientalism* (New York: Vintage, 1979).
7. Sara Mills, *Discourses of Difference* (London: Routledge, 1991), 42.
8. Negotiations authorizing international navigation on the Amazon had been underway since 1850 when British steamboats were allowed. But this authorization did not apply to all foreign commerce. Like the Spanish during the late eighteenth century, Brazilian authorities cautiously guarded their territory and only allowed scientific expeditions to be carried out in the Amazon with a government license. Agassiz's trip was an exception to the extent that US expeditions had not yet been authorized in the Amazon. The United States had pursued negotiations with Brazil to allow its citizens the navigation of the Amazon River and some of its tributaries since 1850. The final authorization, achieved in September 1867, would occur after years of diplomatic negotiations and the help of Louis Agassiz. See Percy Alvin Martin, "The Influence of the United States on the Opening of the Amazon to the World's Commerce," *The Hispanic American Historical Review* 1, no. 2 (May, 1918), accessed June 8, 2015.
9. Mills, *Discourses of Difference*, 21.
10. For references to the "guidebooks" used by soldiers heading to Mexico, see Robert W. Johannsen, *To the Halls of the Montezumas: the Mexican War in the American Imagination* (New York: Oxford University Press, 1985), 148–150.
11. This is what Josefina Ludmer has argued as "the tricks of the weak" in "Las tretas del débil," *La sartén por el mango: Encuentro de escritoras Latinoamericanas*, eds., Patricia González and Eliana Ortega (Rio Piedras: Ediciones Huracán, 1983).

12. In this sense, through their narratives, women redefine Anderson's imagined community by expanding and implicitly unsettling the notion of brotherhood. Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso and New Left Book, 1983).
13. Although the distinction between "public" and "private" has been an organizing principle used to differentiate men and women's spheres, this dichotomy has been unraveled by numerous historical and literary analyses. As these studies demonstrate, by the eighteenth century, women were lecturers, writers, scholars, and activists; in the nineteenth century, they participated in social movements such as anarchism, socialism, and labor reform. See, among others, Harriet B. Applewhite and Darline G. Levy, eds., *Women and Politics in the Age of the Democratic Revolution* (Ann Arbor: University of Michigan Press, 1993); Jane Rendall, "Women and the Public Sphere," *Gender and History* 11, no. 3 (November 1999): 475–488; Elizabeth Eger, Charlotte Grant, Clíona Ó Gallchoir, and Penny Warburton, eds., *Women, Writing and the Public Sphere, 1700–1830* (Cambridge: Cambridge University Press, 2001).
14. After the Civil War, Louis Agassiz was contacted by government officials to discuss segregation. See Chap. 4 of this study.
15. I am broadly referring to the 1840s for Mexico and the 1860s for Brazil. Prior to Calderón's narrative, the most well-known travelogue was Joel Poinsett's *Notes on Mexico in the Autumn of 1822*, published in 1825, which records his impressions of Mexico as US Minister. Brantz Mayer, who was US Secretary of Legation between 1841 and 1842, wrote a well-known narrative entitled *Mexico As It Was and As It Is*, published in Philadelphia in 1844, a year after Frances Calderón's text.

    Prior to Cary Agassiz's travel narrative to Brazil (1868), several others were published, written mostly by scientists or entrepreneurs. Among them: William Henry Edwards, *A Voyage Up the River Amazon* (1847); George Dunham, *A Journey to Brazil* (1853); Thomas Ewbank's *Life in Brazil* (1856); and Henry Walter Bates, *A Naturalist on the River Amazon* (1863), which Cary Agassiz cites several times. For an extensive bibliography of travel narratives to Latin America, especially in later years, see *Travel Accounts and Descriptions of Latin America and the Caribbean, 1800–1920: A Selected Bibliography* compiled by Thomas L. Welch and Myriam Figueras (Washington, DC: Columbus Memorial Library, Organization of American States General Secretariat, 1982), and A. Curtius Wigus, *Latin America in the Nineteenth Century. A Selected Bibliography of Books of Travel and Description, Published in English* (Metuchen, NJ: Scarecrow Press, 1973).

16. The following generation would continue to foster these ideals through their tightly knit network and connections across the Atlantic. See Leslie Butler, *Critical Americans: Victorian Intellectuals and Transatlantic Liberal Reform* (Chapel Hill: The University of North Carolina Press, 2007).
17. Felton died in office two years after becoming president.
18. Throughout this study, I use the term "America" in its hemispheric sense, as it was and is used in Spanish today. Hence "Americans" refers to all individuals born on the continent (north and south), distinguishing, when appropriate, between US Americans and Spanish Americans. In the case of Brazil, no clarification is needed.
19. Peter Hulme and Tim Youngs, Introduction, *The Cambridge Companion to Travel Writing*, eds., Peter Hulme and Tim Youngs (Cambridge: Cambridge University Press, 2002), 1–13.
20. Mary Louise Pratt's noted and repeatedly cited study, *Imperial Eyes: Travel Writing and Transculturation* (New York: Routledge, 1992), focuses on this kind of "imperial" representation. In her study, Pratt mentions a few well-known Spanish American authors such as Andrés Bello, José María Heredia, Simón Bolívar, and Domingo Faustino Sarmiento; and among European travelers, she includes readings of Maria Callcott Graham's *Journal of Residence in Chile in the year 1822; and a Voyage from Chile to Brazil in 1823* (1824), and Flora Tristán's *Peregrinations of a Pariah* (1838). There are, of course, many studies that follow Pratt's analysis focusing on European women travelers to Latin America that highlight Graham and Tristán's narratives.
21. See, for example, Justin D. Edwards, *Exotic Journeys: Exploring the Erotics of US Travel Literature, 1840–1930* (Hanover, NH: University Press of New England, 2001); Mary Suzanne Schriber, *Writing Home: American Women Abroad, 1830–1920* (Charlottesville: University Press of Virginia, 1997). These studies have few or no references to travel in Latin America.
22. Susan Manning and Andrew Taylor, "What is Transatlantic Literary Studies?" *Transatlantic Literary Studies: A Reader*, eds., Susan Manning and Andrew Taylor (Baltimore: The Johns Hopkins University Press, 2007), 2.
23. Amy Kaplan, *The Anarchy of Empire in the Making of US Culture* (Cambridge, MA: Harvard University Press, 2002).
24. John Carlos Rowe, *Literary Culture and US Imperialism: From the Revolutions to World War II* (New York: Oxford University Press, 2000), 5.
25. Bruce Harvey, *American Geographics: US National Narratives and the Representation of the Non-European World, 1930–1865* (Stanford: Stanford University Press, 2001), 6.
26. See Matthew Brown, introduction to *Informal Empire in Latin America: Culture, Commerce and Capital* (Malden, MA: Blackwell Publishing, 2008), 3.

27. Brown, introduction, 15. Although not focused on travel narratives, an interesting and important exception is Anna Brickhouse's study on the literary connections throughout the Americas, including the French Caribbean in *Transamerican Relations and the Nineteenth-Century Public Sphere* (Cambridge: Cambridge University Press, 2004).
28. Hulme and Youngs, Introduction, 1.
29. Ibid., 1.
30. Susan Castillo and David Seed, eds., *American Travel and Empire* (Liverpool: Liverpool University Press, 2009); Alfred Bendixen and Judith Hamera, eds., *The Cambridge Companion to American Travel Writing* (Cambridge: Cambridge University Press, 2009).
31. In fact, citing Thoreau, Melville, and Whitman, Carolyn Porter emphasizes the national relevance of nineteenth-century US American travel books, suggesting they were "a seminal form, spawning some of the greatest American writing of the nineteenth century." Carolyn Porter, "Social Discourse and Nonfiction Prose," *Columbia Literary History of the United States*, ed. Emory Elliot (New York: Columbia University Press, 1988), 362.
32. Ricardo D. Salvatore, "North American Travel Narratives and the Ordering/Othering of South America (1810–1860)," *Journal of Historical Sociology* 9, no. 1 (March 1996): 85–110.
33. Miguel A. Cabañas, *The Cultural "Other" in Nineteenth-Century Travel Narratives. How the United States and Latin America Described Each Other* (Lewiston, NY: Edwin Mellen Press, 2008).
34. Two chapters analyzing Domingo Faustino Sarmiento and José Martí's travels to the United States shift the perspective to discuss Latin American concerns, but they do not connect with US perspectives. Cabañas' chapter on the painter and traveler George Catlin is a more interesting example as he writes about Indians both in the Andes and in the United States.
35. George Yúdice, "Tradiciones comparativas de estudios culturales: América Latina y los Estados Unidos," *Alteridades* 5 (1993): 3. See also Ana del Sarto, Alicia Ríos, and Abril Trigo, eds., *The Latin American Cultural Studies Reader* (Durham: Duke University Press, 2004).
36. For an excellent summary of the historical differences and meanings embedded within the transatlantic perspectives, see Abril Trigo "Los estudios transatlánticos y la geopolítica del neo-hispanismo (Transatlantic Politics and the Geopolitics of Hispanism; Estudos transatlânticos e a geopolitica do neo-hispanismo)," *Cuadernos de literatura* 31 (enero-junio 2012): 16–45.
37. In recent years, South America's trade bloc, Mercosur (which presently includes Argentina, Brazil, Paraguay, Venezuela, and Uruguay, with five associate members: Chile, Bolivia, Colombia, Ecuador, and Peru), has

also sponsored numerous cultural activities, both locally and internationally. See http://www.redculturalmercosur.org/, accessed July 11, 2013. There have been fewer studies focusing on North American studies that include Mexico and Canada, although there are numerous works on the relation between Latin America and Spain.

38. José Martí, "Nuestra América" in *José Martí Reader: Writing on the Americas*, eds., Deborah Shnookal and Mirta Muñiz (Melbourne, New York: Ocean Press, 1999), 116.
39. For an interesting reading of the multiple genealogical narratives regarding this novel (whether it is Cuban or Mexican) and its circulation within the United States, see Brickhouse, *Transamerican Literary Relations*, 37–83.
40. Paul Fussell, *Abroad: British Literary Traveling Between the Wars* (Oxford: Oxford University Press, 1980), 203.
41. The Louisiana Purchase added thirteen new states to the Union, increasing its territory 828,000 square miles. Boundary disputes, however, immediately ensued. The United States claimed the Mississippi River and its tributaries were included, extending the boundary westward to the Rocky Mountains and in the southeast all the way to the Rio Grande. Spain insisted that Louisiana comprised no more than the western bank of the Mississippi River and the cities of New Orleans and St. Louis. The Adams-Onís Treaty of 1819, in which Spain ceded East Florida and surrendered its claims over West Florida and the Pacific Northwest territories, resolved the dispute.
42. Slavery was not abolished in all the Spanish American republics by 1838, but it did not flourish as it did in the United States. Several countries such as Argentina, Chile, Colombia, Uruguay implemented the law of wombs, which freed slaves' children at birth, as early as 1815, but they did not abolish slavery until mid century.
43. By 1804, the Northern States had either abolished or set measures to reduce slavery. In January 1807, a number of Southern congressmen joined with the North, and the US Congress voted to abolish the African slave trade, an act, which became effective January 1, 1808.
44. Some countries like Panama became independent as late as 1903. Panama was originally part of Gran Colombia, which corresponded roughly to the viceroyalty of Nueva Granada. It was a short-lived republic from 1821 to 1831 that included in addition to Panama, Colombia, Venezuela, Ecuador, northern Peru, western Guyana, and part of northwestern Brazil. For a general introduction to the ideological discussions regarding nation building in Spanish America, see Bradford Burns, *The Poverty of Progress: Latin America in the Nineteenth Century* (Berkeley: University of California Press, 1980); David Bushnell and Neil Macaulay,

The Emergence of Latin America in the Nineteenth Century (New York: Oxford University Press, 1988); Germán Colmenares, *Las convenciones contra la cultura: Ensayos sobre la historiografía hispanoamericana del siglo XIX* (Bogotá: Tercer Mundo Editores, 1987); Beatriz González Stephan, *La historiografía del liberalismo hispanoamericano del siglo XIX* (La Habana: Casa de las Américas, 1987); Leopoldo Zea, *El pensamiento latinoamericano* (Barcelona: Editorial Ariel, 1976).

45. The first Brazilian capital was San Salvador da Bahia, founded in 1549.
46. The other major city was Lima, capital of the Viceroyalty of Peru, created in 1542. Even today, Mexico City remains one of the largest and most densely populated cities in the Americas.
47. This is precisely one criticism Louis Agassiz makes of the United States: Even though it looks to Europe for guidance, it really just focuses on England.
48. Paul Gilroy, *The Black Atlantic: Modernity and Double-Consciousness* (Cambridge, MA: Harvard University Press, 1995).
49. See, for example, David Eltis and David Richardson, *Atlas of the Transatlantic Slave Trade* (New Haven: Yale University Press, 2015). My view of the Atlantic draws on and expands Joseba Gabilondo's critique of transatlantic studies, in which he stresses the role the Atlantic played as a key factor that facilitated Spain's imperial expansion in the Americas. Gabilondo defines the Atlantic as a "foundational space" for Latin America. I would argue that the same holds true for the United States. See Joseba Gabilondo, "Introduction. Special Section: The Hispanic Atlantic," *The Arizona Journal of Cultural Studies* 5 (2001), 93.
50. John Lloyd Stephens and Frederick Catherwood are perhaps the first two travelers that put these ideals into place with their travels and discoveries of the Mayan ruins. See John Lloyd Stephens (with illustrations by Frederick Catherwood), *Incidents of Travel in Yucatán,* 2 vols. (New York: Harper & Brothers, 1843).
51. Today, as proponents of intelligent design question Darwin's theory, they have had to accept change, even as they underscore that "intelligent design holds that certain features of the universe and of living things are best explained by an intelligent cause, not an undirected process such as natural selection." See http://www.intelligentdesign.org/whatisid.php, accessed July 1, 2013; also, Stephen C. Meyer, "Not by Chance: From Bacterial Propulsion Systems to Human DNA, Evidence of Intelligent Design Is Everywhere," *Discovery Institute: Center for Science and Culture*, December 10, 2005, accessed July 1, 2013. http://www.discovery.org/scripts/viewDB/index.php?command=view&printerFriendly=true&id=3059.
52. Leonardo López Luján, "El ídolo sin pies ni cabeza: La Coatlicue a fines del siglo XVIII," *Estudios de cultura náhuatl* 42 (August, 2011), accessed

September 29, 2016. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0071-16752011000100010&lng=es&nrm=iso.

53. During the first republic (1823–1835), the country had sixteen presidents, some ruling provisionally for only a few months like Valentín Gómez Farías. Highlighting this instability, another important figure, Antonio López de Santa Anna, served as president for 11 non-consecutive times over a span of 22 years.

Humboldt's Cosmography

El cocodrilo de Humboldt no es el cocodrilo de Hegel.
José Alejandro Restrepo, 1994[1]

As Europe began expanding its imperial domains, travel literature played a major role in mapping and constructing the Americas' identity. From Christopher Columbus' earthly paradise, overflowing with lush vegetation to a land of dangerous savages, the New World was re-envisioned over and over by European travelers through a vast array of narratives that blended fact and fiction. Explorers, missionaries, surveyors, soldiers, traders, and merchants all described the "outsized reality" of the New World guided by their interests and often employing myths and hyperboles to represent the dramatically foreign.[2]

During the eighteenth century, a particular kind of traveler emerged. Propelled by the scientific revolution and the advancement of a new worldview, travelers were guided by a desire of knowledge that would allow them to map the globe more accurately and acquire a better understanding of the natural world. Equipped with more precise instruments, and trained to observe scientifically, travelers spanned the globe collecting specimens of flora and fauna to document their discoveries. The desire to explore remote lands was not solely restricted to the advancement of science; it permeated many fields of inquiry. The relationship between nature and human societies instilled a reflexive imprint

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on Europe that spurred a critical re-evaluation of self through others. Consequently, as travel became more accessible and accounts of travel more popular, writers, philosophers, and artists also headed to far off lands to observe and reflect upon the cultural significance of these new realities. As Dennis Porter notes in *Haunted Journeys*, it was the emergence of critical philosophy during the Enlightenment that encouraged travelers to make systematic comparisons between their homeland and non-European societies.[3] To know oneself meant to compare and observe other societies.

Swedish naturalist Carl Linnaeus' taxonomical classification was instrumental for this task because it provided a common language to approach this global view of the world. As Europeans examined the new species of animals and plants brought back by travelers, they had no systematic way of sorting out this disparate nature. Linnaeus' *Systema naturae* (1735) offered just that: a classification for all plants, animals, and minerals through a hierarchical system. His organization established an overarching natural order, with a methodology based on observation determined by distinct and discernible laws.[4] Linnaeus argued that the first step toward wisdom was to know the things themselves, to have "a true idea of the objects"; classification was the means to achieve this knowledge. His logic was succinct: "objects are distinguished and known by classifying them methodically and giving them appropriate names. Therefore, classification and name-giving will be the foundation of our science."[5]

Linnaeus established three kingdoms, which were divided into classes and subsequently into orders, families, genera, and species. The most influential aspect of his classification was the ordering of plants based on the characteristics of their reproductive parts. He arranged all plants, known and unknown, in twenty-four classes according to the number and position of their stamens (male parts), and he broke down the classes into sixty-five orders according to the number and position of the pistils (female parts).[6] His procedure was based on a standard series of yes or no questions, which guided his readers through careful observation. A year later, when Georg Dionysius Ehret depicted the twenty-four classes in a pictorial table, the visual characteristics of his taxonomy highlighted and reinforced the simplicity of his system.[7] Linnaeus recognized that his was an "artificial" order, but its clarity and practicality were extremely attractive to naturalists, amateurs, travelers, and even gardeners. His system included a binomial nomenclature to identify plants and

animals—the first part identified the genus and the second the species within the genus. If naming was a way "to know the things themselves," as Linnaeus explains in his "Observations," his terminology of Greek and Latin root words is telling.[8] It not only reflected his cultural background but also, more importantly, it reinforced the common ancestry that Greek and Latin culture represented for Europeans. Hence, his way of defining this new order determined the spatial context in which knowledge was to be constructed and legitimized: It was to be European.[9] Despite the fact that many plants came from abroad, he disregarded their indigenous names arguing they did not possess any scientific value. By eliminating indigenous languages, Linnaeus was also erasing a wealth of information provided in numerous sixteenth-century herbolariums such as those included in Bernardino de Sahagun's *Florentine Codex* or Martín de la Cruz's *Libellus de Medicinalibus.*[10] These texts presented detailed descriptions and illustrations of a myriad of plants together with their attributes for curing different ailments. Linnaeus' omission of indigenous knowledge was a way of ensuring that the construction of global knowledge, especially scientific knowledge, remains a European enterprise.

Linnaeus believed—as did Louis Agassiz—that nature was "a balanced and harmonious system" and that the scientist could find the significance of God's creation through observation.[11] Hence, his goal was to provide a clear methodological system to assess nature. His taxonomy offered a comprehensive understanding of nature, while domesticating the globe's vast and heterogeneous nature within clearly defined European parameters. It was an extraordinary feat: containing all future discoveries and global otherness within Europe's purview.

Despite Linnaeus' great success at simplifying the natural world beyond Europe, not everyone agreed with his approach. In his quest to uncover the laws of nature, Georges-Louis Leclerc, Comte de Buffon, questioned Linnaeus' taxonomical approach in his voluminous *Histoire naturelle, générale et particulière* (1749), preferring to focus on habitat and changes among animals and plants. He argued that to understand the present, one had to understand the past. This historical dimension added a new perspective to nature and the environment. Unlike Linnaeus, Buffon considered nature an end in itself, not a reflection of a higher reality. His secular vision of the living world "reified nature into a generative power responsible for the harmony, balance, and fullness of creation."[12] Buffon's order had a relational quality. The living world followed natural laws determined by

natural relationships, driving forces, and geographical distribution. Like Linnaeus, he believed that through observation, the scientist could uncover and explain the current distribution of living forms on earth, but his form of observation took into account change.

Linnaeus and Buffon provided a universalist conceptual framework to understand the natural world based on observation, which kept Europe at the center of this worldview. Within this global vision, the Americas occupied a special place in Europe. Asia and Africa were distinctly different; hence, they did not question Europe's preeminence and civilizing force, but America presented a slightly different problem: The continent may have been different, but it had been colonized by Europeans. Antonello Gerbi succinctly summarized this dilemma in *The Dispute of the New World*: "America was Europe's offspring … it was both Europe and non-Europe."[13] This explains in part why the Americas became a focal point for Europe's own identity. Buffon's historical perception classified the American continent as inferior to Europe because it was a "new" continent in geological terms, largely without a history. Furthermore, Buffon argued that its animals were smaller, less powerful, and less developed. There were no rhinoceroses, elephants, and camels, and the largest of animals was much smaller than those of the Old Continent. Following his relational system, Buffon extended his negative assessment of animals to the indigenous inhabitants within the same environment.[14] His views would be contested (especially by Thomas Jefferson, who took great offense at Buffon's assessment), but they would also be adopted and expanded by other prominent figures reinvigorating the dispute.[15] Among Buffon's key followers were Dutch philosopher and geographer Cornelius de Pauw, British historian William Robertson, French author Abbé Guillaume Raynal, and German philosopher Friedrich Hegel.

Although both Linnaeus and Buffon provided a comprehensive approach to classifying nature, neither of them ever traveled outside the confines of Europe.[16] The Prussian scientist and traveler Alexander von Humboldt would highlight this flaw contesting many of their analogies and observations by emphasizing direct observation within local settings. Building on both scientists' work, Humboldt's extensive travels throughout South America, Cuba, and Mexico would provide the empirical evidence to refute Buffon's negative categorization of the Americas and underscore the limitations of Linnaeus' taxonomical order. Nature in Humboldt's view was a display of interconnections.

To observe a plant outside its microcosm meant grasping nature only partially, missing the possibility of understanding the function of a plant or why it developed a certain way. Humboldt emphasized the importance of travel in order to comprehend the interconnectedness of nature's phenomena. Only through direct observation could the scientist truly grasp nature's complexity. As Jorge Cañizares-Esguerra states: "A new more positive, less skeptical, European historiography of the New World is inaugurated with von Humboldt," prompting Europe to shift its viewpoint and reposition the Americas within the global landscape.[17]

Humboldt's View of Nature

Embracing the scientific shift of the eighteenth century, Humboldt set off to explore the Americas equipped with a new lens of observation. His writings inspired Spanish Americans to applaud their natural riches while at the same time, he incited Europeans to expand and reassess their explorations and travels to the "New Continent"—as he preferred to call it. His goal was to understand nature in its complexity and grasp its interconnections. The first step in this process was to observe the individual phenomenon, but in order to truly grasp an understanding of each phenomenon, it was necessary to observe its relation with other phenomena. In other words, nature's unity could only be comprehended through its multiplicity. Nature, as Humboldt argued, "submitted to the process of thought, is a unity in diversity of phenomena; a harmony, blending together all created things, however dissimilar in forms and attributes; one great whole (*to πᾶν*) animated by the breath of life."[18] In one of his earlier works, *Essay on the Geography of Plants* (Schoell 1805), he explains what this process entails. Contrary to Linnaeus' approach to the study of plants, which did not take into account plants' relation to their micro-systems, Humboldt proposed a "physique générale," a physical description of the globe that demanded a new geography of plants which took into account climatic, physical, atmospheric, moral, and aesthetic aspects of nature as well.[19] It was a unitary vision of the world and its phenomena, which today would resemble the study of natural ecosystems.[20] Summarizing his global vision in *Cosmos*, his final multivolume work, Humboldt reiterates the underlying principles of the universe:

> The most important result of a rational inquiry into nature is, therefore, to establish the unity and harmony of this stupendous mass of force and matter, to determine with impartial justice what is due to the discoveries of the past and to those of the present, and to analyze the individual parts of natural phenomena without succumbing beneath the weight of the whole. Thus, and thus alone, is it permitted to man, while mindful of the high destiny of his race, to comprehend nature, to lift the veil that shrouds her phenomena, and, as it were, submit the results of observation to the test of reason and of intellect.[21]

Humboldt's perspective on nature was relational and comparative: relational in terms of how discrete entities connect with their surroundings, and comparative in terms of highlighting differences and similarities with other geographical locations. Unity of nature was, in other words, a balance between the particular and the general. To achieve this, travel and fieldwork were essential, for one could only grasp the complex web of interrelations through careful on-site observation.

Humboldt articulates his theory throughout his extensive writings on the New Continent. During his five-year journey traversing more than 9000 miles, across what today is Venezuela, Colombia, Ecuador, Peru, Cuba, Mexico, and briefly to the United States, he collected thirty-five boxes of "treasures" containing thousands of plants, seeds, shells, insects, rocks, minerals, animal specimens, and indigenous artifacts.[22] In addition, he took prolific notes, made numerous meteorological and geomagnetic observations, and drew countless maps and illustrations. This resulted in a multivolume publication in French entitled *Voyage aux régions équinoxiales du Nouveau Continent* [*Voyage to the Equinoctial Regions of the New Continent*], which comprised thirty-four volumes with 1200 copper plates of illustrations that he edited and revised over a time span of twenty-nine years (1805–1834).[23] His work reveals an extraordinary multi-disciplinary gaze that addresses a vast array of studies and complex analyses in the fields of atmospheric physics, botany, ethnography, geology, geopolitical studies, topography, and zoology, including landscape painting, among others. Humboldt's view of nature as an all-encompassing planetary system created what Mary Louise Pratt termed, "a new kind of planetary consciousness."[24]

To uncover this complex planetary system, Humboldt approached nature through systematic measurements, assessing the oxygen, humidity, temperature, electrical charge, and barometric pressure of the

atmosphere; the blueness of the sky; the magnetic fields; the vertical and horizontal planes of the earth; and the altitude of mountains. Thus, using a plethora of scientific instruments, he breaks nature down into its distinct individual components to construct a "synchronic narrative of the land."[25] Humboldt would spend more than three decades of his life constructing this synchronic narrative, creating a uniquely complex composition that intertwined multiple disciplines and expanded the realm of observation through travel.

Picturing Science

Humboldt's views on nature were not only scientific but also visual. His texts are filled with visual aids: sketches, drawing, charts, tables, and maps, all designed to complement the data he presents and make the distant travel site visible. In addition to their informative, measurable data, Humboldt's maps also highlight their relevance to the visual arts.[26] In the same way that America became visible for Europeans through travel narratives, maps played an important role in grounding those images, even when those maps were symbolic or thematic. Maps are both material and social products that reflect cultural values and concerns of the society that produce them; they tell stories; in essence "they literally and figuratively influence the way we *see* the world."[27] Humboldt drew countless maps, illustrating barometric measurements, hysothermes, latitude, and longitude, all geared at creating, in the words of Anne Marie Claire Godlewska, "a language—or a way of seeing—that would encourage both conceptual depth and rigor and holistic vision."[28] It was a new way of observing nature, and therefore a new way of looking at the Americas. At the same time, these measurable features (height, barometric pressure, and geologic structure) allowed Humboldt to display the awe-inspiring majestic nature of the Americas while containing it. His maps, in other words, became a tool to divulge and tame nature's overpowering force.

Highlighting his unitary vision of nature, Humboldt develops what I call micro-cosmographies of the regions he visits. These singular visual/textual representations (tableaux, maps, and illustrations) chart and interconnect his copious measurements with numerous distinctive features of a specific region to create an all-encompassing artistic view. This view, however, does not remain static, for it extends metaphorically beyond the borders that frame the image through numerous points

of reference.[29] These micro-cosmographies are a particular blending of different spheres of knowledge, an artistic spatialization of Humboldt's cumulative knowledge.[30]

A superb example is Humboldt's depiction of his ascent of the Chimborazo entitled: "Voyage vers la cime du Chimborazo tenté le 23 Juin 1802 par Alexandre Humboldt, Bonpland et Carlos Montúfar," which appeared in the *Atlas géographique et physique du Nouveau Continent*.[31] The illustration displays the magnificent volcano in the center, framed by two columns of measurements. Blending the scientific data with the painted image of the Chimborazo in the center, the illustration makes a visually striking impression upon the reader/viewer (Fig. 1).

The volcano expands horizontally on the page. The rugged layers of hardened lava, typical of the stratovolcano, are depicted through two alternating hues of chestnut brown that recreate its rocky texture. As the broad low slopes of the base become increasingly steeper, the change in elevation is rendered visible by a distinct light-brown marbled snow belt that wraps across the mountain. The change is also indicated by the presence of the Yanacocha Lake, a small alpine water basin that "does not merit the name of a lake."[32] At the top, the familiar bell-shaped summit crowns the mountain with its perpetual snow. Transversally, cutting across the left mountainside, similar to the *Tableau Physique*, Humboldt itemizes, in Latin, the different alpine plants he and Bonpland collected. This "botanical graffiti" of plants snake up to the base of the snow-covered dome, where organic life ends, and eternal snow begins.[33]

The illustration is geared at underscoring the majestic height of the Chimborazo as well as Humboldt's proud accomplishment of almost reaching the top of what was considered then the highest peak in the world. The two columns of measurements (the left marking temperatures and the right noting altitudes) provide a local context to observe the volcano (the Cotopaxi, a passage in the Andes). They also supply the altitudes of other mountains well known to Europeans (the Vesuvius, Mount Etna, Mount Blanc, and the northern peak of the Himalayas). In this way, Humboldt anchors the local phenomenon—the Chimborazo—within a global setting and expands the information beyond the borders of the pictorial frame. These spatial connections are essential to secure the different spheres of knowledge, for as Humboldt reminds his readers, "Incomplete analogies prevent Europeans from having a just idea of the aspect of the torrid zone."[34]

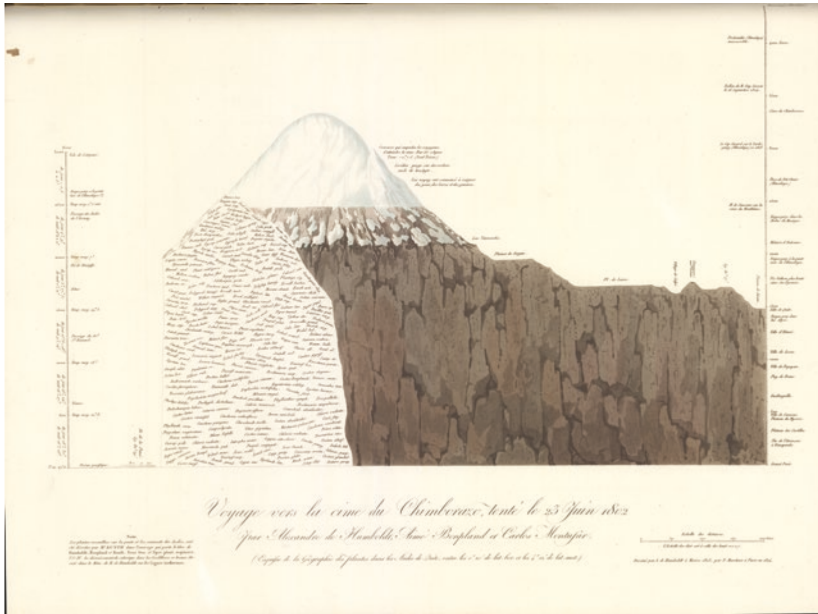

Fig. 1 "Voyage vers la cime du Chimborazo tenté le 23 Juin 1802 par Alexandre de Humboldt, Aimé Bonpland et Carlos Montúfar." Illustration by Alexander von Humboldt in *Atlas géographique et physique du Nouveau Continent*, Plate 9. From the collections of the Ernst Mayr Library, Museum of Comparative Zoology, Harvard University

Humboldt's illustration is also a narrative, already evident in the title. It is the visual documentation of his voyage with Aimé Bonpland and Carlos Montúfar, dated June 23, 1802, when the three travelers attempted to climb the Chimborazo from the south–south eastern side of the mountain. Humboldt wrote the final version of his ascent fifty years after the fact, in 1853, carefully following the notes from his travel diary.[35] His narrative is inscribed in the illustration through discrete notations punctuating the right-hand side of the Chimborazo, almost paralleling the meandering climb of the plants. As the travelers reach the beginning of the snow-covered summit, the inscription states that the travelers' eyes, lips, and gums began to bleed as a result of the altitude ("Les voyageurs ont commencé à saigner des yeux, lèvres et gencives"). While Humboldt asserts that his ascent had "little dramatic interest,"

when reaching this point in his narrative, he details the dizziness, difficulty breathing, the bleeding gums, and conjunctivitis the climbers suffered. He relates these experiences to those of other climbers as well as his own and expands the narrative by including the time when he fell unconscious trying to climb the Pichincha.[36] A bit further up in the illustration, there is a fissure in the mountain. Rather than simply record it, Humboldt gives it meaning by labeling the image "the crevasse that inhibits the travelers from reaching the top" ("la crevasse qui empêche les voyageurs d'atteindre la cime"). In the end, the travelers came within only a few hundred feet of the peak. The goal of these micro-cosmographies is to connect the local with the global, the visual with the textual, the aesthetic with the scientific, and the personal with the general.

Interestingly, Humboldt's description of his ascent does not always coincide with its visual representation. Based on the illustration, the viewer would assume an enormous variety of plants existed along the slopes of the volcano. But in his text, Humboldt states: "At Chimborazo, like everywhere around the high peaks in the Andes chain, the extensive grassland (los pajonales) is very monotonous," adding that "Chimborazo's flora generally seemed to us much less rich and varied than that of other snow-capped mountains around the city of Quito."[37] He also mentions large brown-black shapeless columns rising up from the snow and steep ridges up the dome, which are absent from his depiction.

These discrepancies do not mean that Humboldt's illustrations are deceiving. On the contrary, his goal is not to portray an exact copy of what he observed, but in fact to let free the imagination. Emotion does not undermine knowledge in Humboldt's view; they go hand in hand. He appeals to the senses because they enable the viewer "to engage the imagination, and at the same time to enrich life with new ideas by the increase of knowledge."[38] Aesthetic descriptions or representations of nature (poetry and art), he states, are the only way to achieve "insight into the harmonious co-operation of forces" of nature, the only way to understand the unity of science.[39]

Most of Humboldt's micro-cosmographies have to do with mountains and height. Mountains explain the shape and topography of the continent while engaging the senses. His hypsometric map of another volcano in Ecuador, the Pinchincha, is a beautiful graphical representation with little scientific value but was an important part of an ensemble of clues on the internal structure of the planet (Fig. 2). Mountains are the result

Fig. 2 "Plan Hypsométrique du Volcan de Pichincha." Illustration by Alexander von Humboldt in *Atlas géographique et physique du Nouveau Continent*, Plate 27. From the collections of the Ernst Mayr Library, Museum of Comparative Zoology, Harvard University

of the earth's dynamic geological forces and are the key components in the distribution of organic life because they affect everything in their regions.[40] As geologists quickly understood, mountains are "part of an ensemble of clues revealing the internal structure of the earth."[41]

Humboldt's interest in mountains is visually reflected in his attention to landscape painting. Landscapes have a conceptual value for Humboldt because they order natural formations in space. Given their magnitude, mountain landscapes were a tool for bringing together reason (science) and imagination (emotion). Height allowed him to bring together a great deal of comparative information. As Denis Cosgrove and Veronica della Dora state, "height is much more than a question of scale … it denotes a relationship between location and human experience."[42]

The visual height of the lofty Chimborazo or Cotopaxi releases in the observer emotions of the sublime, and the body reacts unleashing emotions that surpass the rational:

> [I]n the forests of the Amazons, as on the slopes of the Andes, I felt that the surface of the Earth was alive everywhere with the same spirit, the life even which is in the rocks, the plants and the animals, as in the heart of humanity from one pole to the other. Everywhere I went I realised just how much the relationships I formed in Jena (where I conducted part of my academic training) were having a profound influence on me, and how much, inspired by Goethe's perspectives on Nature, I had gained new organs of perception.[43]

Influenced by Goethe's concept of nature, Humboldt's holistic approach takes into account perception ("Anschauung") with the process of observation. Perception gives nature the power to excite the senses. Consequently, Humboldt's "new organs" are bodily organs as well as scientific instruments.[44] They are tools of observation: One appeals to the realm of emotions, and the other demands rational analysis; together, they advance a deep appreciation and knowledge of nature. Cognizant of the enormous power of the visual, Humboldt promoted landscape painting as a means of uncovering nature's laws. Nature had to be represented. As he reminds his readers, painting also had a scientific value: "Descriptions of nature, I would again observe, may be defined with sufficient sharpness and scientific accuracy, without on that account being deprived of vivifying breath of imagination."[45] And among the possible artistic descriptions, landscape painting was the most important:

> Landscape painting, though not simply an imitative art, has a more material origin and a more earthly limitation. It requires for its development a large number of various and direct impressions, which, when received from external contemplation, must be fertilized by the powers of the mind, in order to be given back to the senses of others as a free work of art.[46]

For Humboldt, scientific observation was complemented by art. In this way, he inspired a wide range of travelers to uncover the Americas. Humboldt's unique observation of nature inspired renowned artists such as Frederic Edwin Church, Louis Mignot, George Catlin, Moritz Rugendas, and Ferdinand Bellerman, who followed his journey to the tropics and painted some of the most vivid and important landscapes of their careers, as well as scientists such as Darwin, Henry Walter Bates,

Louis Agassiz, and even curious travelers such as Fanny Calderón de la Barca. These travelers would be profoundly indebted to Humboldt as they traversed the Americas and explored new forms of observation.[47]

Uncovering the Tropics

Until Humboldt's voyage, Spain had restricted foreign explorations in its colonies. While it had garnered a wealth of maps (topographic, physical, and political), nautical charts, geographical reports, and accounts and illustrations of the American flora and fauna through its own scientific expeditions, the information was stored and kept secret, mostly for political and economic reasons. By mid-century, however, the impact of the Bourbon reforms and growing pressure from its European neighbors forced Spain to ease control over its American monopoly.[48] But until Humboldt's voyage, no scientific expedition had been authorized to the Americas without including Spanish scientists.[49]

Spain's authorization to allow Humboldt to freely travel, explore its territories in the New World, and have access to its reports was something no other non-Spanish European had achieved. Circumstances in Spain helped Humboldt. Wars with France and England, in addition to internal political problems and unrest in the colonies, hampered the Crown's motivation to invest in long and costly expeditions. Humboldt solved that problem by offering to finance his trip independently. An added attraction was his reputation as a noted mining engineer, trained at the prestigious Mining Academy in Freiberg—where Spain had sent several of its scientists. In return for its support, Spain hoped Humboldt might help revamp the productivity of the mines in its colonies.[50]

Humboldt was interested in all aspects of science. He had studied geomagnetism and physics, conducted experiments (even on himself) in galvanism and chemistry, and researched methods employed in collecting botanical and zoological specimens. His desire to travel and explore nature had been inspired by his voyage with Georg Forster, famed geographer who had accompanied Cook on his second voyage around the world. Forster trained Humboldt how to discern the essential traits of a landscape, and how to observe and describe nature with art and precision.[51] After two years of failed attempts to join a major scientific expedition, Humboldt decided to organize his own expedition with his recent inheritance. He would do so with Aimé Bonpland, a botanist and doctor he had befriended. Using his European network and diplomatic skills,

Humboldt contacted Spanish naturalists, diplomats, and governmental authorities to obtain the support he needed.[52] In March 1799, two "royal" passports were issued to the travelers guaranteeing their unrestricted access to the Spanish colonies and assuring the full assistance of every governor and magistrate within the region.[53]

In June 1799, Humboldt and Bonpland set sail from la Coruña on the *Pizarro*. After a brief stop to explore Tenerife, they anchored in the port of Cumaná, on July 16th. During the following five years, the two friends traveled through major cities, small towns, and relatively uninhabited areas; they visited missions and made short excursions into the jungle with the expertise of indigenous guides; they explored coasts as well as the interior of the continent; and in Caracas, they climbed Mount Avila with the prominent intellectual and acclaimed poet, Andrés Bello. They witnessed a meteor shower and an earthquake. They navigated through the upper Orinoco River and its tributaries, exploring the Casiquiare canal, which allowed them to confirm the connection between the Orinoco and Amazon water systems.[54] They traversed the Andes and studied and climbed volcanoes—as already stated, one of Humboldt's proudest moments was almost reaching the top of the Chimborazo. These were extraordinary accomplishments. They also visited Cuba twice and spent a year in Mexico where they worked side by side with renowned scientist and academics. Humboldt and Bonpland could not have succeeded in their endeavors alone. They received prodigious help from countless men and women of letters, university professors and students, naturalists, artists, government authorities, local inhabitants, indigenous people, and guides, who assisted them with their travels and helped access public and private archives. Finally, before returning to Europe, they made a brief visit to the United States, where they met President Thomas Jefferson and other important authorities, but did not engage in any travel beyond Washington. Upon their return, a rich new chapter on the Americas began, based on a new understanding of the continent introduced by Humboldt.

Personal Narrative

Relation historique, translated as *Personal Narrative*, is Humboldt's unfinished travel narrative of his American journey, included in *Voyage aux régions équinoxiales du Nouveau Continent*. Published twelve years after his voyage, only the first three volumes were completed

(1814, 1819, and 1825, respectively), leaving out more than two full years of the journey—from April 1801 until his return in 1804.[55] As a travel narrative, *Personal Narrative* stands out for its uniqueness. While it chronicles Humboldt and Bonpland's itinerary, the narrative unfurls through the profuse connections Humboldt establishes. It is a narrative that combines history, science, art, and a bit of adventure, carefully threaded through observation. It is also a narrative in which the traveler takes on multiple identities. Using a variety of grammatical forms ("we," "he," "the traveler," "the travelers," "the spectator," and "I"), Humboldt creates, what Oliver Lubrich calls, a "semantic dispersion" of the textual subject, which often disorients the reader.[56] It is almost as if by stripping the subject from the viewing, the perceptions and observations become neutral and are free to expand. This, perhaps, explains Ottmar Ette's assertion that: "For Humboldt, the different narrating figures or narrative instances form a unity."[57] At the time, most travel narratives presented readers with antiquarian "curiosities" to convey a "local tint" or else they focused on recording scientific information. But Humboldt's desire for unity led him to develop a different kind of narrative in which he could convey all the scientific information acquired, including the excitement of discovery and emotional response to the "curiosities," with scientific precision. This however proved to be much more difficult than he expected, which might explain his initial reluctance to write his travel narrative. Early on in his introduction, Humboldt frames his narrative by laying out the important elements the genre must address:

> When I began to read the numerous narratives of travels, which compose so interesting a part of modern literature, I regretted that travellers, the most enlightened in the insulated branches of natural history, were seldom possessed of a sufficient variety of knowledge, to avail themselves of every advantage arising from their position. It appeared to me, that the importance of the results hitherto obtained did not keep pace with the immense progress which, at the end of the eighteenth century, had been made in several departments of science, particularly geology, the history of the modifications of the atmosphere, and the physiology of animals and plants. I saw with regret, (and all scientific men have shared this feeling) that whilst the number of accurate instruments was daily increasing, we were still ignorant of the height of many mountains and elevated plains; of the periodical oscillations of the aerial ocean; of the limit of perpetual snow within the polar circle and on the borders of the torrid zone; of the variable intensity of the magnetic forces, and of many other phenomena, equally important.[58]

Considering the advances of science, Humboldt envisioned the traveler would utilize the new tools to assess the enormity of facts, which still had to be uncovered. He expected barometric and atmospheric readings, careful measurements, and descriptions that the traveler observed "under his own eye."[59] However, those facts were only interesting inasmuch as they were connected to a broader network: "the knowledge of insulated facts" was far less interesting than observations "on the geographical relations of the vegetable world, on the migrations of the social plants."[60] The difficulty was separating the observations of details from those more general results, which in Humboldt's view, interested every enlightened mind. In trying to find a balance between the details and the broader picture, Humboldt expanded his narrative to include almost everything. Travel in Humboldt's hands was not simply an effort to collect and enlarge inventories, though he certainly recognized the importance and usefulness of this; it was to observe and connect the individual facts with a more global understanding, specifically to determine the phenomena and "the laws observed" of their relations with each other.[61] This not only dispersed the narrative but also, in the tropics, it was particularly difficult, for nature was overwhelming in its beauty and size, as he wrote to his brother upon arriving in Cumaná:

> What trees! Coconut tress 50 to 60 feet high, the *Poiciana Pulcherrima* with garlands of magnificent bright red flowers a foot long; bananas and a mass of trees with monstrous leaves and fragrant flowers the size of a hand, of which we know nothing … and what color of birds, fish, even crabs (sky blue and yellow). So far we have wandered like crazy; in the first three days we could not decide anything, because one topic is rejected to pursue another. Bonpland assures me he will go mad if the marvels do not stop appearing. But what is even more beautiful about these wonderful sights is that they give the impression of the whole of nature's plants, powerful, lush and yet so sweet, so delicate, so serene. I feel I could be very happy here…[62]

Humboldt's excitement is evident. In the tropics, the senses are electrified. The exuberance and sheer size of the plants with their bright colorful flowers and perfume envelop the travelers hindering their focus. As more "marvels" keep appearing, their jaunting gaze rambles about without an anchor. Almost as a reminder to himself, in an effort not to lose his ground, Humboldt asserts that beyond the individual elements, it is

the ensemble that makes the most lasting and vivifying impression. Some critics found his narrative a "mishmash" of information; others were more critical, like John Barrows who, writing in the *Quarterly Review*, found his synthesis regressive.[63] Critics often found his generalizations and systematization deviating from the factual imperative. For example, in describing the rapids of the Orinoco, in a span of several pages, he compares them to the Yellala Falls of the Congo River, the pongos of the Amazon, and the Nile; he discusses the rock formations around the rapids and falls, comparing them to the granite composition of the Mont Blanc; he delves into barometric measurements, soils, vapors, sounds, the indigenous inhabitants of Atures, and their manners; and discusses observations made by John Barrows regarding Africa, Father José Gumilla on the Orinoco, and even Aristotle.[64]

One could easily conclude that so much information and relational construction would paralyze his narrative. But Humboldt threads into his scientific descriptions lively accounts of his personal adventures. Readers follow him through his battles warding off mosquitoes and gnats, enduring shocks and experimentation with electric eels, paddling through crocodile infested waters, studying monkeys, coming head to head with a jaguar, and climbing the peaks of the Andes.[65] Even when relaying scientific information, his narrative is full of evocative descriptions of nature so "even those who, uninstructed in the several branches of physical science, feel the same emotion of delight."[66] He takes pleasure in describing all that inspires wonder: the texture and color of a plant, the pungent smell of a fruit, and the flowing outburst of the waterfall–all that constitutes the varied landscape of the tropics. His ornate descriptions are associated with German Romanticism and *Naturphilosophie*. From the Romantics, he embraced a language that inspired the imagination and conveyed the dazzling power of nature through the sublime. He shared their sense of oneness with nature but without their melancholic longing. He embraced *Naturphilosophie*'s vision of nature as a dynamic force that could be studied through analysis and contemplation.[67] He shared its pursuit to uncover the forces at play in nature to achieve a total history of the planet. This allowed him to bring science and emotion together, enhancing his broader appeal. When describing the constellation of the Southern Cross, for example, the physical immensity resonates in the immense beauty of the constellations:

> Nothing awakens in the traveller a livelier remembrance of the immense distance by which he is separated from his country, than the aspect of an unknown firmament. The grouping of the stars of the first magnitude, some scattered nebulae, rivalling in splendour the milky way, and tracts of space remarkable for their extreme blackness, give a peculiar physiognomy to the southern sky. This sight fills with admiration even those who, uninstructed in the several branches of physical science, feel the same emotion of delight in the contemplation of the heavenly vault, as in the view of a beautiful landscape, or a majestic site. A traveller needs not to be a botanist, to recognize the torrid zone by the mere aspect of its vegetation.… The heavens and the earth,—everything in the equinoctial regions, presents an exotic character.[68]

Humboldt makes clear that observation is the key to any type of knowledge; it is what enables even those "uninstructed" in science to feel delight. Hence despite criticisms, *Personal Narrative* was both informative and entertaining, and became extremely popular. However, Nigel Leask rightly notes, it was not the complete narrative that became popular, but rather the numerous abridged versions. These versions eliminated some of the distracting extensive connections to highlight his more interesting descriptions, adventures, and extraordinary discoveries.[69]

Humboldt recurrently invokes the image of "discovery" through his travels, which has led many critics to consider him a "second Columbus." In the first page of his *Personal Narrative*, he announces that he and Bonpland traversed regions, which "have remained almost unknown to most of the nations of Europe, I might add even to Spain."[70] Like Columbus, Humboldt explored many remote and unchartered lands, treading across the interior of the continent through remote roads and rough rivers, and, like Columbus before him, he opened the New World to Europe. In this sense, what Humboldt saw in Columbus—an agent of transformation, the usher of a new period in European consciousness—applies to him as well.[71] But unlike Columbus, Humboldt did not claim or try to possess those lands. He simply described them in a new way through empirical observation. He will be one of the first to point out the industrial possibilities of guano, but only because he was a careful observer of its use at the time, not because he "discovered" it and claimed it.[72] This is precisely Laura Dassow Walls' point as she cautions current-day readers that celebrating Humboldt as a "second Columbus" has darker undertones that highlight the enslavement and exploitation of the indigenous peoples

and their lands brought on by Columbus.[73] Hence, in her view, it would be preferable not to equate the two. Other critics disagree, arguing that the analogy is in fact quite telling. Mary Louise Pratt characterizes Humboldt as an omnivorous, godlike viewer who observes and taxonomizes everything with an all-consuming imperial gaze, and who self-consciously positions himself as a "double of the first European inventors of America."[74] Pratt aligns Humboldt with Columbus for reinventing America as "primal nature, an unclaimed and timeless space occupied by plants and creatures (some of them human), but not organized by societies and economies; a world whose only history was the one about to begin."[75] Mauricio Olarte concurs with Pratt, arguing that Humboldt's comparisons—measuring and contrasting the New Continent against the Old—reproduce the traditional dichotomy between nature and culture to underscore America's lack of culture.[76] Even his "rhapsodic" language—to use Pratt's adjective—is evocative of Columbus, as they both unearth the flourishing and exuberant vegetation of the tropics.[77] These criticisms point to Humboldt's European prism in viewing the tropics. In the eyes of these critics, Humboldt imposed a new kind of colonizing imprint on the New World: a geography that awaited to be read and decoded by European eyes.

There is no denying Humboldt's Eurocentrism. He systematically contrasts his observations with Europe: "A European acquainted with only the opuntia in our hot-houses is surprised to see … ," the port of Cumaná is large enough to receive "the fleets of Europe."[78] But more importantly, it is through his observations and contrasts between Old and New Continents that he constructs knowledge: "From what I have seen in the mountains of Europe, and in the Cordilleras of America, caverns may be divided, according to their interior structure, into three classes."[79] He repeats this process with different aspects of nature: mountains, rivers, and grottoes. In other words, while global science may be constructed from Europe, there is no global science without the Americas. Furthermore, although Humboldt places Europe at the center of scientific knowledge, he celebrates many aspects of the Americas, from its extraordinary natural world to its different cultures. He also questions prior tenets held by Europe until then and disputes authorities such as La Condamine and William Robertson, among many others. His observations demonstrate how much Europeans still ignored about the world: "The great problem of the physical description of the globe," he explains regarding the distribution of minerals, plants, and animals,

"is the determination of the form of these types, the laws of their relations with each other, and the eternal ties which link the phenomena of life, and those of inanimate nature."[80] Perhaps the most significant trait in Humboldt's quest to "know" the tropics is that he is willing to suspend, review, and even correct many prior assessments or preconceived notions he and others had believed were true. In this sense, although his maps make the Americas accessible and important to Europe in new ways, his gaze simultaneously reexamines European knowledge connecting it to the Americas.

Challenging Pratt's argument that Humboldt essentially erases the human landscape to emphasize the Americas as primal nature, Dassow Walls asserts that wherever "Humboldt goes in the world he looks for traces of the human."[81] Walls argues that he acknowledges the human imprint in the landscape particularly when observing the indigenous population—which he finds both praiseworthy and disgraceful. He also speaks out against European imperialism and creoles' exploitation of the indigenous inhabitants. In her words, "Humboldt did far more than unlock the closed gates of the Spanish empire; he showed Americans how to imagine themselves as something more than offshoots of European ambitions."[82] However, as Stanton Catlin argues, by the time Humboldt arrived in the Americas, a Latin American consciousness was already beginning to emerge in part through the work in the art academies—Humboldt simply reinforced it from a European perspective. In the Quito school of sculpture, for example, under the direction of José Celestino Mutis, creole and Ecuadorean Indian artists were working together to reproduce with scientific accuracy natural specimens. Applying new techniques and colors to reproduce precisely detailed illustrations of extraordinary artistic quality, these artists created striking renditions of Americas' nature that sparked a sense of homeland and self-awareness.[83]

It is worth noting that despite these criticisms, when the colonies embarked on their battles for independence, they embraced Humboldt's scientific observations and outspoken opinions as validation of their own legitimacy.[84] The great independence leader Simón Bolívar exalted Humboldt for what he considered his most important act: "with *his eyes* he pulled her [America] out of ignorance and with his pen he painted her as beautiful as her own nature."[85] Many Spanish Americans fighting for independence shared this perception. North Americans, such as Prescott, Ticknor, Irving, and Longfellow, would also embrace Humboldt's view as he applauded the US political and economic model,

which echoed many of his values. While Humboldt was not a politician, he was well aware of the political consequences his observations had in local contexts. But unlike in Spanish America, where he was and still is highly praised, in the United States his relevance would eventually be curtailed, especially when he voiced his aversion to the continuing of slavery, the Indian Removal, the Mexican-American War, and the burgeoning materialism that permeated US culture. These opinions were cautiously altered or deleted from his subsequent publications in the United States.[86]

Humboldt's travels altered perceptions of the New Continent on both sides of the Atlantic. From landscape painters to natural scientists, they all credit Humboldt with giving them the urge to travel and *see* the continent. While he may well have naturalized colonial relations and racial hierarchies as Pratt contends, Humboldt also questioned both creole and colonial inequalities and denounced all forms of exploitation.[87] Most importantly, he relished observing nature and the inhabitants of the New World, highlighting their relevance for Europe, and galvanizing travelers to engage in observation and explore the Americas with a new lens.

Political Essay on New Spain

Personal Narrative did not include Humboldt's travels through his beloved Mexico, yet it was far from absent throughout his work. In fact, as he confessed to his brother back in Europe, Mexico was where he intended to spend the last years of his life:

> I have a great plan for a central establishment of the sciences in Mexico to serve all free America. The emperor of Mexico, whom I know personally, will fall, a new republican government will come, and I insist on spending my days in the most agreeable and useful manner for the sciences in a part of the world where I am dearly loved and where everything indicates I would lead a happy existence. It is a way to avoid dying without glory, to surround myself with many educated people.[88]

Mexicans shared the feeling. In 1827, Humboldt and Bonpland were declared honorary citizens of Mexico.[89] But Humboldt would never return to the Americas, unlike his friend Bonpland, who had an adventurous life in South America, teaching, studying plants, raising sheep, and producing yerba mate in the unstable tri-border region of Argentina, Brazil and Paraguay. His final years were spent in the northern Argentine

province of Corrientes, where he died.[90] Humboldt's commitment to Mexico, however, never subsided and transcended his geographical distance. His *Essai politique sur le royaume de la Nouvelle Espagne* (1808–1811) is an in-depth study of Mexico's economic, political, and cultural characteristics, which had great political relevance for Mexicans.[91] During their quest for independence, creoles embraced his study as a blueprint of their great potential and the need to take control of their assets.[92] Ensuring a good administration under Mexican control would nevertheless be much more difficult than anyone could have anticipated, as Mexicans' struggle for independence was a drawn out and costly process.

Humboldt and Bonpland reached New Spain from the Pacific port of Acapulco on March 22, 1803, accompanied by Carlos Montúfar, a wealthy creole who had joined them in Quito a few years before.[93] From Acapulco, they took the less traveled route to Mexico City, crossing the scorching valley of the Mezcala River, through Taxco's temperate climate, past Cuernavaca. As they advanced with twenty-one overloaded mules, Humboldt mapped the towns, villages, farms, and mines they visited, registering barometric pressures and other climactic changes. He would do the same at the end of his journey, from Mexico City to the port of Veracruz—a road that almost every European traveler to Mexico would follow thereafter, often citing him. Having completed the trajectory, Humboldt became the first to map Mexico's altitude from the Pacific to the Atlantic coasts.[94]

Viceroy José de Iturrigaray received the travelers warmly, offering his services and placing all available resources at their disposal. Humboldt was struck by Mexico City's beauty: "There is perhaps no city in all of Europe that in general terms is more beautiful than Mexico. It has the elegance, regularity, and uniformity of the beautiful constructions of Turin, Milan; [and] of the beautiful neighborhoods of Paris, Berlin."[95] He admired its elegant stone buildings and cobbled stone streets, its lovely gardens, colorful squares, glistening canals, impressive aqueducts, and rich display of art.[96] He was also impressed with the high standards of its cultural and scientific institutions: "I was most surprised by how advanced the civilization of New Spain was compared to the other parts of South America that I had just explored."[97] But Mexico's beauty was tarnished by harsh contrasts, for nowhere else did he see so much misery and unequal distribution of wealth: "There is no city in all of Europe with so much misery. Thirty to forty thousand men (Indians) completely naked, covered in a wool blanket or just in rags. A sad and repulsive sight!

An abundance of lice! Such uneven fortunes!"[98] This would be a disturbing recurring image subsequent travelers would continuously confront.

During his yearlong stay, Humboldt made a series of short trips to specific points of interest, measuring altitude, longitude and latitude, and barometric pressure. He measured and climbed volcanoes (el Jorullo, el Cofre de Perote); visited mines (in Taxco and Guanajuato); and collected plants and made numerous sketches and drawings of what he saw. In Mexico City, he set up his research center at the Royal School of Mining (1792), where he collaborated with several colleagues from Freiberg, including the Director of the School of Mines, Andrés Manuel del Río. He worked tirelessly with scholars and artists, studying and copying documents and archives, and discussing geology, geography, art, and even commerce.[99] He gave a series of lectures on pasigraphy (a universal conceptual writing system), which was included in the first textbook on geology printed in the Americas (1805), compiled by del Río.[100]

Although Humboldt refrained from participating in local political debates, he knew his work had political significance. While in Mexico, he published a short text, *Tablas geográficas políticas del Reino de Nueva España* (1804), "a sketch" ("*bosquejo*") or preliminary study that would later be developed in his *Political Essay*.[101] Dedicated to Viceroy Iturrigaray in gratitude for his generous support, *Tablas* contains a wealth of statistical information in a summarized form: from the different goods produced in Mexico (cochineal, indigo, and sugar paper) and the annual production of silver and gold in the mines to the demographics and geographical distribution of the population (Spanish, creole, Indian, and mulattoes), including income distribution, military expenses, and fortifications, as well as state income. The information is listed with only brief explanations, composing a scientific record of Mexico's assets and deficiencies, which Humboldt views from a comparative perspective. Summarizing his findings on Mexico's income, for example, he states: "The total income of New Spain is almost equivalent to that of the king of Prussia and exceeds three times the income of the king of Sweden."[102] His conclusions create a new kind of awareness toward New Spain, on both sides of the Atlantic. Spain had zealously concealed this information not only from the rest of Europe but even from Mexico's inhabitants.[103] Humboldt was cognizant of the repercussions his report might have, and in his dedication to Iturrigaray, he acknowledges the political relevance of his study: "The majority of the materials I have used," he confesses sarcastically to the Viceroy, "do not exist in

the Secretariat of this Viceroyalty and this realization leads me to believe that my work will be of some interest to your royal excellency."[104] His statement reveals a critical undertone toward Spain's secrecy and administration. Embracing liberal and democratic ideals of progress, Humboldt sustained that knowledge had to be shared to ensure progress; thus, he was determined to disseminate as much information as he could. In fact, during his visit to the United States, he shared his maps and research on Mexico with President Thomas Jefferson and US government authorities. Secretary of Treasury Albert Gallatin had several copies made of his detailed maps. It is believed that much of this information was instrumental in the United States' incursion against Mexico in the Mexican-American War.[105]

In the wake of independence, Mexican historian Carlos María Bustamante would invoke Humboldt's critique of Spain's secrecy and protectionist policies. Bustamante tried to spread Humboldt's research by publishing a serialized version of *Tablas* in his newspaper *Diario de México*. But local authorities concerned about divulging information, given the tensions in Europe and the political climate in Mexico, interrupted the publication. *Tablas*, nevertheless, quietly circulated among scholars and political leaders until it was finally published in 1822. It was a unique compilation of Mexico's geographic, economic, and political landscape.

Tablas can be considered an aide-memoire for Humboldt's more persuasive and elaborate text, *Political Essay*, published four years later in France (1808–1811). Far from a travel narrative that leads the reader through an unknown geography, *Political Essay* examines, scrutinizes, ponders, and appraises New Spain's society, briefly peppered with personal anecdotes. Dedicated to King Charles IV of Spain, it is Humboldt's contribution to "perfect the social institutions and the eternal principles which are needed to assure people's prosperity."[106] Humboldt analyzes Mexico's geography and population; provides statistics of each *intendencia*; makes astronomical observations; studies the agriculture and mines, its products and commerce, and its general income and military defense. Humboldt is much more critical in this text, detailing problems and offering solutions. He repeatedly compares Mexico to the United States, as if anticipating future conflicts. He discusses hydraulic systems at length, the improper care of roads, and the treatment of the indigenous population. His work is so exhaustive in certain areas such as Mexico's mines that he almost "single handedly" produced

a boom in British investment and was later blamed for exaggerating the information when investments failed.[107]

Humboldt helped Mexicans gauge their assets in a more organic way, taking into account their rich and diverse geography.[108] In his study of Mexico City, rather than focus on the established urban limits imposed by Spain—as most studies did at the time—he redrew the administrative units taking into account the area's physical geography. This allowed him to understand the changes of natural resources (especially water) of the fertile valley since the Aztecs and recommend solutions for potential problems given the population growth.[109]

Attentive to the interconnection between nature and mankind, he paid special attention to the indigenous communities, studying their language and comparing physical traits, customs, and cultures. As he reminded readers in his *Personal Narrative*, "The forms of plants determine the physiognomy of nature; and this physiognomy influences the moral disposition of nations."[110] In Mexico, Humboldt reflected extensively on the indigenous populations. He contested Buffon's theories of Americans' inferiority, arguing that the fertility of the land was exceptional and that the corresponding "immaturity" Buffon and De Pauw sustained was erroneous given the inhabitants' physical strength, especially of those working in the mines: "The appearance of these hardworking and robust men could have changed the opinion of the likes of Raynal, of De Pauw, and of many other authors, who—though otherwise esteemed—have proclaimed so often the degeneration of our species in the torrid zone."[111]

Marco Antonio Urdapilleta Muñoz explains that Humboldt's view of indigenous peoples is determined by an evolutionary model of progress defined by four modes of sustenance: hunter-gatherer societies, herding, farming, and commerce. Hence, their inferiority—which Humboldt does not contest—is not due to a hostile climate but rather to a moral deficiency given their lack of social development.[112] Despite their general good health, he notes they tend to get drunk, are naturally indolent and subservient, and lack imagination. Yet, in making these assertions, Humboldt also recognizes the need for caution, as there are many cultural differences he may not be able to assess.[113] In the end, he considers that these traits, as well as their inferiority, he claims, are due to their history of enslavement.[114] In Humboldt's view, individual freedom is essential to advance progress. He faults the despotism of the Aztecs, and subsequently the Spanish, who continued to build on a legacy of

abuse, forcing indigenous people to be relocated, stripping them of their land and coercing them to work in the mines, or join the military.[115] European readers are not exempt from these criticisms in Humboldt's global view, for "the same cruelties which tarnished the conquest of America, have been re-enacted before our own eyes in times which we supposed to be characterized by vast progress, information, and general refinement of manners."[116] Among the uncivilized acts committed by "civilized nations" he cites: the Reign of Terror in France (1793–1794), the expedition to Saint-Domingue (1791–1803), the War of the Third Coalition (1803–1806), the Chios massacre (1822) and the destruction of Ipsara (1824) by Ottoman troops, and the adverse justice in slave countries.

While *Political Essay* analyzes Mexico's commercial products, its artistic production is presented in a beautiful visual publication that highlights its indigenous legacy, *Vues des cordillères, et monumens des peuples indigènes de l'Amérique* (Paris 1810).[117] *Views of the Cordilleras*, as it is known in English, comprised 69 magnificently executed plates almost all accompanied with texts by Humboldt. The volume, did not focus solely on Mexican art and landscape, it also included images of his beloved Chimborazo and other volcanoes; landscapes in Ecuador; Inca gardens; and Muisca drawings. But most of all, the illustrations focus on Mexican art in a "revolutionary" effort to connect the Americas.[118]

Humboldt's writings presented the creole elite a new visual and textual map of their own territory filled with prospects of economic development, which would help ease the path for the future new republic to claim its own riches. He would become a major "figure" for independence, and his findings were endowed with national significance. Yet, Mexico's fight for independence was perhaps the most entangled process of all the former Spanish colonies. Although it began as a popular uprising, constant infighting as well as foreign incursions systematically hampered the process unlike anywhere else in Spanish America. Resisting the loss of one of its major colonial holdings, Spain did not recognize Mexico's independence until 1836, and it would take another three years until it sent its official envoy to acknowledge that independence. The man endowed with this task was the first Plenipotentiary Minister, Don Ángel Calderón de la Barca, who arrived in Mexico in 1839, accompanied by his wife, Scottish-born Frances Calderón de la Barca.

Fanny Calderón, as she was popularly known, is perhaps the first traveler to explore Mexico with as much freedom as Humboldt.

Well educated and fluent in Spanish, she took advantage of her husband's diplomatic privilege to explore Mexican society. If Humboldt assessed, measured, and analyzed Mexican society focusing on its economy, government policy, indigenous art, flora and fauna, and mountains, Fanny Calderón followed Humboldt's path through the country, updating many of his findings while also penetrating deep into the interior of Mexican society. At a time when women had very few opportunities to act independently, much less to follow their own curiosity, Fanny Calderón explored Mexico with extraordinary zest, engaging in everyday life, observing creoles' tastes, manners, and education, as well as traveling through the countryside with exceptional self-confidence. Inspired by Humboldt's travels and writings, which she often quotes, Fanny Calderón tries to document it all. Humboldt had taught his readers that everything one observed was of interest. The key was to understand how different elements were connected, to scrutinize the ways in which the natural and social environments were linked. Fanny Calderón takes Humboldt's lesson to heart, engaging with Mexicans, from creole to indigenous populations, detailing their customs, habits, likes, and dislikes. Her interest is limitless, as she explores the countryside, ruins, mines, markets, and finds her way into peoples' homes, orphanages, and hospitals, even gaining access to restricted places such as convents. In this way, her narrative on Mexico expands Humboldt's study. As Dawn Ades notes, although Humboldt paid great attention to the wonders of the primitive cultures, his interest in the remains of these American cultures was historical rather than aesthetic; hence, there is relatively little *costumbrismo*–little focus on the everyday mannerisms and local color of the population–in his *Voyage*.[119] Fanny Calderón's narrative fills this gap. Her travel narrative complements Humboldt's *Voyage* by highlighting Mexico's geopolitical structure through her detailed observation of the landscape and her contemporary examination of its people and lifestyles thirty years later. It is a unique and unexpected portrait that shifts the focus of observation toward the internal manners of Mexican society.

Notes

1. "Humboldt's crocodile is not Hegel's crocodile" (1994) is the title of Colombian artist José Alejandro Restrepo's video installation. It is part of his multimedia project, *Transhistorias*, a series of installations in which he reworks images of Latin America from the nineteenth century.

"El cocodrilo de Humboldt no es el cocodrilo de Hegel" highlights the debate between the Old and New Worlds through a playful rendering of Hegel's assessment of America. The title is based on Humboldt's letter to Varnhagen von Ense, dated July 1, 1837, in which he states: "I would gladly abandon 'the European beef,' which Hegel's phantasy presents as so much better than the American, and I could almost wish to live near the weak inanimate crocodiles (which, alas! measure twenty-five feet)." The installation consists of two monitors, spaced twenty-five feet apart on a white wall, one with a blown-up eye of a crocodile slowly blinking, and the other with the crocodile's tail wagging. Restrepo's project not only criticizes nineteenth-century views but also, especially, seeks to shed light on the extent in which the colorful and exoticizing gaze toward America is still prevalent today in many cosmopolitan centers. On Restrepo's exhibit, see http://admin.banrepcultural.org/sites/default/files/joseres_0.pdf, 47–50, accessed September 16, 2015. I am grateful to Juan Torbidoni for bringing Restrepo's work to my attention. For the complete letter, see Alexander von Humboldt, *Letters of Alexander von Humboldt to Varnhagen von Ense, from 1827 to 1858,* trans. Friedrich Kapp (New York: Rudd & Carleton, 1860), 59–60.

2. Gabriel García Márquez, "The Solitude of Latin America" (Nobel Literature Prize lecture), December 8, 1982, accessed July 2, 2015. http://www.nobelprize.org/nobel_prizes/literature/laureates/1982/marquez-lecture.html.
3. Dennis Porter, *Haunted Journeys: Desire and Transgression in European Travel Writing* (Princeton: Princeton University Press, 1991), 29.
4. Other inventories existed long before Linnaeus', such as Pliny the Elder's thirty-seven volume *Naturalis Historia* (AD77–79), which encompassed knowledge about medicine, technology, and art, in addition to that of the natural world.
5. Carolus Linnaeus, *Systema naturae 1735* Facsimile of the First Edition with an Introduction and a First English Translation of the "Observations" by Dr. M. S. J. Engel-Ledeboer and Dr. H. Engel (N.P.: Nieuwkoop b.d. Graaf, 1964), 19, accessed September 16, 2016. https://www.kth.se/polopoly_fs/1.199546!/Menu/general/column-content/attachment/Linnaeus--extracts.pdf.
6. Paul Lawrence Farber, *Finding Order in Nature: The Naturalist's Tradition from Linnaeus to E. O. Wilson* (Baltimore: The Johns Hpkins University Press, 2000), 9.
7. Daniela Bleichmar analyzes the interplay between the textual and visual characteristics in the classification of plants inspired by Linnaeus' taxonomy, particularly in the publications used by botanists traveling to Spanish America. See Daniela Bleichmar, "Exploration in Print: Books and

Botanical Travel from Spain to the Americas in Late Eighteenth Century," *Huntington Library Quarterly* 70, no. 1 (March 2007): 129–151.

8. Linnaeus, *Systema*, 19.
9. This Eurocentrisim continues today. Take, for example, the current process for naming hurricanes. The list of names for tropical cyclones in the Atlantic is maintained and updated by an international committee of the World Meteorological Organization, an agency of the United Nations. There are six lists of alphabetical names (male and female) in use for tropical storms in the Atlantic, which rotate each year. The list of one year will not be reused for six years. The names are compiled from French, English, and Spanish—but not Portuguese. The WMO website states: "The tropical cyclone/hurricane names selected are those that are familiar to the people in each region. Obviously, the main purpose of naming a tropical cyclone/hurricane is basically for people easily to understand and remember the tropical cyclone/hurricane in a region." If all twenty-one names are used, names from the Greek alphabet are used; however, no Algonquin, Haitian Creole, Nahuatl, Mayan, or other indigenous language names are included, despite their regional relevance. Names may also be retired. Accessed August 8, 2016. http://www.wmo.int/pages/prog/www/tcp/Storm-naming.html; http://www.nhc.noaa.gov/aboutnames_history.shtml.
10. See Bernardino De Sahagún, *Historia general de las cosas de Nueva España* known as *Florentine Codex* Book XI, and Martín de la Cruz, *Libellus de Medicinalibus Indorum Herbis, Manuscrito Azteca de 1552, Según traducción latina de Juan Badiano; Versión española con estudios y comentarios por diversos autores*, 2 vols. (México: Fondo de Cultura Econónomica, 1991). It is striking to note that the *De la Cruz-Badiano Codex* circulated among indigenous, mestizos, and creoles throughout the colonial period, which undermines Linnaeus' argument regarding indigenous cultures' lack of scientific knowledge. However, recognizing indigenous knowledge would have entailed approaching and studying their worldview in a way that recognized their authority. Their complex knowledge still remains unclear, as today we still lack a precise understanding of Nahua concepts of plant nomenclature. See Salvador Reyes Equiguas, "Plants and Colors in the *Florentine Codex*," in *Colors Between Two Worlds: The Florentine Codex of Bernardino de Sahagún*, eds. Gerhard Wolf and Joseph Connors in collaboration with Louis Waldman (Florence: Kunsthistorisches Institut in Florenz, Max-Planck-Institut: Villa I Tatti, the Harvard University Center for Italian Renaissance Studies, 2011), 135–155; Sandra Zetina et al., "The Encoded Language of Herbs: Material Insights into the *De la Cruz-Badiano Codex*," in *Colors Between Two Worlds*, 221–257. I thank Eulogio Guzmán for his insights on this topic.

11. Farber, *Finding Order in Nature*, 11.
12. Ibid., 18.
13. Antonello Gerbi, *The Dispute of the New World: The History of a Polemic 1750–1900*, trans. Jeremy Moyle (Pittsburg: The University of Pittsburgh Press, 1973), 157.
14. Ibid., 6.
15. Thomas Jefferson was among those who contested Buffon's degeneracy theory in the Unites States; see Thomas Jefferson's last section of his *Notes on the State of Virginia* (1785) and his letter to Buffon (dated October 1, 1787) accompanying the bones and skin of a Moose, and the horns of a Caribou and Elk to Paris. Others contesting Buffon's theory in Latin America are Juan Ignacio Molina, *Compendio de la historia geográfica, natural y civil del Reyno de Chile*, 2 vols. (1788 and 1796) and Francisco Xavier Clavijero, *Historia antigua de México* (1780–1781). For an important overview regarding European philosophical travelers, see Jorge Cañizares-Esguerra, *How to Write the History of the New World: Histories, Epistomologies, and Identities in Eighteenth-Century Atlantic World* (Stanford: Stanford University Press, 2001).
16. Linnaeus did encourage his students to travel. Most of them went to Asia and Africa, but his favorite pupil, botanist Peter Löfling, joined a Spanish expedition to Venezuela, where he would eventually contract a fever and die. Humboldt made a special visit to his tomb in Cumaná, Venezuela.
17. Jorge Cañizares-Esguerra, *How to Write the History of the New World*, 3.
18. Alexander von Humboldt, *Cosmos: A Sketch of the Physical Description of the Universe*, 2 vols., trans. E. C. Otté (Baltimore: The Johns Hopkins University Press, 1997), 1: 24. The work was originally published in five volumes over the span of several years. The first volume appeared in 1845, and the fifth and last volume appeared posthumously in 1862.
19. Susan Faye Cannon coined the term "Humboldtian Science" to characterize this new type of scientific inquiry that marked the first half of the nineteenth century in *Science in Culture: the Early Victorian Period* (New York: Science History Publications, 1978). For a more contemporary and nuanced reading of Humboldt's scientific method see Michael Dettelbach, "Humboldtian Science," in *Cultures of Natural History*, eds. N. Jardine, J. A. Secord and E. C. Spary (Cambridge: Cambridge University Press, 1996): 287–304.
20. Hugh Ridley, *Darwin Becomes Art. Aesthetic Vision in the Wake of Darwin: 1870–1920* (Amsterdam: Rodopi, 2014), 16.
21. Humboldt, *Cosmos*, 1: 24–25.
22. Humboldt to Freiesleben, near Bordeaux, August 1, 1804 in *Cartas Americanas*, comp. Charles Minguet, trans. Marta Traba (Caracas, Venezuela: Biblioteca Ayacucho, 1980), 135.

23. Humboldt chose to write in French, which was the scientific language par excellence at the time. The complete title is *Voyage aux régions équinoxiales du Nouveau Continent, fait en 1799, 1800, 1801, 1802, 1803, et 1804 par Alexandre de Humboldt et Aimé Bonpland, redigé par Alexandre de Humboldt avec un atlas géographique et physique (1810–1834)*. Humboldt's publications on his voyage to the Americas are difficult to itemize because his work is dispersed throughout numerous editions. Furthermore, Humboldt revised and expanded subsequent editions many times. In addition, not all the translations reproduce the exact material. A useful source is Charles Minguet, *Alexandre de Humboldt historien et géographe de l'Amérique espagnole, 1799–1804* (Paris: François Maspero, 1969). Noted Humboldtian scholar Ottmar Ette has been awarded an eighteen-year grant for his long-term project: "Travelling Humboldt–Science on the Move" at the Berlin-Brandenburg Academy of Sciences and Humanities: http://www.bbaw.de/forschung/avh-r. This project will offer a geneaology and chronology of Humboldt's works. Ette is also in charge of "Alexander von Humboldt's American Travel Diaries" (ART) based at the University of Potsdam and the Berlin State Library. http://www.uni-potsdam.de/humboldtart/.
24. Alexander von Humboldt, *Personal Narrative of Travels to the Equinoctial Regions of America, During the Years 1799–1804*, trans. and ed. Thomasina Ross, 3 vols. (Henry G. Bohn, 1852–1853), 1: ii–iv; Mary Louise Pratt, *Imperial Eyes*, 120.
25. Michael Dettelbach, "Global Physics and Aesthetic Empire: Humboldt's Physical Portrait of the Tropics," *Visions of Empire: Voyages, Botany, and Representations of Nature*, eds., David Philip Miller and Peter Hanns Reill (Cambridge: Cambridge University Press, 1996), 161.
26. This point is developed by Magali M. Carrera in *Traveling from New Spain to Mexico: Mapping Practices of Nineteenth-Century Mexico* (Durham: Duke University Press, 2011). Mapmaking would be central to Mexico in the process of reimagining its identity as it shifted from being a place known as New Spain to becoming Mexico.
27. Karl Offen and Jordana Dym, "Introduction," *Mapping Latin America: A Cartographic Reader*, eds. Jordana Dym and Karl Offen (Chicago: The University of Chicago Press, 2011), 6.
28. Anne Marie Claire Godlewska, "From Enlightenment Vision to Modern Science? Humboldt's Visual Thinking," *Geography and Enlightenment*, eds. David N. Livingston and Charles W. J. Vithers (Chicago: The University of Chicago Press, 1999): 236–276. Humboldt conceived location in three dimensions: latitude, longitude, and altitude; or in geognosic terms, position and superposition as key to understanding

the natural world. See also Godlewska's *Geography Unbound: French Geographic Science from Cassini to Humboldt* (Chicago: The University of Chicago Press, 1999), especially Chap. 7.

29. Humboldt was deeply concerned about how to map the dynamic forces of nature (movement, change, and migration), thus the importance of inscribing analogies within the text. Ottmar Ette focuses on his "mobile knowledge" in "TransTropics: Alexander von Humboldt and Hemispheric Constructions," trans. by Vera M. Kutzinski, *Alexander von Humboldt and the Americas*, eds. Vera M. Kutzinski, Ottmar Ette, Laura Dassow Walls (Berlin: Edition tranvía-Verlag Walter Frey): 209–236. This point is also emphasized by Minguet, *Alexandre de Humboldt*, 76–77 and by Godlewska, *Geography Unbound*, 245.
30. I am building on Bruno Latour's spatialized metaphors of cycles of accumulation through which "unversal knowledge" is created. See Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, MA: Harvard University Press, 1987), 215–258.
31. The complete caption states: "Voyage vers la cime du Chimborazo, tenté le 23 Juin 1802. Par Alexandre de Humboldt, Aimé Bonpland et Carlos Montufar. -Esquisse de la géographie des plantes dans les Andes de Quito, entre les 0° 20′ de lat. Bor. Et les 1° 12′ de lat. Austr.-" in Alexander von Humboldt, *Voyage de Humboldt et Bonpland première partie, relation historique. Atlas géographique et physique du Nouveau Continent* (Paris: Schoell, 1814), MCZ, Harvard University. Another well-known example of Humboldt's micro-cosmographies his depiction of the Chimborazo in *Tableau physique des Andes from Geography of Plants* (1807). On this particular image, see Paul Smethurst, *Travel Writing and the Natural World*, 1768–1840 (New York: Palgrave, Macmillan, 2012), 107; Nigel Leask, *Curiosity and the Aesthetics of Travel-Writing*, 1770–1840 (Oxford: Oxford University Press, 2002), 254; Nina Gerassi-Navarro, "Picturing the Tropics from Humboldt to Darwin," eds. Klaus Hock and Gesa Mackenthun, *Entangled Knowledge: Scientific Discourses and Cultural Differences* (Münster: Waxman, 2012), 201–230.
32. Alexander von Humboldt, "About an Attempt to Climb to the Top of Chimborazo," trans. Vera M. Kutzinski, *Alexander von Humboldt: Transatlantic Personae*, ed. Vera Kutzinski (New York: Routledge, 2012), 139.
33. Leask, *Curiosity*, 254. Leask argues that the itemization disfigures and disrupts the visual unity as a whole, whereas Paul Smethurst points out that the purpose of the image is to deconstruct the unity of surface appearances to reveal a deeper equilibrium of underlying force. Smethurst, *Travel Writing*, 107.

34. Humboldt, *Personal Narrative*, 2: 257.
35. Humboldt published a prior version of his ascent in 1838, which lacks the revisions and footnotes he subsequently added. The 1853 version of his ascent, published in Humboldt's *Shorter Writings*, has been translated by Vera M. Kutzinski in *Alexander von Humboldt: Transatlantic Personae*, 135–155. This book was previously published as a special volume of *Atlantic Studies* 7, no. 2 (June 2010).
36. Kutzinski, *Transatlantic Personae*, 136; 141.
37. Ibid., 139. It is worth noting that in *Views of the Cordilleras*, he presents the *pajonal* like a golden carpet and describes the different grasses and plants in more detail.
38. Alexander von Humboldt, *Views of Nature: or Contemplations on the Sublime Phenomena of Creation; with Scientific Illustrations*, trans. E. C. Otté and Henry Bohn (London: Henry G. Bohn, 1850), xi. Humboldt emphasized the importance of "enjoyment" in this work, originally published in German *Ansichten der Nature*, 1808.
39. Humboldt, *Views of Natur*, 347.
40. Bernard Debarbieux, "Mountains: Between Pure Reason and Embodied Experience: Philippe Buache and Alexander von Humboldt," in *High Places: Cultural Geographies of Mountains, Ice and Science*, eds. Denis Cosgrove and Veronica della Dora (London: I.B. Tauris, 2009), 104.
41. Bernard Debarbieux, "The Various Figures of Mountains in Humboldt's Science and Rhetoric," *Cybergeo: European Journal of Geography* (2012) 9, accessed September 27, 2016. http://cybergeo.revues.org/25488.
42. Denis Cosgrove and Veronica della Dora, "Introduction: High Places," in *High Places*, 1.
43. Humboldt to Karoline von Wolzogen, May 14, 1806: "[H]e reconocido en los bosques del Amazonas, y sobre los contrafuertes de los Andes, que el mismo soplo anima la misma vida de un polo a otro en las piedras, en las plantas, en los animales y en el dilatado pecho del hombre. El sentimiento de la gran influencia de Jena me persigue por todas partes, ya que las ideas de Goethe respecto a la naturaleza me habían transportado y, por así decir, me dotaron de nuevos órganos." *Cartas Americanas*, 163. Translation quoted from Debarbieux, "Mountains: Between Pure Reason and Embodied Experience, Philippe Bouache and Alexander von Humboldt," in *High Places*, eds. Cosgrove and della Dora, 101.
44. Debarbieux, "Mountains: Between Pure Reason," 101.
45. Humboldt, *Cosmos*, 2: 81.
46. Ibid., 94–95.
47. On Church, see Stephen Jay Gould, "Church, Humboldt, and Darwin: The Tension and Harmony of Art and Science, *Frederic Edwin*

Church," ed. Franklin Kelly (Washington D.C.: National Gallery of Art: Smithsonian Institution Press, 1989): 94–107; Nina Gerassi-Navarro, "Picturing the Tropics"; Pablo Diener and Maria de Fátima Costa, *A América de Rugendas. Obras e Documentos* (São Paulo, Brazil: Kosmos Editora, 1999). Regarding Catlin and Mignot as well as the other artists, see Katherine Manthorne, *Tropical Renaissance: North American Artists Exploring Latin America, 1939–1879* (Washington: Smithsonian Institution Press, 1989).

48. Scientific research in Spain and in the colonies would advance particularly during Carlos III's reign, from 1759 to 1788. See Concepción Arias and Cándida Fernández, "La ciencia mexicana en el Siglo de las Luces," *Historia de la Ciencia en México: estudios y textos. Siglo XVIII*, 5 vols., recopilación e introducción de Elías Trabulse (México: Conacyt/Fondo de Cultura Económica, 1983–1989). See especially 3: 9–28.
49. To deter spies and maintain control of the areas explored, Spanish scientists accompanied all expeditions to the Americas. For example, although French geographer Charles Marie de La Condamine led one of the most well-known geodesic expeditions to Ecuador (1735–1746), Jorge Juan and Antonio de Ulloa accompanied La Condamine and produced a report for Spain, as did Vicente Doz and Salvador Medina, who traveled with French astronomer Abbé Jean Baptiste Chappe d'Auteroche to the coast of Baja California (1769). Among the expeditions Spain sponsored: José Antonio Pavón and Hipólito Ruiz to Chile and Peru (1777), José Celestino Mutis' voyage to the New Kingdom of Granada (1783), José Mociño and Martín Sessé's to New Spain (1786), and Juan Tafalla's trip to Ecuador (1799). For a list of Spain's sponsored trips during the second half of the eighteenth century, see Daniella Bleichmar, "Painting as Exploration: Visualizing Nature in Eighteenth-Century Colonial Science," *Empires of Vision: A Reader,* eds. Martin Jay and Sumathi Ramaswamy (Chapel Hill: Duke University Press, 2014), 67. Also, regarding Spanish scientific explorers, see Iris H. W. Engstrand, "Spain's Role in Pacific Exploration during the Age of Enlightenment," in *Enlightenment and Exploration in the North Pacific 1741–1805*, eds. Stephen Haycox, James Barnett, Caedmon Libud (Seattle: University of Washington Press, 1997), 25–37; S. Castroviejo, "Spanish Floristic Exploration in America: Past and Present," in *Tropical Forests: Botanical Dynamics, Speciation and Diversity*, eds. L. B. Holm-Nielson, I. C. Nielson, and H. Balslev (London; San Diego: Academic Press, 1989), 347–354; Juan Ortega y Medina, "Estudio preliminar," in Alexander von Humboldt, *Ensayo político sobre el reino de la Nueva España*, 4th edition (Mexico: Porrúa, 1984), xxvii–xxviii.

50. Concerned with its diminishing funds, Spain was already investing in reinvigorating the exploitation of its colonial mines. In 1788, the Basque Fausto de Elhuyar, who had studied at the Freiberg School of Mines, was appointed General Director of Mining in Mexico, where he founded the School of Mines in 1792. Humboldt would indeed make several recommendations regarding the mines, especially in Mexico, but they would be to encourage the creoles to take charge of the mines as the battles for independence would begin shortly after.
51. Minguet, *Alexandre de Humboldt*, 42.
52. Miguel Angel Puig-Samper Mulero, "Alexander von Humboldt, su estancia en España y sus contribuciones a la geografía peninsular," *Alexander von Humboldt: Estancia en España y viaje americano*, coords. Mariano Cuesta Domingo and Sandra Rebok (Madrid: Real Sociedad Geográfica, 2008), 70.
53. Although Bonpland was an equal and played a major part in the exploration, it is interesting to note that his passport stated *criado (servant)*. Furthermore, their travels did not include Brazil. In fact, in one instance, as they were traveling down the Amazon river in a region unclearly defined, the Portuguese authorities were mobilized and, considering Humboldt a spy, were ready to imprison him.
54. This was a major feat given that at the time geographers, who believed that watersheds were delineated by mountain systems, thought it was impossible that two major river basins such as the Orinoco and the Negro could be connected. See Bernard Debarbieux, "The Various Figures of Mountains in Humboldt's Science and Rhetoric," *Cybergeo: European Journal of Geography* (2012), accessed April 14, 2015. http://cybergeo.Revues.org/25488.
55. Three volumes were published in French in quarto. The first English translation, in octavo, by Humboldt's friend, Helen Maria Williams, consisted of seven volumes and was published between 1814 and 1829 (the last translated volume appeared three years after Williams died), entitled *Personal Narrative of Travels to the Equinoctial Regions of the New Continent during the years 1799–1804 by Alexander von Humboldt and Aimé Bonpland, with Maps, Plans etc.* Humboldt never completed writing the last part of his voyage, leaving out his travels through Colombia, Ecuador, Peru, and Mexico. However, information regarding these and other countries is dispersed throughout his work, in addition to his studies: *Essai politique sur le royaume de la Nouvelle Espagne* (on Mexico)—discussed further down—and *Essai politique sur l'Ile de Cuba*. It appears that the fourth and final volume of his *Personal Narrative* was complete and in press, but was halted and destroyed under Humboldt's orders. Minguet, *Alexandre de Humboldt,* 105. Leask mentions that it was Humboldt's

close friend Helen Maria Williams, who encouraged him to write his travelogue, which she subsequently translated. Leask, *Curiosity,* 288. See also his "Salons, Alps and Cordilleras: Helen Maria Williams, Alexander von Humboldt, and the Discourse of Romantic Travel," *Writing and the Public Sphere, 1700–1830*, eds. C. Grant, E. Eger, C. O'Gallchoir, and P. Warburton (Cambridge: Cambridge University Press, 2001), 217–238. As previously stated, quotes are from Thomasina Ross' translation.

56. Oliver Lubrich, "Alexander von Humboldt: Revolutionizing Travel Literature," *Monatshefte* 96, no. 3 (Fall, 2004), 363.
57. Ottmar Ette, "Der Blick auf die Neue Welt," in Alexander von Humboldt, *Reise in die Aquinoktial-Gegenden des Neuen Kontinents,* 2 vols., ed. Ottmar Ette, with recourse on the translations by Hermann Hauff, Paul Usteri, and Therese Heyne-Forster-Huber, in part newly translated (Frankfurt: Insel, 1991), 1580–1581, trans. Lubrich and quoted in Lubrich, "Alexander von Humboldt," 365.
58. Humboldt, *Personal Narrative*, 1: x–xi.
59. Ibid., xx.
60. Ibid., x.
61. Ibid., xi.
62. Humboldt to Wilhelm von Humboldt, Cumaná, July 16, 1799: "Qué árboles! Cocoteros de 50 a 60 pies de altura, la *Poinciana pulcherrima* con ramilletes de un pie de altura de flores de un rojo vivo magnífico; plátanos y una masa de árboles con hojas monstruosas y flores perfumadas de tamaño de una mano, de las que no sabemos nada. … y qué colores poseen los pájaros, los peces, hasta los cangrejos (azul cielo y amarillo). Hasta ahora nos hemos paseado como locos; en los tres primeros días no pudimos decidir nada, porque se rechaza un tema para interesarse en otro. Bonpland asegura que se volverá loco si no terminan pronto de aparecer las maravillas. Pero lo que es más bello aún que estas maravillas vistas particularmente, es la impresión que produce el conjunto de esta naturaleza vegetal poderosa, exuberante, y sin embargo tan dulce, tan fácil, tan serena. Siento que sería muy feliz aquí…". *Cartas Americanas*, 15–16 (my translation).
63. In Paul Smethurst, *Travel Writing*, 93.
64. Humboldt, *Personal Narrative*, 2: 260–266.
65. Ibid., 287; 112–113; 192; 453; 168.
66. Ibid., 134.
67. For a clear and succinct explanation of the differences between Romanticism and *Naturphilosophie*, see Nicholas Jardine, "Naturphilosophie and the Kingdoms of Nature," in *Cultures of Natural History* (Cambridge: Cambridge University Press, 1996): 230–245; for this distinction related specifically to Humboldt, Paul Smethurst, *Travel Writing*, 95–98.

68. Humboldt, *Personal Narrative*, 1: 134.
69. Leask, *Curiosity*, 288–296.
70. Humboldt, *Personal Narrative*, 1: ix.
71. Anthony Pagden, *European Encounters with the New World* (New Haven: Yale University Press, 1993), 105.
72. Ortega y Medina, "Estudio preliminar," xi.
73. Laura Dassow Walls, *The Passage to Cosmos: Alexander von Humboldt and the Shaping of America* (Chicago: The University of Chicago Press, 2009), 13–15.
74. Pratt, *Imperial Eyes*, 126.
75. Ibid., 126.
76. Mauricio Nieto Olarte, "Alexander von Humboldt y Francisco José de Caldas: americanismo y eurocentrismo en el Nuevo Reino de Granada," *Alexander von Humboldt. Estancia en España y viaje americano*, 127–142.
77. Pratt, *Imperial Eyes*, 126.
78. Humboldt, *Personal Narrative*, 1: 151; 1: 160.
79. Ibid., 265.
80. Ibid., xi.
81. Walls, *The Passage to Cosmos*, 19.
82. Ibid., 17.
83. Stanton Loomis Catlin, "Traveller-Reporter Artist and the Empirical Tradition in Post-Independence Latin American Art"; and Dawn Ades, "Nature, Science and the Picturesque," in *Art in Latin America: The Modern Era, 1820–1980*, ed. Dawn Ades with Guy Brett, Stanton Loomis Catlin, and Rosemary O'Neill (New Haven, CT: Yale University Press, 1989), 41–61 (especially 45), 63–99.
84. Humboldt has often been hailed as a staunch defender of the independence movements in Spanish America. However, as Ulrike Leitner notes, while Humboldt believed that liberal reforms accompanied by a healthy economic growth were the way to ensure progress and democratic freedom, beyond that he was unsure of the path to follow. Nevertheless, he was adamantly against armed revolutions, as in his view they only engaged more violence. See Ulrike Leitner, "Humboldt y la emancipación de México," *Humboldt y la emancipación de Hispanoamérica*, comp. Segundo E. Moreno Yánez (Quito: Edipuce, 2011): 49.
85. Simón Bolívar to Humboldt, November 10, 1821. Bolívar writes, "El barón de Humboldt estará siempre con los días de la América presente en el corazón de los justos apreciadores de un grande hombre, que con sus ojos la ha arrancado de la ignorancia y con su pluma la ha pintado tan bella como su propia naturaleza." In *Cartas americanas*, 266 (emphasis added).

86. See Aaron Sachs, *The Humboldtian Current. Nineteenth-Century Exploration and the Roots of American Environmentalism* (New York: Viking, 2006) and especially Sandra Rebok, *Humboldt and Jefferson* (Charlottesville: University of Virginia Press, 2014).
87. Pratt, *Imperial Eyes*, 130.
88. Humboldt to Wilhelm von Humboldt, Verona, October 17, 1822: "Tengo un gran proyecto de un establecimiento central de ciencias en Mexico, para toda América libre. El Emperador de México, a quien yo conozco personalmente, va a caer, vendrá un gobierno republicano, y yo sigo empeñado en terminar mis días de la manera más agradable y la más útil para las ciencias en una parte del mundo donde soy estremadamente querido y donde todo me permite esperar una feliz existencia. Es una manera de no morir sin gloria, de reunir alrededor muchas personas instruidas…" *Cartas americanas*, 202–203 (my translation). Charles Minguet notes that there is no corroboration to the affirmation that Humboldt knew the Emperor personally.
89. This distinction was awarded by the governor of the State of Mexico Lorenzo de Zavala, and later ratified by President Benito Juárez in 1859, a month after Humboldt's death. Commemorating his legacy, 200 years after his travels, in 1999, a new statue of Humboldt was placed in the beautifully renovated Alameda Park of Mexico City with the epithet of "honorary citizen" that Juárez had so proudly declared ("Benemérito de la patria 1799–1999").
90. Stephen Bell, *A Life in Shadow: Aimé Bonpland in Southern South America 1817–1858* (Stanford: Stanford University Press, 2010). In 1821, on a plant-collecting expedition in northern Argentina in an area disputed with Paraguay, Bonpland was detained by the Dictator of Paraguay, José Gaspar Rodríguez de Francia. After eight years in prison, amid pleas from Humboldt and Chateaubriand, among others, Bonpland was set free. Subsequently, he ran a plantation of yerba mate in the province of Corrientes, Argentina, where he died a year before Humboldt, in 1858.
91. *Essai politique sur le royaume de la Nouvelle Espagne* was accompanied by an atlas with numerous charts and data entitled, *Atlas géographique et physique de la Nouvelle Espagne* (*Geographical and Physical Atlas of New Spain*). Alejandro de Humboldt, *Ensayo político sobre el reino de la Nueva España*, ed. Juan A. Ortega y Medina (Buenos Aires: Porrúa, 1984). All quotes from this edition are my translation.
92. José Enrique Covarrubias and Richard Weiner further highlight Humboldt's enduring influence in Mexican politics in their comparative analysis, "Political Economy, Alexander von Humboldt and Mexico's 1810 and 1910 Revolutions," *Ruptkatha Journal* 2, no. 3, accessed August 4, 2015. http://rupkatha.com/V2/n3/ALEXANDERVONHUMBOLDT.pdf.

93. Carlos Montúfar y Larrea (1778–1816) was a wealthy aristocrat who had studied in Spain. In 1801, he joined Humboldt and Bonpland for three years, returning with them to Europe. He subsequently left Europe to join Bolívar's fight for independence. He was imprisoned and killed in Popayán, Colombia, in 1816. Montúfar is said to have been romantically involved with Humboldt. In a letter to botanist José Celestino Mutis, dated June 21, 1802, Colombian naturalist Francisco José de Caldas complained that Montúfar had stolen Humboldt's heart. On Humboldt's homosexuality, see Helmut de Terra, *Humboldt and the Life and Time of Alexander von Humboldt 1769–1859* (New York: Alfred A. Knopf, 1955), 28.
94. See Alexander von Humboldt, *Route d'Acapulco a Mexico* (Paris: F. Schoell, 1807), accessed April 2, 2015. http://www.davidrumsey.com/luna/servlet/detail.

Several of Humboldt's maps and illustration of New Spain are included in his *Atlas géographique et physique du royaume de la Nouvelle-Espagne, fondé sur des observations astronomiques des mesures trigonométriques et des nivellemens barométriques* (Paris: Dufour, 1812). Folio 5 illustrates the route from Acapulco to Mexico; Folio 18 maps the port of Acapulco, which Humboldt redrew, correcting its meridians.

95. Alexander von Humboldt, "Tal vez no hay ciudad en toda Europa que en general sea más bella que México. Tiene la elegancia, la regularidad, la uniformidad de las bellas construcciones de Turín, Milán, de los bellos barrios de París, de Berlín," *Diario de viaje* (de Acapulco a Veracruz, 1803–1804). *Tablas geográficas políticas del Reino de Nueva España acompañadas de correspondencia mexicana, 1803–1854; Diario de viaje (de Acapulco a Vercruz); Introducción a la pasigrafía geológica; El destino de un manuscrito,* comp. Elías Trabulse (México: Siglo XXI, 2003), 229–230 (my translation).
96. Among the buildings he most admired were: The Royal School of Surgeons (1768), The Royal Academy of Fine Arts (1781), and the famed Royal School of Mining (1792).
97. Humboldt, *Ensayo político*, 1.
98. Humboldt, "No hay ciudad en toda Europa donde se vea tanta miseria en las calles…" *Diario* in *Tablas geográficas*, 231 (my translation).
99. Halina Nelken, *Alexander von Humboldt: His Portraits and Their Artists. A Documentary Iconography* (Berlin: Dietrich Reimar Verlag, 1980), 55.
100. Humboldt would later publish a geognostical essay, which included the principles of a geognostic pasigraphy. Of particular interest in geology, pasigraphy was a simplified means of notations that omitted the structure and composition of rocks "to express with great facility the most complicated relations that exist between the position and periodical occurrence of formations." See Alexander von Humboldt, *A*

Geognostical Essay of the Superposition of Rocks in Both Hemispheres (London: Longman, Hurst, Rees, Orme, Brown, and Green, 1823), viii.

101. The original title was *Tablas geográficas políticas del reyno de Nueva España, que manifiestan su superficie, población, agricultura, fábricas, comercio, minas, rentas y fuerzas militares.* Quotes are from the following edition: Alexander von Humboldt, *Tablas geográficas*, 27–31.
102. Humboldt, *Tablas geográficas*, 99.
103. In fact, data regarding income and state assets were unavailable until Viceroy Revillagigedo requested the information, which was only published in 1791 by Fabián de Fonseca y Carlos de Urrutia in *Historia General de Real Hacienda* and a compendium by Joaquín Maniau in 1794. In *Alexander von Humboldt, Tablas geográficas políticas,* eds. Miguel S. Wionczek and Enrique Florescano (Mexico: Dirección de estadística, 1970) 131, cited by Trabulse in *Tablas geográficas*, 16.
104. Humboldt, *Tablas geográficas*, 29–31 (my translation).
105. Donald McCrory, *Nature's Interpreter: The Life and Times of Alexander von Humboldt* (Cambridge, UK: The Lutterworth Press, 2010), 111. On Humboldt's trip in the United States, see Ortega y Medina, "Estudio preliminar," xvi–xvii; Rebok argues that the information shared by Humboldt would have been out of date by the time the United States invaded Mexico. Rebok, *Humboldt and Jefferson*, 50.
106. "¿Un trabajo como este podría desagradar a un buen rey, cuando dicho trabajo se refiere al interés nacional, al perfeccionamiento de las instituciones sociales y a los principios eternos sobre los cuales reposa la prosperidad de los pueblos?" Humboldt, *Ensayo político*, clxxx.
107. Pratt, *Imperial Eyes*, 131.
108. Federico Fernández Christlieb, "Humboldt, el medio y la representación orgánica de la ciudad de México," *Humboldt y América Latina*, comps. Leopoldo Zea y Alberto Saladino (Mexico: Fondo de Cultura Económica, 2000): 79–90.
109. Humboldt, *Ensayo político*, 117; 152.
110. Humboldt, *Personal Narrative*, 2: 257–258
111. Humboldt, "La vista de estos hombres laboriosos y robustos hubiera podido hacer mudar de opinión a los Reinales, a los Pauwes y al gran número de autores, por otra parte estimables, que tanto han declamado sobre la degeneración de nuestra especie en la zona tórrida." *Ensayo político*, 49.
112. Marco Antonio Urdapilleta Muñoz, "La imagen del indígena en el *Ensayo político* sobre el reino de la Nueva España," in *Humboldt y América Latina*, 93.
113. Humboldt cautions: "Sin embargo no apunto esta opinión sino con timidez; es preciso ser circunspecto en extremo cuando se trata de decidir acerca de lo que se llaman disposiciones morales o intelectuales de los

pueblos que están separados de nosotros por los millares de estorbos que nacen de la diferencia de idiomas, hábitos y costumbres." *Ensayo político*, 64.

114. Humboldt saw slavery as an institution endorsed by local creole elites and adamantly warned against it. For Humboldt's views on slavery, see Michael Zeuske, "Humboldt, esclavitud, autonomismo y emancipación en las Américas, 1791–1825," *Alexander von Humboldt. Estancia en España y viaje americano*, 257–277.
115. It is interesting to note that this is the very same perspective Prescott adopted in his *History of the Conquest of Mexico*.
116. Humboldt, *Personal Narrative*, 3: 283–284.
117. Alexander von Humboldt, *Views of the Cordilleras and Monuments of the Indigenous Peoples of the Americas: A Critical Edition*; with an introduction by Vera M. Kutzinski and Ottmar Ette; trans. J. Ryan Pounter; with annotations by Giorleny D. Altamirano Rayo and Tobias Kraft (Chicago: The University of Chicago Press, 2012).
118. Vera Kutzinski and Ottmar Ette, "Introduction," *Views of the Cordilleras,* xvi.
119. Ades, "Nature, Science and the Picturesque," 68.

Fanny Calderón de la Barca: The Power and Privilege of Observation

Alexander von Humboldt remained a constant referent for travelers venturing to the Americas for most of the nineteenth century, especially for those travelers heading to Mexico. Humboldt had supplied a wealth of information regarding the country: its population, agriculture, topography, mines, industry and commerce, military defense, and economic potential. Yet, despite his encouraging views regarding Mexico's future, its independence and post-independence were the most embattled and drawn out processes in the Americas. When Fanny Calderón arrived from the United States in Veracruz, in December of 1839, she was struck by the backwardness and dreary image of the port, "Anything more triste, *délabré* and forlorn, than the whole aspect of things cannot well be imagined."[1] In her eyes, she had landed in "Purgatory," the land of the *vómito* (yellow fever): "[T]his place is the most *arrière* I have yet seen. To me nothing *earthly* can exceed the *exceeding* sadness of *the aspect of* this city and its environs."[2] A once graceful city founded by Hernán Cortés, which became one of the richest mercantile port cities in New Spain during the colonial period, Veracruz had lost its allure, bruised by the suffocating heat and winds, battered by the fires of wars and revolutions. The bare landscape of surrounding red sand hills, stripped of trees, shrubs, and flowers, augments her sense of loss: "All looks as if the prophet Jeremiah had passed through the city denouncing woe to *all* the dwellers of thereof. *It is enough to make one feel homesick*. Such a melancholy, wholly deserted-looking burial ground as we saw!"[3] In less than forty years, it seemed that Mexico, the prize possession of the Spanish

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Crown that Humboldt had emphatically praised, had become a somber wasteland.

Frances Calderón arrived in Mexico in 1839 accompanying her husband, the first Spanish Plenipotentiary Minister, Ángel Calderón de la Barca. By then, the political map of the Americas had shifted significantly since Humboldt's visit. When he arrived, the only independent nation was the United States, although by the time he left Mexico in March 1804, the Haitian Revolution had triumphed and Haiti had become the second independent country in the Americas. By 1839, most of the continent had embraced independence and was committed to consolidating its national identity. These political changes deeply influenced travel. In fact, Peter Whitfield argues that travel in the early nineteenth century became a "cultural performance" linked to national identity.[4] Narratives describing foreign territories became an implicit vehicle to affirm the author's own cultural superiority. Europeans already had a long history of travel, so as they embarked on their imperialist expansion, travel narratives became a means to assess foreign lands to legitimize their national quest. However, affirming national pride for travelers from within the Americas, whose countries were still in the process of national consolidation proved more difficult. Political and cultural boundaries were too unstable. Even US travelers throughout the Americas masked their own anxiety about their culture by appraising the region's economic potential to highlight the inhabitants' inability to exploit such opportunities. But narratives, as Benedict Anderson has shown, have the power to consolidate a sense of unity.[5] Hence, as nations affirmed their identity and defined their boundaries, travel and travel narratives in particular became an empowering experience that affirmed both individual and national superiority. My reading of Frances Calderón's narrative on Mexico highlights this shift in travel writing.

Born in Scotland, Fanny Calderón—as she was popularly known—made her home first in the United States before moving to Mexico with her diplomat husband. Through her travels, she illustrates the ways in which national identities inform observation, as her multiple belongings shape her portrayal of Mexico. She is not just a US American observing Mexico, nor a Scot nor a Spanish diplomat's wife, as she has been categorized, but rather all of the above. On the one hand, she espouses the imperialist views of the tropics that Mexico embodied for both the United States and Europe, but, on the other hand, as she makes Mexico her home, she challenges many of those views by focusing on the social and cultural aspects

of the country. She is a modern subject, whose observations do not deny national identities but, instead, bring them in contact with each other, often blurring the protective lines of separation. Her own displacements and refashionings within the domestic and international spheres allow her to mobilize different national identities without being confined by them. Thus, she constructs herself as a subject between empires (Spanish, English, and US American) who writes about a newly independent nation (Mexico) struggling to consolidate its own national project between competing imperial claims.[6]

If Humboldt provided an in-depth and detailed description of Mexico's infrastructure before independence, cataloguing its plants and natural riches as well as its people, monuments, and history, Fanny Calderón made a similar kind of assessment regarding Mexican society and culture during post-independence. During the two years she lived in Mexico, she explored and wrote about its men and women, its politicians, the landscape, the habits and customs, religion, social and cultural attitudes, and beliefs of its citizens. Her narrative, *Life in Mexico During a Residence of Two Years in That Country*, recounts her journey accompanying her husband to Mexico.[7] The trip is framed by their visits to Cuba, one of the few remaining Spanish colonial posts in the Americas (where they stopped for twelve days on their way to Mexico, and where they stayed for three months before returning to the United States, as Humboldt had also done). Based on her letters written to family members and friends, in addition to a three-volume private journal, Fanny Calderón spent six months upon her return to the United States compiling and editing her text while awaiting her husband's next destination. Published almost simultaneously in the United States and England in 1843 (although it was already circulating in the United States by December 1842) with a brief preface by famed historian William Hickling Prescott, the book comprises fifty-four extensive letters. Each letter has numerous entries, similar to a diary, some spanning several weeks, which together form a unit resembling a chapter. The letters are written to an anonymous but intimate interlocutor to whom Fanny Calderón describes her life in Mexico. But unlike a diary, the text conveys little of her personal life, especially when compared with her husband's diary, *Diario*, which includes glimpses of the Calderóns' married life, such as disagreements, difference of opinions, and moments of tenderness.[8]

The epistolary genre tends to allow for a certain amount of inconsistencies, discursiveness, and redundancy that most narratives avoid.[9]

Fanny Calderón overcomes these inconsistencies by chronologically relaying her trip and editing overt repetitions. Yet, she writes about so many different aspects of Mexican life that at times her narrative seems like a sprawling collage of events. She sets out to record her daily life exploring the public and private spheres of Mexican society, from the bustling street life and the ubiquitous *léperos* (beggars) to the intimate homes of the elite, and her trips to the countryside. She writes vividly about bullfights, cockfights, funerals, masked balls, and theater performances she attends. Her adventurous journeys include encounters with bandits and visits to silver mines and *haciendas*. Her depictions oscillate from the sublime to the picturesque. Fluent in Spanish and privileged as a diplomat's wife, she has exclusive access to convents and secret religious rituals.[10] Aztec ruins and indigenous culture fascinate her. She includes fragments of poems, newspaper clippings, and popular songs and hymns that she ably translates. She delves into historical explanations of Mexico's past, chronicles two *pronunciamientos* (political uprisings), and reports on politicians and intellectuals, appraising their accomplishments.[11] She pays special attention to the role of women in society, from their physical appearance, education (or lack thereof), habits, dress, and etiquette to their social activities, both in and outside their homes. If Humboldt covers all the aspects of nature that might be scientifically connected, Fanny Calderón covers the social and cultural life of Mexico connecting it to its landscape.

Like Humboldt's *Personal Narrative*, Fanny Calderón's tone is lively and compelling. Whereas Humboldt's travel narrative is filled with scientific observations and comparative measurements that anchor his personal adventures within a broad framework that highlights his planetary vision, Fanny Calderón does not embrace a scientific gaze. Instead, hers is an ethnographic gaze of contemporary culture, peppered with ironic and oftentimes unflattering comments, in which she displays her own subjectivity in the process of observation.[12] Although Humboldt clearly felt welcomed in Mexico, even envisioning living the last days of his life there, he moves about the country with a privileged gaze that keeps him at a distance from the everyday difficulties of life in Mexico. This is precisely what Fanny Calderón's narrative offers. Despite her European origins and her privileged political status, as a woman, she engages in everyday life in Mexico in a way that Humboldt could not. An interesting example is the way each approached describing *pulque*, the popular drink made from fermented juice of the maguey. Humboldt gives

numerous explanations regarding its elaboration, consumption, and taxation. His authority, however, regarding its taste is based on others' opinions: "The inhabitants of the country differ very much in their opinions as to the true fetid odor of the pulque"; adding comments made by "several well informed individuals."[13] Fanny Calderón, on the other hand, delves into Mexican life. She not only tries *pulque*, a drink mainly consumed by men, but also, to her surprise, by the end of her stay finds it "excellent, and shall find it very difficult to livo without!"[14]

Fanny Calderón approaches Mexico in a visceral way; thus, her narrative is filled with contradictions, which reflect both her initial reactions as well as her changes, as she learns to adjust her gaze and navigate her surroundings. Her text displays the complexity and flux embedded in observation. Rather than present a homogenous reading, *Life in Mexico* conveys the author's aversion to as well her warmth and deep appreciation for Mexico almost synchronically. It is a process informed by her multiple political and cultural alliances, which endows her gaze with a comparative approach that announces a new mode of observation: informative, yet filled with subjective remarks that she connects to national differences.

Entangled Bonds

Born in Edinburgh in 1804, to a large and distinguished landowning Scottish family, Frances Erskine Inglis seems to have been an intrepid young woman who weathered several family moves and crises with great resourcefulness (Fig. 1).[15] Educated with private tutors and well traveled in Europe, her noble upbringing was brought to a halt early on. First, her eldest sister Catherine eloped with a British Captain, Edward Schenley, and died two years later. Another sister, Richmond, was abandoned by her husband and left alone to care for her five children.[16] Then, in 1828, news arrived that Fanny's oldest brother had died of yellow fever in Madras. That same year her father, William Inglis, declared bankruptcy and relocated his family to Normandy, where, suffering of ill health, he died two years later, in 1830. Hoping perhaps to make a clean break from a dire social and economic situation, Mrs. Inglis moved to Boston with five daughters, among them Fanny and several grandchildren, where they established one of the early private schools for the daughters of the elite on Mount Vernon Street, Inglis' School for Young Ladies.[17]

Fig. 1 Frances Calderón de la Barca by unknown artist. bMS Eng 1763 (57) Houghton Library, Harvard University

Life in the United States was welcoming, and the family of women apparently recovered quickly and soon seemed settled among the Boston elite. Intelligent, cultured, and entertaining (she was a talented pianist and harpist), Fanny was not only popular among the elite social circles, but having literary ambitions of her own, she became associated with the

well-known journal *The North American Review*, where she published an extensive essay entitled "The Italian Drama" reviewing Alessandro Manzoni's *Tragedies* and the theory of tragic drama.[18] Several of its many contributors, such as George Ticknor, William Hicking Prescott, and Henry Wadsworth Longfellow became close friends.[19] An inspiring teacher, Fanny also wrote several books and did numerous translations to help support her family.[20] More difficulties arose, however. In 1833, an anonymous pamphlet caricaturing several well-known Boston families at the Faneuil Hall Fair was published. The pamphlet, entitled *Scenes at the Fair*, was attributed to George Parish and Fanny Inglis, although Parish insisted he was solely responsible.[21] Among those ridiculed was well-known heiress and socialite, Mrs. Harrison Gray Otis (formerly Eliza Boardman), "the Queen of fashion of Boston Society," and daughter-in-law of famed politician and statesman, Harrison Gray Otis, one of Boston's wealthiest men.[22] The Fair was a benefit for the Blind Asylum, one of the many charities Mrs. Harrison Otis supported.[23] A voluptuous Mrs. Harrowby Grey (identified as Mrs. Otis) appears in the text flirting with several gentlemen. Although Mrs. Otis' coquetry was apparently widely known, it is unclear what could have prompted Fanny to write such a pamphlet. Within the Boston elite, the publication made quite a stir. Despite friends' efforts to contain the reaction, the school was closed.[24] Fanny and her mother relocated to New Brighton on Staten Island, New York, where they established another school for young ladies, while two of her sisters moved to Pittsburgh to open another school. Scandal seemed to follow the Inglis family. Several years later, while Fanny was in Mexico, her sister Richmond McLeod consented to care for her ill widowed brother-in-law, Captain Schenley. Again, Schenley eloped; this time with a young student, Mary Elizabeth Croghan, a Pittsburgh heiress who was only sixteen years old.[25] Although the couple would remain together and the heires's family would eventually accept their daughter's act, the consequences for the Inglis women were more severe and immediate, forcing the school to be closed.

Given their numerous relocations and economic downturns, the Inglis women proved to be well adept at weathering difficult situations and reasserting their social and economic stability. Throughout these moments, they relied on their sophisticated education as well as their close family and social ties. Although at the time it was uncommon for women of Fanny's status to work, her capacity to support herself and

others close to her was seen as praiseworthy. The influential editor and writer Sarah Josepha Buell Hale was particularly forthcoming: "Fanny Inglis while in adversity showed herself worthy of estimation and esteem, and the honour she gained is all the higher, because paid to her talents and virtues when the smiles of fortune were withdrawn."[26] Fanny's resourcefulness undoubtedly helped her overcome and thrive in the unexpected and turbulent life she would encounter in Mexico, as well as help her confront the economic difficulties she and her husband would later sustain on both sides of the Atlantic.

It is unclear when exactly Fanny and Ángel met. Most scholars agree it was through their mutual friend, US historian William Prescott.[27] Their courtship was extremely brief, as Calderón contacted Prescott for the first time after reading his *History of the Reign of Ferdinand and Isabella the Catholic*, published in December 1837, and the two men first met in March 1838. By September of that same year, Fanny and Ángel were married, but his intentions were already public in June, when he requested written authorization from her Majesty, Queen Isabel II of Spain, to marry Fanny.[28] It was an unusual union: Ángel, a widower advanced in age, had been firmly set against remarrying[29]; Fanny, a well-traveled, educated, and attractive European, should have already been married following social conventions of the time. He was Catholic; she was Protestant. Despite their differences, on September 24th, they were married at the Transfiguration Church in New York; Ángel was forty-eight and Fanny thirty-three (although she declared to be twenty-eight).[30] The Yucatec historian and novelist Justo Sierra O'Reilly, who met the couple years later in the United States, concluded that Calderón was simply unable to resist Fanny's "*encantos*."[31] Calderón's official request to marry is significant inasmuch as Fanny was Protestant, and he did not want their religious differences to hamper his diplomatic career. While professionally he weathered their differences dexterously, personally he found it painful, particularly on Sundays when they attended different churches, a routine he qualified as "a bitter experience."[32] The problem would subside in 1847, when Fanny converted to Catholicism while living in the United States.

Fanny and Ángel shared a tumultuous life of travel and political crises. Ángel Calderón was a career diplomat with broad scholarly interests and a singular personal history. Born in 1790 in Buenos Aires, where his father had been stationed as a port inspector, he returned to Spain after his father's death in 1808 and fought against Napoleon's invasion. He was imprisoned in France and returned to Spain at the end of the war

to study at the University. He began his diplomatic career doing archival work before being assigned as Spanish Attaché to Russia, where he remained for three years.[33] After a year in England, where he had been transferred, he returned to Madrid, where he worked for the Ministry of State until he was named Spanish Minister in Washington in 1835. Well educated, interested in literature, history and biology, and fluent in Russian, French, English, and Spanish, Calderón made a good impression among the diplomatic and elite social circles.

During his Ministry in the United States, he was charged with settling the claims between Spain and the United States according to a treaty signed in 1834.[34] He also carefully monitored events regarding Texas. According to Spanish authorities, the conflict with Texas was based on cultural and religious differences, as Texans felt more like US citizens than Mexican citizens.[35] Calderón noted several times the fundamental role the press had in eliciting support for Texans in the United States, and in a dispatch to Spain, he alluded to an impending war between Mexico and the United States.[36] Most notably, shortly before leaving for Mexico, Calderón was responsible for the initial diplomatic negotiations—which would become very complicated and public—involving the *Amistad* slave revolt and trial of 1839.[37]

During his diplomatic service in Washington, Calderón also suffered the impact of political turmoil in his own country. King Ferdinand VII's death set off a succession crisis. His widow, Queen María Cristina became regent, as their daughter was a minor. Carlos de Borbón, Fernando VII's brother, claiming to be the legitimate heir of the crown, challenged the decision. This began the first of many Carlist wars that pitted liberal supporters of the Queen Regent against Carlos de Borbón, a conservative who wanted a return to absolute monarchy. Although a diplomat, Calderón's political opinions—which he did not refrain from expressing—often came first, and while considering himself a moderate, he often sided with the conservative party and strongly opposed republicanism.[38] Hence, when asked to swear allegiance to the liberal constitution of 1812 endorsed by Queen Regent María Cristina, Calderón refused. Madrid removed him from his post immediately, stripping him of all honors.[39] A few months later, however, in July 1837, a new more moderate constitution was promulgated to which Calderón did pledge allegiance, which led to his reinstatement with all prior honors in 1838.[40]

During the months he was expelled from the diplomatic service, Ángel Calderón began considering future projects. He approached Prescott with the intention of promoting and translating his *History*

of the Reign of Ferdinand and Isabella.[41] Ángel Calderón was so impressed with the quality of Prescott's work that he offered to deliver copies to Spanish "*savants*," members of the Royal Academy of History, and even to the Queen Regent.[42] Prescott was delighted, declaring to his good friend George Ticknor, "There's a feather in my cap!"[43] Calderón also secured Prescott's admission to the Spanish Royal Academy of History, an honor that could only be held by a member living in Madrid.[44] Soon after, Prescott and Ángel Calderón became good friends. A year and a half later, Ángel Calderón married Prescott's friend, "a sprightly Scotchwoman," descendant of the Earls of Buchan, Fanny Inglis.[45]

Little has been written about the Calderóns' relationship. The information is scattered in a few private letters and journals. Fanny's travel narrative has very little self-reflection and even less on her private life with Ángel, whereas his personal diary, *Diario*, which he kept during his trip to Mexico, is peppered with brief comments about their relationship, highlighting their numerous disputes as well as their pleasant evenings reading to each other. His pointed albeit candid remarks shed light on some of the difficulties the couple sustained throughout their stay, which often had to do with money and religion.[46] The couple never had children, but their home was always welcoming to her numerous nieces and nephews, several of whom spent extended periods of time with them in Mexico, and later in Spain where the couple returned in 1853. Fanny never mentions her desire to have children in her journal. Only Ángel mentions having a few arguments regarding the topic, and in passing alludes to her miscarriage, stating, somewhat relieved, it would have been a "disaster" to have a child, given the expenses and the poor doctors in Mexico.[47]

Political instability followed the Calderón's throughout their life together. In August of 1841, the more radical Spanish government of Baldomero Espartero would remove Ángel Calderón as a minister in Mexico replacing him with Pedro Pascual de Oliver. Almost simultaneously, they received information regarding the loss of a substantial amount of their savings with the liquidation of the US Bank.[48] The couple settled in Madrid. Fortunately, the following year, Ángel Calderón was appointed Minister to the United States once again, where they resided until 1853. Under General Francisco Lersundi, Calderón was called back to Spain as Minister of State, but by the time he arrived, Lersundi had been replaced. Shortly after, in April 1854, an armed

confrontation among political parties ensued, and the couple was forced to escape to France. Their turbulent experience would be the topic of Fanny Calderón's next book, *The Attaché in Madrid*.[49]

Eventually, the Calderóns returned to Spain, but disliking the political volatility of Madrid, they retired to the beautiful town of Zarauz in the Basque Country until Angel Calderón's death in 1861. Fanny immediately retired to the convent of Anglet in France, but Queen Isabel named her lady in waiting for Infanta Isabel II. She returned to Spain and remained with the Royal Family even during the family's exile in Paris (Fanny's second exile) until 1874. Two years later, King Alfonso XII would name her Marchioness, a title she would bestow to her niece Kate—as she had no direct heirs—who remained with her in Spain.[50] Despite her Scottish roots and Protestant upbringing, Frances Calderón de la Barca made Catholicism her religion and Spain her home, where she resided until her death in 1882.

When the Calderóns set off to Mexico, Prescott had already begun collecting material for his second project, *History of the Conquest of Mexico*, which was published the same year as Fanny's *Life in Mexico*. Prescott had achieved international recognition with his *History of Ferdinand and Isabella*, which became one of the founding blocks of the Hispanist tradition in the United States.[51] His great friend Harvard Hispanist George Ticknor had encouraged him to focus on Spain.[52] Despite his love of literature, Prescott eventually chose to study history, in particular, the age of Ferdinand and Isabella, because he thought it was "an interesting and momentous period of History," key to understanding modern European politics.[53] In the United States, Hispanism had become the hegemonic cultural discourse through which US Americans approached the Spanish-speaking world. Prescott's detailed study of the imperial founders secured his prestige both in the United States and in Europe. The renowned Spanish scholar Pascual de Gayangos wrote in an extensive essay in the *Edinburgh Review,* "Mr. Prescott's work is one of the most successful historical productions of our time."[54] Gayangos, who would be instrumental to Prescott's next endeavor, praised his impartiality and excellent documentation. More importantly, Prescott had introduced a new style of historical writing. Heavily and very carefully documented, he developed a seductive literary style that captivated his readers. His strong sense of drama, colorful language, and descriptive settings owe a great deal to Walter Scott, whose historical novels he admired and whom he praised as "Shakespeare in prose."[55] His approach to history revealed several forces

at play: rationalism, romanticism, democracy, Christianity, and the idea of progress—which in his hands carried a strong moral imprint.[56]

Prescott's decision to focus on the conquest of Mexico for his second project stemmed from his desire to focus on concerns more related to the United States: "My history of the Catholic Kings has met with so favorable a reception from my countrymen that I feel stimulated to pursue the subject of Spanish history further, and no portion of it has greater interest for us than that connected with our own country, and which in itself is singularly romantic, like the Conquest of Mexico and Peru."[57] Reading Humboldt's travels to New Spain helped him envision how he might approach his material. He was impressed with Humboldt's writing: "Like most truly learned men, he [Humboldt] is cautious and modest in his deductions, and, though he assembles very many remarkable coincidences between the Old World and the New in their institutions, notions, habits, &c.[*sic*], yet he does not infer that the New World was peopled from the Old,—much less from what particular nation, as more rash speculators have done."[58]

Prescott used all his connections to enlist key individuals who could supply him with research materials to reconstruct the Conquest, and the Calderóns were instrumental in this process. Through Ángel Calderón, he established contact with Spain's eminent historian Martín Fernández de Navarrete, and in Mexico, with Count Cortina and Manuel Eduardo de Gorostiza. Former US minister to Mexico Joel Poinsett also recommended several key individuals in Mexico whom Calderón would befriend, most significantly Lucas Alamán.[59] In addition to being one of the most influential politicians in Mexico, Alamán was a well-known historian who was the impetus behind the collection of documents housed in the General Archive. Furthermore, during Mexico's political turmoil, he had intervened to rescue the bones of Hernán Cortés and had hidden them for protection.

Prescott never traveled to Mexico. He had employed the firm Manning & Marshall to handle his correspondence and the acquisition of manuscripts and documents for which he gave precise and detailed instructions of what he wanted. However, after only a month of work, Manning & Marshall informed him that there was too much confusion in the Mexican archives to obtain the materials he requested; they suggested he employ someone more knowledgeable in Mexico: that service was granted by Angel and Fanny Calderón. During the following two years, the Calderóns provided Prescott with connections, archival

information, books, historical data, interviews with colleagues, personal impressions, detailed descriptions of the scenery, photographs, cultural artifacts of all sorts, including two indigenous sculls, a piece of Cortés' shroud, and a copy of his portrait.

The Politics of Travel

The Calderóns' arrival in Mexico was a momentous event as it sealed the triumph of the country's independence, even as Mexicans continued to struggle amid chaos and uncertainty. Political instability was so volatile that when the Calderóns arrived in Mexico with letters from Queen Isabel addressed to President López de Santa Anna, Santa Anna had already been deposed and had retired to his native Jalapa.

Unlike the rest of the colonies in Spanish America whose creole elite led the independence movements, Mexico's political revolt for independence began as a violent social protest during Napoleon Bonaparte's invasion of Spain.[60] As part of the rich Viceroyalty of New Spain, Mexico was a key colonial possession that Spain would not give up easily.[61] Its extraordinary abundance of precious metals was one of its greatest sources of wealth.[62] It was also a very hierarchical society. In a population of six million inhabitants, whites accounted for only 18%, contrasting sharply with the lower social ranks occupied by 60% of Indians and 22% of *castas* or mixed races.[63] Further complicating the racial structure was the fact that among whites, the Spaniards or *peninsulares* occupied the highest government echelons, followed by the creoles, who held relatively limited positions. This meant that the creoles or *criollos*—children of *peninsulares* born in Spanish America—were often over passed by those newly arrived from Spain. Over time, this created a serious rivalry between first-generation creoles and new Spaniards. Deep economic divisions echoed the racial contrasts. On one side, the intellectual and wealthy elites profited most from the social and political benefits while the rest of the population, with notable exceptions, which was Indian or mixed race, was poor and had very limited legal resources—a situation that Humboldt described as a "monstrous inequality."[64] Spanish loyalists quickly defeated the insurgents. But once Napoleon was defeated and Fernando VII reinstated, the creole elites realized that Spain could no longer guarantee aristocratic control or the social order, especially as they were often over passed by those newly arrived from Spain. As a form of reasserting their control, the creole elites promoted independence.

A former Spanish loyalist, Agustín de Iturbide, emerged as their leader. Together with the Afro-Mestizo Vicente Guerrero, Iturbide orchestrated a compromise between political factions and proclaimed the *Plan de Iguala* in 1821, establishing a constitutional monarchy that guaranteed Catholicism as the official religion and freedom of the press; he also limited the power of the Church and declared independence. Spain refused to recognize Mexico's independence, which enhanced internal tensions. Frustrated, Iturbide dissolved congress, imprisoned opposing army officers, and claimed himself emperor. A young and defiant colonel, Antonio López de Santa Anna, accused him of tyranny, deposed him, and declared the Republic in 1822. A new liberal constitution was adopted in 1824, and General Guadalupe Victoria became the first constitutionally elected president of Mexico.[65] He was also the only elected president to complete his term in almost thirty years.

Mexico continued to weather civil unrest and political turmoil, a situation created through its widespread *pronunciamientos.* In addition, several significant international issues rattled its nation building process: the secessions of the United Provinces of Central America in 1823, the loss of Texas, as well as the invasions of Spain and France.[66] In 1829, Spain tried to reclaim its colony, invading Mexico, but was defeated in the Battle of Tampico by General Santa Anna. Indignant, Mexico issued its second law of Spanish expulsion, which forbade all *peninsulares* to hold any administrative positions further excluding them from political life.[67] Spain finally recognized Mexico's independence in 1836; the same year Texas gained its independence from Mexico.[68] However, it would take Spain three more years to send its first minister don Ángel Calderón de la Barca to Mexico, finally accepting its former colony's independence.

Spain's acknowledgment of Mexico's independence also marked the beginning of a shift in global politics between Europe—namely, England and Spain—and the Americas. Born in America, Ángel Calderón had first-hand knowledge of the complex relations between *peninsulares* and *criollos.*[69] In Mexico, he would invoke his connection to the former colonies and would be perceived as somewhat of a "compatriot" ("*paisano*").[70] Yet, despite any emotional affinities he could have claimed, he proudly considered himself a Spanish citizen and was a staunch defender of the monarchy. In addition to steadying relations with Mexico and securing commercial treaties, Calderón was expected to negotiate the property rights of Spanish citizens—a task much

more complicated than had originally been envisioned, especially since Spaniards were just as politically divided as their creole counterparts.[71] Given Spain's long-term refusal to recognize Mexico's independence, the arrival of the Calderóns was a political and cultural event that had important economic consequences for both Spain and Mexico.

Aware of the political significance of their arrival, Fanny Calderón is nevertheless unsure how to read their reception. They are greeted by a cheering crowd, "a crowd as far as the eye could reach, of all ages and sexes and kinds of Vera-Cruzians (and a *Vera-Curious* set they appeared to be)." Playfully, she presents a chaotic crowd filling the streets, balconies, and even rooftops to welcome them. She tries to settle her gaze on the people and their dress, but the scene is too haunting. Some individuals had no pantaloons ("inexpressibles" in her journal) while others are wearing two, one split over the other pair; in her eyes people are dressed in rags; everyone has large decorated hats; they are of all ages and of "every tinge of dark complexion from the pure Indian upwards."[72] They stare and cheer at the Spanish envoy and his wife. She worries about her own looks, noting that her poor French bonnet is the "*only* bonnet."[73] The stranger the dress, the more obviously "Mexican" it becomes; hence, she describes the scene full of "Mexican fashion" and "Mexican" hats. Later she adds *rebozos* and *sarapes*, which she equates to "ragged stuff, thrown over the head."[74] Visually, Mexico thrusts its foreignness upon her. There is no getting away from the material otherness that surrounds her. Four days later, as they leave Veracruz, she summarizes her thoughts in her journal (absent in her published text):

> I do not think there is anything in this world that could induce me to live here. The more I see, the more I become convinced of this fact, that the further we recede from civilization, the less happy we are. To live amongst people, however kind, with whom you have not one thought in common *must* be melancholy. To a person brought up in England, and accustomed to European society, a place where the trace of a *book* is not to be seen—where the women spend their time in perfect idleness, smoking—idleness without grace—and where you can find no subject on which to converse—there is an aridness of feeling which is as *triste* as it would be to settle among the red sand hills in the neighborhood.[75]

Mexico is her entry into a landscape of otherness, visually, culturally, and religiously.

Clinging to her Englishness that enabled her to refashion herself in the United States, Fanny Calderón quickly positions herself as far removed as possible from Mexico's "primitiveness." Invoking the well-known Romantic trope of melancholy, the "civilized" European traveler categorizes the foreign land as lacking: lacking in civilization, in order, in progress.[76] Mexico is the illustration of what Europe and the future-looking United States are not. This portrayal leads many critics such as Miguel Cabañas to declare that in *Life in Mexico*, "the Anglo-saxon self reasserts itself with perhaps even more vigor … which reinforces a sense of Anglo-saxon superiority and of class structure."[77] Indeed, at first glance, Fanny Calderón's text reproduces the characteristic imperial gaze that so many English travelers presented. As she continues to describe Veracruz, she notices hordes of large black birds, *zopilotes* (a turkey buzzard or small vulture), hovering over a dead carcass:

> Add to this the *zopilotes* cleaning the streets, disgusting but useful scavengers. These valuable birds have black feathers, with gray heads, beaks, and feet. They fly in troops and at night perch upon the trees. They are not republican, nor do they appear inclined to declare their independence, having kings, to whom it is said they pay so much respect that if one of the royal species arrives at the same time with a plebeian zopilote, in sight of a dead body, the latter humbly waits till the sovereign has devoured his share, before he ventures to approach.[78]

Her metaphor weaves together the contrasts embedded in Mexican culture that inform her gaze: The political tensions inherent in nation building intertwined with a striking geographic landscape that she does not know how to read. She hints at the militarization of Mexico through the image of the "troops" formed by the zopilotes. Like the birds, the troops do not support a republic, nor are they sure about independence; but they do recognize and respect hierarchy. Only in the presence of a king can they behave in an organized way—here lies their colonial heritage. Given the inability to free themselves of their colonial ties, Mexicans—like the zopilotes—have become accustomed to take what they can get: to scavenge for food, recognition, or power. This fragment, originally absent in her journal, was added during her revisions, retrospectively, almost as a way to frame her reading of Mexico.[79]

Despite the impressive reception and enthusiasm, she notes to her readers: "But in all this, you must not suppose there is any personal

compliment. It is merely intended as a mark of good will toward the first representative of the Spanish monarchy who brings from the mother country the formal acknowledgement of Mexican independence."[80] Her analogy reinforces the power imbalance concealed in the politics of recognition: The mother country concedes autonomy to the child but preserves its parental oversight. In this sense, the arrival of the Calderóns was not only to acknowledge independence ("a fatal event" for Spain) but also to assess Mexicans' capacity and maturity to sustain their independence.[81]

Yet contrary to Cabañas' assertion, Fanny Calderón does not always maintain her disparaging gaze. Her picture of Mexico eventually expands beyond the imperial imprint to display a world much more complex and rich that undermines facile categorizations of primitiveness. At the end of her two-year stay, again in Veracruz about to embark home, she is surprised by her pleasure in the food, which sends her back in time:

> I find, personally, one important change in taste if not in opinion. Veracruz cookery, which two years ago I thought detestable, now appears to me delicious! What excellent fish!—and what incomparable *frijoles*! Well, this is a trifle; but after all, in trifles as in matters of moment, how necessary for a traveller to compare his judgements at different periods, and to correct them! First impressions are of great importance, if given only as such; but, if laid down as decided opinions, how apt they are to be erroneous! It is like judging of individuals by their physiognomy and manners, without having had time to study their character. We all do so more or less, but how frequently we find ourselves deceived![82]

She summarizes her reassessment of Mexico as a "trifle," a minor correction, so as not to undermine the bulk of her observations, while at the same time, she recognizes the importance of limiting and containing some of her own impressions, especially the first ones. Her last look back acknowledges that she might have made mistakes in her reading of the country. In fact, on her way home after a few days in Veracruz, she begins to see traces of its beauty "in spite of the miserable condition in which it now is."[83] She admires the fort of San Juan de Ulúa and probes into the past of English pirate attacks and other battles that damaged the city. Within this context, her last assessment of Mexico could be read as an oblique recognition of her affection toward the country inasmuch as she has learned to appreciate its culture beyond her first impressions.

Observation, she realizes is contingent on experience, shaped and informed by knowledge; it is far from static.

Fanny Calderón's shifts in perception, however, are not a methodical progression, for her contrasting opinions are dispersed throughout the text. Although she definitely takes pleasure in certain habits or aspects of society that she had previously scorned, her critical eye never ceases. This is in part because, as Humboldt had poignantly noted, Mexico was a land of sharp contrasts—social, political, and even geographical—often leaving the Anglo or European traveler at a loss. But *Life in Mexico* stands out for its historical accuracy and wealth of information that paints a complex picture of Mexican society at a time when few travelers remained in Mexico for a prolonged period, and political unrest was constant.

Beyond the National Gaze

Contemporary US historians and literary scholars alike have praised *Life in Mexico* for its documentary portrayal of Mexican life. Among its reviewers, historian Charles Hale claimed it was one of the "best Latin American travel accounts" (1967), and more recently, US novelist and longtime resident of Mexico City C. M. Mayo praised the author considering her with "no exaggeration–Mexico's Tocqueville."[84] Silvia Arrom's important study on women in Mexico City begins with a reference to Fanny Calderón's account; Arnold Bauer's history of material culture in Latin America also recognizes her documentary value, and historians Gilbert Joseph and Timothy Henderson include a fragment of her narrative in their *Mexican Reader* because her portrayal gives the reader a sense of "witnessing a bit of political theatre."[85]

On the other side of the border, despite the author's derogatory and critical comments, Mexican scholars have begun citing the text for its chronicling of historical events and its wealth of information regarding daily political and social life in Mexico during a particularly unstable period. Despite early criticism, recent analyses recognize her observations as "an undeniable historical reference" in the construction of Mexico's identity as an independent nation.[86] María Soledad Arboláez considers it both an informative and entertaining book, and she defines the author as a sharp critic who was unforgiving with the elite. In Arboláez's view, Fanny Calderón's observations of Mexico and its inhabitants anticipate the histories of private life.[87] Her observations of Indians uncover many

aspects of their culture that Mexicans themselves did not value, especially their scientific knowledge passed down from generations. Along the same lines, Beatriz Ferrús Antón highlights Fanny Calderón's interest in Indians because she recognizes that "without them, one cannot understand Mexico."[88] Another critic stresses that Fanny Calderón's observations are extremely detailed because unlike most travelers at the time, she remained there for a prolonged time without constantly being on the move. Hence, while she does not make universal claims regarding her observations, they are on point because she has had time to observe. Impartial and undeterred by internal political interests, her portrayal, despite offensive remarks, reveals, in Antonio Acevedo Escobedo's words, "an impulse of benevolence … towards our people."[89] That said, beyond its informative value, the few critical literary essays on *Life in Mexico* (on both sides of the border) tend to reduce its complexity inserting it within the Victorian tradition of women writing against a male-dominated sphere or view it as a travelogue that reproduces the imperial gaze toward the colonized. More recently, instilled perhaps by a critical revision of travel literature, new approaches have begun to focus on the complexities the text presents beyond a gendered writing.[90]

Despite the informative value of her narrative, critics at the time focused primarily on her national and gendered perspectives. In his preface to her narrative, Prescott underscores the personal nature of Fanny Calderón's book, "*really*, not intended originally—however incredible the assertion—for publication." Highlighting her intimate acquaintance with Mexican society, he presents her letters as "rich stories of instruction and amusement" and claims to have been the one who urged her to publish them. By defining the letters as "stories," he relegates her narrative, despite its "instruction," to the intimacy of the domestic sphere reinforcing her gendered perspective. Yet in his letter to Charles Dickens, whom he contacted to help secure the book's publication in England, he states: "The English and Americans who visit these countries are so little assimilated to the Spaniards that they have had few opportunities of getting into the interior of their social life. Madame Calderón has improved her opportunities well, and her letters are those of a Spaniard writing in English."[91] Still highlighting her intimacy in his appraisal of her narrative in *The North American Review*, Prescott shifts her national perspective to position her more in tune with the democratic view of a North American writer.[92] He uses this extensive review to underscore the limitations of the English traveler who clings to his "soft luxuries" and thus becomes

"morbidly sensitive to every temporary jar or derangement in the working of it."[93] Unlike the US American traveler who is unpretentious and more accepting of difference, the British traveler, according to Prescott, is said "to carry castle, park, equipage, establishment"; hence, "he changes place, indeed, but changes nothing else."[94] Even among those notable travelers who pay attention to the social habits and manners of people in Mexico such as Henry Ward, William Bullock, or Joel Poinsett—who all published before Fanny Calderón—none, according to Prescott, not even Humboldt, is as able to penetrate "the interior mechanism of society, its secret sympathies, and familiar tone of thinking and feeling" as Fanny Calderón.[95] Underscoring the intimacy of her knowledge of society, whether as a Spaniard writing in English or as a US American, Prescott reaffirms her knowledge and position within the domestic realm.

Confining Fanny Calderón's knowledge to the domestic realm may have been Prescott's way of categorizing her knowledge as gendered, yet her intimacy was not always perceived as a positive trait, especially when viewed from a national perspective. This is precisely what the reviewer of the British publication *The Quarterly Review* holds against her. In a long critique of twelve travel narratives written by women, the commentator states regarding *Life in Mexico* that "We feel that it is not only tropical life we are leading, but, with the exception of an occasional trait of Scotch shrewdness, and, we must say it, of Yankee vulgarity, a tropical mind which is addressing us."[96] What disturbs the reviewer most is the "very un-English nature of her writing" precisely because she has immersed herself too much into the foreign culture; lacking "anything domestic in it," her writing is considered "unwomanlike."[97] Travel, according to this reviewer, was meant to exemplify national superiority. Fanny Calderón's intimacy unravels this sense of superiority undermining both her national and gendered identities. The reviewer faults her for abandoning her own domesticity and penetrating into the homes of others, and for intermingling with Mexican culture. Avoiding assessments regarding her adequate or inadequate gendered writing, *The Edinburgh Review* praises her testimony for its richness and simply notes that the author is a "Scottish lady, bred in New England, and married to a Spaniard, with whom she was domiciled for two years as Ambassadress in Mexico—a curious combination of personal accidents."[98]

While Prescott finds Fanny Calderón's intimacy appealing, it produces anxiety among most Anglo reviewers for undermining clear national and even gendered boundaries. For Mexicans, *Life in Mexico* revealed quite

the opposite of the English reviews. It demonstrated the author's inability to truly understand "the interior mechanism of [their] society" that Prescott had emphatically praised. The elite resented her condescending tone and flippant attitude toward women, politicians, habits, and celebrations, which she never found up to par with their English or North American counterparts. Those who had welcomed her into their homes felt she had "betrayed" their warmth and openness, and had evidently not learned the most intimate lesson of respect and decorum.

Fanny Calderón was aware of her privileged position as the wife of the Spanish ambassador and used it to explore Mexican society. She boasted to Prescott, "Generally speaking, the Mexican ladies are not intimate with strangers, but Calderón not being considered as a foreigner, I am intimate everywhere, and indeed with the exception of the diplomats, keep almost entirely to Mexican society, which is the best way of knowing the true state of things."[99] Copies of the book in English quickly began to circulate. When the Mexican newspaper *El Siglo Diez y Nueve* published a few extracts in Spanish as a preview of its plan to publish the book in serialized form, a fierce debate ensued. The government-sponsored newspaper, *Diario del Gobierno de la República Mexicana*, fired an impassioned critique dismissing any historical value it might have, given the author's "unjust, biased, virulent diatribes."[100] It went so far as to request the banning of the book. *Siglo Diez y Nueve* invited readers who were attacked to defend themselves in their pages—none did. Reviewers felt that she misrepresented their national identity, and that she had transgressed her role as wife and foreigner, letting her aristocratic pretensions ("improvisada en la aristocracia") take over. Furthermore, they felt her husband had also betrayed his diplomatic responsibility toward their country and proved to be unworthy of his high-ranking position.

Reviewers persistently remarked on Fanny Calderón's national identity as a defining trait of her observations. Why emphasize her gaze in national terms? How might that affect our reading of *Life in Mexico*? Why was Prescott's *Conquest* highly praised in Mexico but Fanny Calderón's narrative censored? Based on the different reactions to Prescott's and Frances Calderón's texts in Mexico, Michael Costeloe argues that Mexicans' main concern was to protect and improve their country's national image.[101] Whereas Prescott's reconstruction of the conquest was a cause for pride and patriotism for many Mexicans for glorifying its noble and Christian past, Fanny Calderón's narrative presented a distasteful critique of the country's contemporary politicians,

customs, etiquette, and even fashion.[102] *El Diario* labeled her "the new Mrs. Trollope."[103] As Mexicans saw it, she reproduced the same negative stereotypes endorsed by their northern neighbors, and to an extent, by the Spanish. In their eyes, she presented Mexico as too immature to be independent, lacking a class of intellectuals with skills and experience for self-government. This was the same argument one deputy in the Spanish Cortes put forth when discussing the independence of the former colonies: "I do not want to insult them because they are my brothers but those countries have not attained maturity or virility; they are in an inferior condition."[104]

Rather than keep her distance from Mexico's sharp contrasts and domestic affairs, Fanny Calderón explores them visually displaying their strangeness in great detail. When she is unable to fully articulate the image, she reaches out for known references that help her grapple with the foreignness. These are for the most part, all European: Byron, Carlyle, Shakespeare, and Dante. Through these literary references and others, she reveals a series of negotiations, both personal and national, deeply intertwined. Her detailed portrayal, while often realistic, hinges on her own sense of place. Far from presenting a uniform narrative, *Life in Mexico* merges competing national interests and the author's own cultural ambivalence as she documents her vision of Mexican culture.

While, on a personal level, Fanny Calderón tends to react as a European, in responding to Prescott's insistent requests and specific questions, she often assesses Mexico from a North American perspective. Their letters to each other are filled with factual information about Mexico as well as a good amount of gossip about friends, relatives, and numerous social acquaintances both in the United States and Mexico. Prescott writes to both Calderóns with requests for original documents, translations, opinions, and books, but his letters to Fanny are much more lively and entertaining. The two share a complicit and playful intimacy. He supplies her with updates on her brother, whom he and his wife often see, and other friends such as the Appletons and the Ticknors. Both writers seem to share a disregard for certain members of society and social events. Prescott amusingly alludes to the social uproar triggered by the pamphlet *Scenes at the Fair* by mocking Mrs. H. Otis once again, "Your old friend Mrs H. G. Otis has just returned—quite in time—as she has a genius for fairs, you know."[105] In one letter, after an extensive update on the Boston social scene, he concludes: "There, I

have poured as much gossip into your lap as any female friend, spinster though she be, could have done."[106]

Although Prescott's own writing on Mexico was informed by an extensive documentation, he looked to Fanny Calderón for help in recreating the visual settings. Having never traveled to Mexico, and with his eyesight deteriorating, he sought Fanny to become his eyes.[107] His requests reveal the distinction he makes between serious history and poetic reflection. Ángel Calderón's letters to his US friend are much more restrained, informing Prescott on the advancement of his research, the manuscripts he has been able to access, the books he has acquired and sent, and the people with whom he has discussed specific topics. His dislike of Mexican culture is evident, often permeating his reports. Frustrated at not being able to secure some documents, he confesses: "As everything here is disorder and procrastination, it is necessary to seek these papers where they are, and keep the day and season, because so-and-so is in the field or in the council, and the clerk who is to do the copying is ill or busy, and will come tomorrow, and tomorrow never comes." His sharpest criticism is the usual postponement of everything: "the eternal refrain of Mexicans, *mañana*, *mañana*, a kind of Mexican *yes* which means—*in the next century, if I find the thing to my hand without search—or never*" for which the only solution he can offer is "patience and more patience."[108]

Requests to Fanny Calderón, on the other hand, are directed at helping Prescott grasp Mexico's landscape and culture that he would never see. He asks her for information to help him imagine Mexico at the time of Cortés, longing for descriptions of Indians, details about the scenery, the trees and flowers along the road, and their colors and smells. From the comfort of his home, he urges Fanny to be his eyes: "if you please on the *scenery*, and let me know if you can without trouble a few of the *indigenous*, *staple* trees and shrubs of the grand tableland growth and of the *tierra caliente*, and their English names, if they have any. Could you not specify a bird or two, with their effect on the eye? You see I want to dip my pencil in your colours—the colours of truth, gently touched with fancy, at least feeling."[109] The kind of information Prescott asks of her is summed up in his understanding of women's writing, or as he puts it, Ladies-writers: "they are the best letter-writers in the world, and go to it as naturally as they would a good gossip over a dish of tea, mixing up a little sweet and a little acid, throwing in a character or two, and flavoring

the whole with that agreeable kind of wit which makes altogether the most delicious compound."[110]

Women, according to Prescott, inform but without seriousness; they provide spice but not substance. Although he asks for her opinions on politicians and events, and discusses books with her as well, in his extensive *Conquest*, he only acknowledges her in a few footnotes, praising her as "one of the most delightful of modern travellers," or as a "spirited author," relegating her contribution to the flavorful coloring of women's writing, but not to the substance.[111] Fanny Calderón diligently complies with Prescott's requests, providing him with the pertinent descriptions, information on the shroud that covered Cortés' body, the books Ángel obtains for him, and meetings her husband attends in order to procure archival material. She seems to enjoy his requests. Her informative reports are peppered with witty asides and humor: "I have at this moment two skulls beside me, not of Aztecs however but of Ottimiti Indians, who little thought that you were destined to disturb their repose."[112] She even plays with his innuendos picking up on his phallic imagery, as she responds, "As for the appearance of the country in tierra *caliente*, you may boldly dip your pen in the most glowing colours."[113]

In her own narrative, however, Fanny Calderón pays special attention to the landscape as well as to the ongoing political debates in Mexico. Upon their arrival, the first official to greet them is the former president of Mexico, Guadalupe Victoria, who, as she notes, was the only president to fulfill his term. Shortly after, on their way to Mexico City, they stop to have breakfast with General Santa Anna, "a gentlemanly, good-looking, quietly dressed, rather melancholy-looking person, with one leg" whom she is quick to unmask: "Knowing nothing of his past history, one would have said a philosopher, living in dignified retirement." Almost as an afterthought, perhaps thinking of his role against Iturbide, in Texas, or during his recent presidency, she adds, "To judge from the past, he will not long remain in his present state of inaction." She omits her comparison (made in her journal) between Santa Anna and US President Van Buren regarding their ambition and cunningness. In her view, men like them have a certain "something that would persuade the multitude that they are above the world, and engage in its toils only to benefit others–so that one can hardly persuade oneself that these men are not saints."[114] Fanny Calderón may not delve into complex critical analyses of Mexico's political figures, but her comments reflect an in-depth understanding of the political map. She is well aware of Santa Anna's many roles in

Mexico's history and does not underestimate him. When she presents a list of literary scholars and politicians, all "distinguished men," among them, General Victoria, Lucas Alamán, Andrés Quintana Roo, and Carlos Bustamante, she explains that their personal story is deeply intertwined with the history of Mexico. She recounts their political trajectory, adding brief comments that underscore she knows most of them personally. She does the same with several intellectuals. She writes that the playwright Eduardo Gorostiza is witty and agreeable, the curate José Miguel Valentín is kind and wise, President Bustamante is honest, and statesman Francisco José Fagoaga has great taste.[115] Through her connections with these men, she uncovers fragments of Mexico's political past. Domestic life, in this sense, is a pathway to accessing the country's political history. Intimacy is a necessary requirement to understanding Mexican politics. If British reviewers faulted her for being "unwomanlike," it was because they sensed that her intimacy was not a means of reaffirming her gender but rather a means of delving into the political realm. *Life in Mexico* underscores the importance of direct personal connections to understand a foreign culture, which in Fanny Calderón's words means being "intimate everywhere." Her experience in this sense transcends the realm of the personal to become embedded in a shared public cultural experience. This was perhaps the most disturbing aspect of her travel narrative for British reviewers; ironically, it is what makes *Life in Mexico* a unique and complex travel narrative.

Unfamiliar Landscapes

Upon leaving the oppressive scenery of the city of Veracruz, heading inland toward Mexico City—referred to as simply Mexico, Fanny Calderón's gaze begins to settle. Following Humboldt's model, she details the changes in the landscape. Invoking Dante, she likens her trip to leaving Purgatory to enter Paradise, noting: "Like paradise also, the road is difficult, and the extraordinary jolts were sufficient to prevent us from being too much enraptured with the beauty of the scenery."[116] The landscape, cloaked in a balmy air, unveils blossoms and flowers of every hue, with roads rimmed by palm trees, cocoas, orange groves, and grenadine trees. The "Arabian deserts" gently fade into a tropical delight. As the landscape changes, so does her perception of the population. Suddenly, "There is not one human being or passing object to be seen that is not in itself a picture, not one which is not picturesque,

or which would not form a good subject for the pencil."[117] The Indian women with their long black hair, the string of *arrieros* or muleteers with "their wild looking face," and the horseman in a sarape, with his ornamented saddle, hat, and silver stirrups have now become "picturesque." Quite rapidly, the foreignness has gone from menacing and disagreeable to picturesque and pleasing. How to explain this sudden shift in perception? What enables her to uncover the picturesque in this new geographic setting that she previously found so disturbing?

Fanny Calderón's representation of Mexico undergoes many visual shifts, determined by her inability or awkwardness to read the social and geographic landscapes. The gaze of others, like those she received in Veracruz, will also trouble her. But when protected by the enclosure of the diligence, or later in the safety of her home or from a private theater box, she is able to grasp the landscape (both natural and urban) with an aesthetic lens. Then, as people step into her picture, she ably accommodates their presence, though there will be times, especially in the city, when she will be unable to maintain control of the scene. Relishing the beauty of the landscape from her diligence after leaving Veracruz, she adds: "Salvator Rosa and Hogarth might have travelled in this country to advantage, hand in hand; Salvator for the sublime, and Hogarth taking him up where the sublime became the ridiculous."[118] The combination of artists can be read as her way of making sense of her contrasting feelings. Rosa, the Italian landscape painter whose paintings charged with forceful drama and excitement inspired the beautiful and sublime in British landscape painters, gives way to the social satire and critique of William Hogarth. Well known and appreciated in England, Rosa's nature is wild and mysterious, at times with obscure bandit figures lurking against rocky cliffs and jagged trees that inspired the Romantics.[119] Nigel Leask reads Fanny Calderón's aesthetic portrayal and this scene in particular, as a reflection of her "colonial ambivalence."[120] This ambivalence, in my view, has to do with the tensions and sharp contrasts that characterized Mexico. She is unable to portray a uniform picture of Mexico because Mexico exceeds containment; hence, her depiction is full of contradictions in which beauty and refinement clash with ugliness and coarseness. In order to accommodate such contrasts, she appropriates, on the one hand, the aesthetic qualities of landscape painting, as Leask notes, to describe the natural scenery while, on the other hand, she endows her observations of social life (looks, customs, and habits) with the stamp of her wit and incisive commentary akin to satire. Both

strands of her narrative bear an ideological imprint stemming from her national alliances.

While many travelers to South America, encouraged by Humboldt, would seek out landscapes inspiring the sublime, Fanny Calderón's Mexico is mostly picturesque. As William Gilpin explains, this "peculiar kind of beauty, which is agreeable in a picture" stands apart from the magnificence of the sublime and the perfection of beauty for its abundance of detail.[121] The picturesque demanded from the viewer a particular kind of observation, one that did not necessarily soothe the eye as beauty did or elate the viewer, which was the effect of the sublime. The picturesque "stimulated, excited and irritated the eye and provoked feelings of curiosity, interest and amusement."[122] It is essentially a more open form of perception, enabling the observer to project his or her sentiments onto the details chosen to highlight. Because the picturesque allows for sharp contrasts, it seems to be a particularly appealing frame to represent Mexico. Hence, while Fanny Calderón distinguishes elements of beauty in Mexico and even of the sublime, their traits do not carry the weight to shape her description. One particularly telling moment, in which her portrayal avoids conjuring aesthetic references beyond the picturesque, is her first view of Mexico City. Perched upon the hilltop, she looks "down upon the superb valley of Mexico, celebrated in all parts of the world, framed by magnificent mountains, volcanoes covered with snow and whose heads are lost in the clouds." Interrupting this "magisterial view" of magnificence and height,[123] she suddenly states: "But the day was overcast, nor is this the most favourable road for entering Mexico." What follows, then, is the possibility of reimagining the scenery in great detail, unhinged precisely by the ambiguous sight:

> The innumerable spires of the distant city were *faintly seen*. The volcanoes were enveloped in clouds, all but their snowy summits, which seemed like marble domes towering into the sky. But *as we strained our eyes* to look into the valley, it all appeared to me rather like a vision of the Past than the actual breathtaking Present. The curtain of Time seemed to roll back a *few centuries*, and to discover to us the great panorama of *Mexico* that burst upon the eye of Cortés when he first *set foot upon these shores* and first looked down upon the tableland; the king-loving, God-fearing conqueror, his loyalty and religion so blended after the fashion of Ancient Spain that it were hard to say where one began and the other ended or which sentiment exercised over him the greater sway. (emphasis added)[124]

The potentially awe-inspiring vista of the sublime is obscured by the haze that, instead of creating apprehension, allows her to reach back into the past to reconstruct the breathtaking views of "the great city of Tenochtitlán." Aligning her gaze with Cortés, her imaginative description for which she must strain her eyes recovers the imperial glory of Spain. Emptying the landscape of inhabitants, she fills the valley with marbled domes (which stand out for their "real" absence in Mexico) to recreate the greatness appropriated by Cortés. Within that reconstruction, Tenochtitlán appears as a "western Venice, with thousands of boats gliding swiftly along the streets and its long lines of low houses." She conjures beautiful gardens surrounding the city, filled with flowers, fruits, and birds, and even imagines the "mild bronze-colored Emperor" advancing to welcome his unbidden guest, Cortés, with gold, rich plumes, escorted by slaves. As Fanny Calderón rolls back "the curtain of time," echoes of Bernal Díaz del Castillo's mythical description three centuries before come into focus:

> Our astonishment was indeed raised to the highest pitch, and we could not help remarking to each other, that all these buildings resembled the fairy castles we read of in Amadís de Gaul; so high, majestic, and splendid did the temples, towers, and houses of the town, all built of massive stone and lime, rise up out of the midst of the lake. Indeed, many of our men believed what they saw was a mere dream. And the reader must not feel surprised at the manner in which I have expressed myself, for it is impossible to speak coolly of things which we had never seen nor heard of, nor even could have dreamt of, beforehand.[125]

The overcast sky allows Fanny Calderón to internalize the natural scenery and invoke a version of the past highlighting the enchanted scenes of the Amadís de Gaula—which she substitutes for the more European image of "domes of marble"—and places Cortés as the emblematic figure of Spain's civilizing role. The exoticness of the landscape is thus reconfigured in a fictional reconstruction that encompasses past and present. By blurring the lines between times, Fanny Calderón creates a "reflective" landscape that dissolves both temporal and cultural boundaries onto which she projects her own reconstructed image of the city. Her dream-like vision allows her to depict a harmonious landscape, which erases all traces of violence brought about by the conquest.[126] Prescott describes the same scene as an "enchantment" for which he

invokes Amadís de Gaula and Don Quixote to convey a sense of wonder. In Prescott's version, Cortés and his men gaze upon the view in amazement, bringing forth "magical pictures in the 'Amadís de Gaula'," legends of chivalry, and romantic adventures.[127]

As chronological time gives way to Fanny Calderón's poetic imagination, she is filled with a sense of well-being that continues onto the next day when she awakens, "as if one had not travelled enough in the body, [I] began travelling in the mind, away to far different, and distant, and long-gone-by scenes; fell asleep at length with my thoughts in Scotland; and wakened in Mexico!"[128] Observing the view from afar enables her to travel beyond the concrete landscape and bring forth her multiple national alliances. In this sense, travel unhinges the gaze opening up the landscape to multiple views. What is portrayed is not only what is seen but also what the vision conjures in the individual looking. Through her numerous displacements, Fanny Calderón has learned to travel physically as well as imaginatively. Like Calvino's traveler who spies Despina and initially encounters his desire, Fanny Calderón's first gaze, still at a distance, comforts her transporting her home. Only then can she begin to see Mexico. It is as if the first step in observation entails overcoming illusions, desires, and preconceived notions in order to begin to see objectively.

Given her diplomatic role as the spouse of the Spanish Minister, it seems only natural that her vision of the past would seek to glorify Spain. This would explain why, for example, she omits certain criticisms of Cortés in her published narrative. These comments undermine her harmonious view of the conquest and question Cortés' role as a great civilizer, a perspective she achieves because she does not have a uniform understanding of the past:

> What pictures are called up by the recollection of the simple narrative of Cortés, *and what wonder if in the enthusiasm of the moment he should unintentionally have exaggerated on some occasions? He is blamed for cruelty—for injustice—but the first cruelty and the first injustice is in his entering these unknown lands, and disturbing an inoffensive people. Once considering it his duty to God and his King to subdue them*, where was his alternative? And how forcibly [these pictures] return to the mind now when, after a lapse of three centuries, we behold for the time the city of palaces raised upon the ruins of the Indian capital.[129]

Leask finds the description of Mexico City a way to question rather than legitimize Cortés' *conquistador gaze* and highlights the deleted passage in cursive as a note of historical contention.[130] While concurring with Leask regarding the discordant note, I would argue, however, that the previous passage serves to excuse Cortés, positioning him as a dutiful soldier who fulfilled his mandate—therefore temporarily diminishing his responsibility for the cruelty that ensued.[131] In other words, Fanny Calderón reframes the conquest in religious terms assigning the violence not to the "hero" but to Catholicism. The conquistador should not be faulted for complying with "his duty to God and his King to subdue," but rather the Catholic mission and its brutal way of bringing progress and civilization to the New World. Perhaps, she omits the passage because it is too early in the text to introduce historical or political contradictions. She is just beginning to grasp the force of Catholicism in the Spanish-speaking world and has yet to comprehend how both history and religion are inscribed in the landscape.

In the preface to his *Conquest*, Prescott expressed a similar sentiment when it came to presenting the cruelty of the conquistadors and of Cortés. However, rather than omitting it, he contextualizes it:

> I have not hesitated to expose in their strongest colors the excesses of the Conquerors; on the other, I have given them the benefit of such mitigating reflections as might be suggested by the circumstances and the period in which they lived. I have endeavoured not only to present a picture true in itself, but to place it in its proper light, and to put the spectator in a proper point of view for seeing it to the best advantage.[132]

Very much aware of the importance of staging his reconstruction, Prescott seeks to place the spectator in the "proper point of view" in order to see/comprehend the events portrayed. He is concerned about appearing objective and impartial in order to create a "true" picture, so he does not hold back on portraying the cruelty committed by the conquerors; yet, he also wants his spectators to see the events from his perspective, which in his terms constitutes: "the best advantage." In order to guide his readers, he must set up the scene in realistic terms. He structures his narrative in terms of character and plot and strives to create a picture that is morally edifying.[133] Inspired by his readings of Washington Irving, Voltaire, and Walter Scott, he is convinced that the historian needs to be a great painter of natural scenery

where the hero's actions take place.[134] For this, he engages Fanny Calderón to help him visually reconstruct the landscape with accuracy. Whereas she dissolves chronological time into a fictional landscape to project different and at times contradicting images of the Conquest, Prescott sculpts a precise and well-defined landscape full of autochthonous plants and bright colored fruits—courtesy of Fanny—to recreate his rendering of the conquest with visual force.

Here lies a noticeable difference between historian and traveler. Ironically, Fanny Calderón's less precise and more evocative landscapes enable her to project her ambivalent views of history, which she imagines inscribed in the landscape. Prescott has an overarching image to present of the Conquest. Although his history seems to present events aligned with the Spanish point of view, Prescott's view is inscribed within the politics of Manifest Destiny. In his staging of events, he is guided by his view of the triumph of Protestant rationalism over Catholic theatricality. Two different conceptions of Empire framed by a religious outlook: the glorious past of the Spanish or the future-looking northerners: "The Protestant missionary seeks to enlighten the understanding of his convert by the pale light of reason. But the bolder Catholic, kindling the spirit by the splendor of the spectacle and by the glowing portrait of an agonized Redeemer, sweeps along his hearers in a tempest of passion, that drowns everything like reflection."[135] Rooted in antebellum US American culture, Prescott's narrative reflects how US Americans viewed Spanish America. Hence, although his history focuses on sixteenth-century events, his narrative highlights how civilizations evolve, compete, and either prevail or collapse.[136] Prescott demonstrates the march of history. He shows how civilizations emerge and are transformed. The Aztecs were a refined civilization with many advances yet with irreconcilable incongruities such as their barbaric practices of human sacrifices and cannibalistic feasts.[137] He explains their contradictions "as a result of religious superstition; superstition which clouds the moral perception, and perverts even the natural senses, till man, civilized man, is reconciled to the very things which are most revolting to humanity." His *Conquest* expounds the greatness of the Spanish who can only civilize the indigenous once they have vanquished their barbarism. Given that the Spanish "carried with them the sword in one hand and the bible in the other," Prescott constructs their conquest as a Holy War with a mission "to conquer and to convert."[138] In so doing, he proclaims the future demise of the Spanish contrasting them with the Protestants, who despite being religious seek to conquer with

"reason." Thus, he affirms the progressive march of history in which the United States emblematizes the future empire with its superior force.[139]

Fanny Calderón, on the other hand, explores the contradictions embedded in the ideas of progress and civilization. Her distance from the concrete events allows her to relativize the conquest pondering on the significance of progress and civilization as well as the means to achieve it. Distance, in this way, can also allow the viewer to see more. In fact, in Fanny Calderón's narrative, it allows her to make comparisons and relativize categorical affirmations made by the likes of Prescott and others. With regard to the use of brutal violence, she knows that no side is exempt. Thus, she reminds her readers that the Protestants have also committed atrocities:

> Fanaticism and policy induced the Spanish conquerors to destroy these heathen temples; and when we recollect that at the time of the Reformation in civilized England the most splendid Catholic edifices were made level ground—in compliance with the ferocious edict of John Knox, 'Ding down the nests, and the rooks will fly off'—we can have little wonder or blame to bestow upon Cortés, who, in excitement of a siege, gave orders for the destruction of these bloodstained sanctuaries.[140]

Unlike Prescott, Fanny Calderón is not preoccupied with constructing a cohesive reading of Mexico. Her multiple alliances inhibit her from doing so. However, her portrayal of Mexico is nevertheless much more complex than many contemporary travel narratives because she allows for contradictions. Focusing on details, she freely juxtaposes her disparate impressions without trying to affirm a sense of unity. The rich and dissimilar landscapes of Mexico arouse contradictory sensations, which come together through the picturesque. Sidney K. Robinson highlights this particular quality of the picturesque: Rather than present a composition in which all parts are seamlessly bound together, it highlights the relation between elements; the challenge of the picturesque is precisely its principle of mixture.[141] This space for mixture and even contradiction is what allows Fanny Calderón to reach for her distinctive cultural references to document the landscape. It is, in fact, the landscape that sparks her reflections on the conquest and other historical events, not the events themselves.

Fanny Calderón's ambivalent affinities with empire, history, and religion become palpable in her landscape paintings. The Calderóns make numerous excursions through the country. They travel through battered

and unsafe roads by diligence, horseback, and even mule; they weather electrical storms, oppressive heat, and even treacherous bandits. With each trip, she exudes excitement and vitality in her narrative that make the journeys rewarding. Her descriptions combine the pictorial aesthetics of landscape painters, peppered with literary and religious references. When visiting the floating gardens and pyramids of Teotihuacán outside the city, she compares the burial ground of the temples of the Sun and the Moon to "an Aztec or Toltec Père Lachaise, or rather a roofless Westminster Abbey"; the Popocatepetl and the Iztaccihuatl volcanoes are "the Gog and Magog of the valley." When approaching the towering Popocatepetl, she quotes a poem by the Cuban poet José María Heredia to express the amazement and admiration upon sighting the volcano: "The clouds parted in the middle, and rolled off in great volumes, like a curtain withdrawn from a high altar. The snowy top and sides of the mountain appeared, shining in the bright sun, like a grand dome of the purest white marble. *But it cannot be described*. I thought of Sinai, of Moses on the Mount."[142] Once again, she interrupts her description to avoid losing her ground, as her physical travel gives way to her imaginary voyage.

The Calderóns' extensive travels include visits to the plains of Tacuba, the celebrated falls of the Tzaráracua, pulque haciendas, coffee mills, and sugar houses, among many other sites. Leaving the city for their first major excursion north to the silver mines, one of Humboldt's major interests described in his *Political Essay*, Fanny Calderón's pictorial lens is prominent: "There is a universal air of dreariness, vastness, and desolation. The country is flat, but always enlivened by the surrounding mountains, like an uninteresting painting in a diamond frame; and yet it is not wholly uninteresting."[143] Nature is elegantly framed in her depictions of Mexico. Unlike the images of the sublime that threaten the observer with boundless immensity, the picturesque is contained by its own irregularity, an irregularity that accommodates beauty but is not uniformly determined by it.[144] The scenery near the mines of San Miguel is "most picturesque and lovely." Climbing hills and making her way on horseback "through tangled luxuriance of trees and flowers" with the field of daisies and buttercups, she adds: "It might be English scenery were it not that there is a richness in the vegetation unknown in England." The mine, however, is striking, almost sublime: "all is on the gigantic scale." Evoking images worthy of Humboldt, she sees "the great cascade with its rows of basaltic columns …. lofty cliffs covered with the wildest

and most luxuriant vegetation: vines trailing themselves over every broken shaft; moss creeping over the huge disjointed masses of rock, and trees overhanging the precipitous ravine."[145] Nature seems to take on a life of its own. Her mind wanders to the plains of Shinar, another biblical reference, but a forceful and sudden storm brings their stroll (and her imagination) to an abrupt halt. She concludes her (interrupted) journey (and portrayal) quoting a few verses from Byron's *Childe Harold's Pilgrim*. *Life in Mexico* is filled with varied descriptions of nature. Yet no matter how striking or enveloping, through pictorial frames or narrative interruptions, the landscape is bound and shaped into the beautifully picturesque, never allowing Fanny Calderón to be completely swept away as the sublime might have done. Containing the landscape is a way of reaffirming her identity.

Although the scenery is often imprinted with historical remnants (ruins of churches, houses, and abandoned buildings), Fanny Calderón prefers to focus on the natural scenery, even when the construction is substantial. At the mines, under British ownership, she cannot ignore the elaborate machinery: the immense vaulted storehouses for the silver ore, the great smelting furnaces, the water wheels, etc., all of which she describes briefly. Aware that she does not engage in the technology of the mines and that her description is incomplete, she directs those readers interested to Humboldt and Ward, who have described the process with scientific accuracy. Her interests lie elsewhere:

> I must confess that my attention was frequently attracted from the mines, and the engines, and the works of man, and the discussion arising therefrom, to the stupendous natural scenery by which we are surrounded: the unexplored forests that clothe the mountains to their very summits, the torrents that leaped and sparkled in the sunshine, the deep ravines, the many tinted foliage, the bold and jutting rocks. All combine to increase our adminiration of the bounties of Nature of this favoured land.[146]

In *Life in Mexico*, nature alerts the senses. Far from frustrated or bothered by the insects that assaulted Humboldt, Fanny Calderón is amused by "the incessant buzz of myriad insects," for it allows her to imagine what "the world must of have been before man was created"[147]; she delights in the smell of flowers and fruits like the *chirimoyo*, oranges, apricots, and many more. She details the characteristics of the maguey and the nopal and all the curious animals she encounters like the *epatl* (skunk). She writes pages and pages on the scenery near the mines and surrounding haciendas while her husband summarizes the whole month of travel in one brief entry. Although Ángel Calderón likes to "indulge" in what she

calls "his botanical and geological propensities," he does not pay much attention to the scenery. Even Humboldt does not freely enjoy the landscape for extended periods. He quickly begins to look for connections, relationships between the surrounding elements. Fanny Calderón is much less scientific about her observations. Landscape, for her, is a form of expression. Describing nature is perhaps when she most feels like a writer and is able to express herself most freely. Sitting on the hills near Lake Pátzcuaro, at dusk, she watches how "a gray vapor concealed the opposite shores, and like a light breath spread gradually over the mirrored surface of the lake." She detains her gaze at the wild *oceloxochitl* flower or viper's head with purple, white, and rose blossoms, which catches her eye, as does an unnamed flower hanging from a tree "whose blossoms are so like large pink silk tassels that, if hung to the cushions of a sofa, you could not discover them to be flowers." As she heads south past Cuernavaca, the smell of orange blossoms and starry jasmine awakens her senses, accompanied by the "delicious clear water, trickling with sweet music, and now and then a little cardinal, like a bright red ruby," creating together "an earthly paradise." In each of her numerous journeys, she is inspired by the beauty of the landscape, a beauty that is lived, worn, captured by her artistic eye, and framed into the picturesque.[148]

Mexico's natural beauty helps her mitigate the country's unpleasant qualities, from foul smells to political chaos. Within the natural setting, the contrasts are less troubling: Indians seem better looking, capable of displaying "a fine specimen of savage good looks"; they are cleaner and their nakedness is less disturbing; their poor huts as well as the old ruins of buildings complement the landscape; and the unkempt roads become adventurous.[149] Gilpin reminds his readers how to move from polished beauty to the picturesque, oftentimes with the aid of a mullet:

> Turn the lawn into a piece of broken ground; plant rugged oaks instead of flowering shrubs; break the edges of the walk, give it the rudeness of a road, mark it with wheel tracks; and scatter around a few stones, and brushwood; in a word, instead of making the whole *smoothe*, make it *rough,* and you make it also picturesque. All the other ingredients of beauty it already possessed.[150]

Mexico is the perfect portrait of the picturesque: wrapped in ruins and vestiges of the past, with its battered roads and absence of cultivated gardens, yet overflowing with natural beauty. As Fanny Calderón

engages the aesthetic of the picturesque, she embraces the ruggedness to the point in which the landscape no longer feels foreign. In fact, it becomes intimate. One day during a horseback ride to Toluca, she inverts her gaze and steps into the scenery: “I imagine we must have looked very picturesque, I in my riding habit and the sandalled friar in his white robes, kneeling side by side on the broken steps of the altar.”[151] By entering the frame of the landscape, Fanny Calderón naturalizes Mexico’s exotic nature. She no longer needs to hide within the protection of the diligence as she journeys through the land. While this act may be read as an imperial gesture of appropriation, typical of so many European travelers, in her narrative, it also reveals her pleasure in exploring the richness of the country and the process through which she sheds her foreignness by expressing her cultural ambivalences. In this sense, *Life in Mexico* can be read as a narrative in which Fanny Calderón learns to accommodate her gaze to the Mexican landscape, harmonizing all its contrasts into a captivating picturesque scene.

Navigating the Urban Grid

While the picturesque landscape has a pleasing effect on Fanny Calderón, her encounter with the city’s urban scenery proves significantly more disturbing and complex to navigate. She is initially overwhelmed with the chaos and sharp contrasts that highlight her foreignness. The swarms of people and cries in the streets overcrowd her portrait, disrupting the stillness of her gaze. Yet, rather than retreat to the interior of her home as the British travel reviewer would have her do, Fanny Calderón sets out into the streets to absorb the city’s rhythm and report on all she sees.

Her first appraisal, however, takes place within the confines of her house, from where she uncovers “the most curious and picturesque groups and figures that were ever seen.” In a snapshot-like narrative, her gaze scans the bustling streets with passersby: “men bronze colour and nearly naked, with nothing but a piece of blanket or a sarape thrown over them,” “women with the invariable *rebozo*, short petticoats of two colours, sometimes all rags,” “gentlemen on horseback with their high Mexican saddles and handsome sarapes,” the ubiquitous “léperos with next to nothing on, moving bundles of rags, coming to the window and begging with a most piteous but false sounding whine,” and “Indian women, with their tight petticoat of dark stuff and tangled hair.”

She quickly stitches together these incongruous portraits, in flux until, exhausted, she abruptly ends the scene by declaring: "we had enough to look at from the window for the present."[152] Mexico constantly jolts the eye of the artist, even amid the urban chaos. For Fanny Calderón, the city is more demanding to grasp. It has a rhythm of its own, inhibiting her from stabilizing her gaze. Unlike a flâneuse, who observes the city moving about at her own pace, she is engulfed by the city's chaotic rhythm, which forces her to lose her ground. In time, she is able to observe Mexico's urban grid as its landscape. When she becomes accustomed to the urban chaos, "the city dilates to become landscape," and she moves about with ease.[153] As she navigates through the streets and along public buildings, she constructs a map of the city and its people to reveal its pulse, a pulse that in the end, she finds undeniably exciting.

She makes her social "*début*" in the physical and spiritual heart of the city, the Cathedral. Here, she is struck by the intricate overlapping of history and class. The Cathedral, emblem of the Spanish legacy encapsulated in gothic columns, "immensely rich in gold, silver, and jewels" is built upon the remnants of the great Aztec temple where thousands of human sacrifices were committed. As she evokes these past strands, she sees the present as a discomforting display of deterioration and filth:

> The floor is thick with dirt and dust, upon which you kneel with a feeling of horror, and an inward determination to effect as speedy a change of garments as possible on your return home. Besides, many of my Indian neighbours were generally engaged half the time in an occupation too disgusting to be named, which I must leave to your imagination; in fact, relieving their hair from the pressure of the colonial system, or rather, eradicating and slaughtering the colonists who swarm there in greater numbers than the emigrant Irish in the United States.[154]

The metaphor conjures the portrayal of the *zopilotes* cited earlier. Bringing in again her multiple views, Fanny Calderón associates the Indians' actions to their rebelling against the colonial system. To convey her feelings of disgust and foreignness, she inverts the image of displacement equating the invasion of the colonists to the Irish immigrants swarming the United States. Whereas one culture—the indigenous—resists the advancement of civilization (Spain), the progress of the other—the United States—is hampered by the arrival of the poor foreigner (the Irish). The images are inversely proportional. Highlighting the multiple frameworks

from where she observes Mexican culture, she reaches for her own imperial references—in this case, both US and British anti-Irish Catholic sentiments.[155]

A distinct element that both metaphors (zopilotes and lice) share is the image of decay. In Fanny Calderón's portrayal, the dirt and waste in the streets, left to be cleaned by the scavengers, seeps into the sacred realm of the Church, where rich and poor overlap. As she notes, the "universal dirtiness of the lower classes" protrudes onto the spatial setting of the upper classes, tainting them with "much laziness and untidiness." Dirt is "certainly one of the greatest drawbacks to human felicity in this beautiful country. It pervades everything." Even in the Church of San Francisco, the cleanest in Mexico, one may find well-dressed ladies, "but you are equally likely to find your neighbor—a beggar with a blanket," and the floor as dirty as that of the Cathedral.[156]

Fanny Calderón's obsession with the city's filth is not unfounded. The country's political turmoil and frequent financial crises had devastating consequences on the city, evident in its lack of infrastructure and ability to adjust to its rapid growth and urbanization. By 1811, Mexico was the largest city in the Western Hemisphere. However, lack of potable water, an inadequate sewage system, deficient trash removal, periodic floods, and earthquakes—Fanny Calderón experienced one—created dire unsanitary conditions.[157] Houses were poorly ventilated and trash was often scattered in the streets. Everyone was affected, even the wealthy who, at the time, lived in the center of the city. Yet only thirty-five years before, impressed with the city's infrastructure, Humboldt had praised Viceroy Revillagigedo for creating a proper drainage system, cleaning the sewers, repairing and expanding the cobblestone paving of streets, and installing streetlights.

Trying to overcome the uncomfortable closeness of social classes, Fanny Calderón aligns herself with the United States to create distance. In her assessment, poverty and by extension dirt are the distinguishing markers between north and south. They form a dividing line between order and progress, on the one hand, and chaos and unruliness, on the other hand. The contrast was most striking, she noted, for anyone coming from the United States. In that country, "wooden churches or meeting–houses are all new, all painted white"; the nearby village tavern is also clean and new as the churches, the surrounding houses, and little stores: "all new, all wooden, all clean." The neatly ordered image of a typical New England village "proclaims prosperity, equality, consistency; the past forgotten,

the present all in all, and the future taking care of itself." Almost with a sigh of relief, she notes that in that "future-looking country," there are "no beggars," clarifying that if a man reveals any sign of poverty, "even a hole in his coat, he must be lately from the Emerald Isle."[158] Once again, she reinforces the comparison aligning the Irish immigrants with the beggars who tarnish the image of prosperity. If the picturesque landscape of the countryside offered the delight of a rugged view, in the urban setting, the unrefined landscape had to be chiseled into a more structured and shapely form to reflect progress and sophistication. Not in Mexico. Instead of clear delineated spatial divisions within the city, Mexico appears as the intersection of multiple spaces where social relations, riven with internal tensions and in constant flux, were disturbingly juxtaposed.[159] From a US perspective, Mexico's disorderly mixture was its demise.

After her visit to the Cathedral, Fanny Calderón retreats to the intimacy of her home where seeking the comfort of a well-known bond, she writes to her family. She is soon interrupted: "Whilst I am writing a horrible *lépero*, with great leering eyes, is looking at me through the windows, and performing the most extraordinary series of groans …. The wretch! I dare not look up." More beggars appear. Frightened, she glances up to capture glimpses of their bodies: "a hand with two long fingers," "a paralytic woman mounted on the back of a man," "a *deformed* foot," and "a hand stretched out."[160] The dark display of characters is accompanied by a cacophony of moans and cries. Each time she sits down to write she is accosted by their presence. If earlier she was able to look out onto the streets from the protection of her home to observe the display of people in the streets, the gaze has now been reversed. The beggars' threatening stares and jarring cries imprison her behind the iron bars that had previously been her protection. The impossibility of freeing herself from the look of others reminds her that the travelers' gaze is always reversible, and that she too is under scrutiny. In a way, this reversal forecasts the critique *Life in Mexico* received in Mexico once it became public. Mexicans faulted Fanny Calderón for not respecting their intimacy, for not knowing proper etiquette, in sum, for not really understanding anything about Mexico. The inversion of the gaze points to the interconnectedness between subject and object embedded in observation, an interconnectedness that is indifferent to class hierarchy and can be surprisingly democratic and of course, for travelers like Fanny Calderón, painfully disturbing.

A key difficulty reinforcing Mexico's foreignness is the cultural perception of space. Notions of public and private realms differed greatly in Mexico from those in the United States or England, visible in the city's dynamic street life as well as in the intimacy of the home. Fanny Calderón finds the spatial divisions between private and public spheres unclear and vexing, at times, even repulsive. Her descriptions of street life visualize the deep interconnection between spatial organization and social identity. Space is an ordering principle, but it is organized and defined by people.[161] Through their social interactions, people construct the spatial boundaries of their world. Fanny Calderón expected class to provide a stable boundary, but in the streets of Mexico City, she encounters porous spatial interactions that leave her bewildered. It will take her some time until she is able to understand and feel comfortable in Mexico City's physical and social map.

One of the distinctive traits in Mexico is the beggars or *léperos* that punctuate city life. They are everywhere, creating a sense of unruliness. In another description of a chaotic street scene, Fanny Calderón presents a spectacle in which hundreds of discordant voices are heard, "impossible to understand at first."[162] Slowly, she begins to differentiate the cries of food vendors, from those of mule drivers, hawkers, day laborers, newspaper boys, people praying, peddlers, and lottery salesmen. She identifies the coalman, "'Carbón, Señor?' which, as he pronounces it, sounds like 'Carosiu?'"; men and women selling cheese, honey, and other sweets, as well as maize cakes, hot ducks, chestnuts; the cries of fruit vendors, lard men, and butchers "'Hay cebo-o-o-o-o-o'." She pays special attention to the musicality of the cries, even transcribing the call of a woman selling hot cakes, "gorditas de horno, calientes," in a musical score in her journal. John Ochoa points to her misreading of one vendor, an Indian she-trader or exchanger, who according to Fanny Calderón, "sings out, 'Tejocotes por venas de chile' a small fruit which she proposes exchanging for hot pepper. No harm in that."[163] Ochoa reads this as an *albur*, a verbal combat for public entertainment made through vulgar sexual allusions. In this case rather than offering an exchange for fruit, the deal was for sex.[164] Whether or not the sexual allusion was evident, the tradition of these exchanges was extremely popular in the streets of Mexico.[165] Fanny Calderón's possible mistake in grasping Mexicans' colloquial double entendres highlights the role of language in observing different cultures. Not only does language convey what is seen, but it is also needed to understand the meaning of what is seen. Fanny Calderón's innocence

(highlighted by her remark, "No harm in that") signals her foreignness while undermining her presumed superiority, as her European Spanish proves useless in understanding the local culture. As she continues to scan the streets, her rapid portrayal constructs a disjunctured visual image not only of the variety of products sold in the streets but also most significantly of what Jean Franco termed the "dangerous heterogeneity" of the population, the disturbing mixture of people of all classes.[166]

The staggering number of *léperos*, which in the early decades after independence surpassed 40,000, became an onerous challenge for Mexico's transition to modernity. This vast population of street beggars and lowlifes included gypsy children, unemployed, and a considerable number of tramps. Although vagrancy was a significant problem for Mexico, not all street people were vagabonds.[167] There was also a large number of "léperos decentes," decent workers (some semi-occupied) such as carpenters, butchers, tanners, coach drivers, freight carriers, and peddlers, in addition to artisans and independent producers, who sold their products directly to the public in the streets.[168] This heterogeneous mass of people encompassed a vast array of races and professions that played an important role in the local economy. Despite decrees and public ordinances that tried to clean up the streets, commerce spilled onto the streets in multiple informal settings. Often, right outside the *almacenes*—the large more expensive stores that sold imported goods such as wine, cloth, and jewelry to the middle class—there would be numerous street vendors selling trinkets, mock jewelry, and food.[169]

The juxtaposition of classes and activities in the streets of Mexico created an incredibly confusing urban grid, which flustered travelers. Although the city had distinct barrios, they closely overlapped. The wealthy tended to live in large palatial homes in the center of the city, while the poor were relegated to the outer margins or the streets.[170] However, these divisions were extremely fluid. Five causeways, a legacy of the Aztec urbanization, traversed the city, at the center of which was the zócalo, an enormous square or *Plaza Mayor*, flanked by municipal offices, the government palace, and at the north end, the Cathedral, where rich and poor congregated everyday. Because political, economic, and religious activities converged around the *zócalo*, there was an extremely dynamic street life in the center of the city, forcing social classes to interact daily. Compared to Boston's 84,401 inhabitants in 1840, Mexico City's 205,000 inhabitants must have presented a shocking scene to North Americans.[171] Furthermore, whereas Mexico City

was spread out over nine acres, Boston had a relatively compact urban area that occupied only 3300 acres, neatly organized in distinct neighborhoods in which the elite residences were discernibly separated from the immigrants and industrial areas.[172] Nothing could prepare a US traveler for Mexico City's vast extension and intense street life.

Beyond these spatial and social differences, Fanny Calderón has a hard time reading class differences. In particular, the unstable adoption of foreign models by creoles disorients her. She misinterprets events, customs, and etiquette, which she willingly dismisses with a laugh. She scoffs at the outrage and "shock" caused by her wanting to wear a Poblana dress to a fancy ball, which compelled several members of the government (the secretary of state as well as the ministers of war and interior), and high society ladies to personally request that she alter her choice. Given the beauty of the dress, she is surprised that the Poblanas are considered "*femmes de rien*." She tries to convince the Cabinet Council that from a European perspective, it is a decent dress, but she is unsuccessful.[173] Her mistake reveals her inability to perceive the cultural anxiety of the creole elite, who adopts certain European dress fashions but reframes them within their own cultural conventions. While she is quick to criticize the dress code of the Mexican ladies, faulting them for overdressing, under dressing, wearing shoes that are too small, or smoking in public, she cannot grasp Mexicans' own ambivalences between importing features of "cultured" European civilization and affirming their unique idiosyncrasies. In another instance, while paying a visit to an acquaintance, she enters a room and mistakes a statue of Christ covered in white muslin for the dead master of the house. Shortly after, unaware that well-to-do families rent out some of their rooms, she accidentally walks in on two medical students examining a body: "After that adventure I never entered a house unaccompanied by a footman, until I had learnt my way through it."[174] Despite her excellent Spanish, she also makes several verbal blunders: She mistakes a birth announcement for an offer of a servant—"otra criada a mi disposición."[175] By and large, these are small mistakes she shares with her readers, highlighting, despite her criticism, her sympathy toward Mexican culture inasmuch as she recognizes the mistakes are hers for trying to read Mexican culture primarily from a European prism. In time, she learns to accept and even appreciate customs and norms that do not coincide with European forms. Yet, whenever she finds herself in an awkward situation, she quickly brings forth her foreignness as the authorized perspective that distances and protects her.

As she explores Mexico, Fanny Calderón acquires a certain authority in her role as "ambassadress."[176] As such, she attends numerous dinners and receptions in her husband's honor, as well as balls, plays, weddings, and concerts, where she meets dignitaries, diplomats, and even presidents. Her intimate circle is filled with well-established and aristocratic families such as the Cortinas, the Adalids, and the Estradas. These families were the Catholic and conservative elite, educated in Europe, who defended Mexico's Spanish heritage. Count José Gómez de la Cortina was a politician, diplomat, and academic, and his sister was married to José María Gutiérrez de Estrada, another conservative politician and diplomat. Ignacio Torres Adalid owned one of the largest and most productive haciendas of *pulque*, the milk-colored alcoholic beverage from the maguey plant. This old aristocracy was a tight-knit network, which she proudly joins. The social life is, however, so intense that in trying to fulfill her diplomatic role, she is constantly receiving guests and making formal visits, a task she finds exhausting: "Some Mexican visits appear to me to surpass in duration all that one can imagine of a visit, rarely lasting less than one hour and sometimes extending over the greater part of the day …. These should not be called visits but visitations."[177]

These visits, however, give her great insight into the customs and domestic life of Mexican society. Despite the wealth of her friends, she finds many houses overwhelmingly large and empty, full of melancholy. The Cortinas' home, for example, both immense and magnificent, highlights the discomforting contradictions within creole society: "But although there are cabinets inlaid with gold, fine paintings, and hundreds of rich and curious things, our European eyes are struck with the usual numerous inconsistencies here in dress, servants, &c. in all of which there is a want of keeping very remarkable."[178] In one beautifully painted room stands the finest Broadwood grand piano, which remains untouched. But what shocks her most is that despite the family's wealth and good taste, she finds "the count in an ill-furnished miserable room with two candles—the countess with an old rebozo and diamond earrings … everything looking poor, dirty, and uncomfortable." When she attends "an ill-regulated, ill-dressed dinner" at the Cortinas, in which a Parisian cook prepares Spanish food, she is shocked to see the butlers sit down at the same table with the guests. These mixtures are disconcerting. Unable to make sense of the sharp contrasts, she concludes: "These people would be just as happy in an Indian hut."[179]

In observing the contradictions of Mexican society, Fanny Calderón is particularly harsh with the dress and etiquette of Mexican women. They are always overloaded with jewelry, and never seem to be in tune with the proper dress, according to European standards and etiquette. Dress was an important aspect of daily life linked to the domestic sphere. Fanny Calderón considers observations of dress and habit emblematic of deep societal ways that reveal a great deal more than just clothes of Mexicans. She cites several times the Scottish philosopher and social commentator Thomas Carlyle, whose text *Sartor Resartus* (1833–1834), a "philosophy of clothes," expounds on the relationship between truth and falseness, fact and fiction, and satirical and historical. In a section from her journal that she deleted in her published version, she summarizes her impressions early on:

> Mexican women are decidedly neither pretty nor graceful, and their dress is *awful*. The French modistes who come here, and are in fact the very scum of the earth, persuade them into all sorts of follies. Their gowns have a hunchy, loaded look, all velvet or satin. The diamonds, though superb, were frequently ill-set. As to a plain white muslin, the dirtiest *lépera* wears an embroidered one. The dresses, compared with the actual fashion, are made excessively, incredibly short, and sticking all round at the bottom like hoops so that when they stoop! Caramba!

She goes on to discuss their shoes and hair, concluding: "They are a peculiar contrast to the ladies of the United States with their pretty faces and their long scraggy figures. I have seen here nothing approaching a beauty."[180] Creole women's poor judgment and taste regarding clothes, from her European perspective, reflect Mexicans' chaotic mishmash reproduced in their spatial and class divisions which foreigners found so disconcerting. Fanny Calderón ties that indiscriminate mixture to creole women's lack of education and idleness:

> How do Mexican ladies occupy their time? They do not read—they do not write—they do not go into society. For the most part they do not play—they do not draw—they do not go to the theatre—nor have they balls, or parties, or concerts—nor do they ride on horseback.[181]

Fanny Calderón judges these women with a tone and authority that underscore her European upbringing and education. Although she

interjects a few praiseworthy comments regarding women's "amiability and warmth of manner," musical talent, and natural gifts as well as their patriotism, her attitude is often disparaging, highlighting their lack of education and interest in literature. In these instances, her perspective reinforces Mexico's backwardness while asserting her own view as emblematic of the civilizing gaze.[182]

Both Calderóns underscore Mexico's lack of progress. For example, despite the country's cultural richness, they are surprised by the lack of cultural associations in Mexico, which prompted Ángel Calderón to found the Mexican Athenaeum following the model of the Athenaeum of Madrid, established in 1835.[183] Athenaeums were an essential part of bourgeois social life, particularly in Spain. As Ángel Calderón observes, they provided a cultural and social space for intellectuals, politicians, and writers to discuss literature, current events, and even to exhibit artwork.[184] The Mexican Athenaeum became an important cultural center, although its members did not seem to include women, which most likely frustrated Fanny Calderón given her experience in the United States with elite women authors and educators.[185] She expected city women to be more sophisticated and chastised them for their lack of literary society, intellectual curiosity, and general carelessness in dress according to European standards. While she does not mention the Athenaeum, she does underline her weekly *soirées* or *tertulias* at diplomats' homes, which include music, dancing, and card playing. By the end of her stay, she seems to rectify some of her prior observations regarding Mexican women's idleness as she recognizes that women in fact devoted much of their time to "charitable offices, [which] together with their numerous devotional exercises, and the care which their houses and families require, it cannot be said that the life of a Mexican señora is an idle one—nor, in such cases, can it be considered a useless one."[186]

When she portrays women, race blends naturally in her description, yet it is striking how little she engages directly with race. For all her sophisticated observations, Fanny Calderón demonstrates very little insight when discussing race, never really delving into distinctions nor reflecting on race relations. Following Humboldt's *Political Essay*, she identifies seven castes that existed in pre-independent Mexico, although the Fishers point out in their volume that "no legal distinctions based on race survived in Fanny's day."[187] The caste system was a socio-racial classification based largely on the individual's birth, color, race, and origin of the ethnic type that, regardless of its legality, impacted every aspect of the individual's life.

According to the first Mexican census by Revillagigedo in 1793, there were 8000 Europeans, 700,000 creoles, and approximately 420,000 *mestizos* (mixed Spanish and Indian), which included a large number of mulattos. Fanny Calderón rarely refers to the racial categories explicitly and when she does she is inconsistent. She quotes Humboldt several times, linking his observations with her own. She prefers to use broad general categories like "Indians" and "Mexicans." The first refers to the indigenous population as well as *mestizos*, while the latter is used to refer to the creole elite, but can also include upper-class *mestizos*. However, she rarely uses the term "*mestizo*", and the only time she mentions *zambos* (mixed indigenous and African ancestry) explicitly is to state that they are "the most frightful human beings that can be seen, almost monstrous," a perception her husband reproduces in his *Diario*.[188] When she sees an Indian woman who stands out for her beautiful dark hair and eyes, and glowing white teeth, she immediately assumes the Indian woman must have some Spanish blood, a view echoed by Ángel Calderón who compares her to the beautiful Andalusian peasant woman. Rather than acknowledging a woman's racial mixture as a *mestiza* and highlighting her distinctive Mexican features, Fanny Calderón underlines the woman's European characteristics that distance her from the indigenous population of "pure Indians," who are "as ugly as one can imagine."[189] Even when spying an Indian woman whose beauty is so striking that she imagines her to have resembled Doña Marina, she adds despite the anachronism: "however Indian in her appearance, there must have been some intermarriages in former days between her progenitors and the descendants of the conquerors."[190] On other occasions, she uses terms such as "common Indian" or (quoting Humboldt) "handsome savages" to refer to the indigenous population. Hence, "Indian" encompasses a broad spectrum of ethnicities, which she belittles or praises depending on the aesthetic impression the individual has on her. Even when she describes "pure Indians" who are almost always dirty, ignorant, and unpleasant, with "a great depth of cunning" under an appearance of stupid apathy, she recognizes there are distinctions among them she cannot grasp: "Indians of noble race, though to the vulgar eye undistinguishable from their fellows, are held in great respect by their inferior countrymen."[191] These Indians, she explains, appear to have refused to mix with their conquerors, and while they may not be distinguishable to the European eye, they possess distinct class markings.

Although Fanny Calderón recognizes differences among Indians and other races, she lacks the vocabulary to present a systematic

categorization of these differences. This inability to assess racial distinctions properly is undoubtedly marked by her US American lens (where all native inhabitants are Indians) and the Spanish colonialist discourse, which she appropriates referring to all those who are not creole as "Indians." Eschewing complexities, she approaches race in *Life in Mexico* by degrees of beauty.[192] At the same time, although the caste system was officially abolished with independence, she repeats many of the general racial stereotypes endorsed by the creole elite, who virtually continued the hierarchical caste system and dismissed Indians as inferior.[193]

Influenced perhaps by Prescott's incessant requests, she approaches the indigenous population from a historic perspective delving into events and stories from pre-Conquest and Conquest times. For this, she draws on works by the Jesuit scholar Francisco Javier Clavijero, the politician and intellectual Lucas Alamán, scholars such as Count Cortina, historian Carlos Bustamante, in addition to essays from the weekly journal *El mosaico mexicano*, and numerous anecdotes told by local priests and friends. Her excursions offer several opportunities to include a narrative about the past. Her visits to ancient ruins or museums are occasions to talk about the Aztec gods, traditions, knowledge, or battles. She highlights Malinche's important role in the conquest when she visits the gardens and castle of Chapultepec, a site where for the first time Ángel Calderón uses the daguerreotype camera Prescott had sent them. At the Cathedral, upon seeing the Aztec calendar and the Stone of Tizoc or Stone of Sacrifice—no longer considered the actual sacrificial stone—she discusses Aztec religion and ritual. She narrates the famous myth of Coatlicue when seeing the statue of the goddess of war at the University.[194] Her visit to the church of Santa Teresa reminds her of the battle between the Spaniards and the Aztecs, when Moctezuma was taken prisoner. The Cathedral of Our Lady of Guadalupe summons the myth of the Virgin Mary revealing herself to the Indian Juan Diego narrated by the bishop. Voicing her Protestant disdain toward the Catholic fervor of saints, she scoffs at the "tissue of the greatest absurdities" the bishop tells her with the utmost seriousness "in this nineteenth century."[195]

Given the numerous remnants of the past (abandoned churches, buildings, and bridges), her strolls in the city as well as in the countryside are filled with references to the past. However, in comparison to the way she critically discusses social norms and etiquette, her tone regarding Aztec history is informative and rather distant. For the most part,

she avoids assessing that past directly. Instead, she encases the historical past within a distant time frame, missing the opportunity to explore how the past and present fuse in Mexico's daily life. Perhaps, she is too attached to Prescott's chronological reading of Mexico's history. For Prescott, the past was a means to trace and measure the advancement of progress. Although Fanny Calderón recognizes Mexican culture is heavily informed by the Aztec legacy, her gaze simply highlights the remnants of the past. Her interest lies in the way Spanish culture has shaped and "civilized" Mexican culture, not in exalting the indigenous past.

One of the most intriguing aspects of Mexican society for her is the way religion permeates both the past and contemporary culture. Her fascination with Catholic liturgy is evident in her eager disposition to attend funerals, baptisms, and numerous religious services—all powerful displays of devoutness she finds mesmerizing. She enjoys describing in great detail the churches she visits throughout the country, twenty at a time on festive occasions. She pays special attention to the elaborate constructions and decorated *retablos*, many by the Spanish Neoclassical architect and sculptor Manuel Tolsá, whose work on the Cathedral and the Palacio de Minería is well-known. She is especially impressed by the visual display of Catholic liturgy that transcends the materiality of the churches themselves. Her descriptions are filled with a sensorial language. She is entranced by the chanting and prayers of the white hooded monks of San Agustin; the "voice of angelic sweetness" amid pillars of white marble and gold at the Church of Santa Clara; the picturesque garden of the Convent of San Joaquín.[196] During Holy Week, she is swept away by the beauty of the churches: "The prettiest and most fantastic scene I ever beheld" is Santo Domingo; its steps covered in flowers, cages of birds, and music of Romeo and Juliet, which "looked like a little Paradise, or a story in the Arabian Nights."[197] She is captivated by the religious imagery of Catholicism and moved by the crowd of exalted worshipers. Alluding perhaps to the internal divisions of Protestantism that ensued during the second Great Awakening in the United States, which had an especially strong impact in New England, she chastises Protestant intolerance toward its different sects and faults "the cautious, moral, industrious, money-loving, time-saving, incredulous, conceited, independent yankees," to explain why "the old religion is assuming more power daily."[198] During Holy Week, she admires the dazzling processions through the streets, from the Virgin of Dolores to the arrival of Christ and the Holy Apostles. What strikes her most is the way

the theatrical spectacle and the Christian aesthetics come together to create a sense of spirituality through its various liturgies. These spectacles uncover the ways in which sacred symbols condense Mexicans' worldview; they are a fundamental form of communication or, as Clifford Geertz argues, a cultural act.[199] Taking a step back, she realizes her Anglo-Protestant readers might find her descriptions of the Catholic processions childish or superstitious. She explains that the purpose is "to impress certain religious truths on the minds of a people too ignorant to understand them by any other process."[200] The religious display of Catholic imagery is mesmerizing compared to the stark and rather plain imagery of Protestantism. Even Prescott concedes several times in his *Conquest* that Catholicism with its "dazzling pomp of its service and its touching appeal to the sensibilities" by far overshadows "the cold abstractions of Protestantism, which addressed to the reason, demand a degree of refinement and mental culture in the audience to comprehend."[201] But Fanny Calderón pushes beyond Prescott's view noting that Catholicism seems much more democratic in its uncomfortable mixture, resembling a form of social communion. Comparing the appearance of a fashionable chapel in London with that of a church in Mexico, where *léperos* kneel besides the wealthy, all occupied in their own devotions, she favors the true devoutness evident in Mexican culture as, "all seem to think they are alike in the sight of heaven."[202]

Ángel Calderón is often disturbed by his wife's fascination with the Catholic festivities, which he sees as her misunderstanding of rituals. He is outraged that she accepts to be a godmother at a baptism and expects to have an honorable place in a Catholic service, which he views as hypocrisy.[203] In these instances, he also faults Mexican creole society for not being truly Catholic. In his view, Mexico's hybridity has distorted Catholicism. Despite tensions with her husband, Fanny Calderón approaches Catholic ceremonies almost with an ethnographic curiosity. She is especially intrigued by the concept of vocation and conventual life for which she has sharp contradictory feelings. She visits numerous convents and proudly obtains special permission from the Archbishop to visit the convents of La Encarnación and La Concepción, two of the most well-off convents, which were banned to outsiders. Her prying almost borders obsession, as she confesses to her reader: "You will think I pass my time in convents, but I find no other places half so interesting, and you know I always had a fancy that way."[204] In their edition of *Life in Mexico*, the Fishers suggest that her particular interest in the convents

was due to the fact that her closest sister in age, Jane, had converted to Catholicism and entered a convent in France. Given that the family was closely knit and devoutly Protestant, Jane's decision must have felt like a "desertion" which shook all of its members.[205]

Conventual life had played an important role in New Spain.[206] Under the aegis of the Church, convents and monasteries constituted corporate societies governed by their own regulations, laws, and tribunals. They also administered their wealth independently. Nunneries' economic success grew significantly toward the end of the seventeenth century when they began to invest in urban property. They also started lending money to merchants, landowners, and miners as a way to increase their wealth. By the eighteenth century, convents had become major property holders—especially in the city—and strong banking institutions with close ties to the elite, giving them considerable influence in colonial society. In addition, through donations from the elite, *censos* (liens), dowries, and pious deeds for which a mass was offered in honor of a donor, certain convents had amassed substantial wealth.[207]

Fanny Calderón is elated when visiting the convents. Entering a forbidden realm seems to incite all her senses. At Las Vizcaínas, she finalizes her tour almost like a party, with an excellent lunch of cakes and desserts. She visits the elite convent of La Encarnación with her friends, señoras Escandón and Adalid. The convent itself is housed in a building that resembles a palace: beautiful gardens and patios with broad hallways that open to the nuns' quarters where they lived, in her view, like princesses. Her tour ends with an elegant supper that greeted "our astonished eyes": full of cakes, chocolates, and rich desserts. After the meal, the ladies were entertained with a novice playing the harp—while Fanny Calderón accompanied playing the organ. The exuberance and pleasant ambiance evokes her lost colonial privilege, as she jovially states: "I felt transported three centuries back."[208]

Independence did not bring about significant changes to the role of convents in Mexico. Although new laws were enacted to protect individuals' freedom and curtail the Church's political and economic power, it was not until La Reforma, the Liberal Reform which began in 1854, that major changes were implemented to limit the power of the Church. However, the government eliminated the convents' special tribunals, imposed high taxes on their properties, and expropriated many of its possessions.[209] Despite these restrictions and the eventual reduction of convents during the second half of the nineteenth century, Fanny

Calderón portrays conventual life as extremely valuable for the daughters of the creole elite, many of whom were encouraged to take their vows.[210] Marriage or religious life were the two options for elite women to maintain their honor and family social status. Although conventual life was by no means reserved for elite women, convents also reflected class distinctions. In order to take her vows, a woman needed to bring a dowry to the convent. Depending on the institution, the dowry could be very steep.[211]

Fanny Calderón's perception of taking the veil, however, changes as she attends several religious ceremonies in convents. From a celebratory event, it becomes almost a cause to mourn: "I have now seen three nuns take the veil; and, next to death, consider it the saddest event that can occur in this nether sphere. Yet the frequency of these human sacrifices here is not so strange as might first appear."[212] Among the reasons she gives why women might choose to become nuns is the fact that young girls have neither amusements nor instruction at home, and as they are quite religious they are heavily influenced by their confessor who teaches them that by entering the convent they will assure their salvation: "Add to this the splendor of the ceremony, of which she is the sole object, the cynosure of all approving eyes. A girl of sixteen finds it hard to resist all this." In one particular ceremony, the young girl is dressed in blue satin, with diamonds, pearls, and a crown of flowers, practically "smothered in blonde and jewels." As customary, the girl is then paraded in the streets, as rockets go off and musicians play gay music. Back in the church the performance begins:

> Suddenly the curtain was withdrawn, and the picturesque beauty of the scene within baffles all description. Beside the altar, which was in a blaze of light, was a perfect mass of crimson and gold drapery—the walls, the antique chairs, the table before which the priests sat, all hung with the same splendid material. The bishop wore his superb mitre and robes of crimson and gold, the attendant priests also glittering in crimson and gold embroidery … The black nuns then rose and sang a hymn, every now and then falling on their faces and touching the floor with their foreheads. The whole looked like an incantation, or a scene in *Robert le Diable*. … In the *second act* she [the young girl] was lying prostrate on the floor, disrobed of her profane dress and covered over with a black cloth, while the black figures kneeling round her chanted a hymn. She was now dead to the world.[213]

She is impressed with the performance. Everything is perfectly timed and staged, like a heavily scripted play. Her reference to the successful opera, *Robert le Diable* by Giacomo Meyerbeer, which first played at the Paris Opéra house in 1831, reveals the dramatic impact such a production had on her. It is a true spectacle, both alluring and almost frightening. She attends two more ceremonies in which the young girl is "sacrificed in a similar manner."[214] Despite the splendor of the performances, Fanny Calderón cannot fathom how a mother hands over her daughter to a cloistered life, and she insists in the horror of a confined life. It is ironic that a few years later, in 1847, she would convert to Catholicism, and upon her husband's death, the convent would be her first choice of where to take comfort and reside.

Although Fanny Calderón has her readers believe that taking a veil was a common activity, particularly for the elite, research points to the contrary. Silvia Arrom argues that entrance to religious orders was not a significant alternative to marriage. In 1790, only 4.2% of Mexico City's Spanish women ages 16 were members of religious orders, and the percentage diminished significantly more from 2.5% in 1828 to 1.3% in 1850.[215] Furthermore, many of the new ideas about women's education, inspired by the Enlightenment, were already implemented in several convents before independence. By 1753, a number of convents had created schools to instruct the daughters of the elite as well as Indian girls, such as the boarding school known as La Enseñanza, run by the convent of Nuestra Señora del Pilar.[216] As motherhood took on a civic function during the early 1800's, women's education became an important component of the new ideals of nationhood. Not all sectors of society were in agreement regarding how much instruction to offer women.[217] Furthermore, Virginia Sánchez Korrol notes that despite the fact that many women's roles had changed during the fights for independence, women's social and legal status remained virtually unchanged regardless of race and class.[218] Contradictions abounded in determining women's role in society during post-independence (despite a more democratic stance, women could not vote, hold public office, advocate, or adopt children). Hence, it could be expected that as political and social institutions began to change in Mexico, convents—which until then had sought to provide a cloistered life sheltered from secular affairs—would also undergo transformations, either losing importance or increasing their social service orientation to remain relevant. It is likely that Fanny Calderón paid special attention to conventual life because she

was intrigued by this aspect of Catholicism that surrounded her and had attracted her sister years before, and still played an important role in elite women's lives. Furthermore, as a foreigner and a woman, the possibility of entering a realm so cloistered gave her a unique insight into Mexican society and culture.

While religion offers a fascinating display of Mexican culture, Fanny Calderón struggles to grasp the constant political tensions that permeate everyday life. As Josefina Vázquez notes, independence unleashed innumerable battles between different social factions, exacerbated by the sharp inequalities within Mexican society.[219] The fact that there were no organic political parties until 1846 meant that confrontations were the result of groups rallying behind or opposed to the way the state dealt with particular issues, mainly related to the military, the Church, or treaties with foreign nations. The constant instability of these years permeated everyday life undermining economic stability and growth. This led to what Vázquez has termed *Two Decades of Disillusions* in which political leaders and the military constantly turned against each other.[220] A case in point was the political trajectory of Valentín Gómez Farías, who first supported the monarchy, then federalism, then remained impartial, and finally became a revolutionary, aligning himself with previous opponents such as General Paredes and the volatile Santa Anna.[221]

During their stay, the Calderóns faced two armed uprisings or *pronunciamientos*, one only seven months after arriving in Mexico, in July 1840, and the second shortly before leaving in late August of 1841. The scene was shocking and frightening to Fanny Calderón: cannons roaring, artillery resounding, *léperos* being armed, and soldiers fighting in the streets amid wounded men. Meanwhile, shops closed, streets were deserted except for soldiers, and powerless civilians watched anxiously from rooftops. During the July 15 uprising, chaos invaded the city when President Anastacio Bustamante was kidnapped from his bed. Cannons thundered continuously, homes were hit, and people wounded. Several frightened Spaniards and acquaintances took refuge with the Calderóns, cramping their living quarters. In trying to piece together the fight between political factions, Fanny Calderón underscores the sense of confusion. She transcribes proclamations made by President Bustamante and his liberal opponent Valentín Gómez Farías, and relays the official bulletins as well as the rumors that circulated about the events taking place. She recognizes that both sides invoked their love for Mexico and claimed to defend the Mexican Republic. Each day more troops joined the battle.

She struggled to make out the political differences between the two leaders whom she considered dedicated and honest, true *hombres de bien*. For twelve days, she wrote about the events. Finally, the imminent arrival of the temperamental General Santa Anna, who would most likely not have supported either faction, precipitated a resolution.[222] When the uprising was over and order restored, fearing her readers might consider her obsession with politics unlady like, she cites Mme de Staël, who, when faulted for paying too much attention to politics, responded: "[W]hen a woman's head is about to be cut off, it is natural she should ask: '*Why*?'" To which Fanny Calderón adds, "So it appears to me that when bullets are whizzing about our ears, and shells falling within a few yards of us, it ought to be considered extremely natural, and quite feminine, to inquire into the cause of such phenomena."[223]

Although she is unable to grasp the ideological nuances embedded in the confrontations, Fanny Calderón recognizes how deeply politics permeates everyday life in Mexico. During the battles, life seems suspended: "Impossible to fix one's attention on anything. We pass our time on the balconies, listening to the thunder of the cannon … wondering, speculating, fearing, hoping, and excessively tired of the whole affair."[224] Provisions become scarce, activities are canceled, and life, while feeling tenuous, is brought to a standstill until order is reinstated. By the second uprising, she has learned to cope with the chaos and ably distances herself from the events, comparing them to "a game of chess, in which kings, castles, knights, and bishops are making different moves, while the pawns are looking on or taking no part whatever."[225] She explains the game with composure, introducing the four principal players: Santa Anna, Bustamante, Paredes, and Valencia, whose moves seem guided by disloyalty and hypocrisy.[226] The government requested the use of the Calderóns' house for its troops and ammunition; hence, husband and wife headed out to the countryside to the Fagoaga's hacienda. They remained there enjoying the leisure forced upon them: reading books, taking walks, attentive but far removed from the anguish of events until October when Santa Anna was declared victorious, and once again became president.

If Mexico was to be assessed by its progress since independence, Fanny Calderón conveys an image that the country had yet to show any significant sign of maturity as it was still struggling to decide its form of government, and had been unable to assure economic stability. In less than forty years, Mexico had lost its magnificence and solid image that

Humboldt had so forcefully praised. During her stay, she notes that everything has fallen into ruin: Mines are no longer productive, roads are abandoned, and bandits roam the countryside. Mexico's monumental greatness seems buried among the crumbling Aztec ruins and dilapidated colonial buildings. As she sadly confesses to Prescott: "The only proof they [Mexicans] have given of their independence is in abandoning and neglecting all the fine old buildings of the Spaniards, making barns or barracks of the Vice-Roy's palaces, cutting down trees, leaving roads to care for themselves and the finest country in the world to lie waste."[227]

"Progress" and "development" were two nineteenth-century banners revered as symbols of civilization across the continent. Inspired by Jefferson's future-looking optimism, the United States sought to establish itself as a model of progress and advancement, while placing Mexico, its closest neighbor south, as its antithesis. One represented the future, the other the past. This was the view of history Prescott embraced in his *Conquest*. Concurring with Prescott but not without sorrow, Fanny Calderón wistfully remarks: "Everything reminds us of the past," stressing, "it is the present that seems like a dream, a pale reflection of the past. All is decaying and growing fainter, and men seem trusting to some unknown future which they will never see…"[228] Yet, unlike Prescott, Fanny Calderón's more complex view of historical progress allows for a broader consideration of the obsession with futurity. By the end of her stay, she proudly affirms feeling "like an old resident," which is perhaps why she is able to visualize the loss and destruction embedded in modernization. When she visits the natural baths of Peñon, she sighs: "We could not help thinking, were these baths in the hands of some enterprising and speculative Yankee, what a fortune he would make; how he would build a hotel *à la* Saratoga." Material progress and cleanliness will accompany the ventures by the savvy "yankee money-loving" entrepreneurs, but she sadly recognizes that this guiding force obstructs understanding the importance of retaining that past.[229] Thus, she fears for Mexico's future because she does not know how to deter the road of progress:

> Let them beware. Some day, when they have dreamt on—it may be half a century longer—they will be rudely awakened from their sleep, and find their cathedral turned into a large meetinghouse and all painted white—the silver railing melted down, the silver transformed into dollars—the Virgin's pearls sold to the highest bidder—the floor washed, which it

> greatly requires—and perhaps, round the whole, a nice new wooden paling, freshly done in green. And all this will be performed by some of the artists from the wide-awake republic further north.[230]

Mexico's decline seems inevitable in *Life in Mexico*. Fanny Calderón sees imperial expansion as an imminent force that will brutally torpedo Mexico out of its lethargic state eventually leading to gluttony and decay. Thinking about the United States and its imperial quest, Thomas Cole, founder of the Hudson River school, shared this concern. In his five-part series, *The Course of Empire* (1833–1836), Cole illustrates how the rise of a great empire will unerringly entail destruction, leaving behind ruins and the emptiness of desolation. Progress meant industrialization, the ordering of space to enhance capital accumulation and economic growth. The artists in the previous quote are the ones charged with constructing a picket fence to enclose and bound the territory to ensure productivity. They will melt the silver railing into currency erasing any aesthetic value it might have had, and they will sell off the jewels for a profit. Cleanliness will replace the filth (a welcoming feature for Fanny Calderón), but it will also wash away character, singularity, and history. Living in Mexico had made Fanny Calderón fear that Mexico's dream of independence was doomed because she saw it as unable to detain the force of progress propelled by its northern neighbor. Just like the Spanish conquered the Aztecs, a new empire would overtake Mexico. She mourns this process, visualizing it with sadness. Torn between applauding Mexico's exuberant and lavish culture entangled in the Spanish past or endorsing the United States' vigorous, bland, but wealthy future, she is filled with melancholy. As she prepares her departure, the prospect of going home and seeing her family is the only element capable of offsetting: "the unfeigned regret we feel at leaving."[231]

As nineteenth-century reviewers reminded their readers time and again, there were two kinds of knowledge constitutive to travel literature implicitly aligned with gendered differences. One was serious, informative, and analytical, while the other was "all ease, animation, vivacity."[232] Prescott declared that Humboldt's narrative was "the result of profound scholarship and art," which in his view made it, "the very best *manuel du voyager*."[233] Yet, when discussing women's travel narratives, the *Quarterly Review* noted that the home life of every country was necessary to interpret the public life, and stressed that women knew more of human nature because their mode of observation was

defined by its "purposelessness."[234] Although the *Quarterly Review* faulted Fanny Calderón for her lack of distance, her account of Mexico reveals how deeply informative and insightful aimless observation or "purposelessness" can be. As she weaves together her detailed and perceptive observations of both public and private spheres, threaded with witty remarks and emotive language, she constructs an invaluable web of information. In fact, in his study of ancient Mexico, Eduardo Matos Moctezuma cites *Life in Mexico* as an important source of information precisely because the author is not a "scholar" (*estudiosa*), but rather "a person who describes what she sees and therefore presents us with a panorama of the state our monuments and museums had at the time."[235] But instead of remaining a spectator on the sidelines, as the *Quarterly Review* demanded of its travelers, Fanny Calderón immerses herself into the landscape. Thus, in observing Mexico she unfastens her own national alliances to construct an unusual cultural map of the 1840s, which engages perspectives from the United States, Europe, and Mexico. By allowing her subjectivity to emerge in the text, she also underscores the fragility embedded in the process of observation as she positions herself amid the political and cultural chaos.

More than three decades had passed since Humboldt's visit to Mexico, and the internal battles had left the country in disrepair, offering a very different image than the one he had conveyed in *Political Essay*. In this sense, *Life in Mexico* is the first major travel narrative on Mexico after Humboldt, in which the imprint and cost of an embattled process of independence are assessed as the author studies the country and reflects upon its future. Fanny Calderón's view was by no means as scientific in her observations as Humboldt expected from travelers, but she did understand that progress and commercial development made a strong imprint on the landscape. Hence, she set out to record the numerous changes throughout the country with a keen and detailed eye, relating all that she saw.

Life in Mexico illustrates the advancement of progress in the Americas. As forces collide, Fanny Calderón realizes that her observations will soon become a testimonial of the past. Her reading of Mexico and its relation with the United States was indisputably insightful. Surprisingly, it would not take half a century for the United States to declare war on Mexico, as she presumed, not even twenty-five years. Only four years later, the United States invaded Mexico, and by the end of the war had appropriated more than half the country. In his 2012 prologue to *US*

Ambassadors to Mexico, Vice-president for Programs of the Woodrow Wilson Center, Andrew Selee stated: "Few relationships if any, matter more to the United States than Mexico," though it is also "a relationship fraught with historical conflict, significant economic disparities, and a persistent cultural divide."[236] Despite their sharp and overwhelming differences, both countries continue to be profoundly linked even today. *Life in Mexico* remains a valuable source of information for scholars of post-independence Mexico as well as for US American historians and literary scholars. It is a testimony of women's extraordinary resourcefulness and the power and usefulness of detailed observation. It was a lesson Fanny Calderón took from Humboldt's innovative form of observation and his insistence in uncovering the interconnectedness of the world. A lesson she used to empower herself with the freedom to explore.

Notes

1. Frances Calderón de la Barca, *Life in Mexico. The Letters of Fanny Calderón de la Barca With New Material From the Author's Private Journals*, eds. Howard T. Fisher and Marion Hall Fisher (New York: Doubleday, 1966), 53.
2. Ibid., 56.
3. Ibid., 59.
4. Peter Whitfield, *Travel: A Literary History* (Oxford: Oxford University Press, 2011), 16.
5. Benedict Anderson, *Imagined Communities*, 44–46.
6. This is the main argument set forth in Amy Kaplan and Nina Gerassi-Navarro's reading of *Life in Mexico*, "Between Empires: Frances Calderón de la Barca's Life in Mexico," *Symbiosis* 9, no. 1 (April, 2005): 3–27; M. Soledad Caballero and Jennifer Hayward, "'An occasional trait of Scotch Shrewdness': Narrating Nationalism in Frances Calderón de la Barca's *Life in Mexico*," *Romanticism and the Anglo-Hispanic Imaginary*, ed. Joselyn M. Almeida (Amsterdam, New York: Rodopi, 2010): 297–326; and to a lesser degree in Nigel Leask, "'The Ghost in Chapultepec': Fanny Calderón de la Barca, William Prescott and Nineteenth-Century Travel Accounts," *Voyages and Visions: Towards a Cultural History*, eds. Jás Elsner and Joan-Pau Rubiés (London: Reaktion Books, 1999).
7. The first edition of Fanny's letters appeared as *Life in Mexico During a Residence of Two Years in that Country* by Madame C—de la B—with a preface written by William Hickling Prescott, published in 1843 in two volumes by Charles C. Little and J. Brown. The explicit identity

of the author was revealed only a few decades later in an abridged version, without Prescott's preface, published in England as *Life in Mexico During a Residence of Two Years in that Country* (London: Simms-McIntyre, 1852). Subsequent English editions were published in the United States in 1931, 1934, 1940, 1946, and in 1964 by E. P. Dutton. The 1946 edition is prefaced by Henry Baerlein. For this edition, Baerlein had been given access to two volumes of Fanny's original journals, but family members were upset at the prospect of another edition with a new introduction and immediately requested the copies of the journals be returned; see "Correspondence Concerning Life in Mexico" in Frances Erskine Inglis Calderón de la Barca Papers with Howe and Other Family Papers, 1799–1988, Houghton Library, Harvard University (subsequent references Inglis Calderón Papers). In 1966, Howard T. Fisher and Marion Hall Fisher were given access to the journals and additional material allowing them to publish an excellent edited volume used in this study. This carefully annotated edition visually identifies added material in the text with a different font, such as the names of individuals, which in the original appear with initials, as well as passages that Fanny left out. Retracing Fanny's trip to Mexico, the Fishers meticulously corroborated the information Fanny provided in her narrative. In addition, they obtained two copies of Fanny's published book with revisions inscribed. One is a worn copy of the first US edition of *Life in Mexico*, which was inherited by Mrs. R. Lucien Patton—born Jane Singer—great-granddaughter of Fanny's younger sister, Lydia. According to the Fishers, this copy has numerous handwritten notations (if not by Fanny herself, with her guidance), which they decided to incorporate in their edition. The Fishers refer to this source as the *Singer copy*. The second copy the Fishers used as a source for their edition is the *Carlisle copy*. This version of *Life in Mexico* was named by the Fishers for the correspondence regarding a future edition of Fanny's text that Lydia, Fanny's younger sister, sustained with a great-nephew, Calderón Carlisle, who lived in Washington, DC. Like Fanny, Lydia had converted to Catholicism and had remained in Spain, hence the revisions she made on this copy regarded Fanny's comments about Catholicism which she later regretted. Lydia informed her great-nephew: "The book is corrected—that is to say, a few trifles which she [Fanny] didn't like, erased." She also secured a new preface by "a rather clever and crazy Englishwoman here called Miss Hart." This version, however, was never published. Letter from Lydia Inglis to Calderón Carlisle, undated, Inglis Calderón Papers, Houghton Library, Harvard University.

Regarding the publication in Spanish, given the extremely negative reaction to a few letters published in the Mexican newspaper *Siglo XIX*,

plans for its publication were suspended until 1920 when the first edition of the two volumes appeared, translated by Enrique Martínez de Sobral with a prologue by the Marquis of San Francisco, Manuel Romero de Terreros. Subsequent editions in Spanish were published by Porrúa in 1959 and 1977, translated by Felipe Teixidor, who also wrote a prologue. The title was *La vida en México durante una residencia de dos años en ese país* and the author appeared as Madame Calderón de la Barca. A more recent edition in Spanish was published in Mexico by Rey Lear editions, in 2007, translated by Raquel Brezmes Raboso. The author appears as Frances Erskine Inglis [Marquesa Calderón de la Barca].

A word about the editions used in this study. Unless otherwise noted, quotations are from the Fisher edition. I respect the different typography, which appears in bold, used by the Fishers to note the material taken from the *Journal* that was not originally included in Fanny Calderón's book. When useful, I expand or compare the quotes with her original journal entries from *Journal* 2 vols., box 2, Inglis Calderón Papers. These papers include additional family letters, memorabilia, and a typescript copy of her journal. The first volume dates from October 27, 1839, to approximately March 31, 1840; the second volume, which is actually the third volume of her journal, is dated 1841. Unfortunately, the volume, which would have covered events between March 1840 and 1841, remains missing. When referring to her Journal, I quote the typescript copy, which is numbered, referred to as Journal.

Given that I refer to both Ángel and Fanny Calderón de la Barca as well as their published works, henceforth, I have chosen to distinguish the authors by adding their first names: Fanny Calderón and Ángel Calderón. I have chosen Fanny instead of Frances because that is how she is mostly known in public.

8. Ángel Calderón, *Diario de Ángel Calderón de la Barca, Primer Ministro de España en México (Incluye sus escalas en Cuba)*, ed. Miguel Soto (Mexico, D.F.: Dirección General del Acervo Histórico Diplomático, Secretaría de Relaciones Exteriores; [Dallas] Clements Center for Southwest Studies, Southern Methodist University, 2012). All translations of this text are mine.
9. Eva-Marie Kröller, "First Impressions: Rhetorical Strategies in Travel Writing by Victorian Women," *ARIEL: A Review of International English Literature* 21, no. 4 (October 1990): 90.
10. Although Fanny's Spanish must have been quite good, Ángel mentions several times how she struggles with the language when preparing speeches.
11. *Pronunciamientos* or pronouncements were a declaration of a rebellion, which can only loosely be defined as a military coup. The pronouncement was a written petition itemizing a list of grievances signed by a

group of individuals that could easily result in a rebellion if the government did not respond adequately. It should be noted that *El Grito de Dolores*, Mexico's cry for independence, was also a pronouncement. See Will Fowler, ed., *Forceful Negotiations: The Origins of the Pronunciamiento in Nineteenth-Century Mexico* (Omaha: University of Nebraska, 2010).

12. In her reading of European women's travel narratives (among which Calderón de la Barca is included), Adriana Méndes Rodenas highlights a particular form of anthropological knowledge, a mixture of subjective impressions and empirical observations, which she terms "ethnographic sketch." See her *Transatlantic Travels in Nineteenth-Century Latin America: European Women Pilgrims* (Lewisburg: Bucknell University Press, 2014), 139–144. It is interesting to read this interpretation against Eva-Lynn Jagoe's observation that *Life in Mexico* may be informative but it is not pedagogical. Jagoe highlights Fanny Calderón's contradictions, stating that her observations skim "across many surfaces never working any type of closure." Thus, she concludes that Calderón "hovers" between ethnographer and participant. See Eva-Lynn Alicia Jagoe, "'The Visible Horizon Bounds Their Wishes': Seclusion and Society in Fanny Calderón de la Barca's Postcolonial Mexico," in *Imperial Objects: Essays on Victorian Women's Emigrations and the Unauthorized Imperial Experience*, ed. Rita S. Krandis (New York: Twayne Publishers, 1998), 187–188.
13. Humboldt, *Ensayo político*, 58; 279–281.
14. Calderón de la Barca, *Life in Mexico*, 452.
15. Her father, William Inglis, was a writer to the signet, and her mother was Jane Middleton, daughter of a large and well-known prosperous family.
16. Her husband, Alexander Norman McLeod, laird of the island of Harris, would lose his estate, relocate to Jamaica and die poor, bringing shame to the McLeod family. Regarding the loss of his estate, see *Reports of the Cases Decided in the Supreme Courts of Scotland, and in the House of Lords on Appeal from Scotland* by W. H. Dunbar Esq., Advocate; Geo Dingwall Fordyce, Esq., Advocate, John de Maria, Esq., Advocate, Being a Continuation of The Scottish Jurist, 9 (Edinburgh: Anderson Law-Place, 1837), Case# 271, June 2, 1837, 502, accessed March 25, 2014, http://hdl.handle.net/2027/osu.32437121388769.
17. One brother who remained in Scotland would join the rest of the family in Boston a year later.
18. Originally unsigned, her essay appeared in the *North American Review*, 39 (October, 1834): 329–370. It is an extensive, articulate, and in-depth analysis of Alessandro Manzoni's work.
19. Founded in Boston, in 1815, by William Tudor and other members of "The Anthology Club," The *North American Review* was the United States' leading literary magazine during the first half of the nineteenth

century. It remained the foremost literary magazine until the founding of *The Atltantic Monthly* in 1857. *The North American Review* boasted a long list of well-known political and literary contributors such as John Adams, George Bancroft, Cullen Bryant, Edward Channing, Richard Henry Dana, Edward Everett, Henry Cabot Lodge, James Russell Lowell, William H. Prescott, Jared Sparks, George Ticknor, and Daniel Webster, among many others. Frances Inglis does not appear listed as a regular contributor but she is listed as the author of the unsigned review of Manzoni's tragedies, previously cited. The name that appears in Library catalogues today is Calderón de la Barca, although at that time she would have been Erskine Inglis. For a history of this seminal literary journal, see Marshall Foletta, *Coming to Terms with Democracy: Federalist Intellectuals and the Shaping of an American Culture* (Charlottesville: University of Virginia Press, 2001).

20. Two novels have been attributed to Fanny Inglis, which she apparently wrote as a means to help support her family during the family's bankruptcy in Europe: *Gertrude: A Sixteenth Century Tale,* 2 vols. (London: Colburn and Bentley, 1830), and *The Affianced One,* 3 vols. (London: Colburn and Bentley, 1831). A review of *Gertrude* can be found in *The Dublin Literary Gazette* 17 (April 24, 1830): 258–260. Although the authorship is not explicit, a review of the *Affianced One* states that the author has also written *Gertrude*. See *The New Monthly Magazine and Literary Journal*, 33 (London, 1831), 530; *The Spectator Archive* (Nov. 19, 1831) 20. The review in the *Athenaeum Journal of Literature, Science and the Fine Arts* (London, Jan.–Dec., 1831) concludes that, despite its faults, "there are many new and curious anecdotes, clear and clever descriptions," yet it faults the author for lacking to present "new views of life and manners," something Fanny would certainly achieve in her *Life in Mexico*. According to a letter dated, Madrid 27, n.d, Lydia suggests she did the same in the United States: "In America, afterwards, to gain money, she wrote a number of books for schools, for Mr. Goodrich—a geography, a history—several children stories, which were published as his in Boston." "Correspondence," Inglis Calderón Papers.
21. Though published anonymously, a letter from Samuel Green asserts that George Parish was the author. Subsequently, Reverend E. E. Hale ascribes co-authorship to Fanny Inglis. See George Parish, *Scenes at the Fair* (Boston: James B. Dow, 1833). The original text is housed at the Massachusetts Historical Society. It is written as a play. Inserted within the text is a handwritten list of the main characters' true identity; Mrs. Harrowby Grey is identified as Mrs. Otis. Ángel Calderón makes a reference to Parish in his *Diario*, implying that he may have been romantically involved with his wife, or at the very least, he was a suitor. After a

disagreement with his wife, he states: "she says goodnight to me with the rubbish of having loved Parish. How absurd, but I could not contain my jealousy" ["me despide con la sarca [*sic*] de haber amado a Parrish [*sic*]. ¡Qué necedad pero no pude contener mis celos!"] 86. I am translating "sarca" as "sarta."

22. Eliza Boardman was the daughter of a wealthy merchant of the China and India trade, before becoming Mrs. Harrison Gray Otis. Her husband Harrison Gray Otis Jr. (1792–1827) was the son of the preeminent Harrison Gray Otis, Harvard alumnus, former US Senator from Massachusetts, and Boston Mayor (1829–1831), *A Woman's Wit & Whimsy: The 1833 Diary of Anna Cabot Lowell*, ed. Beverly Wilson Palmer (Boston: Northeastern University Press, 2003); On the rich social and intellectual scene in Boston, see Lilian Whiting, *Boston Days: The City of Beautiful ideals; Concord, and its Famous Authors; The Golden Age of Genius Dawn of the Twentieth Century* (London: Sampson Low, Marston & Company, 1911) and 74–75 on Eliza Boardman Harrison Otis.
23. The Blind Asylum was the New England Asylum for the Blind, founded by John Dix in 1829, which would be renamed the Perkins Institute for the Blind, in honor of Elizabeth Cary Agassiz's grandfather, who donated his mansion to the school.
24. Among those friends was Harrison Gray Otis himself, who tried to intercede on Fanny Inglis' behalf, but was unsuccessful.
25. Schenley, who had served under Wellington and had been in Italy with Byron and Shelley, had a fascinating life, serving England in Surinam, Port au Prince and Para, Brazil. He was a "dashing young soldier" who, twice widowed, was so good-looking that while visiting Richmond "captivated the susceptible hearts of the young ladies of the entire school." Mrs. S. Kussart, "One Hundredth Anniversary of the Birth of Mrs. Mary E. Schenley," *Western Pennsylvania Historical Magazine* 9, no. 4 (October 1926), 214. According to this version, the events took place in New York not Pittsburgh. (Paper originally read before the Historical Society on April 27, 1926.) Also, see Adelaide Mellier Nevin, *The Social Mirror: A Character Sketch of the Women of Pittsburgh and Vicinity During the First Century of the Country's Existence* (Pittsburgh: T.W. Nevin Publishers, 1888), 90. In this account, Miss Croghan was fifteen years old. Ángel Calderón notes this event, referring to it as the "theft," in his *Diario*, March, 1842: "por estos días llega a nuestra noticia *el robo* de Miss Croghan por Shenley [*sic*]. Sabemos la aflicción de Mamá; es la hablilla de la Habana y un disgusto más" (279, emphasis added); "in these days we have received news of Miss Croghan's theft by Shenley. We know Mother's affliction; it is the talk of Havana, and one more torment."

26. Sarah Josepha Buell Hale, *Woman's Record: Or, Sketches of All Distinguished Women, from the Creation to A.D 1868, Arranged in Four Eras with Selections from Authoresses of Each Era* (New York: Harper and Brothers, 1874), 841.
27. Manuel Romero de Terreros, Woodrow Borah, Peter Standish, María Bono López, and Felipe Teixidor. Few, however, address the specifics of this encounter. Woodrow Borah states that Fanny met Ángel on Staten Island, "sometime after his arrival" (in 1835); Peter Standish states that the couple met while Prescott was writing his *History of Ferdinand and Isabella*. However, Calderón did not contact Prescott until after reading his history, which appeared in December of 1837. María Bono López and Felipe Teixidor state the couple met at Prescott's house in 1838. I have found no letters or references confirming when the encounter might have occurred. In Allan Hall Fisher's edited biography of Fanny Calderón, Sophy Thorndike writes to Fanny Appleton that during the summer of 1836 in Newport, the Spanish minister "took a great fancy for Fanny I." See Marion Hall Fisher and Howard T. Fisher, *Frances Calderón de la Barca née Frances Erskine Inglis: A Biography of the Author of Life in Mexico and The Attaché in Madrid* (Middletown, DE: Xlibirs, 2016), 142. No additional information is provided. However, given the dates we do know, if the couple met through Prescott, it was most likely after April 1838, when Prescott wrote Ticknor, about his recent trip to New York to meet Ángel for the first time. While in New York, he also visited friends—although Fanny was already living in Staten Island, Prescott does not mention any names. See Manuel Romero de Terreros' "Introduction," *Life in Mexico* (*Everyman's Library 664*), (London: J.M. Dent, 1960), 6; Woodrow Borah, "Introduction," *Life in Mexico* (Berkeley, University of California Press, 1982), 6; Peter Standish, "La mujer de Calderón," *ACTAS XLV* (AEPE) Centro Virtual Cervantes, accessed August 14, 2015, http://cvc.cervantes.es/ensenanza/biblioteca_ele/aepe/pdf/congreso_45/congreso_45_33.pdf, María Bono López, "Frances Erskine Inglis Calderón de la Barca y el mundo indígena mexicano," *La imagen del México decimonónico de los visitantes extranjeros: ¿un Estado-Nación o un mosaico plurinacional?*, coord. Manuel Ferrer Muñoz (Mexico: Universidad Nacional Autónoma de Mexico, 2002), 155; Felipe Teixidor, "Prólogo," Frances E. Calderón de la Barca, *La vida en México durante una residencia de dos años en este país* (Mexico: Porrúa, 1976), xx.
28. A summary of his request is noted in his personal file, in which Calderón requested Her Majesty's official authorization to marry Francisca Erskine Inglis, niece of Lord Erskine, British Minister in Munich.

Calderón de la Barca, File 02327, Archivo General, Ministerio de Asuntos Exteriores y de Cooperación, España (AMAE).

29. Ángel Calderón complains several times in his *Diario* about the difficulties of marrying old, in addition to his concerns about Fanny's religion (145, 146, 147, and 174). After a particularly bad fight with his wife in which she states that she hates him and accuses him of being stingy, Ángel Calderón writes "this is one of those days in which I figured out too late that a man who marries old with a notable woman has to expect at the very least these kinds of disputes. A just prize for his imprudence and the security of his pride/self esteem" ["éste es uno de los días en que he conocido tarde que un hombre que se casa viejo y con una mujer notable debe esperar estas disputas cuando menos. Justo premio de su imprudencia y de la seguridad de su amor propio."] (174).
30. Calderón de la Barca to Secretary of State, New York, September 28, 1838, File 40, AMAE. The letter also contains a clipping from *The Evening Post*, Tuesday, September 25, 1838, informing that the marriage took place on September 24, 1838, and that it was performed by Cuban-born, Reverend Felix Varela. A few months later, on December 23, 1838, Fanny would turn 34. Teixidor erroneously speculates that the marriage took place in Prescott's house in Boston or perhaps in Ticknor's library.
31. "Enchantments" in Justo Sierra O'Reilly's words: "No pudo resistir los *encantos* de la escocesa," *Impresiones de un viaje a los Estados Unidos* II, 170, cited in Teixidor, "*Prólogo*," xix–xx. Ángel Calderón's first wife was Ana de Vera y Soto Sánchez. It is interesting to note that in Sierra O'Reilly's *Diario de mi viaje a los Estados Unidos*, vol. 2 (México: Porrúa, 1953), the editor, Marte R. Gómez, introduces Ángel Calderón de la Barca in a footnote as "the husband of the well known Marchioness Calderón de la Barca, author of *Life in México*" ["se trata del esposo de la célebre marquesa Calderón de la Barca, autora de La vida en México."]. Justo Sierra O'Reilly, *Diario de mi viaje a los Estados Unidos*, 31.
32. Calderón confesses to Sierra O'Reilly that on Sundays, he would escort his wife to her Church and then head to his Church, which he found an "*amargo trance*," cited in Teixidor, "Prólogo," xxi.
33. For a more detailed account of Ángel Calderón de la Barca's biography, see Miguel Soto's "Introducción" in *Diario*, 15–48.
34. On February 17, 1834, José Heredia (Spain) and Cornelius van Ness (USA) signed a treaty in which Spain agreed to pay the United States the sum of twelve million "Rials *vellon*" (equivalent to $600,000) to settle claims from US merchants. However, given the suspension of four semi-annual payments of interest, which occurred during 1835 and

1836, new payment arrangements had to be made. See *Treaties and Other International Acts of the United States of America*, ed. Hunter Miller (Washington: US Government Office, 1933), 3: 811–822.

35. Fausto Fernández Fernández, "La diplomacia española ante la independencia texana, (1835–1837)," *Revista española de estudios norteamericanos* 7 (1994), 61, accessed October 4, 2016, https://dialnet.unirioja.es/servlet/articulo?codigo=2745962.
36. Calderón asserts: "Una guerra entre Méjico y esta República se está preparando y puede de un día a otro formalizarse." [a war between Mexico and this Republic is developing and can materialize any day] Calderón de la Barca, Dispatch no. 98, Washington, February 9, 1837 (A.M.A.E. leg. H-1465), cited in Fernández Fernández, "La diplomacia española", 68, accessed October 4, 2016, https://dialnet.unirioja.es/servlet/articulo?codigo=2745962.
37. A series of diplomatic and legal battles ensued from the mutiny of African slaves on board the American-built schooner named *La Amistad*, off the coast of Cuba against their Spanish captors. The voyage, initiated June 28, 1839, was to be an uneventful three-day trip from Havana to Puerto Príncipe, Cuba, but contrary winds kept the ship at sea. The revolt took place during the third evening. Rather than return to Africa as the slaves requested, the spared Spanish crew led the slaves to the United States. The rebellion, well-known at the time, is considered one of the first most notable civil rights events in the United States, later depicted on screen by Steven Spielberg (*The Amistad*, 1997). In the United States, Spanish slave holders José Ruiz and Pedro Montes, despite having illegally bought the slaves, claimed them as their property; US abolitionists united to expose the human and moral consequences of slavery. Ángel Calderón argued in favor of Ruiz and Montes, pressuring Secretary of State John Forsyth to comply with the Spanish Government to let the captives stand trial in Cuba. Given the US territorial and economic investments in Cuba, he argued that it would set a bad precedent and encourage further slave revolts in Cuba. See Iyunolu Folayan Osagie, *The Amistad Revolt. Memory, Slavery and the politics of Identity in the United States and Sierra Leone* (Athens: University of Georgia Press, 2003), esp. 3–12. For Calderón–Forsyth correspondence, see *House Documents, Otherwise Published as Executive Documents 13th Congress, 2nd Session-49th Congress 1st session*, Doc. No. 185, 1–79). As of October 3, 1839, Chevalier Pedro Alcántara Argaiz replaced Calderón as Minister in the United States and continued the diplomatic negotiations. On Calderón's diplomatic role: Lloyd Chaisson Jr., *Illusive Shadows: Justice, Media, and Socially Significant American Trials* (Westport, CT: Praeger Publishers, 2003), 32.

38. Soto, *Diario*, 28. Oftentimes, as reflected in his diary, Calderón will regret having spoken his mind openly. Soto underscores Calderón's position as a moderate; however, his comments regarding Mexico, race, and his political actions reflect a much more conservative viewpoint.
39. Calderón claimed the Constitution of 1812 was an obstacle to ensuring freedom; it is "el mayor obstáculo al establecimiento de la libertad misma que, por su medio se pretende cimentar." Calderón de la Barca, November 28, 1836. Personal file No.82, AMAE. For the notification of his removal, see First Secretary of State to Calderón, Madrid, May 13, 1837, Personal file no. 82, 3, AMAE.
40. Soto, *Diaro*, 28.
41. Ángel Calderón to Prescott, New York, March 23, 1838, in Roger Wolcott, *The Correspondence of William Hickling Prescott, 1833–1847* (Boston and New York: Houghton Mifflin, 1925), 24; on Prescott's reaction to Calderón's intentions: "Mr. de Calderón you know is, or rather was, the Minister from Spain to the United States. I knew nothing of him until the publication of my work. But on its appearance, he wrote me in the most friendly manner, offering me his services for any object, sending me a valuable present of some rare Spanish books germaine to the subject, and assuring me he proposed to translate the book at once himself. This is very gratifying, coming from an intelligent citizen of the country." Prescott to Arthur Middleton, April 21, 1838, in Wolcott, *Correspondence*, 27. Middleton was a Harvard classmate of Prescott and, at the time, the Secretary of the American Legation in Madrid.
42. Prescott to Arthur Middleton, January 10, 1939, in Wolcott, *Correspondence*, 47. The term "*savant*" is Prescott's, in Wolcott, *Correspondence*, 27.
43. Ticknor transcribes the letter received from Prescott on April 6, 1838, informing him of his meeting Calderón de la Barca for the first time in New York: "'I have been much gratified,' he says 'by the manner in which the book has been received by more than one intelligent Spaniard here, in particular by the Spanish Minister, Don Angel Calderon de la Barca, who has sent me a present of books and expresses his intention of translating my *History* into Castilian. In consequence of this, as well as to obtain his assistance for the other crotchets I have in my head, I paid a visit to New York last week—a momentous affair, for it would be easier for you to go to Constantinople. Well, I saw his *Spanish-ship*, and was very much pleased with him—a frank, manly *caballero*, who has resigned his office from a refusal to subscribe the late democratic constitution. He is quite an accomplished man, in correspondence with the principal Spanish scholars at home, so that he will be of obvious use to

me in any project I have hereafter. He told me he had sent a copy of the work to the Royal Academy of History, and should present one to the Queen, if he had not retired from office. There's a feather in my cap!'" George Ticknor, *Life of William Hicking Prescott: With a New Portrait en Steel* (London: Routledge, Warne, and Routledge, 1864), 174–175.

44. Ángel Calderón to Prescott, August 2, 1939, in Wolcott, *Correspondence*, 84.
45. Wolcott, "Introduction," *Correspondence*, xv.
46. Ángel Calderón, *Diario*. Highlighting the hypocrisy of religious authorities in Mexico who honored his Protestant wife during the celebration of the Virgin of Covadonga, he adds "Another of the many inconveniences of marrying a person of another religion" ["Otro de los muchos inconvenientes de casarse con [una] persona de otra religión"], 146. On his lack of funds to fulfill, 88. Many of his dispatches are also rife with complaints lacking funds.
47. Ángel Calderón writes "chasqueada la cepa," alluding to his ruined lineage, and then adds that he can't believe he agreed to have children, as it would be a "disaster" given the expenses and the poor doctors in Mexico, *Diario*, 95. A few months later, he wonders why Fanny would think he wanted to have a child, *Diario*, 146.
48. The Bank of the United States was in fact the Second Bank of the United States (the second federally authorized bank)—chartered by President James Madison—which underwent liquidation in 1841. Prescott also had savings deposited in this bank and, like the Calderóns, suffered a significant loss.
49. Madame Calderón de la Barca (although it was originally published anonymously and in English), *The Attaché in Madrid or Sketches of the Court of Isabella II*, trans. from the German (New York: D. Appleton and Company, 1856). She also published her translation of Daniello Bartoli's *History of the Life and Institute of St. Ignatius Loyola Founder of the Society of Jesus*, 2 vols. (New York: Edward Dunigai, 1855).
50. For a more detailed biography, see Teixidor, "Prólogo," especially for the Spanish political conflicts, and Allan Hall Fisher, *Frances Calderón de la Barca*.
51. For a summary of the reviews of Ferdinand and Isabella, see C. Harvey Gardiner, *William Hickling Prescott: A Biography* (Austin: University of Texas Press, 1969), 143–144.
52. Prescott began contributing to the *North American Review* in 1821. The editors, Edward Everett and George Ticknor, are to have had an important influence on Prescott.
53. Prescott quoted in Iván Jaksic, *The Hispanic World and American Intellectual life, 1820–1880* (New York: Palgrave Macmillan, 2007), 128.

54. Gayangos quoted in C. Harvey Gardiner, *William Hickling Prescott: A Biography* (Austin: University of Texas Press, 1969), 141.
55. Prescott, "Memoirs of Sir Walter Scott," *North American Review* 46 (April 1938): 445–446, quoted in Gardiner, *William Hickling Prescott*, 141. Gayangos would secure innumerable documents for Prescott from Spain for his work on Mexico.
56. William Charvat and Michael Kraus, *William Hickling Prescott* (New York: American Book Company, 1943), xxxvii.
57. Prescott quoted in George Ticknor, *Life of William Hickling Prescott: With a New Portrait, En Steel* (Boston: Ticknor and Fields, 1864), 152.
58. Prescott quoted in George Ticknor, *Life of William Hickling Prescott* (Boston: Ticknor and Fields, 1864), 165.
59. Former representative of South Carolina, Joel Poinsett was originally sent as an observer to Mexico before becoming minister (1825–1830). At the request of Mexican authorities, he would be removed from his post for his endless meddling in local politics.
60. This initial revolt, known as the cry or *Grito de Dolores*, led by father Hidalgo on September 16, 1810, has nevertheless become the official date of Mexican independence. On the significance of the *Grito de Dolores*, see Isabel Fernández Tejedo and Carmen Nava Nava, "Images of Independence in the Nineteenth Century: The Grito de Dolores, History and Myth," trans. Margarita González Aredondo and Elena Murray de Parodi, *¡Viva México! ¡Viva la independencia! Celebrations of September 16*, eds., William H. Beezeley and David E. Lorey (Wilmington, Delaware: Scholarly Resources, 2001), 1–41. Also, on Mexican independence, see John Lynch, *The Spanish-American Revolutions, 1808–1826* (New York: W.W. Norton & Company, 1973); Lesley Byrd Simpson, *Many Mexicos* [1941] (Berkeley: University of California Press, 1966).
61. The Viceroyalty of New Spain, created in 1535, was the first of the four viceroyalties established under the Spanish empire. In 1565, it would include under its jurisdiction the newly conquered Philippines that would cement trade with the East.
62. This was especially true during the second half of the eighteenth century when, under the Bourbon reforms, Spain's demands on the Viceroyalty of New Spain grew exponentially. In fact, the total revenue collected from New Spain by the imperial state grew between six-fold and sixteen-fold—depending on whether or not loans are factored in—replacing Peru as the jewel of the Spanish Crown in America. Herbert Klein, "The Great Shift: The Rise of Mexico and the Decline of Peru in the Spanish American Colonial Empire, 1680–1809," *Revista de historia económica* 13 (1995): 35–61. See also John Coatsworth, *Los orígenes del*

atraso, nueve ensayos de la historia económica de México en los siglos XVIII y XIX (México: Alianza, 1990); Carlos Marichal and Matilde Souto Mantecón, “Silver and Situados: New Spain and the Financing of the Spanish Empire in the Caribbean in the Eighteenth Century,” *Hispanic American Historical Review* 74, no. 4 (1994): 587–613.

63. *Castas*, or castes, is a Spanish term used in Spanish America to classify mixed-race people during post-Conquest. Many of the oil paintings depicting the colonial caste system identify sixteen racial categories, depending on the degree of mixings of the three main racial strands: Spanish (European or caucasian), Indian, and black. Each combination was also identified with moral values and assigned specific political, economic, and social roles. See Nasheli Jiménez del Val, “Pinturas de Casta: Mexican Caste Paintings, a Foucauldian Reading” *New Readings* 10 (2009): 1–17, accessed July 23, 2013, http://ojs.cf.ac.uk/index.php/newreadings/article/view/6.
64. Humboldt, *Ensayo politico*, 149.
65. This constitution incorporated a number of features from the United States’ Constitution. It imposed a federalist system—which, at the time, was not the most appropriate for Mexico given the reigning anarchy and the lack of cohesion. Lesley Byrd Simpson argues that the general havoc of the first half century of independence in Spanish America is due in part to the rejection of everything Spanish, the inability to gauge the effect of three centuries of an established colonial system, and the assumption that the old Spanish administrative districts were independent entities with a culture and destiny of their own in *Many Mexicos*, 234. Iturbide abdicated and left for Europe. Poorly advised, he returned to Mexico, where he was arrested and then shot by decree of the State Congress on July 19, 1824.
66. The United Provinces of Central America would later separate to become Guatemala, Costa Rica, El Salvador, Honduras, and Nicaragua.
67. Expulsion laws were passed several times at the state and national level, in 1827–1828, in 1829, and in 1833–1834. Harold Dana Sims, *The Expulsion of Mexico’s Spaniards 1821–1836* (Pittsburgh: University of Pittsburgh Press, 1990).
68. The *Tratado de Paz y Amistad* secured Texans’ independence. For a copy of the treaty, see *México y el mundo: historia de sus relaciones exteriores*, 9 vols., coord. Blanca Torres (México D.F.: Colegio de México, 2010) in Josefina Zoraida Vásquez, *México y el mundo; México, Gran Bretaña y otros países* 2: 237–244, accessed October 5, 2016, http://bibliohistorico.juridicas.unam.mx/libros/libro.htm?l=2778.
69. In his excellent prologue to *Life in Mexico*, Felipe Teixidor claims Ángel Calderón de la Barca was most likely born in 1794. He cites Santiago

Fernández Jiménez as his source but does not provide any documentation. Hence, I follow what is stated in the *Relaciones Diplomáticas Hispano-Mexicanas (1839–1898), Serie I: Despachos Generales I, 1839–1841* (Mexico: Colegio de México, 1949), 323, which states that Ángel Calderón was born in1790 (footnote 28). See also Madame Calderón de la Barca, *La Vida en México durante una residencia de dos años en ese país*, trad. and prologue Felipe Teixidor (México: Porrúa, 1978), xix.

70. Lucas Alamán to Ángel Calderón, May 15, 1841, in William Hickling Prescott, *Correspondencia mexicana* (1838–1856) (México: Conaculta, 2011), 75. While his birth in *América* may have benefited him in Mexico, when he is removed from his position as Minister, Calderón will claim it is because of that: "Es claro que [se] dirá que mi prestigio lo debía a *la circunstancia de ser americano*" (emphasis added); upon returning he states: "el partido actual no me perdonará ni mi nacimiento en América ¡Ni mi casamiento!" See *Diario*, 286; 278.
71. One of the issues complicating the process was that in order to remain in Mexico and keep their properties, many Spanish citizens had opted to become Mexican citizens. However, once debts and claims issued by the Spanish government were being awarded, many of those former Spanish citizens began requesting retroactive indemnization. Ángel Calderón made this conflict clear in his dispatches and demanded that individuals choose between their Spanish citizenship and indemnization or remain Mexican citizens with the properties they were allowed to have in Mexico and rescind all other claims, but not both. *Diario*, 83.
72. Frances Calderón, *Life in Mexico*, 54.
73. In the third volume of her journal, reflecting a change in her appreciation for a more Hispanic dress fashion, Fanny Calderón will complain about the Parisian bonnet usurping the place of the mantilla in Mexico and Spain, *Journal* 3, 44.
74. Frances Calderón, *Life in Mexico*, 56.
75. Ibid., 62.
76. Caballero and Hayward read Frances Calderón's use of melancholia as the marker of European difference and as the authorizing affective trope of her journal.
77. Cabañas, *The Cultural 'Other'*, 60.
78. Frances Calderón, *Life in Mexico*, 56–57.
79. Several contemporary travelers to Mexico noted the zopilotes. Upon his arrival in Veracruz, secretary of the US legation, Brantz Mayer noted a large group of galley slaves working in the sun and more than a thousand zopilotes who walked the streets with a great "nonchalance." In his view, both "constitute the most useful part of the population—the former being the city authorities' labourers and the latter the city

authorities' scavengers" in *Mexico As It Was and As It Is* (New York: J. Winchester, New World Press, 1844), 3–4.
Fanny Calderón's allusion to the royal species refers to the king vulture (*sarcoramphus papa*), a species most common in Mexico and further south, similar to the condor in size, but distinguished among other smaller vultures for its red crested crown and neck as well as for its royal behavior. A contemporary author explains: "[I]ts chief claim to regal distinction rests upon … its right royal behavior. Though not so very large, it is a bird of grand prerogative, and great bullying propensities. It is king over the carcass, acknowledged by the *zamuros*, *urubus*, *gallinazos*, and *zopilotes*—all the smaller species of vultures, who dare not dispute its sway." Mayne Reid (cond.), "Vultures of America: A Monographic Sketch of These Foul-beaked birds (continued)," *Onward* 2 (New York: J.W. Carleton, 1869), 465. Ángel Calderón also mentions the zopilotes. Disapprovingly, he complains they are treated as if they were sacred birds, as they are protected from being harmed or killed because they are like police soldiers (*soldados de policía*) in charge of cleaning the filth in the streets. *Diario*, 75.

80. Frances Calderón, *Life in Mexico*, 97.
81. Mexico was the first former colony whose independence Spain officially recognized. In his first dispatch, Secretary of State Evaristo Pérez de Castro refers to Mexico's independence as "a separation," which was received as a "fatal event" ["*un hecho fatal*"]. See *Relaciones Diplomáticas*, 7.
82. Frances Calderón, *Life in Mexico*, 614.
83. Ibid., 610.
84. Charles Hale, "Review of 1966 edition of Fanny *Calderón de la Barca's* Life in Mexico," Hispanic American Historical Review 47, no. 4 (1967): 581–583; book review by C. M. Mayo, *Tin House* 2, no. 1 (Fall 2000), accessed March 17, 2014, www.cmmayo.com/pubs–bkrev–life–in–mexico.html. Peter Standish also makes this comparison underscoring that Tocqueville was more serious in his observations while Fanny gave them life. Peter Standish, "La mujer de Calderón," 371–378; 373, accessed March 17, 2014, cvc.cervantes.es/ensenanza/…/congreso_45_33.pdf.
85. Silvia Arrom, *Women of Mexico City, 1790–1857* (Stanford: Stanford University Press, 1985); Arnold J. Bauer, *Goods, Power, History: Latin America's Material Culture. New Approaches to the Americas* (New York: Cambridge University Press, 2001); Gilbert M. Joseph and Timothy J. Henderson eds., *The Mexican Reader: History, Culture, Politics* (Chapel Hill: Duke University Press, 2009), 196.
86. Rodolfo Ramírez Rodríguez, "Fanny Calderón de la Barca y su percepción romántica de México," *Históricas 88* (May–August, 2010), 19. See also María Bono López, "Frances Erskine Inglis."

87. María Soledad Arbeláez, “La Vida en México. Una breve historia,” *Historias 34* (April–September, 1995): 86.
88. Beatriz Ferrús Antón, *Mujer y literatura de viajes en el siglo XIX: Entre España y las Américas* (Valencia: Publicaciones de la Universitàt de Valencia, 2011), 55.
89. Antonio Acevedo Escobedo, quoted in María Bono López, “Frances Erskine Inglis,” 192.
90. Among the essays that complicate Frances Calderón’s reading, see Leask, “The Ghost in Chapultepec”; Kaplan and Gerassi-Navarro, “Between Empires”; Caballero and Hayward, “An Occasional Trait of Scotch Shrewdness”; Ana Brickhouse, “Hawthorne in the Americas: Frances Calderón de la Barca, Octavio Paz, and the Mexican Geneaology of ‘Rappacini’s Daughter’” *PMLA* 113, no. 2 (1998): 227–242.
91. Prescott to Charles Dickens, Boston, August 31, 1842, in Wolcott, *Correspondence*, 315–316.
92. Prescott, “Madame Calderón’s Life in Mexico,” *The North American Review* (January 1843): 137–170.
93. Ibid., 140.
94. Ibid., 141.
95. Ibid., 149. Henry George Ward was a British diplomat stationed in Mexico in 1825 and the author of *Mexico in 1827* (1828); William Bullock was one of the first British travelers to visit Mexico after independence, author of *Six Months Residence and Travels in Mexico* (1824). These texts, together with Joel Poinsett’s *Notes on Mexico* (1825), constitute the first travel narratives about Mexico, in English, after independence.
96. “Lady Travellers,” *The Quarterly Review* 76 (June and September, 1845): 116. This review incorrectly assumes that she “is now a Spaniard—and a Roman Catholic” two years before she converted.
97. “Lady Travellers,” 115, 118, 116.
98. “Madame Calderón’s Life in Mexico,” *The Edinburgh Review* (July 1843): 157.
99. Frances Calderón to Prescott, Mexico, June 5, 1840, in *Correspondence*, 129.
100. Michael P. Costeloe, “Prescott’s History of the Conquest and Calderón de la Barca’s Life in Mexico,” *The Americas 47*, no. 3 (1991): 344.
101. Costeloe, “Prescott’s History of the Conquest,” 347.
102. José F. Ramírez’s *Notas y esclarecimientos a la Historia de la Conquista de México, del Señor W. Prescott* offers a counter narrative to Prescott’s view. See Leila Gomez’s analysis, “El hispanismo en viaje: William H. Prescott y México,” *Revista de crítica literaria latinomaericana* 82 (2do semestre, 2015): 117–134.

103. Howard T. Fisher and Marion Hall Fisher, "First Appearance of Life in Mexico," in *Life in Mexico,* 634. Published in 1832, Frances Trollope's *Domestic Manners of the Americans* was a harsh critique of Americans, whom she viewed as vulgar and prudish.
104. "Diario de las cortes" quoted in Michael P. Costeloe, *Response to Revolution: Imperial Spain and the Spanish American Revolutions, 1810–1840* (Cambridge: Cambridge University Press, 1986), 226.
105. Prescott to Frances Calderón, August 18, 1840, in *Correspondence*, 148.
106. Prescott to Frances Calderón, Nahant, July 28, 1841, in *Correspondence*, 240.
107. In college, Prescott had been hit by piece of bread, which left him blind in one eye. Over the years, his other eye developed an infection. By the time he wrote his *Conquest*, he was legally blind and wrote with the aid of a noctograph. To encourage the Calderóns to relay as much visual information they could of Mexico, he sends them a daguerreotype camera, which at the time was a recent invention, so they could take photographs. Fanny Calderón mentions the daguerreotype camera briefly whereas Ángel Calderón mentions it several times. Unfortunately, the daguerreotypes have not been found.
108. Ángel Calderón to Prescott, Mexico City, March 5, 1840, *Correspondence*, 112.
109. Prescott to Frances Calderón, Nahant, July 28, 1841, *Correspondence*, 240.
110. Prescott to Frances Calderón, August 15, 1840, *Correspondence*, 147.
111. William H. Prescott, *History of the Conquest of Mexico* (New York: The Modern Library, 2001) 245; 738. He cites her for anecdotal information as the Indians' love of flowers (245), descriptions of the plains of Tacuba (738), the cooking of the tortilla (760), Marina's spirit in Chapultepec (868), or Cortés' palace in Cuernavaca (894).
112. Frances Calderón to Prescott, Mexico, October 15, 1840, in *Correspondence*, 168.
113. Ibid., 169.
114. Fanny Calderón, *Life in Mexico*, 65–66. Antonio López de Santa Anna did not remain passive: He replaced Anastasio Bustamante as president shortly before the Calderóns left Mexico, and later led the forces against the United States in the Mexican-American War (1846–1848). After his crushing defeat and his selling off Mexican territory to the United States, Santa Anna was exiled. Before being able to return to Mexico where he died, he lived in Jamaica, Cuba, Colombia, and coincidentally in Fanny Calderón's former home city, Staten Island, New York. Santa Anna was involved in practically all the county's major political events of the nineteenth century. In all, he was president of Mexico 11 times and remains one of the most interesting and dominant figures in Mexican history.

115. Ibid., 418–423.
116. Ibid., 67.
117. The Fishers' edited version of *Life in Mexico* is slightly altered (69); hence, I quote her *Journal* 1, 77.
118. Frances Calderón, *Life in Mexico*, 69.
119. Although Rosa's landscapes with *banditti* were rare, they were extremely popular in late eighteenth and early nineteenth-century England. Fanny Calderón will bring up Salvator Rosa several times (*Life in Mexico,* 81, 88). On Rosa, see *Salvator Rosa in America* (Wellesley, MA: The Wellesley College Museum, 1979) 5; and on his influence in English landscape painting, Richard W. Wallace, *The Etchings of Salvator Rosa* (Princeton, NJ.: Princeton University Press, 1979), 113–119. It is interesting to note that one of the major theorists of the picturesque aesthetic, Uvedale Price, considers Rosa, despite the elusive qualities of his landscapes, one of the most remarkable artists for his picturesque effects because of his rugged forms. Uvedale Price, *Essays on the Picturesque as Compared with the Sublime and the Beautiful; and, on the Use of Studying Pictures, for the Purpose of Improving real Landscape*, vol. 1 (London: J. Mawman, 1810), 64.
120. Nigel Leask, "The Ghost in Chapultepec," 193.
121. William Gilpin, *An Essay on Prints* [1792] (London: A. Strahan, 1802), xii.
122. Ann Bermingham, "The Picturesque and the Ready-to-Wear Femininity," *The Politics of the Picturesque: Literature, Landscape and Aesthetics Since 1770*, eds. Stephen Copley and Peter Garside (Cambridge: Cambridge University Press, 1994), 89.
123. Albert Boime, *The Magisterial Gaze: Manifest Destiny and American Landscape Painting, c. 1830–1865* (Washington D.C.: Smithsonian Institute Press, 1991).
124. Frances Calderón, *Life in Mexico*, 87–88.
125. *The Memoirs of the Conquistador Bernal Diaz del Castillo Written by Himself Containing a True and Full Account of the History of the Discovery and Conquest of Mexico and New Spain,* 2 vols., trans. John Ingram Lockhard (London: Hatchard and Son, 1844), 1: 219.
126. See W. J. T. Mitchell's discussion of a reflective landscape, "Imperial Landscape," *Landscape and Power*, ed. W. J. T. Mitchell (Chicago: The University Press of Chicago, 2002), 7.
127. Prescott, *Conquest*, 388.
128. Frances Calderón, *Life in Mexico*, 90.
129. Ibid., 88.
130. Leask, "The Ghost in Chapultepec," 198–199.
131. Similarly, during her first visit to the cathedral in Mexico, built on the Aztec temple, reflecting on the thousands of human sacrifices, Fanny

Calderón states: "but if the tenth part be the truth, let the memory of Cortés be sacred. *While on one side he exterminated with the sword, on the other*, with the cross, he stopped the shedding of innocent blood *that flowed from human victims*; *planted* the cathedral on the ruins of the temple which had so often resounded with human groans; and in the place of their huge blood-smeared idols enshrined the mild form of the Virgin," *Life in Mexico*, 103.

132. Prescott, *Conquest*, 7–8.
133. James Lockhart, "Introduction," in Prescott, *History of the Conquest of Mexico*, xxv.
134. Gardiner, *William Hicking Prescott*, 172–173. Prescott had read Washington Irving's work and in fact when he decided to work on the conquest wrote Irving, who had apparently planned a similar work on Mexico. Irving courteously replied willing to abandon his project—although he later confessed to his nephew and biographer it was "a sacrifice." Quoted in Harry Thurstom Peck, *William Hickling Prescott* (New York: The Macmillan Company, 1926), 76.
135. Prescott, *Conquest*, 258.
136. Jaksic, *The Hispanic World*, 134.
137. Prescott states early on that, "[I]n truth, the Mexicans were not cannibals, in the coarsest acceptation of the term. They did not feed on human flesh merely to gratify a brutish appetite, but in obedience to their religion," *Conquest*, 67–68. Nevertheless, he describes the "loathesome" process in great detail and later reminds his readers with enough commentary to reinforce their barbarism: "On such occasions a slave was sacrificed and his flesh, elaborately dressed, formed one of the chief ornaments of the banquet. Cannibalism, in the guise of an Epicurean science, becomes even more revolting." *Conquest*, 117.
138. Prescott, *Conquest*, 119, 291, 467.
139. It is telling that a few years later, after the Mexican-American War, Prescott was approached by a group of Whigs who, inspired by his *Conquest*, hoped he would agree to write a history of the US campaign against Mexico. Prescott declined. See Jasikc, *The Hispanic World*, 154–155.
140. Frances Calderón, *Life in Mexico*, 219. John Knox (1514–1572) was a Scottish clergyman, known to be a strict and dogmatic leader of the Protestant Reformation.
141. Sidney K. Robinson, *Inquiry into the Picturesque* (Chicago: The University Press of Chicago, 1991), 5.
142. Frances Calderón, *Life in Mexico*, 49, 185 (emphasis added).
143. Ibid., 216. The image of vastness is a recurring image. For example, when describing the haciendas in a much later trip, she states: "there is

a feeling of vastness, of solitude and of dreariness in some of these great haciendas, which is oppressive." *Life in Mexico*, 399.

144. In his psychoanalytic reading of the picturesque, David Punter sees the frame as a strategy to render the unconscious manageable in "The picturesque and the Sublime: Two Worldscapes." Stephen Copley and Peter Garside, *The Politics of the Picturesque: Literature, Landscape, and Aesthetics Since 1770* (Cambridge: Cambridge University Press, 1994), 223–224.
145. Frances Calderón, *Life in Mexico*, 236, 241.
146. Ibid., 240.
147. Ibid., 399.
148. Ibid., 399, 151, 555, 181, 583, 397, 367, 376.
149. Ibid., 335.
150. William Gilpin, *Three Essays: On Picturesque Beauty, on Picturesque Travel, and on Sketching Landscape: To Which is Added a Poem, on Landscape Painting* (London: Printed for R. Blamire in the Strand, 1792), 8.
151. Frances Calderón, *Life in Mexico*, 363.
152. Ibid., 91–92.
153. Walter Benjamin, *Reflections. Essays, Aphorisms, Autobiographical Writings*, trans. Edmund Jephcott (New York: Schocken Books, 1986), 150.
154. Frances Calderón, *Life in Mexico*, 104. In her journal, Fanny Calderón states that the women and *léperos* perform the cleansing.
155. Kaplan and Gerassi-Navarro, "Between Empires," 12–13.
156. Frances Calderón, *Life in Mexico*, 368–367.
157. See Mark Wassermann's description of diseases in the city, *Everyday Life and Politics in Nineteenth-Century Mexico: Men, Women, and War* (Albuquerque: New Mexico Press, 2000), 35.
158. Frances Calderón, *Life in Mexico*, 365.
159. Mexico illustrates several points Doreen Massey raises in her discussion of place. See Doreen Massey, *Space, Place, and Gender* (Minneapolis: University of Minnesota Press, 1994), 135–143.
160. Frances Calderón, *Life in Mexico*, 106.
161. Shirley Ardener, "Ground Rules and Social Maps for Women: An Introduction," *Women and Space: Ground Rules and Social Maps*, ed. Shirley Ardener (Oxford: Berg, 1993), 3.
162. Frances Calderón, *Life in Mexico*, 76–77.
163. Ibid., 77.
164. See John A. Ochoa, *The Uses of Failure in Mexican Literature and Identity* (Austin: Texas University Press, 2004), 72–73. Given the time of year, the exchange of *tejocotes* (a small kind of apple) for *chiles* was nevertheless common.

165. Jorge María Prieto, *Albures y refranes de México* (Mexico: Panorama Editorial, 1985). Octavio Paz defines the albur as a verbal combat of double meanings that is practiced in the streets of Mexico "El juego de los 'albures'—esto es, el combate verbal hecho de alusiones obscenas y de doble sentido, que tanto se practica en la ciudad de México—transparenta esta ambigua concepción." Octavio Paz, *El laberinto de la soledad* (México: Fondo de Cultura Económica, 1992), 14.
166. Franco is referring to the anxiety the creole elite had toward street life in *El Periquillo Sarniento*. Jean Franco, "La heterogeneidad peligrosa: Escritura y control social en vísperas de la independencia mexicana," *Hispamérica*, 34/35 (Abril-Agosto 1983): 3–34.
167. Vagrancy was a social problem in Mexico during the first half of the nineteenth century. In 1828, a tribunal was created to deal with the endemic situation. On Mexico's vagrancy and street life during this period, see Sonia Pérez Toledo, "Los vagos de la ciudad de México y el Tribunal de Vagos en la primera mitad del siglo XIX," *Secuencia. Revista de Historia y Ciencias Sociales*, 27, (septiembre-diciembre, 1993): 27–42; Hilda Margarita Sánchez Santoyo, "La percepción sobre el niño en el México moderno (1810–1930)," *Tramas,* 20, (2003): 39, accessed June 20, 2014, http://132.248.9.34/hevila/TramasMexicoDF/2003/no20/2.pdf; Silvia Arrom, "Vagos y mendigos en la legislación mexicana, 1745–1845," 71–87, accessed June 20, 2014, http://biblio.juridicas.unam.mx/libros/2/721/10.pdf.
168. Torcuato S. Di Tella, "Las clases peligrosas a comienzos del siglo XIX en México," *Desarrollo económico* 12, no. 48 (January–March, 1973): 782.
169. Ochoa, *The Uses of Failure*, 66–67.
170. The capital, Mexico, or *Distrito Federal*, was founded in the Constitution of 1824, mainly as the residence for the federal powers. It extended in a radius of two leagues (almost nine acres, three times the size of Boston) from the center of the Plaza Mayor, meaning that several cities or towns such as Tacubaya, Tacuba, and villa de Guadalupe were incorporated into the city, accessed June 23, 2014. http://www.cervantesvirtual.com/servlet/SirveObras/12148085130100492976402/index.htm.
171. Manuel Miño Grijalva, "La ciudad de México en el tránsito del virreinato a la república," *Destiempos* 3, no. 14 (Marzo-abril 2008): 460, accessed June 20, 2014, www.destiempos.com/n14/manuelmino.pdf; for Boston, see Richard A. Meckel, "Immigration, Mortality, and Growth in Boston, 1840–1880," *Journal of Interdisciplinary History* 15, no. 3 (Winter 1985): 394.
172. Mona Domosh, *Invented Cities: The Creation of Landscape in Nineteenth-Century New York & Boston* (New Haven: Yale University Press, 1996).

173. Frances Calderón, *Life in Mexico*, 125. A few months later, Fanny Calderón notes a "flashing Poblana dress" during Holy Week (201), and that the respectable Señora Adalid wore a Poblana dress to a country fair, "She looks beautiful in this dress, which will not be objected to in the country though it might not suit a fancy ball in Mexico," 276. Wearing local indigenous clothes seemed to be regulated according to class and social events. In contrast to Fanny Calderón's frustration, Frida Khalo was perhaps the most visible figure, who seemed indifferent to any codes, wearing the Tehuana dress, floral headbands, vibrant prints, huipil tops, and rebozos. More recently, on April 23, 2014, the well-known Mexican writer, Elena Poniatowska, received the acclaimed Cervantes Literary Award in Spain dressed in a boldly colored Juchitana dress (from Oaxaca). Ricardo Pérez Montfort traces the history behind the "china Poblana" as a cultural icon of Mexicanness documenting her transition from an "exotic beauty from Delhi" whose simple but impeccable behavior was morally irreproachable to the independent, coquettish, and unprejudiced woman, who became the utmost expression of Mexicanness. See Ricardo Pérez Montfort, *Expresiones Populares y Estereotipos Culturales en México. Siglos XIX y XX. Diez ensayos* (México: Centro de Investigciones y Estudios Superiores en Antropología Social, 2007), 119–146.
174. Frances Calderón, *Life in Mexico*, 179.
175. Ibid., 158.
176. I am drawing on Kirsten Silva Gruez's notion of "cultural ambassadorship" as defined in *Ambassadors of Culture: The Transamerican Origins of Latino Writing* (Princeton, NJ: Princeton University Press, 2002), xiii.
177. Frances Calderón, *Life in Mexico*, 42.
178. Ibid., 108.
179. Ibid., 129, 109.
180. Ibid., 133.
181. Ibid., 156.
182. Ibid., 288, 291.
183. Miguel Soto, *Diario*, 149. Soto notes that an important antecedent already existed in Mexico: the *Instituto Mexicano de Ciencias y Artes*, founded in 1826 where historians, writers, academics, doctors, and even businessmen congregated.
184. Jesus Cruz, *The Rise of Middle-Class Culture in Nineteenth-Century Spain* (Baton Rouge: Louisiana State University Press, 2011), 202.
185. Founded in 1807 and modeled on the Liverpool Athenaeum in England, the Boston Athenaeum became the city's elite center of intellectual life during the nineteenth century. According to Charles Knowles Bolton, the Athenaeum's librarian and unofficial historian, women were not

welcomed in the library early on, mentioning only three women allowed as of 1829 (Hannah Adams, Elizabeth P. Peabody, and Lydia Maria Child). However, recent scholarship highlights that women's presence in the library was evident from its beginning as benefactors, shareholders, guests, and even borrowers of books, in addition to their participation in social events organized by the Athenaeum. See Barbara Adams Hebard, "The Role of Women at the Boston Athenaeum," *The Boston Athenaeum: Bicentennial Essays*, ed. Richard Wendorf (Hanover and London: The Boston Athenaeum, 2009), 69–97.

186. Frances Calderón, *Life in Mexico*, 533.
187. Ibid., *Life in Mexico* 444, 771.
188. Ibid., 448. Ángel Calderón refers to them as Otomiles stating they are "pobrísimos incultos, sumisos," *Diario*, 129. In general, she considers "negros, mulatos zambos y todas esas razas miserables e ignorantes." *Life in Mexico*, 168.
189. Frances Calderón, *Life in Mexico*, 194.
190. Ibid., 155.
191. Ibid., 335. Other references to "pure Indians," 186; 444; 445.
192. Cabañas, *The Cultural 'Other,'* 89.
193. Beyond their looks, she notes the indigenous populations have different origins and languages (she mentions their "liquid" sounding Náhautl and Tarascan), and have a vast knowledge of herbal medicine—which she values because much of it "is now used in European pharmacy" (180). She also praises their love of flowers, which Humboldt also highlighted, their soft-spoken manners and politeness (when they were not drunk), as well their skill to make wax figures. Ibid., 278.
194. The calendar as well as the stone sculpture of Coatlicue was originally discovered in the Cathedral when renovation was being done in 1790. The statue of Coatlicue was subsequently moved.
195. Ibid., 123.
196. Ibid., 156; 198; 186–187.
197. Ibid., 196.
198. Ibid., 164.
199. Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973), 91.
200. Frances Calderón, *Life in Mexico*, 197.
201. Prescott, *Conquest*, 210.
202. Frances Calderón, *Life in Mexico*, 369.
203. Ángel Calderón, *Diario*, 146.
204. Frances Calderón, *Life in Mexico*, 343.
205. Ibid., 713.

206. Asunción Lavrín, *Brides of Christ: Conventual Life in Colonial Mexico* (Stanford: Stanford University Press, 2008).
207. Asunción Lavrín, "The Role of Nunneries in the Economy of New Spain in the Eighteenth Century," *The Hispanic American Historical Review* 46, no. 4 (November, 1966): 371–393.
208. Frances Calderón, *Life in Mexico*, 207.
209. Before independence, Spain enacted the 1804 law of *Consolidación de Vales Reales*. Faced with the need to pay back its foreign loans, Spain forced the sale of real estate owned by clerical corporations and imposed high taxes on its assets through this law. Landowners, miners, and merchants, who had contracted large debts with the convents, were against this. The law would be repealed in 1809. A second group of laws was enacted beginning in 1833 until 1859 to reduce the number of nunneries and their economic privilege. See Elisa Speckman Guerra, "Las órdenes femeninas en el siglo XIX: el caso de las domincas," *Estudios de Historia Moderna y Contemporánea de México* 18, accessed October 7, 2016, http://www.ejournal.unam.mx/ehm/ehm18/EHM01801.pdf and Asunción Lavrín, "Problems and Policies in the Administration of Nunneries in Mexico 1800–1835," *The Americas* 28, no. 1 (July, 1971): 57–77.
210. In 1859, monasteries were closed but nuns already professing were allowed to continue their life in the convents although no new nuns were allowed. Elisa Speckman Guerra, "Las órdenes femeninas," 27.
211. Perla María Silva Martínez, "Una opción de vida para las mujeres. El beaterio de Santa Rosa de Viterbo. Pobreza, esplendor y migración. 1728–1870," Thesis, Universidad Autónoma de Querétaro (Santiago de Querétaro, December, 2012), 26. Unpublished. Accessed June 23, 2014, http://ri.uaq.mx/bitstream/123456789/641/1/RI000254.pdf.
212. Frances Calderón, *Life in Mexico*, 258.
213. Ibid., 258, 261–262.
214. Ibid., 263.
215. Silvia Arrom, *Women of Mexico City, 1790–1857*, 142.
216. Ibid., 16–17. See also Josefina Muriel, *Conventos de monjas en la Nueva España* (Mexico D.F.: Editorial Santiago, 1946).
217. The debate is playfully illustrated in José Joaquín Fernández de Lizardi's novel *La Quijotita y su prima*, published in serialized form, between 1818 and 1819. Lizardi presents two models of women: Pomposa (Pompous) and Prudenciana (Prudence).
218. Virginia Sánchez Korrol, "Women in Nineteenth and Twentieth Century Latin America and the Caribbean," *Women in Latin America and the Caribbean*, eds. Marysa Navarro and Virginia Sánchez Korrol (Bloomington: Indiana University Press, 1999), 59, 86, accessed

September 22, 2015, http://emsc32.nysed.gov/ciai/socst/ghgonline/units/5/documents/Korrol.pdf.

219. Josefina Zoraida Vázquez, *Dos décadas de desilusiones. En busca de una fórmula adecuada de gobierno (1832–1854)* (México, D.F.: El Colegio de México, Instituto Investigaciones José María Luis Mora, 2009), 12.
220. This is the title of Vázquez's study, which covers events from 1832 to 1854.
221. Vázquez, *Dos décadas de desilusiones*, 13.
222. Ibid., 76.
223. Frances Calderón, *Life in Mexico*, 315.
224. Ibid., 301.
225. Ibid., 497.
226. Ibid., 500.
227. Frances Calderón to Prescott, Mexico, June 5, 1840, in *Correspondence*, 131.
228. Frances Calderón, *Life in Mexico*, 433.
229. Ibid., 164.
230. Ibid., 433.
231. Ibid., 603.
232. *Quarterly Review*, 99.
233. Prescott, *The North American Review*, 148.
234. *Quarterly Review*, 99.
235. Eduardo Matos Moctezuma, *Arqueología del México antiguo* (México; Milán: Instituto Nacional de Antropología e Historia: Jaca Book, 2010), 150.
236. Andrew Selee, "Prologue," in Dolia Estévez, *US Ambassadors to Mexico: The Relationship Through Their* Eyes (Washington: Woodrow Wilson International Center for Scholars, 2012), 3, accessed November 3, 2016, https://www.wilsoncenter.org/sites/default/files/Estevez_Amb_to_Mex.pdf.

Elizabeth Cary Agassiz: The Art of Scientific Observation

Shortly after her arrival in Brazil in 1865, having briefly explored the outskirts of Rio de Janeiro, Elizabeth Cary Agassiz wrote in her journal:

> We shall, no doubt, see wilder scenery, but the first time that one looks upon nature, under an entirely new aspect, has a charm that can hardly be repeated. The first view of high mountains, the first glimpse of the broad ocean, the first sight of tropical vegetation in all its fullness, are epochs in one's life. This wonderful South American forest is so matted together and intertwined with gigantic parasites that it seems more like a solid, compact mass of green than like the leafy screen, vibrating with every breeze and transparent to the sun, which represents the forest in the temperate zone.[1]

Echoing Humboldt's sense of discovery, Cary Agassiz identifies viewing the tropics for the first time as a moment of personal discovery and profound awakening. It is the first step toward a new understanding of nature and by extension of the world. It marks an epoch, a coming of age (and knowledge), in one's life. Stepping back in time, the tropics reveal nature's primeval characteristics. Everything is oversized: the mountains high, the waters vast, the parasites gigantic, and the vegetation a mass of solid green. It is the moment when the traveler's imagination encounters for the first time its material reflection.

Unlike Frances Calderón, who was a seasoned traveler and had lived in several countries before arriving in Mexico, Cary Agassiz had led a sedentary life. Beyond Northampton, Massachusetts, and a visit to

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South Carolina accompanying her husband, her life had been confined to Cambridge, Boston, and summers in Nahant, on the coast of Massachusetts. Once married, she would travel to Europe to visit her husband's family, a more traditional journey for members of her class. But beyond those brief trips, she had led a sheltered life in Boston. Yet, like Calderón, when she left for Brazil, she too was accompanying her husband and embraced her journey with excitement. The trip was a unique opportunity for her husband, Louis Rodolphe Agassiz, a renowned Harvard scientist, to spend a year in the Amazon analyzing the geological composition of the tropics and collecting specimens for his recently established Museum of Comparative Zoology (MCZ). Although Cary Agassiz did not consider herself a scientist, for fifteen years she had been living with the man credited for revolutionizing the study of natural science in the United States. Since her marriage to Louis Agassiz in 1850, she had been his most devoted partner, assisting him on his research projects, working by his side, writing, studying, teaching, and even fundraising for his ventures. Hence, when Agassiz confirmed his trip to Brazil, she went along not just as a spouse but as the expedition's self-appointed "scribe" to document and "gather all the material" related to the expedition.[2]

Popularly known as Lizzie, Elizabeth Cabot Cary was the second of seven children of Thomas Graves Cary, a wealthy businessman, and Mary Ann Cushing Perkins. She was also the granddaughter of Coronel Thomas H. Perkins, whose family ties dated back to the first Puritans (Fig. 1).[3] Perkins was a wealthy merchant who exemplified the distinct Boston Brahmin culture.[4] Influential in developing US American institutions and culture, he was a generous benefactor of some of the most prestigious institutions at the time–the Boston Athenaeum, the Boston Museum of Fine Arts, and the Massachusetts General Hospital–and was involved in the founding of the Perkins Institute for the Blind.[5] Ensuring the power of strong extended family ties, Perkins created an elite enclave around his home on Temple Place in Boston, known more often as "the Court," where his married children also lived. Thus, Lizzie grew up among a tight-knit, protected, and well-connected clan of twenty-one cousins, among Cabots, Carys, and Gardiners, all centrally located on Temple Place in Boston.[6] Although Boston was a small city, it was the center of a rich and stimulating climate. As related by Cary Agassiz's younger sister, Emma, the families on Temple Place grew up going to concerts, performing plays at "the Court," sheltered by privilege yet

Fig. 1 Elizabeth Cary Agassiz. Photograph by Augusto Stahl and Germano Wahnschaffe, Rio de Janeiro, Brazil, 1865, courtesy of the Coleção Princesa Isabel

attentive to the events happening around them: "Margaret Fuller's talks were the wonder of the times; Alcott and Thoreau were trying experiments in living … Transcendentalism was at its height, indignation at the negro slavery was surging in many hearts, and meanwhile … a most conventional social world moved on as placidly as if nothing in Boston would ever change."[7]

Despite being educated in privilege and stability, both Frances Calderón de la Barca and Elizabeth Cary Agassiz not only adjusted to change but also, more importantly, embraced it. Unlike her siblings, Cary Agassiz

was home-schooled, due to her delicate health, primarily by her governess, until she briefly attended Elizabeth Peabody's Historical School.[8] Her curiosity and love of reading were further expanded under the guidance of her brother-in-law, Harvard classics professor, Cornelius Felton.

Like Frances Calderón de la Barca, Cary Agassiz married late. Lizzie was twenty-eight when she met the Professor, as Agassiz was popularly known. This might explain her mother's initial interest in introducing the forty-three-year-old Agassiz to her daughter.[9] Agassiz was not the most likely groom for Lizzie. The Carys and Cabots were members of the Boston urban elite; Agassiz was middle class and from the countryside. Although he held a prestigious position at Harvard, he was originally from a family of clergymen in rural Switzerland. His hard work, determination, and intelligence had taken him far from his origins, but he would always struggle for money to fund his research. Furthermore, he was a widower with three children (his estranged wife had died in Europe in 1848) and was fifteen years Lizzie's senior.

Louis Rodolphe Agassiz had arrived from his native Switzerland in the United States in 1846, invited by John Amory Lowell to give a series of public lectures at the prestigious Lowell Institute.[10] Mentored by the great French naturalist and zoologist Georges Cuvier, and then by Alexander von Humboldt, Agassiz had achieved significant notoriety in Europe but had yet to reach the stature of his mentors. Humboldt would be a staunch supporter of his, promoting his work, even helping fund his research.

Agassiz's first publication, as a young student, was *Brazilian Fishes* (1829), a little book that artfully described numerous species of fish collected in the Amazon by German botanists Karl Friedrich Philipp von Martius and Johann Baptist von Spix during their expedition to Brazil, between 1817 and 1820.[11] The work was superbly done and caught the attention of the scientific community. Two additional studies followed: *Études sur les glaciers* (1840), a groundbreaking study on glaciers in which Agassiz offered new evidence of glacial action, and *Recherches sur les poissons fossils* (1843) a major work that described 1700 species of ancient fishes.[12] Most importantly, Agassiz had devised a new system of classification for certain vertebrate fossils and had introduced a glacial theory that solved the enigma of the parallel roads of Glen Roy in the Scottish highlands, which garnered him praise from famed geologists such as Charles Lyell and Charles Darwin.[13]

It was Lyell who recommended Agassiz to Lowell. Energetic and outgoing, Agassiz revolutionized the scientific community in the United States. He made science important and exciting, promoting and advancing its professionalization. The son of a Protestant clergyman, Agassiz was a gifted speaker, who was known to convene an audience of more than 5000 people at once.[14] Following Humboldt, his approach was based on observation. In fact, when asked what his greatest achievement had been, Agassiz replied, “I have taught men to observe.”[15] Agassiz believed students should be outside, in the field, experiencing the confusing complexity of nature. Science, he argued, did not proceed in a linear fashion, as it was so often portrayed in books. Books offered coherent explanations in which all the steps had been put in a logical order, but they were not in the sequence in which they had necessarily occurred. The only way students could truly understand nature was by rigorous and meticulous observation in the field. His mandate was clear: “Study nature, not books,” he repeated like a mantra.[16] His reasoning was simple: “If you study Nature in books, when you go out of doors you can not find her.”[17] He was famously known for handing students a single fish or a whole drawer of oyster or turtle shells instructing them to simply “look.” A week later, when the student would present his assessment, it would not be uncommon to have Agassiz respond, “look again, look again!” and perhaps even add before walking away, “a pencil is one of the best of eyes.”[18] For Agassiz, drawing was a form of documentation that forced the eyes to focus on details that in turn helped uncover the object in its intricacy and specificity. As Humboldt had demonstrated, visual representation was an essential part of the process of constructing knowledge. Agassiz viewed drawings not just as a form of reproducing the object, but rather as a form of apprehending it through the understanding of all its parts. It was in fact his blending of text and illustrations, exemplified in the drawings and compelling descriptions of *Brazilian Fishes*, that had launched his notoriety within the scientific community. Agassiz's approach to science was a “modern” way of thinking that resonated with the new outlook the United States had embarked upon as it positioned itself with regard to Europe and the Americas.[19]

Cary Agassiz met the professor at her sister Mary's house, as her husband, Cornelius Fenton, had become good friends with Agassiz. The couple married two years later on April 25, 1850, in Boston's King's Chapel. Cary Agassiz's strong family ties to Harvard helped Agassiz secure his position within the Boston and Cambridge cultural elite, and their marriage

ensured that his decision to remain in the United States became permanent.[20] The couple settled in Agassiz's house on Oxford Street; later they would move to a house on Quincy Street, built for them by Harvard. For a woman steeped in tradition, Cary Agassiz seemed to adjust very well to the peculiar circumstances of her new home. She shared it with two of Agassiz's collaborators: Jacques Burkhardt, a dedicated draftsman who had worked with Agassiz in Switzerland, and one of Agassiz's students. In addition, shortly after their marriage, Agassiz's three children, Alexander, Ida, and Pauline, also moved in with them. When Agassiz arrived in the United States, he had left behind a fraught situation. His first wife, Cécile Braun, a talented artist who had helped Agassiz with his illustrations, had already moved away with her two daughters, leaving their son with Agassiz. In July 1848, she died of tuberculosis. Alexander would join his father in the United States, and the girls would do the same shortly after their father's marriage to Elizabeth. Cary Agassiz embraced her role as stepmother, and the young children thrived under her care. Alexander Agassiz, who went on to become a marine ichthyologist and renowned scientist in his own right, directed the MCZ after his father's death and oversaw its completion. He would also publish two scientific books with his stepmother, a woman he claimed fulfilled many roles: mother, guide, and friend; she even took care of his children, when he was overcome with grief, after his wife died only a year after his father.[21]

Oxford Street, where Lizzie and Louis settled, was much more than a home; it was a living laboratory. Agassiz always had guests visiting and students working on different projects, and he was continuously bringing home both live and fossil animal species. Their home had a glass tank for turtles and an alligator, and there was a cage with eagles. It would not be uncommon for Cary Agassiz to find among her clothes a snake that Agassiz had brought home a few days earlier, coiled up in one of her boots. The most curious incident was during a dinner party, when a live bear cub escaped from his cage in the cellar and crashed the party to enjoy a delicious meal that the frightened guests had left behind.[22]

Among those who socialized regularly with the Agassizes were many of the Calderóns' friends: W. H. Prescott, George Ticknor, and Henry Wadsworth Longfellow. Others included Oliver Wendell Holmes, Ralph Waldo Emerson, and, of course, Cary Agassiz's brother-in-law Cornelius Felton, who became president of Harvard in 1862. These prominent men often gathered informally over lunch or dinner, spending long hours discussing current events, art, literature, and science.

Several of these men were scholars involved in the literary *Atlantic Monthly* magazine, originally edited by Holmes and James T. Fields. Eventually, in 1855, they founded the Saturday Club, a society of historians, scientists, writers, poets, and philosophers who met once a month for dinner (from three until nine). As one of the original founding members, Agassiz quickly took on a prominent role with his expansive nature and "many-sided knowledge," motivating the club to be popularly known as "Agassiz's Club".[23]

Throughout their years together, Cary Agassiz did not just anchor her husband within a privileged social network; she was his closest partner; she gave him a home and the possibility to thrive. His cause became her cause, and she worked tirelessly along his side to raise funds and promote his projects. Despite his public charm and scientific enthusiasm, Agassiz was a solitary and undemonstrative man, and his previous marriage had worn him down emotionally. One of the few people who knew Agassiz more intimately was Charles Lyell. He intuitively understood the significance of his marriage, stating to a friend, "Agassiz, I am told, is about to marry a young lady of good Boston connections. If so he will be a New Englander for the rest of his life and will be the founder of a school of zoology (for he has many pupils) of a higher order, as he teaches them to dissect and go into all the minutiae."[24]

Taking a lesson from her husband, Cary Agassiz quickly became in her own right an educational pioneer. As a means to raise funding for Agassiz's research, she decided to run a school for girls out of her new home on Quincy Street. She envisioned an exciting curriculum that encompassed a vast range of subjects, which were not typically taught at young girls' schools. In addition to the traditional classes on literature, drawing, and art, she arranged for Agassiz and his fellow Harvard colleagues, as well as her stepson Alexander, to lecture on physical geography, natural history, mathematics, and botany.[25] The Agassiz School lasted eight years (from 1855 to 1863) and was attended by the daughters of many well-known families. It was most likely the seed for the creation of the Harvard "Annex" years later, which would eventually develop into the prestigious Radcliffe College. Cary Agassiz's own scientific education began in her school as well, as she attended all of the science lectures and took prolific notes. She soon discovered that she truly enjoyed the world of science and education.

A few years later, she published a science manual entitled *A First Lesson in Natural History* (1859) under the pseudonym of Actaea,

written for children and parents who shared a “general juvenile delight in Aquariums.”[26] The book was written as a series of four letters from “Aunt Lizzie” to her nieces, Lisa and Connie, in which she tells them stories “not about little boys and girls, but about animals.”[27] Under the guidance of Agassiz—whom she explicitly thanks—she displays her aptitude for crafting scientific knowledge into a collection of accessible “true stories” about sea creatures. Beginning with the sea anemone, she recounts its transformation from a rather dark soft ugly substance into a beautiful flower-like form with long graceful feelers that slowly creep out from the inside of the animal. Underscoring the importance of patient and careful observation, she gently coaxes her readers to observe: “Now we must watch him long and patiently.”[28] Her factual yet poetic descriptions coupled with numerous drawings are geared at highlighting the pleasure of discovery. She makes science accessible because it incites curiosity and emotion. As Nina Baym highlights, she brings her young readers into the text actively and imaginatively by focusing on the senses.[29] She imagines walking with her nieces in the summer in Nahant through the slippery seaweed in search of a sea anemone. At first, they will only see a “brown soft lump,” in some dark corner among the rocks, “ugly and unattractive.” Patience and careful handling, however, will give way to a wonderful surprise:

> But watch him,—slowly, very slowly, for he has not the power of any quick motion,—he begins to expand,—the little soft ball rises gradually, till it stands up, as it does in the picture you see here,—from its summit it puts out long and graceful feelers growing so close that they look to you like fringes forming a sort of wreath around the top. Very slowly and softly these beautiful fringes creep out from the little animal.”[30]

Nature comes alive in Cary Agassiz’s narrative. Her detailed descriptions are geared at stimulating the senses and the aesthetic pleasure of discovery. Six years later, she co-authored with her stepson Alexander what Baym considers “a more grown-up, more comprehensive” version of her first book.[31] Published the same year as her trip to Brazil, *Seaside Studies in Natural History: Marine Animals in Massachusetts Bay* (1865) is an attempt to present a popular book on facts about “marine animals common to our shores.” Following Agassiz’s principles of classification, Cary Agassiz presents a scientific discussion of radiates, which includes visual and tactile descriptions. Both texts are essentially guides instructing the general public about marine life.[32]

Cary Agassiz's style of writing about nature reflects women's approach to science and scientific writing, especially during the first half of the nineteenth century. Her language is delicate, guided by aesthetics, not determined by technical terms; she detains her gaze on the beauty of the natural object, searching for metaphors to highlight its elegance, paying less attention to its classification. Although women's professionalization in science would occur during the second half of the century, they had not been excluded from the world of science. Early on, they attended public lectures on science just like men did; there were even popular journals designed for women such as the *Lady's Book*, edited by Sarah Hale since 1837, which included articles about science. But there was a considerable ambivalence among women as to how to approach science and even what kind of language to use. Until women became professional scientists, their ambivalence toward scientific knowledge was determined by what Baym has termed their different "styles of affiliation."[33]

Cary Agassiz does not define herself as a scientist, yet her life was constantly immersed in science. In addition to her own writing, she participated in and helped organize her husband's two major scientific expeditions—the Thayer expedition to Brazil (1865–1866) and the Hassler expedition to South America (1871–1872)—both of which she carefully documented. She also helped set up and run the coeducational Anderson School of Science on Penikese Island, off Buzzard's Bay.[34] In 1869, she was elected to the American Philosophical Society, the same year as astronomer Maria Mitchell was elected. Her marriage to Agassiz gave her a direction in science and education that she fervently embraced and extended beyond his lifetime. After his death, she would select and compile his letters into his biography and continue to work in education. His biography, *Louis Agassiz: His Life and Correspondence*, is framed as a collection of letters, fragments of journals, and facts, which she claims to simply contextualize; yet it is a sophisticated and nuanced editing of her husband's life and works geared at securing his legacy.[35] In 1894, using her connections and fundraising skills as well as her experience running her own school, Elizabeth Cary Agassiz became the founding president of one of the preeminent liberal arts colleges for women in the Unite States, Radcliffe College.[36] Louis Agassiz was well aware of the role his wife played in his success, emotionally

as well as professionally. He openly confessed to a friend, "Without her I could not exist."[37]

A Troubled Science

By mid-century, the United States was at the height of its nationalist expansion, swiftly spreading to the west and south of the continent. Two forces moved the country: One was a material desire for progress; the second was an idealistic effort to advance culturally and intellectually, in which scientific knowledge was considered a fundamental tool for growth. At the end of the Mexican-American War (1848), the United States had doubled its size with the annexation of Texas, the control over its coveted Mexican territories, and the addition of the southern part of the Oregon territory. As the nation expanded, the emergence of a national culture distinctly "American" in its content and mode of expression became a pressing issue.[38] Agassiz quickly realized this and embraced the building of Americanness in science. In the preface to his 1848 *Principles of Zoology*, co-authored with Augustus Gould, the authors state: "No similar treatise now exists in this country, and indeed some of the topics have not been touched upon in the language, unless in a strictly technical form, and in scattered articles." Emphasizing the patriotic importance of their work, the authors go on to stress: "Being designed for American students, the illustrations have been drawn, as far as possible, from American objects."[39]

Agassiz was well aware of his founding father role and fostered it constantly. His success was predicated on making science accessible and captivating, and to an extent, national. He wanted students to be engaged by the concrete world. He firmly believed in the separation of scientific inquiry from religious beliefs. This allowed him to pursue his science through induction. Yet, as a creationist, he believed the observation of the concrete world would lead to abstract thought processes and "produce more enlarged ideas of man's relation to Nature," which would eventually substantiate "more exalted conceptions of the plan of Creation and its Great Author."[40] In essence, for Agassiz, the study of nature affirmed divine creation, a deeply held belief that permeated his science.

When Agassiz arrived in the United States, new disciplines were beginning to emerge within the sciences. The demand for new colleges, teachers, scientific societies, and journals became vital. Agassiz's work and personality seemed to embody the US ideological vision of science and progress

perfectly. His European credentials, his broad scientific knowledge and curiosity, his stimulating lectures and charm, as well as his capacity to engage the general public and distinguished scientists alike made him a sort of a cultural celebrity.[41] He, in turn, was also impressed with the United States, struck by the reigning determination to educate the population at large, and the fervor with which scientists undertook their study and the building of their collections. Echoing Emerson's idealism and view of nature, Agassiz was seduced by the desire to instruct scholars and citizens through his work and lectures on the importance of scientific research and especially on the spiritual imprint of nature's creative powers. In a letter to his colleague, French zoologist Henri Milne-Edwards, he noted "What a people! … Their look is wholly turned toward the future … nothing holds them back, unless, perhaps, a consideration for the opinion in which they may be held in Europe. This deference toward England (unhappily, to them, Europe means almost exclusively England) is a curious fact in the life of the American people."[42] In his view, if US scientists were to chart their own territory, create their own schools and institutions, they needed to know (continental) Europeans a little better, in order to build their future. Thus, in 1847, when Harvard created a position for him at the newly founded Lawrence School, he accepted enthusiastically. In his mind, he would free the United States from foreign "tutelage" and, in doing so, he would become a legitimating authority in the advancement of science in the United States.[43] Reflecting on his decision to stay, he reveals his insightful perception of US scientists and his desire to share their impetus:

> [I] have formed a high opinion of their acquirements, since I have learned to know them better, and I think we should render a real service to them and to science, by freeing them from this tutelage, raising them in their own eyes, and drawing them also a little more toward ourselves … these men are so worthy to soar on their own wings, why not help them to take flight? They need only confidence, and some special recognition from Europe would tend to give them this.[44]

Appropriating the same role Humboldt had had for Latin America, Agassiz assigns himself an equally authoritative position placing himself as the legitimizing force, the "special recognition," for US American scientists. This maneuver, in turn, secured his own success (Fig. 2).

Fig. 2 Louis Rodolphe Agassiz. Photograph by Augusto Stahl and Germano Wahnschaffe, Rio de Janeiro, Brazil, 1865, courtesy of the Coleção Princesa Isabel.

Despite Agassiz's brilliant career, his legacy remains severely tarnished. Although he was instrumental in promoting change in the United States, he was unable to keep up with the scientific thinking that led to evolution. His anti-evolutionary and polygenist theories, as well as his highly controversial racist viewpoints, eventually left him isolated from the scientific community by the time of his death in 1873.[45] Still, many of his students believed that he would have eventually accepted evolution; he simply needed more time to understand it in different terms.[46] Highlighting this point, at one of the memorial services, his former student, geologist Joseph LeConte, explained how Agassiz's methodology

indirectly "prepared the whole ground and laid the whole foundation for the modern doctrine of evolution." Aligning Agassiz with Copernicus, Galileo, Linnaeus, and Buffon, among several others, as men who opened the way to new fields of study, LeConte concludes that in this sense, "Agassiz is the great Apostle of evolution."[47]

The decline of Agassiz's prestige can be explained in part by the transformation in scientific thought and the new paradigms developed to understand nature and the origin of life. One of the key points of this transformation was the religious shift in scientific research. Until mid-century, the possible conflict between scientists and their religious tenets seemed for the most part negligible; in fact, the elaborate and intricate design of nature and living species seemed to reinforce the belief that God had designed the world, created all living things, and maintained them in majestic permanence. Questions regarding this balance had been raised since the eighteenth century, but it was only in the 1850s that scientists began to accumulate substantial evidence of geological changes and species variation to seriously unsettle the reigning harmony.[48] In 1856, Lyell noted, "belief in species as permanent, fixed and invariable … is growing fainter."[49] The process, however, was very slow. In the United States, even as schools, lyceums, and observatories sought to cope with the growth of scientific knowledge and its dissemination, a concerted effort was made to maintain harmonious relations with religious beliefs. The Lawrence School, for example, stipulated that students should "attend religious worship," and John Lowell Jr. of the Lowell Institute left precise instructions in his will that students were to take a course once a year on "the historical and internal evidences of Christianity."[50]

As a creationist, Agassiz believed the world had been created according to a divine plan, and it was the scientist's task to uncover that divine order through direct observation. He recognized that change and development were everywhere in nature and could be observed in the life history of the embryo—but this process in his view was fixed and determined by the divine Creator. In his quest for the origin of life, he focused on fish fossils because they were present through nearly all the geological ages. He established a correspondence between the scales and skeleton of a fish and its internal organs. This explained why different species existed in different regions without any clear connections. Following Cuvier's theory of catastrophism, he maintained that the Earth had been periodically hit by global catastrophes, after which new species of animals and

plants had appeared. Fossils did not record ancestral history of contemporary forms, but rather, as Cuvier had argued, they recorded a history of successive extinctions.[51] For Cuvier, the biblical flood had been the last catastrophe; for Agassiz, it was ice. His glacier theory, which proved to be a fundamental contribution to the understanding of natural history and won him international recognition, was in his view a clear example of the power of the Creator. By examining the layers of the earth, geologists were beginning to understand the earth's changes, and the study of paleontology helped corroborate these changes. Agassiz's reasoning was that ice masses had moved forward and retreated, grinding the earth with different contours, depositing drift, boulders, and primitive rocks, thus explaining the appearance and distribution of mysterious land configurations.[52] This accounted for patterns of extinction of flora and fauna, known only through fossil remains, as well as through their particular geographical distribution. Much like the inhabitants of Macondo, Gabriel García Márquez's fictional town of *One Hundred Years of Solitude*, who had attributed magical powers to ice, Agassiz considered glaciers, "God's great plough," a destructive and chaotic natural force that could only be understood as part of a divine plan.[53]

Agassiz's glacial theory offered scientists empirical corroboration of change, yet for him, it anchored his belief in the fixity of species because it enabled him to dismiss any disturbing resemblance between past and present.[54] This is the point LeConte considered would have eventually led Agassiz to reconsider his conclusions, but his resistance to a new kind of science in the end had a devastating effect on his legacy.[55]

In 1859, the publication of Charles Darwin's groundbreaking work, *On the Origin of Species*, stirred both scientific and religious communities. Although natural selection was not geared at disproving God, its implications questioned God's balanced design of unity because it introduced the concept of strife in nature.[56] What was remarkable about Darwin's analytical approach was that using the theory of plausibility, he attempted to translate into new forms the preexisting questions that naturalists and geologists had been addressing, and in the process, he radically altered their meaning; among those reformulated questions was the designfulness of organic nature. Darwin invited his readers to imagine how natural selection might have brought about changes that could actually be observed.

Agassiz dismissed evolutionary theory because it did not offer proof; it was in his words, a "scientific mistake."[57] He argued that theories that

presupposed change as a result of physical agents were as false as they were fanciful; they were "the curse of science."[58] In his copy of *On the Origin of Species*, he highlighted numerous passages he found disturbing. In one instance, on the margins of a section in which Darwin speculated on the transformation that could affect the black bear in North America through natural selection rendering it more like an aquatic creature, he wrote: "This is truly monstrous!"[59]

Others criticized Darwin's thinking as well. Biologist and paleontologist Richard Owen asserted, "We do not want to know what Darwin believes & is convinced of, but what he can prove."[60] Darwin's account of the origin of species was shocking to the religious and scientific communities because it implied a world without morality and questioned religious truths.[61] Although he did not give proof, he offered highly probable explanations regarding the development of new species: They were created by and evolved according to processes that were entirely natural, chance-generated, and blind. It was a new way of thinking.[62]

Agassiz would take on Darwin's theory to prove its fallacy. In 1859, he debated fellow Harvard colleague, botanist Asa Gray, at the American Academy of Arts and Sciences, where he demonstrated he was familiar with the factual evidence advanced by Darwin, but not with the logic that bolstered his argument.[63] This new science operated according to probabilities; it was a science that found plausible, persuasive explanations as patterns in the midst of indeterminate events.[64] Agassiz found this unacceptable and focused instead on the "methods by which scientific truth has been reached."[65] His approach was inductive, founded on close observations of nature and comparison of facts that ultimately, in his view, reinforced divine creation, because "facts are the words of God."[66] Furthermore, Darwin could not explain why some characteristics remained the same while others did not under conditions that Agassiz argued should effect change. Hence, as a steadfast creationist, Agassiz maintained that Darwin's argument did not stand up to God's design:

> Until they can tell us why certain features of animals and plants are permanent under conditions which, according to their view, have power to change certain other features no more perishable or transient themselves, the supporters of the development theory will have failed to substantiate their peculiar scientific doctrine.[67]

Revealing a different kind of logic, Asa Gray reproached Agassiz for overriding explanations, "by affirming, that as things now are, so they were at the beginning; whereas facts of the case … appear to demand from science something more than a direct reference of the phenomena as they are to the divine will."[68] Agassiz remained undeterred from his position even as the scientific community began to lean toward evolution. His trip to Brazil provided him with what he believed was a unique opportunity to disprove Darwin and thus reestablish his position in the scientific field.

A Collaborative Venture: The Thayer Expedition

In 1865, physically exhausted after working tirelessly fundraising and building his collection for the MCZ, Agassiz departed for Brazil. The trip was originally planned for a much-needed rest to recover from a mild stroke, but when Nathaniel Thayer, a wealthy businessman, offered to finance the cost, delighted, Agassiz transformed it into a professional expedition. Traveling to Brazil was a fortuitous occasion, for despite the fact that *Brazilian Fishes* had launched Agassiz's success, he had never been to Brazil and had yet to make an important scientific voyage as Humboldt or Darwin had done before him. Furthermore, he was sure it would provide him with proof to overthrow evolutionary theory. It was in his view the opportunity of a lifetime.

The trip to Brazil would have a life-altering effect on both Agassizes. For Elizabeth Cary Agassiz, it ironically positioned her (rather than her husband) as a keen observer of nature. She described everything she saw with an inquisitive appreciation: the landscape, people, customs, the flora, and fauna. Her colorful and detailed depictions of the tropics engaged all the senses, inciting scientific curiosity. For her husband, however, the trip accentuated his scientific downfall. Determined to find proof to discredit Darwin's evolutionary theory, Agassiz returned from Brazil declaring to have found traces of glaciers in the Amazon. He also claimed to have discovered hundreds of new species, which in the end were far fewer than he had anticipated. Finally, although he did not comment much on the culture, he found Brazil's racial mixture so disturbing that it reinforced his belief in the multiple origins of humans. Hence, although Agassiz had once revolutionized science in the United States, his expedition to Brazil reinforced his racist and outmoded scientific theories.

The Thayer expedition, as it was known, set sail on the *Colorado*, a Pacific Mail Steamship, in 1865 from New York to Rio de Janeiro, and

returned sixteen months later, in early August 1866.[69] The expedition comprised a small group of Harvard scientists and students in addition to Agassiz and his wife. Among the six professionals were geologist Charles Frederick Hartt, who would return to Brazil to continue his own explorations, and Jacques Burkhardt, Agassiz's illustrator, who produced more than 2000 watercolors of Brazilian fish.[70] The other scientific members of the expedition included Orestes St. John, geologist; George Sceva, preparator; John G. Anthony, malacologist; and John Allen, ornithologist, who would become curator of birds at the American Museum of Natural History. The latter two returned to the United States because of ill health shortly after their arrival. A Brazilian engineer and naturalist, João Silva Coutinho, joined the expedition upon the group's departure for the Amazon from Rio de Janeiro, as a courtesy of Brazil's Emperor Dom Pedro II, with whom Agassiz had been in correspondence.[71] The students included Stephan van Rensselaer Thayer (Ren), Newton Dexter, William James (future psychologist and philosopher), and Walter Hunnewell, who would become the expedition's photographer (Fig. 3).[72] Given Agassiz's national popularity, his expedition attracted the attention of the US government with the hope of obtaining navigation rights through the Amazon. Gideon Wells, Secretary of the Navy, issued an order to all naval officers to provide their service if they encountered Agassiz, and Secretary of State William Seward asked US Minister to Brazil, James Watson Webb, to offer his assistance as well.

The group spent the first three months in Rio de Janeiro, where Emperor Dom Pedro II, deeply interested in all scientific studies, had invited Agassiz to give a series of public lectures and meet with other scientists. While the group prepared for their trip, they explored the city and its neighboring regions. Once ready, the expedition split up to cover different regions. Hartt and St. John headed north exploring the Atlantic coast to Bahia, making several side trips to the interior including Minas Gerais (Appendix VI), while Agassiz, his wife, and the others headed to Belém, at the mouth of the Amazon River on the Atlantic coast. From there, they continued to Manaus, following the Amazon River practically to the Peruvian border, exploring many of the river's tributaries and towns as they collected fish specimens.

The narrative of the trip was entitled *A Journey in Brazil* (1868). The authors appear as Professor and Mrs. Louis Agassiz, but the narrative was primarily written by Cary Agassiz, whose observations make up the bulk of the text. Based on her chronological journal entries, it is, however, an eclectic text filled with interruptions that dislodge the main narrative,

Fig. 3 A few members of the Thayer expedition, from left to right: William James, D. Bourget (a French naturalist residing in Rio de Janeiro recruited by Agassiz), Walter Hunnewell, S.V.R. Thayer, Jacques Burkhardt, M. Silva Coutinho, and Newton Dexter, from the Archives of the Museum of Comparative Zoology, Ernst Mayr Library, Harvard University

resembling an edited collage of textual forms (travel log, letters, formal lectures, scientific assessments, and illustrations), assembled by both Cary Agassiz and her husband.

The main purpose of the narrative is to promote Agassiz's research and scientific opinions, to create a platform for Agassiz to voice his thoughts. Hence, the narrative weaves long fragments of his lectures, scientific observations, and a number of his letters his wife transcribes (in both French and English), generally introduced by quotations. Closing the main narrative are six appendices written by Agassiz, which range from flying fishes to his brief study of human races. A number of woodcut illustrations of Brazilian scenery and local inhabitants taken from photographs or sketches are interspersed throughout the text.

Unfortunately, there are no images of Burkhardt's beautiful watercolor fish.[73] Cary Agassiz is essentially in charge of the narrative. Following Agassiz's methodology of observation, she describes her experience in the Amazon in great detail. We see her trekking through the jungle, spending countless hours traveling up the river, sleeping in hammocks, and fighting off insects; we also hear her thoughts on tropical nature, women, slavery, and Brazil's racial diversity, while Agassiz spends his time "geologizing and botanizing."[74]

In addition, numerous footnotes from both Cary Agassiz and her husband punctuate the text. These footnotes create a confusing additional narrative layer, expanding the main text in multiple directions. Some footnotes are informative, broadening the context as they refer to events occurring in Brazil or the United States, or they provide bibliographic references or translations to the letters included in the main narrative. A group of footnotes, signed by Louis Agassiz, extend his scientific explanations, which can at times occupy more than a page.[75] For the most part, his footnotes as well as his voice within the main narrative help encase the text within a scientific framework. He interjects names of species, professional opinions, and corroboration of facts. Finally, some footnotes shift the timeframe of the narrative, anticipating events or commenting on what happened later, even contradicting what was stated in the main narrative.

These footnotes constitute a sort of meta-narrative, written by Cary Agassiz and her husband. For example, not wanting to "mislead" her readers after an exquisite breakfast banquet for 200 people in their honor, hosted by the President of the Amazonian Provinces, Antonio Epaminondas de Mello, Cary Agassiz reminds readers in a footnote that in the Amazon, "there are many things essential to the comfort of the traveller not be had."[76] Rather than editing the text itself, these footnotes are like afterthoughts about the main narrative. In another instance, after asserting he had collected almost two thousand new species, Agassiz clarifies in his footnote that his collection, currently housed at the museum, still needs to be critically examined to confirm all the species.[77] Earlier in the text, upon arriving at Monte Alégre, a town in the Amazon at the mouth of the Gurupatuba River, Cary Agassiz describes the sight as "rather somber" with overgrown vegetation, "coarse, rank shrubs which spring up everywhere in this ungenial soil." She adds a footnote clarifying that after a longer stay she has "learned to know its picturesque nooks and dells, where a luxuriant vegetation is

watered by delicious springs." Nevertheless, she decides not to edit her first entry stating in the same footnote: "I feel that the above description is superficial; but I let it remain as perfectly true to my first impressions."[78] The footnotes can even reproduce an implicit dialogue between husband and wife. For example, after Cary Agassiz describes the red drift with stratified gray rocks she sees cropping out, a footnote signed by Agassiz refines her comment: "In the course of the investigation, I have ascertained that this slaty rock, as well as the hard sandstone along the river-banks at Manaus, forms part of the great drift formation of the Amazons, and that there is neither old red sandstone, nor trias, here, as older observers supposed."[79]

The footnotes expand the text, creating a multilayered discourse that not only blends scientific and personal observations but also displays how time and experience shape the process of observation. Observation in this text is revealed as a complicated process in which subjectivity plays an integral part in the construction of knowledge. It is shaped by first impressions, followed by revisions made after more sustained and detailed observations, and comparisons that highlight distinguishable features. It is a process that unfolds over time and must be readjusted. Instead of blending this process into a coherent and unified narrative, *A Journey in Brazil* exposes different stages of observation.

Despite the intertwining of discourses, it is evident from both the main narrative as well as the footnotes that Louis Agassiz's discourse is informative, serious, and scientific, whereas Cary Agassiz's narrative and footnotes are of a more personal nature; they are captivating descriptions, commentaries, anecdotes, and "minor" pieces of information or clarifications. The result is an abundance of digressions in the narrative, creating a web of entangled discourses. The entanglement is such that Cary Agassiz directly addresses the structure of the book (in a footnote): "The way in which this volume has grown up, being as it were the result of a double experience, makes it occasionally difficult to draw the exact line marking the boundaries of authorship; the division being indeed somewhat vague in the minds of the authors themselves."[80] In this passage, she owns her collaboration as she compares the volume to a child "growing up," bearing the indistinguishable imprint of both parents.

The digressions also occur because the scope of the narrative exceeds the initial intent. Cary Agassiz's declared goal is to bolster her husband, show "the comprehensiveness of his aims and the way in which he carried them out."[81] But her gaze oscillates between his inexhaustible and tedious collecting of fish, butterflies, turtles, palms, and her own

impressions of the landscape and the people she meets, which she finds much more captivating and are in fact the force that sustains the narrative. The difficulty of her task is to observe and describe nature from her own perspective while trying to feature her husband and his discoveries; this perhaps explains the lack of a consistent viewpoint. Sometimes, she blends her observations with his opinions: "It should be seen that the continent once presented an unbroken line, as Mr. Agassiz believes …" or in another instance, she states: "Mr. Agassiz has had an opportunity of going on shore and examining this formation. He finds a thick bed of ferruginous sandstone … These beds are overlaid by a bank …"[82] When she figures too prominently detailing her activities, she swiftly includes his opinion or his voice: "I have said nothing of Mr. Agassiz's observations on the character of the soil since we left Rio, thinking it best to give them as a whole."[83] In the following page, she includes a letter her husband wrote to the Emperor in French (with the footnoted English translation) with his assessments. Other times, she simply transcribes Agassiz's lectures, which, given their scientific tone, stand out for their drabness.

Another element complicating the narrative is the implied audience, which Cary Agassiz knows to be mixed, a combination of scientists and curious readers. Shortly after discussing the town and people of Breves—a small settlement in the lower Amazon, and expressing her excitement about its vegetation, she states: "For those of my readers who care to follow the scientific progress of the expedition as well as the thread of personal adventure, I add here a letter on the subject." In the letter to a local authority of Pará, Louis Agassiz announces having found ten new species and proudly declares: "Considering all, it seems to me already apparent that our voyage will make a *revolution* in Ichthyology."[84] Longfellow noted this "mingling" of voices but found it very "felicitous" and compared it to "the intermingling of masculine and feminine rhymes in a French poem."[85] Agassiz does not enumerate the species nor does he describe them in detail; he simply pronounces his achievements, in much the same way Asa Gray faulted him for discarding Darwin's science. This contrasts sharply with the tone used by Cary Agassiz, who—not having anything to declare—describes what she sees with emotion and detail, inciting her readers to follow her through the tropics.

Cary Agassiz's collaboration with Agassiz can be seen as fulfilling the mandate of the dutiful wife. For women educated in the "cult of true womanhood," intellectual achievement for its own sake was not

necessarily a virtue.[86] The social mandate for women was to accompany and support their husbands, but not to compete or draw attention from them; hence, even women fully engaged in scientific research remained on the periphery of the scientific community until well into the nineteenth century. However, in several private letters, Cary Agassiz confesses to her family that she eagerly awaits reviews of *A Journey*, which she termed "our copper mine."[87] While her goal may have been to promote her husband, she is conscious of her own contribution in the process and cares deeply about the results. When commended by others she shares the praise with her family while pleading them to keep the comments private. As she divulges Dom Pedro II's compliment regarding an article she had written about her trip, she confesses, "The Emperor had read my article in the *Atlantic Monthly*, and was very pleasant about it. This is a strictly private epistle, because I don't tell these little bits of egotism for the benefit of anybody but my own family."[88]

While she may not have had any technical scientific training, Cary Agassiz had learned about scientific research through her work with her husband. She certainly believed the acquisition of knowledge was important and should be shared, and she was particularly concerned about creating opportunities for women to learn. She profited enormously from her husband's enthusiasm and passion, taking advantage of all that was offered to her through him, and she enjoyed it. By 1867, women were already engaged in scientific research regardless of their professional status. Furthermore, as Elizabeth Keeney argues, "The terms 'amateur' and 'professional,' as commonly applied in modern usage, are simply not useful or accurate categories for the nineteenth century."[89] Cary Agassiz, however, preferred to stay within the confines of the more traditional role of spouse and thus stressed her role of "unprofessional" rather than embrace her role as scientist.[90] Yet, for someone who quietly worked alongside her husband and shied away from publicity, her commencement speeches at Radcliffe, thirty years later, demonstrate an important shift in her understanding of what having knowledge meant. In her commencement address in Sanders Theatre, on June 23, 1896, she stated:

> [O]ur first task (at least so it seems to me) is to adapt the new means put into our hands to the conditions and methods of a woman's life, which must be in a great degree her own, and in accordance with her natural endowments and limitations. We have to show that the wider scope of knowledge and the severer training of the intellect may strengthen and

> enrich a woman's life, and help her in her appointed or chosen work, whatever that may prove to be.[91]

While encouraging women to pursue their education, Cary Agassiz also expected them to maintain the traditional values of class. She thought they should be well bred, have good speech and manners, be kind and gentle, and have sympathy. These were traits that gave women "a strong foundation." Yet, she also instilled in them the desire to pursue their interests, whatever they may be. She knew that the territory ahead was unchartered, and that women might even venture into politics. While she had mixed feelings regarding women's professionalization, she did not want to impose her personal choices on them; on the contrary, she wanted women to "lose nothing which belonged to the ideal womanhood of old, but only add to it increase of knowledge and wisdom as the handmaidens of a higher usefulness."[92]

It is not clear to what extent Cary Agassiz shared her husband's ideas, although even if she disagreed, she would have never publicly stated anything. In her narrative, for the most part, she simply transcribes Agassiz's views, particularly regarding his glacial theory: "The more he [Agassiz] considers the Amazons and its tributaries, the more does he feel convinced that the whole mass of the reddish, homogeneous clay, which he has called drift, is the glacial deposit brought down from the Andes and worked over by the melting of the ice which transported it."[93] She is faithful to his scientific theories, but at times, she is careful not to merge her views with them. In those instances, her tone is of a scribe, who matter-of-factly relays his opinions. Her views are separate because her sphere is essentially "non-scientific." She avoids addressing evolutionary theory directly—that would be the scientist's job—yet throughout her writing she seems to be aligned with her husband's position. In *Seaside Studies,* when addressing the development among animals, she states: "The comparison of embryo forms with fossil types is of course difficult and must in many instances be incomplete," however, reasserting her husband's position, she notes that: "whenever such comparisons have successfully been carried out, the result is always the same; the present representatives of the fossil types recall in their embryonic condition the ancient forms, and often explain their true position in the animal kingdom."[94]

Of course, as a dutiful wife, who deeply admired her husband, Cary Agassiz would always submit to his opinions, even if she did not share

them. She knew this would be the case from the moment they were together, as she wrote to Agassiz during their brief courtship: "We have such opposite views on some essential points, that it is not probable we shall in all be able to agree, even after the most deliberate discussion. In such cases one must yield, and it is surely from me that the concession ought to come."[95] The few hints of discrepancy offered in her journal and private letters underscore her concern for how his views were perceived by their social circle. Her biography of Agassiz after his death reflects her effort in crafting an image of "a scientific hero," mitigating any views that might present him negatively.[96] This would be particularly evident regarding Agassiz's views on race, which become much more unsettling after his trip to Brazil.[97]

In general, critics citing *A Journey* regard Louis Agassiz as its guiding authority as well as its primary author, even when addressing quotes obviously written by Elizabeth Cary Agassiz.[98] Hence, it is not surprising that critics such as Nina Baym and Christoph Irmscher contend that Cary Agassiz performed a "disappearing act," effacing her own contributions or simply positioning them as a weaker feminine perspective.[99] While it is true that by 1850 a number of women associated with professional scientists participated or were instrumental in the discoveries accomplished by men, Cary Agassiz preferred to position herself more as an "appreciative onlooker" rather than as a collaborator.[100] She places herself at the margins of science by stating that she prefers to read a book or go for a walk while Agassiz focuses on his work. But as a travel narrative, her entries are the ones that provide the most interesting information about Brazil, "precisely because she does not efface herself or her experiences," according to Linda Bergman.[101]

These critical discrepancies are grounded in two distinct concepts of knowledge: the objective and the subjective. Both concepts are interlaced while they simultaneously pull in contradictory directions straining the text. As Cary Agassiz voices her "unscientific opinions," based on detailed personal observations of the landscape and people, scientific knowledge is discretely pushed to the margins. Aware of this discursive hybridity, Agassiz explains in his preface the structure of the book:

> Partly for the entertainment of her friends, partly with the idea that I might make some use of it in knitting together the scientific reports of my journey by a thread of narrative, Mrs. Agassiz began this diary … our separate contributions have become so closely interwoven that we should

> hardly know how to disconnect them … In this volume I have attempted only to give such an account of my scientific work and its results as would explain to the public what were the aims of the expedition, and how far they have been accomplished.[102]

The scientific discourse, serious and empirical, merges with the fictional or minor "thread" that turns the text into "entertainment." Each discourse reflects two different types of knowledge: the scientific, through Agassiz's lectures, research, and opinions, and the subjective and personal travel account that threads together his reports through incidents and observations about Brazil, which belong to Elizabeth Cary Agassiz. The latter tells us about Brazil, its geography, flora, and fauna, including its inhabitants. In fact, it is because of this "entertaining" discourse that *A Journey* presents a rich and valuable portrayal of the country's landscape.

Compared to other travel narratives like Henry Walter Bates' *The Naturalist on the River Amazon* (1863), which Darwin considered "the best work of Natural History Travels ever published in England,"[103] Darwin's own *Expedition of the Beagle* (1839), or Humboldt's *Personal Narrative*, *A Journey in Brazil* received little attention from professional scientists. Perhaps because of its amalgamation of discourses, or its wanting of a heroic scientific figure like both Bates and Darwin, it was not as seriously considered, but friends such as Longfellow and Emerson praised it, and the poet Oliver Wendell Holmes eloquently remarked: "So exquisitely are your labors blended, that as with the Mermaidens of ancient poets, it is hard to say where the woman leaves off and the fish begins. The delicate observations from the picturesque side relieve the grave scientific observations."[104] For Holmes, science, through careful and direct observation of the outside world, appears opposed to the subjective world, in which the observations are "delicate" and pleasing to the senses. The contrast between the fish (serious and concrete) and the mermaid (imaginary, mythical, and intangible) encompasses two forms of knowledge as well as two modes of perception: male versus female. Perhaps the reason that *A Journey* was not taken as seriously by the scientific community was because, as Holmes suggests, both discourses were too tightly knit, or perhaps because Agassiz's science was tainted by "his" imaginary conclusions, which in turn highlighted Cary Agassiz's observations, full of detailed descriptions, as more scientific.

Agassiz's former student, William James, also noted the amalgamation of discourses in his letter to the authors commenting on their book, "[I]t was even more interesting than I thought it would be … you have so skillfully picked out the more picturesque incidents and sandwiched the narrative with science so art fully that one is led on from chapter to chapter and finish the book without knowing it."[105] In James' reading, Agassiz's "scientific observations" have been pushed to the sidelines; they are not the meat of the text, but rather the frame for the more substantive part, the "incidents" through which Cary Agassiz observes Brazilian life and nature. Perhaps, his assessment is most poignant not only for highlighting the double discourse but also for his subtle understanding of how the narrative is crafted, chronologically through incidents, a series of seemingly incoherent events that entertain and give life to the expedition.

Agassiz's view of Brazil is much less interesting than his wife's, in part because he is primarily interested in collecting and is determined to find proof to corroborate his glacial theory and disprove evolution. Agassiz reads Brazil for what it offers in terms of science. Yet, his determination to discredit evolution leads him to undermine his own "scientific observations" as he anxiously pushes his conclusions forward without solid evidence. In their historical study of "objectivity," Lorraine Daston and Peter Galison note that as notions of objectivity and subjectivity were revamped by Kantian philosophy and became defining in the quest for scientific knowledge, the fear in the nineteenth century was that the subjective self might idealize or regularize observations to fit theoretical expectations; in Daston and Galison's words, the fear was that the self would "see what it hoped to see."[106]

Agassiz's obsessive quest to find ice in the Amazon exemplifies the process of "making science fit." He hoped to find traces of the continental ice sheet to negate the continuity of species and thus refute Darwin. Although finding traces of ice in the tropics seemed unlikely, Agassiz believed the ice age was cosmic:

> Indeed, when the ice period is fully understood it will be seen that the absurdity lies in supposing that climactic conditions so intense could be limited to a small portion of the world's surface. If the geological winter existed at all, it must have been cosmic; and it is quite as rational to look for its traces in the Western as in the Eastern hemisphere, to the south of the equator as to the north of it.[107]

Agassiz spent considerable time studying the Amazon's "stupendous" geological structure, reflected in his extensive discussion that encompasses most of chapter XIII of *A Journey* (a total of 44 pages). He argued that the drift he found was proof of Brazil's glacial past—though what he interpreted as such were layers of laterite soil, extremely common in the tropics.[108] Nevertheless, upon his return, at the National Academy of Sciences in Washington DC, he announced he had found "Traces of Glaciers under the Tropics."[109] This shocked the scientific community and, reinforcing the growing distance between Agassiz and his colleagues, prompted the influential geologist and one-time admirer and friend of Agassiz, Charles Lyell, to state "Agassiz … has gone wild about glaciers."[110]

Throughout *A Journey* Agassiz contends that all the different deposits belonged to the ice period and, as if already anticipating his critics, asserts, "I am aware that these suggestions will appear extravagant. But is it, after all, so improbable that … in this epoch of universal cold, the valley of the Amazon also had its glacier poured down into it from the accumulations of snow in the Cordilleras?" His answer overrides facts and even probability as he affirms: "The movement of this glacier *must have* been eastward … It *must have* ploughed the valley bottom over and over again."[111] Going against his own theory of avoiding conjecture, Agassiz subtly admits lacking evidence; nevertheless, he asserts the glacial origin of the Amazon: "there cannot, in my opinion, be any doubt" he insists.[112] Categorical and determined, Agassiz affirms over and over his claims with emphatic pronouncements repeating: "I reject," "I have found," "I can truly say," "it seems certain," and "it must be," as if his own remarks, like God's words, could plow through the scientific debates and stand as proof.

Cary Agassiz has no particular theory to prove; her task is to observe both the tropical landscape and her husband. Regarding the tropics, she does not hide her views; instead, she expresses them, recognizing the possibility of misreading her surroundings and even changes opinion. As she admits in a letter to her mother, her first impression of Rio de Janeiro was extremely disappointing: "I thought it was the most rickety-tumble down specimen of picturesque decay I had ever seen and that one good vigorous kick would knock it all down."[113] But as the journey continues, she changes her mind, reassesses her opinions, and even enjoys the places and people she meets. She is able to do so because she submerges herself in Brazil, trying to adapt to its rules and customs

as a compliant guest, while reflecting on herself and her pre-conceived notions of tropical culture. In his review of the text, Raimundo Morais praises this gesture of compliance, stating that: "she was an Amazonian in the Amazon."[114] As a true proper lady, she was willing to follow the local etiquette; hence, if she had to sit, she sat, if she had to bathe, she bathed, whereas Agassiz's gaze "never shifts."[115]

Throughout her journey, Cary Agassiz is mesmerized not only by tropical vegetation but also especially by the people and lifestyles she encounters. Despite her initial uneasiness, she soon adjusts to the climate and rhythm of Brazilian culture, taking pleasure in her discoveries and adventures. Aware of her privileged situation, she confides in a letter reflecting upon her own role: "As I lay in my hammock looking up at the beautiful constellations, for the sky at night is wonderful here, I say to myself 'can this really be Lizzie Cary floating up the Amazon with a parcel of naturalists or shall I come to myself and find it all a dream'."[116] This joy of discovery and her genuine curiosity permeate her narrative transforming it into a perceptive and rich picture of Brazil. It is for this portrayal that we should read *A Journey in Brazil*.

Representing Tropical Nature

For the European or North American traveler, tropical nature demanded a willingness to endure extreme hardships as nature unfurled its overwhelming force. Even Humboldt, who had survived five years of extreme conditions, had found himself in dire and frightening situations. Henry Walter Bates and Alfred Russel Wallace are perhaps the most emblematic travelers of the tropics, as they headed straight to Pará (today Belém do Pará), where they battled hordes of insects and dangerous reptiles, endured extreme heat and hunger while suffering high fevers from malaria. The members of the Thayer expedition, however, ushered a new kind of travel through the tropics as they received governmental support from Brazil and eased their way through the bustling metropolis of Rio de Janeiro. Yet despite being a thriving cosmopolitan city with numerous urban amenities, Rio de Janeiro's tropical setting and distinct racial profile shocked its visitors. Cary Agassiz found it had an odd feeling of progress and backwardness at the same time; its urban amenities concealed within the exuberant tropical geography and its population daunting.[117]

Until the 1850s, few US American travelers had visited Brazil.[118] Unlike with Mexico, the United States recognized Brazilian

independence shortly after it was declared, but its economic interests there grew slowly. The United States acknowledged Brazil's economic potential, given its vast territorial extension, but its culture and geography remained distant. Furthermore, the Portuguese had been just as vigilant as the Spanish in protecting their territories from foreign excursions, a policy that continued to be implemented by Dom Pedro II, which also accounted for the lack of US travelers heading to Brazil.

Since independence, Brazil had undergone numerous economic and social changes that were reflected most notably in its new capital, Rio de Janeiro.[119] Emperor Dom Pedro II's official crowning in 1841 marked the beginning of a period of political stability and economic prosperity that would last 58 years.[120] During his reign, he transformed Brazil, modernizing the country and bolstering its economy with the lucrative coffee boom that shifted the economic center from the north, where sugar had been the dominant resource, to the south, where coffee production was located. By 1850, Brazil led the world's coffee production.[121] Dom Pedro introduced new technologies to unify the vast country, such as the telegraph, railroads, and the use of steamships, and he pioneered the transition from slave to salaried labor. Rio de Janeiro, where the imperial court resided, was the emblem of the country's monumental transformation. However, despite Brazil's rapid growth in wealth, Rio's development was unique and could not be considered representative of the country as a whole. As Lyman Johnson and Zephyr Frank underscore, it "was the political, financial and cultural capital of a largely agrarian and regionally diverse country."[122]

The city's rapid urbanization owed much of its transformation to Henrique de Beaurepaire Rohan, a military engineer who redesigned the capital tackling its urban problems and insalubrious conditions.[123] Beaurepaire's Plan of 1843 focused on installing a new sewer system and distributing potable water; he also redesigned and paved streets; implemented gas lighting; constructed public walks with elegant fountains; and established new banks, hospitals, and schools, all geared at improving the well-being of Rio's citizens. In addition to modernizing the harbor, he proposed new imposing buildings to enhance the national patrimony such as the National Assembly, the Palace of the Municipal Government, the National Library, National Museum, and Academy of Fine Arts to name just a few.[124] With the newly acquired wealth, Dom Pedro, a fervent patron of the arts and sciences, funded scientific research and encouraged the development of new institutions such as the Royal Press, the

Royal Library, the Theatre of Saint John, the Academy of Fine Arts, the Royal School, the Botanical Garden, and the Historical and Geographic Institute of Brazil, a major research center founded in 1838.[125] The city's economic growth and cultural buoyancy began attracting European immigrants and foreign investments, infusing parts of the city with new cafés and restaurants that mirrored those in Europe.[126]

In the 1850s, when resources of the Amazon valley were publicized, the United States began lobbying for its access. But the onset of the Civil War deterred efforts until 1865, when interest was zealously renewed.[127] Dom Pedro, however, remained cautiously firm in his position. Brazil had yet to exploit its river basin; hence, he did not want any foreign governments in the area. But Irineu Evangelista de Sousa, Viscount of Mauá, another key figure in Brazil's modernization who had set up commercial operations in the Amazon, strongly supported its opening to international commerce.[128] As one of Brazil's foremost industrialists and politicians, Mauá invested in railroads, banks, and navigation. In 1853, he established the navigation company, *Companhia de Navegação e Comércio do Amazonas*, which would provide Agassiz with transportation along the river.[129] After the US Civil War, Reverends D. P. Kidder and James C. Fletcher, who had resided in Brazil for extended periods of time, renewed their efforts in lobbying both US and Brazilian authorities to allow commercial trade.[130] Fletcher shared his Brazilian contacts with Louis Agassiz and encouraged him to use his diplomacy and charm to advance relations between both countries. While Agassiz cannot be credited for the opening of the Amazon to international traffic in 1867, given his personal relationship with the Emperor, and his numerous contacts during his expedition, he most certainly had a positive role in the negotiations.

Despite Dom Pedro's apprehension about opening the Amazon to commercial trade, he wanted to promote a positive and modern image of Brazil worldwide as well as maintain his image of a model sovereign.[131] A great intellectual, passionate about languages, astronomy, mineralogy, and geology, he was deeply involved in the cultural life of his empire financing artists, musicians, writers, historians, and scientists alike. His intellectual curiosity had few limits.[132] Cognizant of Agassiz's place within the scientific community, both in Europe and in the United States, and of his intentions to create a complete zoological collection in his museum, Dom Pedro helped sponsor Agassiz's expedition up the Amazon. This was a major achievement for Agassiz as well as for the United States. In addition,

despite his personal reservations regarding Agassiz's theories, especially his glacial theory, Dom Pedro recognized the importance of having scientists of his stature present their work to the public, and therefore, he invited him to deliver several public lectures during his stay.[133] Agassiz's lectures did more than just divulge his scientific theories. In welcoming Agassiz to discuss his research, Dom Pedro was forced to open the public lectures to women, who until Agassiz's arrival were prohibited from attending these events. Agassiz insisted that his wife attend his lectures, as she was integral to the expedition (and had to take notes, of course); thus, Dom Pedro issued a decree to allow women to attend public lectures. Upon their return to Rio de Janeiro after their nine-month stay in the Amazon, during Agassiz's first lecture relaying his results, Cary Agassiz explicitly refers to this change: "It is worthy of remark, that the appearance of ladies on such occasions no longer excites comment. There were many more senhoras among the listeners than at the previous lecture, when their presence was a novelty."[134]

During their stay in Rio, while Agassiz prepared for his expedition, exploring Brazilian life was mostly left to his wife and her travel companions. Immersed within an unfamiliar and unique tropical setting, Cary Agassiz struggled to find a stable place from where to observe her surroundings and grasp Brazil's diverse landscape. As the "unprofessional" member of the expedition, she had no scientific authority to ground her observations; yet, she legitimates her narrative by acknowledging her subjective views and detailing the unique aspects of tropical life to the best of her abilities. Unlike Bates, whose book she acknowledges as a "very pleasant companion," and who had an infinite number of adverse predicaments in addition to the loss of his collection, her adventures are much less life threatening.[135] They are more modest events, such as riding down the peak of the Corcovado on horseback, finding her dress covered with insects, or sleeping in hammocks in open dirt-floor rooms with local Indians. Once the expedition sets off down the Amazon, the deck on board the steamer tripled as laboratory, dining room, and dormitory. Unaccustomed to this lifestyle of collecting and constantly traveling, Elizabeth Cary Agassiz seems to adapt seamlessly to her new and rudimentary lifestyle. She refrains from boasting about any difficulties—especially since they really had very few. Everywhere they went they had help from locals, who welcomed them into their homes, cooked, cleaned, and even obtained specimens for Agassiz. At most, the expedition's setbacks had to do with delays due to heavy rains or having

to wait for the arrival of alcohol to store specimens, but never did the expedition encounter destructive forces as Bates or Wallace did. Despite her excitement and accomplishments, Cary Agassiz cautiously avoids becoming the heroic protagonist of the expedition as Bates does, because the real scientific hero must be Agassiz. In this sense, her narrative resembles Darwin's effort to efface the presence of others in order to highlight, in this case, her husband.[136] We rarely see other members of the expedition at work. Except for Jacques Burkhardt, who was Agassiz's longtime companion and generally sat quietly in a corner drawing, the work of the other members of the expedition is absent. In other words, the independent journeys following the tributaries of the Amazon or other water basins; the crossing of mountains; exploring caves; analyzing the soil and rock formations; observing bird habits; collecting and preparing specimens of fish, reptiles, birds, and insects; and looking for fossils done by others, are mentioned in passing and mostly relegated to the last appendix of the book, which occupies only seven pages of the extensive narrative.[137]

Cary Agassiz performs a distinct balancing act in her narrative. On the one hand, she is the main voice who observes and describes. Her early impressions in particular, both of the natural surroundings as well as the people, reveal her own negotiations as she tries to steady her perceptions of tropical nature; these observations are her own. In this sense, she is far from being merely a scribe or Agassiz's shadow. On the other hand, she always tries to highlight Agassiz's work. But beyond noting him at work or relaying his comments or lectures, the pleasures, dislikes, and especially the excitement of uncovering tropical nature and its inhabitants are her own.

Her first view of Rio de Janeiro is from the steamship that brought her from Boston, where the group remained for a day before disembarking. She finds the crescent-shaped city hugging the Guanabara Bay with the sharp peak of the Corcovado and the lush mountaintops of the Tijuca and Gavea behind "exceedingly pretty" with a "scenic effect."[138] But the following afternoon, as she wandered through the streets, she is shocked by the city's urban decay, overgrown foliage, and distinct racial composition. Her impression of the city is condensed in a series of jolted snapshots. Unsettled by the general "want of cleanliness," "the absence of a proper sewage," and the city's odd narrow streets with balconied windows and peeling stucco walls, she finds the city to be a "motley scene," crowded with people of all types. Her visual collage

is composed of “half-naked black carriers,” “padres in their long coats and square hats,” “mules laden with fruits and vegetables,” a striking black woman in white muslin and turban baring her neck and arms, and another woman “almost without clothing” cradling a naked child.[139] As she sharpens her gaze, she remarks,

> Or take this as another picture: an old wall several feet wide, covered with vines, overhung with thick foliage, the top of which seems to be a stand for the vendors of fruits, vegetables, &c. Here lies at full length a powerful negro looking over into the street, his jetty arms crossed on a huge basket of crimson flowers, oranges, bananas, against which he half rests, seemingly too indolent to lift a finger even to attract a purchaser.[140]

Like most European travelers to Brazil, Cary Agassiz is struck by the country’s racial diversity. She sees blacks as indolent and lazy, blending into the landscape. But as she adjusts to Rio’s vibrant urban landscape, she is able to focus on the natural setting as well. Two days after her first outing, she amends her initial reaction, stating that if her first walk through Rio left her with “an impression of picturesque decay; things seemed falling to pieces … This impression was quite effaced to-day.” Touring the Larangeiras road, she discovers beautiful gardens, peppered with colorful Poinsettias, begonias, palm trees, and vines. And a few days later, after a drive outside the city to the “wilder scenery,” she remarks:

> Many of the trees in the region we passed through to-day seemed in the embrace of *immense serpents*, so large were the stems of the *parasites winding about them*; orchids of various kinds and large size grew upon their trunks and the vines climbed to their summits and threw themselves down in garlands to the ground.[141]

The detailed description is accompanied by an illustration from a photograph by George Leuzinger of a tree tethered by the twisted Sipo vine, in what seems to be a struggle to overcome the vine as well as other unwieldy parasites (Fig. 4). Absent in her narrative, the picture also shows a man sitting at the base of the tree, in repose. To the side, his hut emerges from the landscape with a small fire. His plow on the opposite side of the tree lays unused, almost resting, like the man himself. From a US perspective, the image of an unused plow highlights

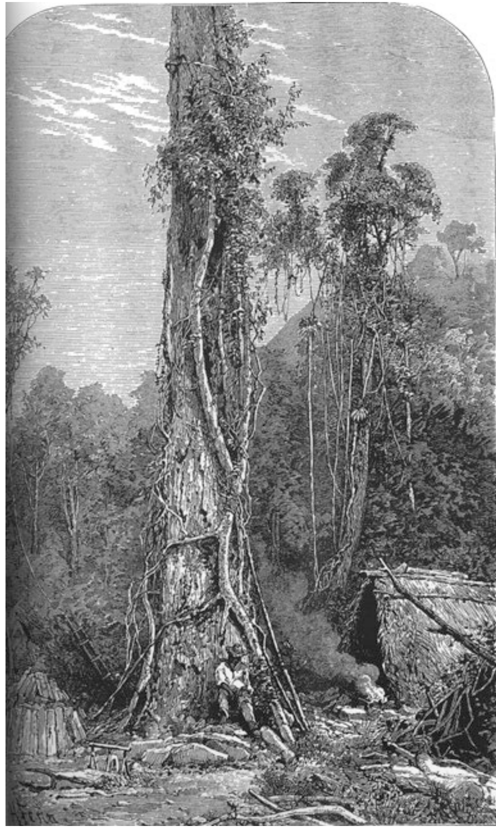

Fig. 4 Tree entwined by Sipos. From a photograph by Georg Leuzinger in *A Journey in Brazil* (54)

the lack of productivity or "laziness" of the native population. It is the white stereotype of black indolence. Curiously, the common plow was rarely seen in Brazil, in part because the older coffee regions were steep hills that could not be plowed up and down like they could in the United States.[142] Yet, the function of the illustration is to emphasize tropical nature over man's ability to control it. The man blends into the landscape, portrayed as unproductive, almost parasitical. As she moves beyond the urban setting, the densely overgrown background of trees encloses the human presence. Nature becomes prominently active: the vines "embrace," "climb," and thrust themselves down, while the inhabitants unobtrusively linger or rest.

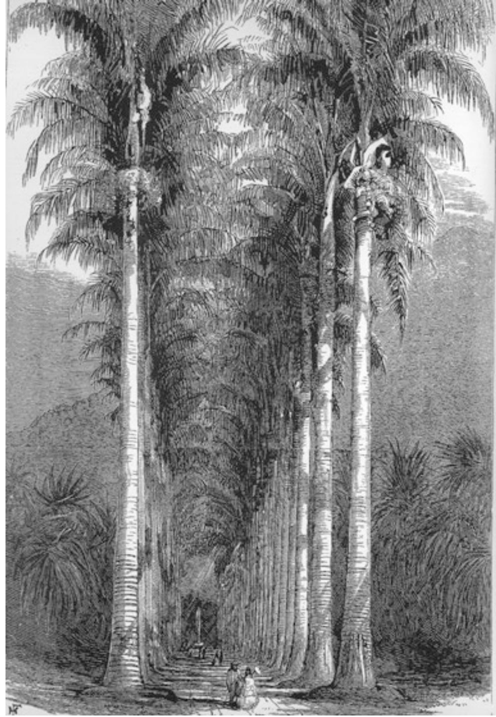

Fig. 5 Vista Down the Alley of Palms. From a photograph by Augusto Stahl and Germano Wahnschaffe in *A Journey in Brazil* (60)

A few days later, a visit to the botanical garden stands out as a pleasant surprise, a carving of perfection within the unruly nature of the tropics with its unique and beautiful avenue of palm trees, some eighty feet high (Fig. 5): "I wish it were possible to give in words the faintest idea of the architectural beauty of this colonnade of palms, with their green crowns meeting to form a roof. Straight, firm, and smooth as stone columns, a dim vision of colonnades in some ancient Egyptian temple rises to the imagination as one looks down the long vista."[143] The wild matted derelict forest has given way to sculptured elegance. The clean and architecturally structured image of the tall upright trees whose tips unite harmoniously emblematizes Edmund Burke's notion of beauty: neat, controlled, firm, and smooth.[144] The tropical forest is a vigorous matted chaos of foliage that takes time and experience to grasp; the gardens, on the other hand, are beautiful because they have been tamed, ordered by

a civilizing force. Yet, as Cary Agassiz's gaze becomes accustomed to the landscape, the tropics seem to become more manageable and pliant.

Humboldt had created an image of the tropics as exuberant and lush, inspiring the sublime. But in Cary Agassiz's eyes as in Fanny Calderón de la Barca's text, nature is subdued. Humboldt's images of the sublime have become picturesque; in William Gilpin's terms, beautiful but varied with a certain roughness.[145] There are, nevertheless, several moments in which tropical nature conveys a profound sense of awe. From the summit of the Corcovado, evoking the magisterial gaze of the heights, Cary Agassiz looks down upon the landlocked harbor that opens onto the sea and its many islands, framed by "the circle of mountains with soft fleecy clouds floating about the nearer peaks,–all these features make a wonderful picture."[146] The emotions conjured through the ascent of the peak recall Humboldt's trek up the Chimborazo and the view from the soaring heights evoking the sublime. As she observes the sight, she realizes that the view, though vast, "is not so distant as to deprive objects of their individuality."[147] Her gaze is capable of grasping the individual components in unison with the overall view. This sense of unity represented in the panoramic view echoes Humboldt's vision: "a harmony, blending together all created things, however dissimilar in forms and attributes; one great whole."[148] This comforting sense of wholeness is inscribed in the landscape that extends to the sky, where soft fleecy cumulus clouds float together, creating a dreamy sensation that projects an atmospheric transcendence.

Another eloquent description of tropical nature occurs as the expedition heads up the Amazon River from Belém do Pará to Manaus:

> Last evening was the most beautiful we have seen on the Amazons. We sat on the front upper deck as the crimson sun went down, his broad red pathway across the water followed presently by the pale trembling line of light from the crescent moon above. After the sun had vanished, broad rays of rose-color, shooting almost to the zenith, still attested his power, heading something of their glow also to a great mass of white clouds in the east, the reflection of which turned the yellow waters of the river to silver, while between glory and glory the deep blue sky of night gathered over the hills of Almeirim.[149]

As the bright colored sunset casts its glow upon the water, the powerful mass of white clouds—perhaps lenticular cumulus clouds spreading their fluffy whiteness across the horizon—reflects the light,

evoking the landscapes typical of the Hudson River School artists. It is a moment of transcendental beauty. In her study *Nature and Culture*, Barbara Novak underscores how US American landscape painters used clouds to create a theater of rhetoric that best served their structural and aesthetic needs.[150] Clouds order the immensity of space and for the painters of the Hudson River School—such as Thomas Cole, Frederic Edwin Church, and Albert Bierstadt—they were a key element in elevating the landscape to a palpable eternity of the sublime. The play of light in Cary Agassiz's account reinforces the religious metaphor of beauty and perfection originating from divine creation. There is a subtle balance between the force of nature and its delicate features in the pale trembling line of shimmering light from above. In this depiction, rather than viewing the landscape from above, Cary Agassiz's gaze follows the illuminated path that guides her across the water, leading her to the majestic height of the clouds, where the divine Creator radiates its force. Her representation exudes an overall sense of harmony and unity that clearly echoes Humboldt's views and Agassiz's belief as he approached the study of nature. It is the same belief that Frederic Church embodied in his representation of the tropics, most notably in "Heart of the Andes."[151]

Once the expedition is fully immersed in the Amazon, the scenes Cary Agassiz presents are generally no longer Humboldt's sublime but instead picturesque. She is, of course, impressed with the size of tropical nature: "The proportions of everything in nature amaze one here," yet she is not frightened or intimidated by the vegetation; in fact, for the most part, she is "delighted."[152] Faced with the monotony of the scenery heading up the Amazon, she asserts, "to me it seems delightful to coast along by these woods, of a character so new to us, to get glimpses into their dark depths or into a cleared spot with a single stately palm here and there," and further along the river, upon sighting a group of strange looking trees rising from within the waters, which could easily have created an eerie effect, she calmly states: "numerous blackened and decayed trunks stood up from the water in all sorts of picturesque and fantastic forms."[153] Tropical nature in Cary Agassiz's hands becomes approachable, pleasant, even in its foreignness. She tends to focus on discrete elements of nature, like specific palm trees, mushrooms, or the geological structure of the land, instead of depicting grand portraits of nature; that is left to Agassiz. She prefers to approach nature through

discrete individual elements that allow her to tame the sublime into the picturesque.

One might say that Cary Agassiz was her husband's model student in her observation of nature, as illustrated in the following quote made after a brief visit to a *fazenda* (ranch), shortly before they head up the coast to Pará:

> It is interesting to watch the progress of an investigation of this character, and to see how the mental process gradually clears away the obscurity. The perception becomes sharpened by dwelling upon the subject, and the mind adapts itself to a difficult problem as the eye adapts itself to darkness. That which was confused at first presently becomes clear to the mental vision of the observer, who watches and waits for the light to enter.

In this passage, she is referring to the way Agassiz has been able to overcome what he initially perceived as an inexplicable aspect of the geological constitution of the soil, which he now finds "perfectly legible." She goes on to explain the composition of the soil and concludes, using Agassiz's own arguments, "Here as elsewhere ice has been the great fertilizer,—a gigantic plough grinding the rocks to powder and making a homogeneous soil in which the greatest variety of chemical elements are brought together from distant localities."[154] But what is most telling of the previous quote is how well it reflects her process of adaptation. As she continues to observe her surroundings, her gaze stabilizes and adjusts to the newness of the landscape, which is no longer unknown and dark. Her careful and attentive observation endows her with a deeper understanding of the Amazon, reflected in her delicate depictions of the intricate complexities of tropical nature. Acknowledging the importance of constant and continuous observation, she confesses after her stay in the fazenda, "I am not sure that, in giving an account of this model fazenda, we give a just idea of fazendas in general."[155] Being able to relativize her perception reveals her insight; she is aware that what she sees is only a partial reality. She cannot speak about fazendas in general, only about the one she has seen. Unlike her husband, she cautions the reader not to generalize from the few examples she offers because she has not observed enough. Hence, the underlying message is that observation is fundamental in the process of acquiring knowledge, but conclusions cannot be drawn from a limited scope. Not having to demonstrate a hypothesis nor having a particular a priori conviction of nature enables

her to be more aware of her subjectivity in the process of grasping tropical nature.[156] This awareness allows her to reflect on her own bias, and thus, she is much less imperialist in her assessments. Observation in Cary Agassiz's narrative is not synonymous to objectivity, yet it is an important asset to acquiring knowledge.

Once she is immersed in the Amazon with a clear and focused eye, she depicts the landscape with an ease and comfort that features the aesthetic of the tropics. As she had done in her previous books, highlighting once again the pleasure of discovery, she offers detailed poetic vignettes of the vegetation: A striking four-inch spidery white mushroom reminds her of "the fairy web of Queen Mab." She delights in characterizing palm trees, such as the slender Assai palm "with its crown of light plume-like leaves"; the Mirití (Mauritia) "with its pendant clusters of reddish fruit and its enormous, spreading, fan-like leaves cut into ribbons"; the Jupatí with "its plume-like leaves," forty to fifty feet in length and its graceful vase-like form; and the Baccába or white palm, "from which flowers droop in long crimson cords, with bright-green berries from distance to distance along their length, like an immense coral tassel, flecked here and there with green."[157] In her depiction, the Amazon unfolds through the senses: Lofty trees are "clothed from base to summit in vines," with hidden flowers that fill "the air with fragrance"; the Pirarara or jet black fish parrot expands its "bright yellow sides, deepening into orange here and there"; the white waterbirds rustling from the margin of the river "floated like a cloud above us"; "A ragged drapery of long, faded grass" hangs from the lower branches of the trees where she spies a white heron, "with snowy plumage glittering in the sunlight."[158] Her description of the well-known Victoria Regia water lily occupies a full page: "its formidable armor of spine, its gigantic leaves, and beautiful flowers, deepening in color from the velvety white outer leaves through every shade of rose to deepest crimson, and fading again to a creamy, yellowish tint in the heart of the flower."[159] The colorful details of her depictions reflect her enjoyment in uncovering the rich palette of the tropics. Not ignoring the scientific information but determined to remain on the sidelines of her husband's research, Cary Agassiz's science is embedded in her aesthetics.

Returning to Pará amid the rainy season, she discovers a great variety of animals that seemed to have been hidden during the dry season: turtles, capybaras, and alligators—she even spots a tiger floating on an island dragged by the Amazon as its waters rise and overflow the river banks—in addition to vultures, monkeys, paroquets, and macaws of all colors.[160]

To know the Amazon, Cary Agassiz claims "one must float for months upon its surface, in order to understand how fully water has the mastery over land along its borders. Its watery labyrinth is rather a fresh-water ocean cut up and divided by land, than a network of rivers. Indeed, this whole valley is an aquatic, not terrestrial basin."[161]

She concludes her narrative proclaiming the beginning of a new era of scientific travel; perhaps because their voyage lacked any tragic ordeal that had certainly characterized those before them. This new kind of voyage brings a different kind of knowledge that can only be discovered once the newness and adventurous experience of the tropics has subsided. She admits that voyages like those of Spix and Martius, which Agassiz illustrated, or of Bates and Wallace, who dealt with numerous perils and adventures, no longer occur: "These days of romantic adventure and hair-breadth escapes are over. The wild beasts of the forest have disappeared before the puff of the engine." Alluding to the forthcoming changes brought about by commercial travel on the Amazon, she affirms that the canoe and encampments on the beach will give way to "the prosaic conveniences of the steamboat."[162] Echoing the tensions that writers like Thoreau, Emerson, Twain, and Melville had raised, and that Thomas Cole had portrayed in *The Course of Empire*, the wild landscape succumbs to the force of progress embodied in the machine of technology.[163] Cary Agassiz does not feel the loss implicit in that process as clearly as Fanny Calderón had when observing Mexico; she still sees it as an advancement for science. In a democratic twist, the voyage along the Amazon has become accessible to those willing to endure heat and mosquitoes for the sake of "seeing the greatest river in the world, and the magnificent tropical vegetation along its shores"[164]—although few could match the support and infrastructure Agassiz received during his trip. Her narrative ends somewhat abruptly with a concluding chapter written by Agassiz in which he condenses his view of Brazil, from its scientific and educational institutions to the economic development of the Amazon. Although the scientific narrative voiced by Agassiz may open and close *A Journey in Brazil*, sandwiching the narrative as James so eloquently highlighted, it is Cary Agassiz's voice that has made the travel along the Amazon an educational and enriching experience, even in her non-scientific descriptions of tropical nature.

Classifying Race in the Tropics

Although it was not the expedition's main focus, race in *A Journey in Brazil* is an important thread that Louis Agassiz insistently intertwines with his science. Agassiz had not demonstrated any particular concern about the origins of mankind before his arrival in the United States. He had written in 1845 that people of different racial characteristics did not share a common origin but they nevertheless belonged to a single species.[165] Humboldt, on the other hand, had dismissed the question of multiple origins, asserting in *Cosmos*: "The different races of mankind are forms of one sole species by the union of two of whose members descendants are propagated. They are not different species of a genus." Regarding differences in form and color, he insisted on rejecting "the depressing assumption of superior and inferior races of men," asserting "There are nations more susceptible of cultivation, more highly civilized than others—but none in themselves nobler than others."[166]

But by 1850, Agassiz's ideas about race had shifted, despite the fact that he had been living in Boston, where slavery opponents were outspoken and where there were numerous legal cases regarding school segregation. Agassiz must have had numerous discussions with his friends and colleagues on the topic, including with Senator Charles Sumner, who was also a member of the Saturday Club.[167] But Agassiz remained undeterred. In fact, Agassiz's views on race began to change upon his arrival to the United States, as he was shocked by the racial landscape he encountered. In a letter to his mother written while touring the country before giving his first lectures at the Lowell Institute, he confessed the profound revulsion he felt at the sight of this "new" race:

> All the domestics in my hotel were men of color. I can scarcely express to you the painful impression that I received, especially since the feeling that they inspired in me is contrary to all our ideas about the confraternity of the human type and the unique origin of our species .... Nonetheless, it is impossible for me to repress the feeling that they are not of the same blood as us. In seeing their blackfaces with their thick lips and grimacing teeth, the wool on their head, their bent knees, their elongated hands, their large curved nails, and especially the livid color of their palms, I could not take my eyes off their face in order to tell them to stay far away.[168]

Shortly after, he met famed craniometrist Samuel Morton with whom he had briefly corresponded. Morton had begun his work studying fossils, in particular those collected by Lewis and Clark in their expedition across

the country (1804–1806).[169] Later, he had become interested in crania and had collected hundreds of specimens (approximately nine hundred skulls) from all over the world. He had measured each skull carefully—thirteen different ways—to assure accuracy. He was the "great data-gatherer" who ranked races "objectively" by physical characteristics of the brain, particularly their size.[170] His work, *Crania Americana* (1839), was considered to be evidence of true objective science.[171] Although Morton did not affirm separate creation, based on his findings, he implicitly argued in its favor. He divided mankind into twenty-two "families" in which some families displayed "primitive distinctions"; the Caucasian had the "highest intellectual endowments."[172] Agassiz was very impressed with Morton's collection of skulls, affirming: "Nothing like it exists elsewhere. This collection alone is worth a journey to America."[173]

Shortly after arriving in the United States, Agassiz visited the South, returning every winter between 1849 and 1853. These visits introduced him to Southern culture and offered him a very different view of race relations than the one he saw in the North. In Charleston, South Carolina, he met several important naturalists, among them John E. Holbrook, Lewis R. Gibbes, Robert W. Gibbes, and Francis Holmes, who became his circle of friends.[174] Agassiz, who was adamantly opposed to slavery, had no dogmatic religious affinity—unlike most of his colleagues—which enabled him to argue in favor of special creation and support at the same time the plurality of the origin of mankind. He saw himself as a scientist, who observed facts, which he firmly believed to be "the words of God."

Faced with what in his view were extreme differences among races, Agassiz extended his belief in the successive separate and independent creations that had characterized plants and animals to man, eventually identifying a dozen separate creations. In Charleston, he stated that Africans had been created separately from Europeans and asserted that their distinct physiological and anatomical differences proved they constituted separate species, an argument he would continue to develop as reflected in his essay in *Types of Mankind* (1854), commemorating Samuel Morton's work.[175] For Agassiz, the argument was about natural science, but for Southerners, it was also an important political tool that justified slavery. As Lurie points out, Agassiz's position demonstrated how a scientific theory became instrumental for a particular social doctrine, a fact that profoundly irritated Agassiz.[176]

The debate in the United States regarding human origins came to its peak precisely in Charleston, at the 1850 American Association for the

Advancement of Science (AAAS) meeting, a year before Agassiz became its president and shortly before he married Cabot Cary.[177] Prior to the meeting, Agassiz had published an article in the *Christian Examiner*, a Boston Unitarian journal of liberal religious views, articulating his beliefs and arguing that an unorthodox interpretation of human origins did not necessarily contradict a truly religious attitude.[178] For Agassiz, separate creation was coherent with his denial of development and change, but for others it opened a religious and political dilemma that had serious repercussions with regard to slavery. At the AAAS meeting, Josiah Nott, a well-known doctor from Mobile, Alabama, who had written on hybridization, discussed the unity of races, arguing that Jews, obeying their religious mandate, had not mixed with other species and therefore had remained a "pure" race. His conclusions were that man could not reverse the law of God and raise an inferior race up to the standard of a superior one. When Agassiz articulated his position, he added that all races possessed attributes of humanity although "in very different degrees."[179] Several theologians attacked Agassiz for his views, which led him to complain, frustrated, that "there was no freedom for a scientific man in America."[180] For the South, the debate of human origins had clear political and religious consequences. If Southerners accepted all men as equal, their support of slavery would mean they were enslaving their fellow men, if not they would be enslaving an inferior species.

As a preeminent Bostonian, Cary Agassiz opposed slavery, but she most likely found her husband's biblical interpretation regarding the distribution of races disturbing. Agassiz's trip to Charleston was the first time the couple had been apart since their engagement, and her anxieties were such that she vowed never again to be separated from him. The letters written during this brief period shed some insight into their relationship and hint at her discomfort with certain convictions he strongly defended. As a woman of her times, Cary Agassiz knew she would hand over to her husband "the responsibility of all important decisions." However, she was also aware of their differences and admitted to having difficulty yielding to his views on "the subjects on which we have differed so often."[181] The subject is never explicitly stated but one might well imagine that as a devout Unitarian from an established New England family, she must have had serious difficulties with Agassiz's interpretation of the Bible. Agassiz believed in a divine God who had created everything. However, as a proponent of polygenism, he sustained that the number of races could not have developed within the commonly

accepted biblical timeframe, nor could the biblical couple of Adam and Eve have given origin to all the different races. Polygenists sustained that the Bible's authors had knowledge of their own region but not of the earth; therefore, their knowledge was limited. Cary Agassiz is quite candid about having different opinions from her husband. Given the date of her letter, we can assume that she was most likely referring to the 1850 controversy and Agassiz's biblical interpretations.[182] Yet, she also sees Agassiz as her true companion with whom she expects to share everything, even her disagreements: "I have no friend in the world but you, to whom all my thoughts are open."[183] Thus, once married, she understands her obligation is to share her thoughts with him, even if they are controversial, but at the same time, she is willing to accept his final word: "To have the courage to express fully my difference from you on any point, even to the utmost degree, and yet to let the decisions rest always with you, I am convinced is the only course which can satisfy us both."[184] These are the few instances in which she acknowledges dissent with her husband; yet, it is part of her intimate life with Agassiz that she kept very private. It is most likely that religion rather than race was the subject of their "disagreements," since she avoids addressing the topic of religion in *A Journey* and in her biography of Agassiz, while she only avoids voicing her husband's most adamant pronouncements regarding race. She is never as rigid as her husband. Even when she has concerns about the racial landscape Brazil offers and seems to agree with some of his criticisms, her descriptions at times suspend and even question Agassiz's adamant conclusions about race.

Agassiz was gravely disturbed by Brazil's singular racial landscape and felt compelled to express his opinions regarding what he saw in terms of racial miscegenation. By 1850, Rio de Janeiro not only had the largest urban slave population in the Americas (four times larger than Charleston's, which was one of the South's largest slave population), but its composition was also quite different from that of the United States.[185] US slaves were mostly from the West African coast, as were those imported to Bahia and the northeast of Brazil, but slaves in Rio were mainly from West Central Africa (Congo to Benguela).[186] Unlike their US counterparts who worked on plantations, slaves in Rio worked in many capacities. They were street vendors, gardeners, artisans, and labored in public works and factories as well as in domestic and transportation services. City slaves worked without constant supervision, which allowed them to buy real estate, slaves,

and even their freedom. Furthermore, most slaves in Brazil maintained their African rites and rituals including their traditional food, etiquette, clothing, and religious practices. This undoubtedly created a unique urban setting that the Agassizes, as other travelers before them, were ill prepared to confront.

Most travelers visiting Brazil during this period were shocked by what Lilia Moritz Schwarcz termed the "spectacle of humans," inciting travelers to focus on the numerous "strange" dances and religious ceremonies they encountered among the races.[187] In her first outing, while Agassiz had gone to pay his respects to Dom Pedro II, Cary Agassiz and her party wander through the streets of Rio where they discover a group of slaves, singing and dancing a "fandango." Her description is preceded by a brief statement that qualifies her place as an observer, which she often repeats: "So far as we could understand":

> [T]here was a leader who opened the game with a sort of chant … he broke into a dance which rose in *wildness and excitement*, accompanied by *cries and ejaculations*. The movements of the body were a singular combination of negro and Spanish dances. The legs and feet had the *short, jerking, loose-jointed motion* of our negroes in dancing, while the upper part of the body and the arms had the swaying, rhythmical movement from side to side so characteristic of all the Spanish dances.[188]

She incorrectly identifies the spectacle as an Andalusian dance (the fandango) that has little in common with any dances of African origin, which might have been popular in Brazil at the time. Her description highlights the need to order what she considers chaotic disjunctured body movements. The recognizable aspect of the dance, which reinforces the slaves' "otherness," is the wild disjointed movement of the lower body, which she identifies with blackness (whether from South or North America). The other more rhythmic aspect of the dance, which is still foreign but less menacing, is assigned to the Spanish, a more prestigious culture yet still far removed from the Anglo-Saxon values she espoused. In one swift movement, she observes and categorizes the foreignness of what she sees, while acknowledging her own limitations at decoding her surroundings. In a unique fashion, Cary Agassiz depicts the tropics through her own cultural lens while recognizing that she may be mistaken, or at least admits not always having enough information to make the correct assessment. In these instances, she includes a comment that relativizes her observations: "So far as we could understand," "to

my eye," "it is difficult to judge," "to me it seems," and "I am not yet accustomed to."[189] Consequently, her gaze and comments are nuanced, allowing for contradictions that enrich her narrative, which in turn contrasts with Agassiz's rigid scientific narrative and undermines his racial politics.

Agassiz believed races were not to be mixed in order to protect each race's characteristics. This is what he affirmed when, in the midst of the Civil War, Samuel Gridley Howe, a leading abolitionist and member of the American Freedman's Inquiry Commission, established by President Lincoln, asked him to reflect on the role of blacks in a reunited nation. While Agassiz opposed slavery, he did not believe in social equality with blacks or Indians; he argued that races should remain separate so as not to degenerate.[190] He was especially adamant about the need to avoid the amalgamation of races. According to Agassiz, half-breeds "as shown by their very constitution, their sickly physique, and their impaired fecundity" were proof that the crossing of races was "unnatural."[191] What Agassiz had previously stated in his essay for *Types of Mankind*, he found corroborated in Brazil. Hence, by focusing on Brazil's racial configuration, he thought he could offer more facts to uphold his previously stated views.

When the Agassizes set sail for Brazil on April 1, 1865, the US Civil War was reaching its end. On board, Cary Agassiz notices "a cloud of smoke, in the direction of Petersburg. We think it may be the smoke of great decisive engagement."[192] The engagement was the Battle of Five Forks, often referred to as the "Waterloo of the Confederacy" for ushering the end of the war.[193] Nevertheless, this end did not mend the divided nation; what lay ahead for the United States was a fundamental question that both Brazil and the United States shared. How would former slaves be incorporated in society? What effect would they have on the economy? What would the racial demographics look like? What consequences would the unification have for whites as well as for blacks? After watching black slaves perform their dances in Rio, Cary Agassiz articulates some of these concerns: "Looking at their half-naked figures and unintelligent faces, the question arose, so constantly suggested when we come in contact with this race, 'What will they do with this gift of freedom?'" The image of the "savage" is evoked as she implies that blacks will not know what to do with the "gift" that progressive-thinking whites will give them. Yet, she concludes: "Whatever one may think of the condition of slavery for the blacks, there can be no question as to its evil effects on their masters."[194]

The transatlantic slave trade ensured that across the Americas, slavery developed into a lucrative economic institution based on race. Brazil imported the greatest number of slaves.[195] However, as the coffee boom fueled the country's modernization and industrialization, the slow transition from slave to salaried labor began, and slaves were slowly integrated into society with legal rights, even though slavery was not abolished.[196] By the time the Agassizes arrived, slavery was culturally in its final stages—although that would officially occur more than twenty years later in 1888, only one year before the fall of the empire and the creation of the Republic of Brazil.[197]

One of the reasons for the delay in abolishing slavery in Brazil was the War of Triple Alliance, more commonly known as the Paraguayan War (1864–1870). It was one of the bloodiest conflicts in Latin America fought between Brazil and its allies, Argentina and Uruguay, against Paraguay and its leader Francisco Solano López. Despite the overwhelming material resources and people Brazil had over Paraguay, Brazil needed five long years to end the war. The consequences were devastating for both Paraguay and Brazil.[198] Paraguay lost a large part of its national territory and remained highly indebted for years, and its demographics were severely altered due to the loss of most of its male population. Despite its victory and territorial expansion (particularly in the Matto Grosso province), Brazil would also suffer economically. As the war dragged on, with only 18,000 soldiers ready for combat, Brazil had to draft its black, mulatto, and Indian men, in addition to many slaves, to consolidate a force of 123,000 fighters.[199] Those who resisted were put into prison. As women relayed this information to Cary Agassiz, she criticized Brazil for its "utter want of system," comparing its authorities to England's horrible "recruiting parties."[200] She concludes her discussion of the war by stating: "Coming from a country where the soldier is honored, where men of birth and education have shown that they are not ashamed to serve in the ranks if necessary, it seemed to me strange and sad to see these men herded with common criminals."[201]

Although the war led to abuses of the population, especially in the Amazon, Cary Agassiz is surprised by the way Brazilians discuss the subject of emancipation. It is "liberally and calmly discussed by all classes," unlike in the United States where it has been a "political bugbear."[202] Yet, while she praises how blacks can obtain their freedom and rise in social and political status, she underlines slavery's "appalling aspects." In Brazil, she notes, slaves often become "beasts of

burden," carrying on their heads hundreds of pounds worth of coffee, sugar, or even cumbersome furniture such as pianos, which leave many of them crippled or with maimed limbs.[203] In Brazil, she is capable of seeing the inhumanity of slavery, yet she says nothing of the hardships of the plantation work in the United States, which she had seen during her visit to South Carolina. Although she appreciates certain Brazilian attitudes regarding slavery that seem superior to US Americans, she is quick to assert her national pride. When a traveling companion, Dr. Sinimbu, proudly mentions that free blacks compare well in intelligence with Brazilian and Portuguese, she cautions her readers that "it must be remembered, in making the comparison with reference to our own country, that here they are brought into contact with a less energetic and powerful race than the Anglo-Saxon."[204] Reaffirming her point of observation, she never hesitates to indicate national characteristics that irritate her such as the Brazilian "national habit of procrastination" and the profound conviction "that to-morrow is better than to-day," which echo Ángel Calderón de la Barca's complaints years before.[205]

Throughout her narrative, Cary Agassiz is able to appreciate difference without letting it undermine her own values. Toward the end of her trip, she acknowledges the hospitality she and her husband have received and thus refrains from voicing too many criticisms so as not to offend any of their friends. Furthermore, she adds, "Neither do I believe that a few months' residence in a country entitles any one to a judgment upon the national character of its people."[206] Yet what follows are a series of comments that can be summarized by what she considers Brazil's main problem: "an utter want of harmony between the institutions and the actual condition of the people." And while she acknowledges having gotten used to the Brazilian rhythm, she recognizes that an American "accustomed to the rapid methods of work at home" could only look at Brazilian work ethics "in incredulous astonishment."[207]

Despite Cary Agassiz's greater acceptance of racial diversity, both Agassizes seem shocked at the mixing of races in Brazil, especially as the large Indian population of the Amazon mixed with blacks and whites that created a unique racial landscape in which "children are of every hue."[208] In these instances, Cary Agassiz echoes her husband's negative views of racial mixing—albeit more subtly—affirming how racial traits are transformed through "amalgamation." The following is her depiction of the people of the town of Breves:

> Its population, like that of all these small settlements on the lower Amazon, is made up of an amalgamation of races. You see the regular features and fair skin of the white man combined with the black, coarse, straight hair of the Indian, or the mulatto with partly negro, partly Indian features, but the crisps taken out of the hair; and with these combinations comes in the pure Indian type, with its low brow, square build of face and straight line of shoulders.[209]

Although she has preconceived notions of each race, evident in her stereotypical comments, her descriptions of Indians in the Amazon vary enormously, from "wild-looking" ugly Indians, squatting on the ground eating clay and dirt to handsome naked Indian boys "like bronze statues … in attitudes full of grace and strength."[210] She oscillates between broad categorizations and individualized portrayals of the Amazon inhabitants: "The habits of the Indians are so irregular, and they care so little for money, finding, as they do, the means of living almost without work immediately about them, that even if one does engage a servant, he is likely to disappear the next day."[211] The Mundurucu Indians in Mauhes, however, prove to be an interesting exception, particularly a middle-aged couple the Agassizes meet. The couple has fine features and a "passive dignity" in spite of characteristics that Cary Agassiz finds more vulgar, like the "intricate network of tattooing" and piercings.[212] Although beauty is not an attribute she would commonly assign to any Indian woman, she recognizes in this case that the woman's face she admires has more mobility and occasionally "her expression is sweet and gentle."[213] The couple is so striking that Agassiz has the two of them taken to Manaus to have them photographed. While the couple waits, the woman takes out her sewing, and the husband makes cigarette envelopes from a bark–"certainly very civilized occupations for savages." Major Silva Coutinho explains that their beautifully elaborate color tattoos, which take years to be completed, are indicative of their aristocracy and prompt Cary Agassiz to make the following caustic remark "'Il faut soufrir pour être beau,' was never truer than among these savages." Coutinho, who had been researching the tribe, informs the Agassizes that the Mundurucu are pure types with stringent laws against intermarriage, which enables them to be "free from one great source of degeneration."[214] Although Cary Agassiz is impressed with the Mundurucu Indians, she continues to view them as types, along the lines of Agassiz's racial categorizations.

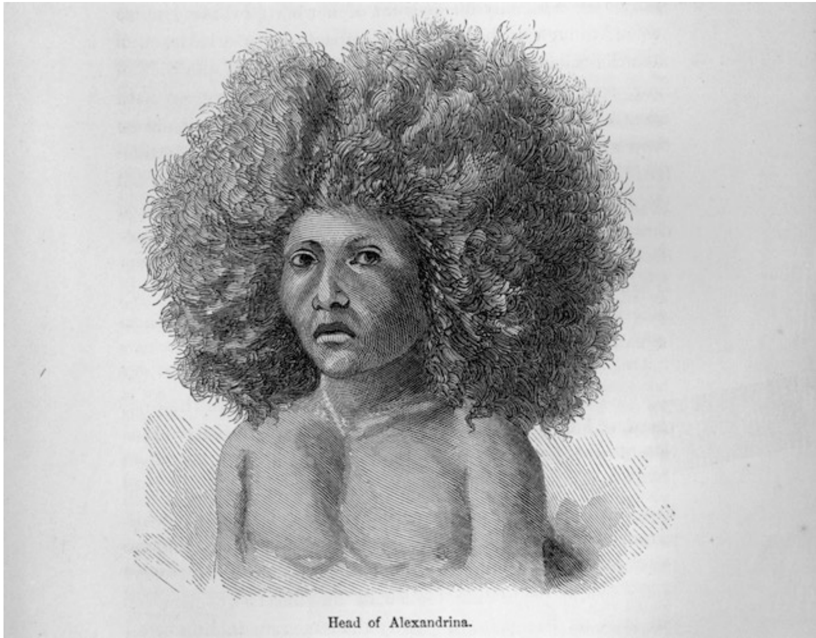

Fig. 6 Head of Alexandrina. From a sketch by William James in *A Journey in Brazil* (245)

It is only after spending a few months among the Indians that Cary Agassiz can momentarily suspend her typological classification to recognize a few positive traits, such as with her mestizo housemaid Alexandrina, who "has a mixture of Indian and black blood in her veins. She promises very well, and seems to have the intelligence of the Indian with the greater pliability of the negro."[215] Alexandrina turns out to be a valuable asset for the expedition not only for her domestic skills but also because she learns to be very useful in the laboratory (Fig. 6). However, Cary Agassiz cannot completely avoid racial stereotypes even as she praises her maid's agility: "*Nimble as a monkey*, she thinks nothing of climbing to the top of a tree to bring down a blossoming branch."[216] Physical traits during the nineteenth century reflected much more than visual differences; they revealed biological differences that in turn justified racial rankings. As Stephen Jay Gould has shown, "the pervasive assent given by scientists to conventional rankings arose from shared

social belief, not from objective data gathered."[217] In their study *Types of Mankind*, Josiah Nott and George Gliddon claimed to have used great care in their drawings and illustrations to assure such accuracy that they thought their illustrations required no explanation or comment. Hence, an illustration simply proved: "palpable analogies and dissimillitudes between the inferior type of mankind and a superior type of monkey."[218] Physical differences were believed to reflect mental differences, and as blacks were positioned as an inferior race, their physical traits stood as proof of their racial inferiority. Miscegenation was disturbing for these men because it led to "unnatural" and "degenerate" characteristics. Alexandrina's extraordinary hair illustrates this process of degradation, prompting Louis Agassiz to also have a portrait of her made (after a good deal of coaxing), which he includes in *A Journey*. After describing her hair, Cary Agassiz generalizes the negative effects of crossbreeding:

> [T]hough it has lost its compact negro crinkle, and acquired something of the length and texture of the Indian hair, [it] retains, nevertheless, a sort of wiry elasticity, so that, when combed out, it stands off from her head in all directions as if electrified. In the examples of negro and Indian half-breeds we have seen, the negro type seems the first to yield, as if the more facile disposition of the negro, as compared with the enduring tenacity of the Indian, showed itself in their physical as well as their mental characteristics.[219]

Immediately following this quote, she adds a few remarks from her husband's notes to reinforce her statement that highlights the need to introduce change in the region. In this instance, Louis Agassiz conflates economic growth (understood as the opening of the Amazon River to foreign commerce) with the moral and racial improvement of the region:

> A better class of emigrants would suppress many of these evils. Americans or Englishmen might be sordid in their transactions with the natives: their hands are certainly not clean in their dealings with the dark-skinned races; but they would not degrade themselves to the social level of the Indians as the Portuguese do; they would not adopt his habits.[220]

Agassiz's idea of introducing a "better class of whites" in the Amazon echoes similar nineteenth-century projects of civilization and progress in Spanish America and Brazil, notably articulated in Domingo Faustino Sarmiento's seminal text, *Facundo: Civilización y barbarie*.[221] Although most of the continent was obsessed with measuring and defining

progress in national terms during the nineteenth century, Fabiane Vinente dos Santos underscores the importance of taking into account cultural differences in that process. In her reading of *A Journey in Brazil*, dos Santos explains how the difference in conceiving time is a key factor among indigenous communities that hinders a Western interpretation of progress.[222] Dos Santos argues that Cary Agassiz's capitalist logic overdetermines her view of the Amazon and to an extent hampers her own observations. The waiting time of the locals, which is cyclical in nature and therefore endless, opposes the modern linear temporality of progress endorsed by the West.[223] Cary Agassiz sees this as a lack on the part of the Indians, reflected in the locals' habits and pace of life she observed: "An Indian will do more for good-will and a glass of cachaça [rum] than he will do for wages, which are valueless to him." Indians, she claims, are careless, they take too long to carry out their tasks, and they lack moral values as well as any desire for progress. Her irritation at their negligence is evident when compared to her cultural expectations; yet at times, she seems to have a subtle envy of their own rhythm and their leisurely lifestyle:

> In these excursions one learns to understand the fascination this life must have for a people among whom civilization is as yet but very incomplete; it is full of physical enjoyment, without any mental effort. Up early in the morning and off on their fishing or hunting excursions long before dawn, they return by the middle of the day, lie in their hammocks and smoke during the hours of greatest heat; cook the fish they have brought with them, and, unless sickness comes to them, know neither want nor care.[224]

Almost despite herself, Cary Agassiz acknowledges the pleasure of their repose. While she clearly considers it a primitive lifestyle, there seems to be an honest element of delight in not needing or demanding much, particularly for a woman like Cary Agassiz who cared deeply about societal rules and went to great pains to control her own image as well as that of her husband.

One difference she does highlight is the unequal division of labor, while unfair, it has some positive effects. Women clearly bear the burden of most of the work:

> An Indian [man] is never to do any of the work of the house, not even to bring wood or water or lift the heavy burdens, and as the fishing is done chiefly at certain seasons, he is a very idle fellow for a great part of the

> time. The women are said, on the contrary, to be very industrious; and certainly those whom we have had an opportunity of seeing here justify this reputation.[225]

As she grows accustomed to the Indians' lifestyle and establishes her own relationships with women and children, she is able to observe the Amazon population through a lens that is not solely determined by race, but also by gender. She is struck by women's moral and physical autonomy, their physical strength, and their freedom to move about without men's supervision. In the Upper Amazon, women are "energetic, bearing a hand at the oar or the fishing-net with the strength of a man."[226] They travel alone in canoes, smoke pipes, and enjoy a sexual freedom inconceivable for Cary Agassiz. At times, she sees their life "perfectly free and a thousand times pleasanter than the ladies' life."[227] Yet, although she admires their resolve and independence, she faults Indian women for their lack of morality, which she equates with progress and civilization: "Here were people of gentle condition, although of Indian blood, lifted above everything like want, living in comfort and, as compared with people about them, with a certain affluence—people from whom, therefore, in any other society, you might expect a knowledge of common rules of morality." When she asks about a girl's father, the mother answers with a smile "She hasn't any father, she is the daughter of fortune." What is most disturbing of the response is the fact that the mother has no "intonation of sadness or of blame, apparently unconscious of any wrong or shame." Following her husband's assertive conclusions, Cary Agassiz imposes her own interpretation of the response: "it has the most melancholy significance; it seems to speak of such absolute desertion."[228] For a class that was steeply embedded in its legacy, and strongly adhered to the strict Victorian values as the one Cary Agassiz belonged to, the encounter with a culture that disregarded marriage, paternity, and class prompts Cary Agassiz to explain her observations in a way that must ultimately allow her to reassert her own cultural values, which in her view are the bearers of civilization and progress. Thus, Cary Agassiz demonstrates that observation demands an effort; it is an exercise, not merely a reflective process, for when she is not truly focused on what she observes her imperialist gaze takes over, limiting her nuanced scope.

The demand to civilize is a concern voiced throughout *A Journey*, not only as a means to reinforce Anglo-Saxon racial and economic superiority but also as a means of reasserting a sense of morality and culture

that was essential to the well-being of Western culture. In Cary Agassiz's view, the white population of the Amazon does "little to civilize Indians beyond giving them the external rites of religion. It is the old sad story of oppression, duplicity, and license on the part of the white man, which seems likely to last as long as skins shall differ, and which necessarily ends in the degradation of both races."[229] She faults whites for not creating better educational venues for the Indians and concludes that the mixture of races is always the same in slave societies, adding that in northern Brazil, "this mixture of races seems to have had a much more unfavorable influence on the physical development than in the United States. It is as if all the clearness of type had been blurred, and the result is a vague compound lacking character and expression."[230]

Cary Agassiz's narrative is full of contradictions. She faults the Indians for their carefree lifestyle, yet appreciates their sense of leisure; she is appalled by their lack of family constraints, yet admires women's independence; she condemns their lack of ambition yet praises their simplicity; and she finds them ugly but recognizes they can be attractive. She constantly assesses and compares what she observes with what she knows. Unlike her husband, who uses analogies to confirm his views established a priori, as she sifts through her own notions of nature and culture, progress, and backwardness, and her comparisons at times trip her, forcing her to momentarily suspend categorical affirmations to introduce fluctuations in her narrative. These fluctuations allow her to shift the gaze onto herself, as she too is observed. Indian women touch her clothes and inspect her as they would "a very extraordinary specimen." Recognizing that she too can be the subject of observation implicitly relativizes the notion of place and scientific observation, subtly expanding the two-way road of the gaze.

The fact that Cary Agassiz does not need to prove a particular theory, and that her observations are framed within her unscientific perspective, relieves her of having to avoid contradictions. Not having a defined professional role in the expedition frees her narrative of constraints. It is within these narrative blind spots or contradictions between observations that readers can appreciate her perceptive eye and construct a more elaborate image of Brazil, framed by ongoing political debates in the United States. Hence, despite her apparent opposition to racial mixing, Cary Agassiz can also recognize advancement in Brazil regarding race, without undermining her previous statements.

> It seems to me that we may have something to learn here in our own perplexities respecting the position of the black race among us … The absence of all restraint upon free blacks, the fact that they are eligible to office, and that all professional careers are open to them, without prejudice on the ground of color, enables one to form some opinion as to their ability and capacity for development.[231]

Cary Agassiz's ambivalence contrasts with Agassiz's sanguine declarations. Her narrative may lack historical and political anchoring, but neither Cary Agassiz nor Agassiz himself was interested in offering a comprehensive view of Brazil. Nor was it part of Louis Agassiz's scientific research. Whether he discusses glaciers, fauna, or race relations, Agassiz is never tentative. His opinions are always authoritative, sustained through scientific reasoning, albeit informed by his religious views. He does not offer any contradictory views. In fact, his trip to the Amazon was a corroboration of what he expected to find, though he claimed the trip surpassed his expectations given the wide array of species he discovered. The expedition never undermined any of his prior convictions. Thus, when it came to racial issues and the consequences of racial amalgamation, Agassiz was adamant about the lesson his readers had to take from Brazil:

> Let any one who doubts the evil of this mixture of races, and is inclined, from a mistaken philanthropy, to break down all barriers between them, come to Brazil. He cannot deny the deterioration consequent upon an amalgamation of races, more widespread here than in any other country in the world, and which is rapidly effacing the best qualities of the white man, the negro, and the Indian, leaving a mongrel nondescript type, deficient in physical and mental energy.[232]

Although reporting on race was not an explicit part of the expedition, faced with the "spectacle of races" that characterized Brazil, Agassiz realized that he had a unique opportunity to obtain proof to reaffirm his theory of racial distribution and stress the importance of avoiding racial mixing. Consequently, while researching fish and glaciers, he decided to collect as much material as possible regarding the different races in Brazil. For this purpose, he employed one of his students, Walter Hunnewell, to learn the art of photography and help him gather proof to illustrate the negative consequences of the intermingling of races.

Hunnewell took approximately fifty portraits and a few landscapes, but Agassiz's complete collection of photographs included more than a hundred images, which he intended to publish as a separate book. Agassiz was extremely excited about this project. This might explain why among the twenty illustrations included in *A Journey in Brazil* five are of racial types copied from original photographs taken in Brazil.[233] In the fifth appendix of the book, entitled "Permanence of Characteristics in Different Human Species," Agassiz explains that it would take years to do a serious study of different crossbreeds in the Amazonian valley, so for the moment he is content with the study of races through "the natural history method: viz. the comparison of individuals of different kinds with one another, just as naturalists compare specimens of different species." In this appendix, he hints at the type of study he envisioned as he directs his readers' attention to the study of women:

> On following out the details concomitant with these general differences, we find that they agree most strikingly. In a front view of an Indian woman and a Negress the general difference is in the width between the breasts of the former compared with their close approximation in the latter. In the Indian the interval between the two breasts is nearly equal to the diameter of one of them; while in the Negro they stand in almost immediate contact.[234]

Agassiz describes these women as if he were producing a scientific study, measuring their bodies through grids and rulers as he goes on to discuss the shape and size of their breasts, even detailing the shapes of their nipples. These descriptions resemble anthropological photographs, typically of naked bodies, both men and women, front and profile. Agassiz uses them as a form of documentation, which later on he would compare with other "scientific" documents. In the end, Agassiz never published this book.[235] He may have found it more problematic given the growing acceptance of evolution and the realization that the photographs did not always reproduce what he believed they showed. Furthermore, shortly after his return from Brazil, in December 1871, he embarked on a second expedition—the Hassler expedition—accompanied once again by his wife, to do deep-sea coastal dredging down and around the coast of South America. He would have little time to put together another publication, as he died a year and a half after returning to Cambridge, in 1873.

Teaching to Observe

As an amateur scientist, Elizabeth Cary Agassiz was free from having to make categorical judgments. Nevertheless, she dutifully followed the most important precept upheld by her husband, which was to carefully observe and document the world around her. Agassiz believed observation was an acquired talent that everyone was equipped to perform but that too many had ceased to perform professionally. In his view, it required time and solitude, a great deal of discipline to be completely focused, and a capacity for elaborating comparisons. The more one practiced observation without distractions, the quicker one could identify differences and recognize the uniqueness of a specific species. Observation, according to Agassiz, could be taught: It was systematic and ordered. Through observation, one acquired knowledge. And Agassiz was a renowned observer. But as Jonathan Crary stresses: "Vision and its effects are always inseparable from the possibilities of an observing subject who is both the historical product *and* the site of certain practices, techniques, institutions, and procedures of subjectification."[236] Crary underscores the importance of the parameters within which the observer can actually see, just like the travelers arriving at Calvino's imaginary city, Despina. Crary highlights that observation occurs within a prescribed set of possibilities embedded within a system of conventions as well as limitations. Hence, when students and natural scientists state that Agassiz taught them to observe, it should be understood that the process of observation occurred within "a heterogeneous system of discursive, social, technological, and institutional relations."[237] Agassiz's major feat was to introduce students and colleagues as well as the broader public to transcend specific relations that existed at the time, presenting them with a new form of observation and understanding of the surrounding world. Part of that process entailed experiencing the world for oneself. He encouraged students to leave books aside and accept their own individual experience. Yet, as evolutionary science made its way in the field of the natural sciences, new forms of observation were thrust upon observers. As a scientist, Agassiz welcomed new forms of observation, but in the case of evolution, he resisted this new way of observing, clinging to and reiterating his own mode of observation, primarily because evolution introduced difference without offering factual proof of change and undermined his creationist beliefs. But

plausibility was reasonable and credible. It was simply a different form of observation; one that Agassiz was not ready to accept.

As his most faithful assistant, Cary Agassiz was ostensibly influenced by her husband's mode of perception, but as his most diligent student, she also allowed herself to experience directly the outside world and to recognize the value of her own observation. Her gaze in *A Journey in Brazil* exceeds Agassiz's. She was able to move beyond the confines of the natural sciences, hinting at changing signs (social, discursive, and technological) that influenced observation and even her own.

Her experience as an elite white woman from New England implicitly undermined her husband's mode of classification. Her narrative is, in fact, the product of a shift in observation. Geared at entertaining a particular class with a particular set of values, her narrative sets out to present her observations in conjunction to highlighting her husband's achievements. Rather than fault her narrative for its numerous contradictions and obsequiousness to her husband, they might be understood as personal and non-scientific, but at the same time, they may be appreciated as insightful negotiations of the shifts taking place as modernization and evolution took center stage. In trying to apprehend the totality of the tropics, Cary Agassiz tries to acclimate the exoticism of the landscape and its inhabitants for her audience, while folding in her husband's scientific theories and voicing her own personal experience. This conflation of observations "sandwiched" by a scientific goal reflects subtle negotiations as a result of new modes of observations introduced through evolutionary theory. It is also the result of Cary Agassiz's particular gaze, female and non-scientific, which allows her to dismiss observation with a specific purpose. When contrasting husband and wife's observations of Brazil, it is clear that Cary Agassiz's detailed gaze without a specific objective is the most comprehensive form of observation. The narrative displays purposefulness confronted with uncertainty, or, to evoke Holmes' review of their joint text: a narrative of the grave science "relieved" by the picturesque images of a subjective view. However, these "picturesque images" bear significant weight, as they subtly undermine Agassiz's racial condemnation and blindsided observation. In this manner, Cary Agassiz's undirected gaze becomes a political gesture inasmuch as she recognizes that she too is observed and that her observation is relative. Without eliminating the scientific endeavor, Cary Agassiz is open to other forms of observation. This is perhaps her greatest contribution to *A Journey in Brazil*, to expand the eye of scientific observation hinting at a new scientific discourse, which

would not be hers but would certainly inform US culture and its views of other cultures during the second half of the nineteenth century.

Notes

1. Louis and Elizabeth Agassiz, *A Journey in Brazil* [1868] (Boston: Fields, Osgood & Co., 1871), 54. The authors appear as Professor and Mrs. Louis Agassiz. Subsequent references to the text will be noted parenthetically as *Journey.* Unless otherwise noted, quotes belong to Cary Agassiz abbreviated as ECA; when corresponding to Louis Agassiz, the initials LA precede the page numbering.
2. Lucy Allen Paton, *Elizabeth Cary Agassiz: A Biography* (Boston and New York: Houghton Mifflin Company, 1919), 96.
3. For a detailed biography, see Paton, *Elizabeth Cary Agassiz.* On her scientific work, see Nina Baym, *American Women of Letters and the Nineteenth-Century Sciences: Styles of Affiliation* (New Brunswick: Rutgers University Press, 2002), 91–112. For a genealogy of the Perkins family, see Augustus Thorndike Perkins, *A Private Proof In Order to Preserve Certain Matters Connected with the Boston Branch of the Perkins Family, Intended Only As An Indication Of the Best Points of Future Investigation* (Boston: T. R. Marvin and Son, 1890).
4. The term was coined by Oliver Wendell Holmes to represent the exclusive Anglo-American families of the nineteenth century, who traced their ancestry back to the original sixteenth- and eighteenth-century colonial ruling class of Massachusetts. Holmes, "The Brahmin Caste of New England," *The Atlantic Monthly* 5, no. 27 (1860).
5. Originally founded in 1829 by Samuel Gridley Howe, The New England Asylum for the Blind was the first school for the blind in the United States. The School was later renamed for Thomas Handasyd Perkins, Cary Agassiz's grandfather, who was one of the organization's incorporators and had begun to lose his sight; he also donated his mansion for the school's second home.
6. Paton, *Elizabeth Cary Agassiz*, 10.
7. Emma Cary quoted in Paton, *Elizabeth Cary Agassiz*, 14.
8. Jennifer Dawes Addikson, "Elizabeth Agassiz," in *Early American Nature Writers: A Biographical Encyclopedia*, ed. Daniel Patterson; contributing eds. Roger Thompson and Scott Bryson (Westport, Connecticut: Greenwood Press, 2008), 7.
9. According to Lucy Patton, upon seeing Agassiz for the first time in Church with the Lowells, not knowing he was already married, Mrs. Cary told her daughter she had met someone "I should like you to marry," *Elizabeth Cary Agassiz*, 31.

10. John Amory Lowell was a successful businessman and philanthropist, who belonged to one of the major elite New England families of the nineteenth century. Lowell played a dominant role in developing the textile industry and several financial institutions. He was the first trustee of the Lowell Institute, which was founded in 1836 by John Lowell Jr. as an educational foundation offering free public lectures on various scientific, social, and religious issues. He was also president of the Boston Athenaeum and a forceful member of the Harvard Corporation. See Betty G. Farrell, *Elite Families: Class and Power in Nineteenth-Century Boston* (Albany: State of New York Press, 1993), 66–68.
11. As a way of introducing himself, Agassiz dedicated the book to Cuvier and sent it with a personal letter in which he confessed to be "a traveling naturalist," adding, "I only need to regulate the impetuosity that carries me away. I beg you, then, to be my guide." Cuvier obliged and took him under his wing. See Louis Agassiz to George Cuvier, April 1829, Agassiz Papers, Houghton Library, Harvard University. The book was published in Latin: *Selecta Genera et Species Piscium Brasiliensium Munich* (1829). On Agassiz see Edward Lurie, *Louis Agassiz: A Life in Science* (Chicago: The University of Chicago Press, 1960). This is the most complete biography, and more recently, Christoph Irmscher, *Louis Agassiz: Creator of American Science* (Boston: Houghton Mifflin Harcourt, 2013); also Louis Menand, *The Metaphysical Club: A Story of Ideas in America* (New York: Farrar, Straus and Giroux, 2001), chap. 5, and *Louis Agassiz: His Life and Correspondence*, ed. Elizabeth Cary Agassiz (Boston: Houghton, Mifflin and Co., 1997).
12. *Recherches* actually appeared in several parts, beginning in 1833 thanks to Humboldt's financial support. In 1843, the parts were bound together in five volumes with an additional volume of corrections and new data. According to Lurie, exact dates can't be determined given Agassiz's constant corrections, *Louis Agassiz*, 395, Note 13.
13. Darwin had argued that the sea had caused the parallel roads, but Agassiz's research made him reconsider his theory. In 1840, after their annual meeting of the British Association for the Advancement of Science, Darwin wrote Agassiz a note stating his admiration. For a detailed history of Agassiz's development during these years, see Lurie, *Louis Agassiz*, chaps. 2 and 3.
14. Elizabeth Cary Agassiz, *Louis Agassiz*, 406; Lurie, *Louis Agassiz*, 126.
15. Lane Cooper, *Louis Agassiz as a Teacher* (Ithaca, NY: The Comstock Publishing, 1917), 1.
16. Elizabeth Higgins Gladfelter, *Agassiz's Legacy. Scientists' Reflections on the Value of Field Experience* (Oxford: Oxford University Press, 2002), 7; Edward Lurie, *Nature and the American Mind: Louis Agassiz and the Culture of Science* (New York: Science History Publications, 1974), 23.

17. Agassiz quoted in David Starr Jordan in his brief account of his summer at the school, "Agassiz at Penikese," *The Popular Science Monthly* 40 (April, 1892): 721. Agassiz was a firm believer in direct observation. For example, he arranged to take two of his students to Florida to study the growth of coral reefs so they could "see" for themselves what they had read in books.
18. The episode in question is referred by Samuel Scudder, founder of insect paleontology in the United States (40–48), published previously in 1874, and included in Cooper, *Louis Agassiz*. For additional first-hand accounts regarding Agassiz's pedagogical methodology, see Joseph LeConte *The Autobiography of Joseph LeConte* (New York: Appleton, 1903), and James David Teller, *Louis Agassiz: Scientist and Teacher* (Columbus: Ohio State University Press, 1947). Among Agassiz's numerous students with successful scientific careers are Frederick W. Putnam, director of the Peabody Museum, first anthropological museum in the United States; Nathaniel Southgate Shaler, Dean of Lawrence Scientific School, and Addison Emery Verrill, Yale University's first Professor of Zoology.
19. In his *ABC of Reading*, Ezra Pound declares that the proper method for studying poetry is through careful examination and comparison, adding: "No man is equipped for modern thinking until he has understood the anecdote of Agassiz and the fish." The anecdote in question told by Pound regards a postgraduate student who approaches Agassiz to obtain the final touches of his degree and receives a fish from the professor; he is told to write a description of the common sunfish. The student offered first a standard description according to textbooks, then a four-page essay. Each time Agassiz made the student go back to observe the fish. Three weeks later, with the fish now in an advanced state of decay, the student finally "knew something about it," in Ezra Pound, *ABC of Reading* (New Haven: Yale University Press, 1934), 3–4.
20. Agassiz would have at least two important opportunities to change his mind. The first was in 1854, when the newly founded University of Zurich, Switzerland, called upon his patriotism to consider an endowed professorship. Although not official, Agassiz turned the invitation down (Cary Agassiz, *Louis Agassiz*, 513). The second and most important offer came in August 1857, when the Government of France extended him the Chair of Paleontology at the Museum of Natural History in Paris. Agassiz had coveted heading the *Jardins des Plantes* for many years, yet he declined. In a letter to a friend he wrote, "The work I have undertaken here [The United States], and the confidence shown in me by those who have at heart the intellectual development of this country, make my return to Europe impossible for the present." Quoted in Cary Agassiz, *Louis Agassiz*, 553–554. See also Elizabeth Cary Agassiz to

Mrs. Thomas G. Cary, September 19, 1857, in Paton, *Elizabeth Agassiz*, 55–56. In 1863, Agassiz confirmed his decision to stay in the United States by becoming a US citizen.

21. Paton, *Elizabeth Cary Agassiz*, 37.
22. Ibid., 38–39.
23. Other well-known members included Charles Sumner, Ralph Waldo Emerson, Nathaniel Hawthorne, Charles Peirce, Henry David Thoreau, Asa Gray, and John Greenleaf Whittier. For a detailed history, see Edward Waldo Emerson, *The Early Years of the Saturday Club, 1855–1870* (Boston: Houghton Mifflin, 1918).
24. Charles Lyell to Charles Bunbury, London, January 17, 1850, in *Life, Letters and Journals of Sir Charles Lyell, Bart*, edited by his sister-in-law Mrs. Lyell, vol. 2 (London: John Murray, 1881), 159–160.
25. Among those who taught at the school were James Russell Lowell, William Stillman, Luigi Monti, and Whitman Gurney from Harvard in addition to Helen Clapp, Katherine Howard, August Curtis, and Katherine Ireland.
26. Although the first edition of *A First Lesson* appeared under the pseudonym of Actaea, the second edition, also published in 1859, stated as the author Mrs. Agassiz and included Actaea as part of the title. This perhaps led Cary Agassiz's biographer Lucy Paton and others to incorrectly state the title of the book: *Actaea, A First Lesson in Natural History* (Boston: Little, Brown and Company, 1859). See Paton, *Elizabeth Cary Agassiz*, 64; Marilyn Ogilvie, entry for Elizabeth Cary Agassiz in *The Biographical Dictionary of Women in Science: Pioneering Lives from Ancient Lives to the Mid-20th Century*, eds., Marilyn Ogilvie and Joy Harvey, vol. 1 (New York: Routledge, 2000), 24–26. Quotes are from the second edition.
27. Cary Agassiz, *A First Lesson*, *7.*
28. Ibid., 10.
29. Baym, *American Women*, 99.
30. Cary Agassiz, *A First Lesson*, 10–11.
31. Baym, *American Women*, 100.
32. The date generally offered for *Seaside Studies* is 1871; however, the first edition was published in 1865. As Alexander Agassiz states in the preface to the 1871 edition, this second edition "is a mere reprint of the first" adding that "a few mistakes overlooked have been corrected."
33. Baym, *American Women*, 1–17. Tina Gianquitto also explores this aspect, highlighting that women often used the natural world as a platform to discuss issues of domesticity, education, and the nation since they were limited by the public discourse. This, in turn, determined the ways in which they perceived and wrote about the world, *"Good*

Observers of Nature" American Women and the Scientific Study of the Natural World, 1820–1885 (Athens: The University of Georgia Press, 2007).

34. The Anderson School is considered an antecedent to the well-known Marine Biological Laboratory in Woods Hole, Massachusetts. Despite some initial protest by male students, Agassiz insisted that women be admitted to the school. Among the few female students admitted were Lydia Shattuck and Cornelia Clapp, faculty from the Mount Holyoke Seminary, and Susan Hallowell, Professor of Natural History at Wellesley College, pioneers in higher education for women. The school opened in July 1873; Agassiz died in December of that same year. His son, Alexander Agassiz, took over as director until the school's closing, two years later. For a brief summary and list of the students attending the school, see Burt Wilder, "Agassiz at Penikese," *The American Naturalist* 32, no. 375 (March 1898): 189–196.
35. For a more in-depth analysis of Cary Agassiz's editorial work, see Nina Baym, *American Women*, especially 107–111.
36. Cary Agassiz would remain president until 1903.
37. Agassiz quoted in Paton, *Elizabeth Cary Agassiz*, 58.
38. Margaret Welch, *The Book of Nature: Natural History in the United States 1825–1875* (Boston: Northeastern University Press, 1998), 6.
39. Louis Agassiz and Augustus Gould, "Preface," *Principles of Zoology: Touching the Structure, Development, Distribution, and Natural Arrangement of the Races of Animals, Living and Extinct; with Numerous Illustrations. For the use of Schools and Colleges*, Part I (Boston: Gould, Kendall and Lincoln, 1848), no page. Gould was a well-known conchologist and malacologist, who taught at Harvard for a few years.
40. Agassiz and Gould, "Preface," *Principles of Zoology*, no page.
41. In a way, Agassiz continued the example of Cuvier who, through patronage and individual prowess, was able to occupy a unique position of intellectual and political power within the scientific community. See Dorinda Outram's insightful text, *Georges Cuvier: Vocation, Science and Authority in Post-Revolutionary France* (Manchester: Manchester University Press, 1984).
42. Cary Agassiz, *Louis Agassiz*, 435.
43. Agassiz would become a key figure in transforming Harvard from a traditional college into a modern research University for which he would achieve national celebrity status (Lurie, *Nature*, 17). It should also be noted that the offer from Harvard coincided with political changes in Europe that affected his research. Most significantly was that the canton of Neuchâtel, where Agassiz had been teaching before coming to the

United States, had ceased to be a dependence of the Prussian Monarchy, and therefore, Agassiz was discharged from the service of the king along with the corresponding funds for his research, which Humboldt had originally secured for him.

44. Cary Agassiz, *Louis Agassiz*, 435. Agassiz would repeat this assessment to his team of scientists in his lectures on the way to Brazil, in part as a criticism to the attention being awarded to Darwin and his theory of natural selection: "An American author is often better satisfied if he publish his book in England than at home. In my opinion, every man who publishes his work on the other side of the water deprives his country of so much intellectual capital to which she has a right. Publish your results at home, and let Europe discover whether they are worth reading. Not until you are faithful to your citizenship in your intellectual as well as your political life, will you be truly upright and worthy students of nature" (LA, *Journey in Brazil*, 44–45).
45. Agassiz's legacy continues to be questioned. On May 21, 2002, the Cambridge School Committee voted unanimously to rename the Agassiz School, the Maria L. Baldwin School. Maria Baldwin, an African American who served as principal of the school from 1889 until her death in 1922, had an important role in transforming the school's educational goals. The School's website states that the renaming was to celebrate Baldwin and her work in a new building. *The Harvard Crimson*, however, reports that the renaming was due to a motion initiated by a former student, Nathaniel Vogel, who discovered Agassiz's racist views through Stephen Jay Gould's writings on Agassiz. The official renaming took place February 14, 2004, accessed June 14, 2011, www.cpsd.us/BAL/history_school.cfm; http://www.thecrimson.com/article/2002/5/22/committee-renames-local-agassiz-school-the/. Recently, members of the Transatlantic Committee for "De-Mounting Louis Agassiz," filed a petition to rename the Swiss mountain peak Agassizhorn, Rentyhorn, in honor of a Congolese-born slave whom Agassiz had photographed naked in South Carolina in 1854. The petition was denied. In 2008, Swiss performance artist, Sasha Huber, was flown to the mountaintop where she placed a plaque with a photograph of Renty as a symbolic act to call attention to Agassiz's dangerous legacy. See http://www.rentyhorn.ch/;http://www.sashahuber.com/?cat=5&lang=fi&mstr=4. For a different consideration of his legacy, see Elizabeth Higgins Gladfelter, *Agassiz's Legacy: Scientists' Reflections on the Value of Field Experience* (Oxford: Oxford University Press, 2002).
46. Lurie seems to agree with this interpretation, highlighting that although "Agassiz went on to admit that the Darwinian idea might very well be

true … Agassiz could not entirely shake off a cosmic approach to the universe," *Louis Agassiz*, 373.

47. Joseph LeConte, *The Autobiography*, 150–151.
48. French naturalist Jean-Baptiste Lamarck had argued for evolutionary change in the early 1800s, maintaining that the transformation of species was due to two factors: that animals actively adapted to changes in the environment, and that there existed a general progressive force in animals that pushed them in successive generations to higher levels of organization. The 1830 controversy over the laws that regulated the order in nature, between Georges Cuvier and Étienne Geoffroy Saint-Hilaire at the Paris Museum, was another important antecedent, which generated much debate among the natural scientists. For a succinct summary of the debate, see Farber, *Finding Order in Nature*, 37–45.
49. Lyell in Michael Ruse, *The Darwinian Revolution: Science Read in Tooth and Claw* (Chicago: University of Chicago Press, 1999), 202. Prior to Darwin's *On the Origin of Species*, Robert Chambers argued for the evolution of species in his anonymously published *The Vestiges of Creation* [1844]. The book's hostile reception most likely contributed to Darwin's delay in publishing his own theory.
50. Paul Jerome Croce, "Probabilistic Darwinism: Louis Agassiz vs. Asa Gray on Science, Religion, and Certainty," *The Journal of Religious History* 22, no. 1 (February 1998), 40.
51. Cuvier's argument combined the taxonomic inclusiveness of Linnaeus with Buffon's quest for the underlying laws of the order of nature, which had an enormous impact on natural history. Farber, *Finding Order in Nature*, 41–42.
52. Drift refers to a superficial layer of earth that bears no relation to the underlying rocks of a region.
53. Louis Agassiz, *Geological Sketches* (Boston: James R Osgood & Co, 1876), 99. This edition comprises the second series. Also, see Lurie, *Louis Agassiz*, 94–105. For Agassiz's investigations regarding the ice age in the United States, see Louis Agassiz, "Ice-Period in America," *Atlantic Monthly* 14, no. 81 (July, 1864): 86–93.
54. Louis Agassiz, *Geological Sketches* (1866), 42.
55. Agassiz's biographer, Edward Lurie, highlights this contradiction, noting, "Agassiz lived as a man who provided basic insights and discoveries that helped effect such change and at the same time as one who fought against the implications of his own insights in the development of a new framework of the study of natural history. It was for these reasons that Agassiz was such an admired yet perplexing intellect to men like Charles Darwin and Charles Lyell," *Louis Agassiz*, 98.

56. In fact, Michael Ruse argues that Darwin arrived at evolution "because of his religious beliefs, rather than despite them," *The Evolution Wars: A Guide to the Debates* (New Brunswick: Rutgers University Press, 2000) 37.
57. Louis Agassiz, "Prof. Agassiz on the Origin of Species," *American Journal of Science and Arts* (Ser. 2) 30 (July 1860): 142–154; 154.
58. Agassiz quoted in Lurie, *Louis Agassiz*, 254.
59. Agassiz's copy of Darwin's *On the Origin of Species* (London: John Murray, 1859), 184, is housed in the Mayr Library, Museum of Comparative Zoology, Harvard University.
60. Darwin to Charles Lyell, December 10, 1859, *Darwin Correspondence Project*, accessed October 9, 2016, https://www.darwinproject.ac.uk/letter/DCP-LETT-2575.xml. See also, David L. Hull, *Darwin and His Critics: The Receptions of Darwin's Theory of Evolution by the Scientific Community* (Cambridge, MA: Harvard University Press, 1973).
61. Croce, "Probabilistic Darwinism," 41; Ruse, *Darwinian Revolution*, 229.
62. Menand, *The Metaphysical Club*, 121.
63. Although Gray publicly supported and defended Darwin's theory, he criticized Darwin's explanation of the forces that motivated natural selection in nature, in Croce, *Probabilistic Darwinism*, 54–55.
64. Ibid., 35.
65. Louis Agassiz, *Methods of Study in Natural History* [1863] (Boston: Fields, Osgood & Co., 1869), iii.
66. Ibid., 202.
67. Agassiz, *Geological Sketches*, 1866, 43.
68. Asa Gray quoted in Lurie, *Louis Agassiz*, 277.
69. Nathaniel Thayer was among several important financial supporters who had helped secure Agassiz's stay at Harvard. Others included Samuel and Nathan Appleton, Francis Cabot Lowell, and John Murray Forbes.
70. In 1876, Hartt became director of a section of the *Museo Nacional* in Rio de Janeiro, a teaching museum dedicated to educating the public in the natural sciences. Magali Romero Sá and Heloisa Maria Bertol Domínguez, "O Museu Nacional e o Ensino das Ciências Naturais no Brasil no Século XIX," *Revista da Sociedade Brasileira de História da Ciência* 15 (1996), 82.
71. João Martins da Silva Coutinho was an engineer who took part in several exploratory commissions during the second half of the nineteenth century, most notably in the ill-fated Exploratory Scientific Commission (better known as the *Comissão das Borboletas* or Commission of the Butterflies), the first expedition of its kind, which examined the region of Ceará, shortly before Agassiz's arrival, between 1859 and 1861. Silva

Coutinho was well acquainted with the Amazon region where he lived for several years studying the vegetation and several indigenous populations. In addition, he had numerous contacts in the region and was consequently instrumental for Agassiz' s smooth success. For more on Silva Coutinho, see Marina Jardim e Silva, Antonio Carlos Sequeira Fernandes, Vera Maria Medina da Fonseca, "Silva Coutinho: uma trajetória profissional e sua contribuição às coleções geológicas do Museu Nacional," (abril/junho 2013), accessed December 7, 2016, http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-59702013000200457. I thank Bob Schwarz for this reference.

72. The photographs of the expedition were to be published in a separate book, which was never produced.
73. Burkhardt's fish was to be published separately. They can be seen in Museum of Comparative Zoology, Harvard University.
74. Elizabeth Cary Agassiz, *A Journey in Brazil*, 328.
75. See, for example, his footnotes on pages 238–240; 243–244.
76. ECA, *Journey*, 286.
77. LA, *Journey*, 383.
78. ECA, *Journey*, 167.
79. LA, *Journey*, 199.
80. ECA, *Journey*, 290.
81. Paton, *Elizabeth Cary Agassiz*, 106–107.
82. ECA, *Journey*, 152; 204.
83. Ibid., 146.
84. LA, *Journey*, 159 (emphasis added).
85. Henry Longfellow to Louis Agassiz, December 26, 1867, in *Letters of Henry Wadsworth Longfellow* ed. Andrew Hillen, vol. 5, 1866–1874 (Cambridge, MA; London, England: The Belknap Press of Harvard University Press, 1982), 198.
86. Sally Gregory Kohlstedt, "In the Periphery: American Women in Science, 1830–1880," *Signs* 4, no. 1 (1978): 81–96 at 90. Also, Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: The Johns Hopkins University Press, 1982).
87. Cary Agassiz in Paton, *Elizabeth Cary Agassiz*, 110.
88. Ibid., 102.
89. Elizabeth B. Keeney, *The Botanizers: Amateur Scientists in Nineteenth-Century America* (Chapel Hill: The University of North Carolina Press, 1992), 6. It is worth noting that both Alfred Russel Wallace and Henry Walter Bates state that their desire to travel to the tropics was inspired by William H. Edwards's book *A Voyage up the River Amazon: Including a Residence at Pará* (London: John Murray, 1847). Edwards

was not a scientist, but a lawyer, yet his exciting first-person account relaying his three-month stay in the Amazon, written in a rhapsodic prose, made a strong impression on both naturalists.

90. ECA, *Journey*, 59.
91. Elizabeth Cary Agassiz quoted in William Roscoe Thayer, Mark Antony Wolfe Howe, Bernard Augustine De Voto, Theodore Morrison, *The Harvard Graduates Magazine* 5, 1896–1897 (Boston, MA: The Harvard Graduates Magazine Association), 90.
92. Elizabeth Cary Agassiz, "Commencement Address," June 28, 1898. Elizabeth Cabot Cary Agassiz Papers, SC99 carton 1, folder 33, Schlesinger Library, Radcliffe Institute, Harvard University, hereafter ECCA. In her commencement address the following year, in 1899, Cary Agassiz will admit: "The field is wide and the opinions various, and I share too much perhaps in the predilections and traditions of the century which is ending to be a good judge of the questions under discussion, as for instance regarding professional or political work for women." Yet, she adds just as forcefully, "I am confident of one thing, however, which is that the largest liberty of instruction cannot in itself impair true womanhood." ECCA, SC99 carton 1, folder 34.
93. ECA, *Journey*, 250.
94. Cary Agassiz, *Seaside*, 138.
95. Cary Agassiz to Louis Agassiz, Thursday morning, [1849–1850], ECCA, A-3, folder 9.
96. Baym, *American Women*, 108.
97. Stephan Jay Gould has highlighted a significant discrepancy between Agassiz's letters and Cary Agassiz's citation of those same letters. In one instance, Gould notes Cary Agassiz "expurgated the text and didn't even insert ellipses." See *The Panda's Thumb: More Reflections in Natural History* (New York: W.W. Norton & Company, 1980), 171.
98. See, for example, Manoel Cardozo who quotes Agassiz several times when, in fact, the quotes belong to Elizabeth Cary Agassiz in "Slavery in Brazil as Described by Americans, 1822–1888" *The Americas* 17, no. 3 (Jan 1961): 250, 253, 257, 258, 260.
99. Baym, *American Women*, 92; Christoph Irmscher, *Poetics of Natural History: From John Bartram to William James* (New Brunswick: Rutgers University Press, 1999), 249–251. In his recent biography of Agassiz, Irmscher has reassessed Cary Agassiz's role and gives her more agency in their joint narrative. He sees her occupying an "intermediate position" between "her husband's science and an ignorant, uncomprehending public" in *Louis Agassiz*, 305.
100. Baym, *American Women*, 92.
101. Linda S. Bergmann, "A Troubled Marriage of Discourses: Science Writing and Travel Narrative in Louis and Elizabeth Agassiz's *A Journey*

in Brazil," *Journal of American Culture* 18 (1995): 83. See also Fabiane Vinente dos Santos, "'Gold Earrings, Calico Skirts': Images of Women and their Role in the Project to Civilize the Amazon, as Observed by Elizabeth Agassiz in *A Journey in Brazil*: 1865–1866," *História, Ciências, Saúde-Manguihnos* 12, no. 1 (2005), 1–21.

102. LA, *Journey*, ix.
103. Charles Darwin to H. W. Bates, April 18, 1863, in Francis Darwin ed., *The Life and Letters of Charles Darwin including an Autobiographical Chapter*, 3 vols. (London: John Murray, 1987) 2: 381.
104. Lurie, *Louis Agassiz*, 357.
105. William James to Mrs. Louis Agassiz, Dresden, June 15, [1868] MS Am 1419, Houghton Library, Harvard University.
106. Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), 34. As Daston and Galison explain, the line between objective and subjective for Kant is generally between universal and particular, not between word and mind. Notions of objectivity and subjectivity are redefined throughout the history of science, but as the authors stress in their introduction, the history of objectivity is almost by definition "part of the history of the self," 37.
107. Agassiz, "Physical History of the Valley of the Amazon," *The Atlantic Monthly* 18, no. 105 (July 1866), 49–60.
108. LA, Journey, 425. Marcus Vinicius de Freitas, *Hartt: expedições pelo Brasil Imperial (1865–1878)* (São Paulo: Metalivros, 2011), 38.
109. This was the title of Agassiz's paper, which was not printed but its contents were reported in Asa Gray to Charles Darwin, August 27, 1866, Gray Papers, cited in Lurie, *Louis Agassiz* 353.
110. Lurie, *Louis Agassiz*, 354.
111. LA, *Journey*, 425 (emphasis added).
112. Ibid., 427.
113. Cary Agassiz to Mrs. Thomas Gray, May 1, 1865. ECCA, A-3, folder 14, accessed November 10, 2016, http://nrs.harvard.edu/urn-3:RAD.SCHL:2026873.
114. Raimundo Morais, *A Margem do Livro de Agassiz*, (São Paulo: Comp. Melhoramente de São Paulo, 1939), 2: "Era amazoniense na Amazônia," my translation.
115. Morais, *A Margem do Livro*, "seu olhar não se desvia," 3, my translation.
116. Cary Agassiz to her mother [Mrs. Thomas Graves], on the Icamiaba, August 20th [1866], ECCA, A-3, folder 15.
117. In 1871, Rio de Janeiro had approximately 275,000 inhabitants; Boston's population was approximately 250,526 in 1870. See *Rio de Janeiro, 1862–1927 Album fotográfico da formação da cidade* (Rio de Janeiro: Instituto Moreira Salles, 1998), 137; also, Associação dos

Geógrafos Brasileiros, *Aspectos da Geografía Carioca* (Rio de Janeiro: Conselho Nacional de Geografia, Instituto Brasileiro de Geografia e Estatística, 1962).

118. The few exceptions were Thomas Ewbank, *Life in Brazil* (New York, 1856) and Daniel P. Kidder and James C. Fletcher, *Brazil and Brazilians Portrayed in Historical and Descriptive Sketches* (Philadelphia, 1857).
119. The original capital, Bahia, was transferred to Rio in 1773.
120. Dom Pedro II became emperor in 1831 at the age of five, when his father abdicated and returned to Europe. He was officially crowned on July 18th, 1841. His reign lasted until 1889, when he was deposed and Brazil became a Republic.
121. John DeWitt, *Early Globalization and the Economic Development of the United States and Brazil* (Westport, Connecticut: Praeger, 2002), 43.
122. Lyman L. Johnson and Zephyr Frank, "Cities and Wealth in the South Atlantic: Buenos Aires and Rio de Janeiro before 1860," *Comparative Studies in Society and History* 48, no. 3 (July 2006): 641.
123. During the nineteenth century, Rio de Janeiro underwent essentially three phases of urban "embellishment." See Margareth da Silva Pereira, "The Time of Capitals, Rio de Janeiro and São Paulo: Words, Actors and Plans," *Planning Latin America's Capital Cities 1850–1950*, ed. Arturo Almandoz (New York: Routledge, 2002): 75–108.
124. Beaurepaire's Plan of 1843 is considered the first urban project for the city. His extraordinary vision helped transform and modernize the city. See Verena Andreatta "Río de Janeiro: planes de ordenación y orígenes de la urbanística carioca," accessed July 13, 2011, www.riurb.com/n1/01_02_VerenaAndreatta.pdf.
125. See José Murilo de Carvalho, *Dom Pedro II* (São Paulo: Companhia das Letras, 2007); Lilia Moritz Schwarcz, *The Emperor's Beard. Dom Pedro II and the Tropical Monarchy of Brazil,* trans. John Gledson (New York: Hill and Wang, 2004); Roderick J. Barman, *Citizen Emperor. Dom Pedro II and the Making of Brazil, 1825–1891* (Stanford: Stanford University Press, 1999).
126. In 1872 of Rio's 275,000 inhabitants, 84,000 were foreigners (Portuguese, French, Germans, and English), *Aspectos de Geografía Carioca*, 76–77.
127. The Amazon had remained considerably isolated within Brazil as well as from the rest of the world. Over the years, there had been several unsuccessful attempts to transport cargo down the Amazon (including from the United States). Matthew Fontaine Maury, head of the United States Naval Observatory and Hydrographic Office, was one individual particularly eager to secure the opening of the Amazon. Eventually, the US Navy Department sent three naval lieutenants to explore the river

basin. They described the region as an extension of the American West and encouraged efforts to establish a treaty. The main instigators of the opening of the Amazon, however, were the reverends D. P. Kidder and James C. Fletcher, who lived several years in Brazil. See Fletcher's address to the Boston Board of Trade "Steam Communication with Brazil" August, 14, 1863, accessed June 13, 2011, http://www.nytimes.com/1863/08/14/news/steam-communication-with-brazil-interesting-address-rev-jc-fletcher-before.html?pagewanted=2; also, Rev. James C. Fletcher and Rev. D. P. Kidder, D.D. *Brazil and the Brazilians Portrayed in Historical and Descriptive Sketches* (London: Sampson Low, Son, and Marston, 1866). For a detailed history of events regarding the Amazon, see Bradford Burns, *A History of Brazil* (New York: Columbia University Press, 1993). David M. Pletcher, *The Diplomacy of Trade and Investment: American Economic Expansion in the Hemisphere, 1865–1900* (Columbia: University of Missouri Press, 1998), 184.

128. On the opening of the Amazon, see Anyda Marchant, *Viscount Mauá and The Empire of Brazil. A Biography of Irineu Evangelista de Sousa (1813–1889)* (Berkeley: University of California Press, 1965), 101–114; Lídia Besouchet, *Pedro II e o Século XIX* [1975] (Rio de Janeiro: Editora Nova Fronteira, 1993), 77–87.
129. Louis Agassiz introduces a footnote mentioning Mauá, though he misspells his name, and refers to him as Baron of Mazá in *Journey*, 145.
130. One of the issues involved in negotiations between the United States and Brazil was slavery. Even though the slave trade had been banned in Brazil in 1850 under the Eusebio de Queirós Law, it was not until the Golden Law was decreed that slavery was officially abolished in 1888. After the US Civil War, a few hundred Confederates emigrated to Brazil, which subsequently spurred several books addressing this relocation south. See Reverend Ballard S. Dunn, *Brazil, the Home for Southerners; or a Practical Account of What the Author, and Others, Who Visited that Country, for the Same Objects, Saw and Did While in that Empire* (New York: George B. Richardson, 1866); Rev. John Codman, *Ten Months in Brazil: With Notes on the Paraguayan War*, reprinted from the American edition (Edinburgh: R. Grant & Son, 1870). Codman, who saw no future in Brazil for Southerners, shared Agassiz's view on miscegenation: "He must be a careless observer of society who does not see that its pest in Brazil is amalgamation—the mixture of two bloods which the Almighty never intended to course in one current," 176.
131. *The Illustrated London News* praised Dom Pedro for displaying "good sense, prudence, sagacity, and firmness," October 30, 1852, 349, quoted in Barnum, 160.

132. Lilia Moritz Schwarcz, *As barbas do Emperador: D. Pedro II, un monarca nos trópicos* (São Paulo: Companhia das Letras, 1998), 198–200.
133. José Murilo de Carvalho, *Dom Pedro II: Ser ou não ser* (Brazil: Companhia das Letras, 2007), 226. In a letter recounting Agassiz's lectures on glaciers and zoology, Dom Pedro describes Agassiz's presentation in great detail, including his own personal questions and reservations regarding Agassiz's assessments. Dom Pedro is extremely insightful in following Agassiz's thinking, and while he is not convinced by his theory and expresses doubts, he states at the end of this letter: "Il a fini la leçon en encourageant les Brésiliens à étudier leur proper sol. Ce que j'ai causé avec Agassiz sur ses leçons antérieures n'exige pas que je modifie ce que que [sic] je vous ai écrit." ("He concluded his lesson encouraging Brazilians to study their proper soil. What I have said regarding his previous lessons does not demand that I modify what I wrote you before."), 6. Letter from Dom Pedro II to Luísa de Barros, Countess of Barral, 1-DBM-06_04_1865 PII.B.c I-27, Museo Imperial, Petropolis, Brazil.
134. ECA, *Journey*, 484.
135. Ibid., 243.
136. John Tallmadge analyzes Darwin's narrative strategies in "From Chronicle to Quest: The Shaping of Darwin's 'Voyage of the Beagle'," *Victorian Studies* 23, no. 3 (Spring 1980): 325–345.
137. It should also be noted that that throughout his trip, Agassiz was accompanied by numerous local authorities, who are briefly mentioned such as deputy Tavares Bastos, Mr. Pacheco da Silva, Mr. Lage, or Major Estolano. These individuals were instrumental in making sure that the professor and his crew were properly received and had help from local inhabitants. These collaborators are thanked in the footnotes.
138. ECA, *Journey*, 47.
139. Ibid., 50.
140. Ibid., 51.
141. Ibid., 53–54 (emphasis added).
142. Richard Graham, "Slavery and Economic Development: Brazil and the United States South in the Nineteenth Century," *Society for Comparative Studies in Society and History*, 23, no. 4 (October 1981): 628.
143. ECA, *Journey*, 61.
144. Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* (Oxford: Oxford University Press, 1990).
145. Based on the characteristics Gilpin assigns to the picturesque (roughness, variety, and contrast), the object presented in picturesque beauty is rich and complex, which in this sense is more "real" than the static beauty. William Gilpin, *Three Essays: on Picturesque Beauty; On Picturesque*

Travel; And on Sketching Landscape; To Which Is Added a Poem on Landscape Painting (London: Blamire, 1794).

146. Albert Boime, *The Magisterial Gaze* (Washington, DC: Smithsonian Institution Press, 1991).
147. ECA, *Journey*, 62.
148. Humboldt, *Cosmos* I, 24.
149. ECA, *Journey*, 166.
150. Barbara Novak, *Nature and Culture*, *97*.
151. For a detailed analysis of Church's representation of the tropics, see Gerassi-Navarro, "Picturing the Tropics," 201–229.
152. ECA, *Journey*, 164.
153. ECA, *Journey*, 156; 264.
154. ECA, *Journey*, 99–100.
155. Ibid., 112.
156. A similar process is evident in William James' diary describing his own process of observing tropical nature. See Nina Gerassi-Navarro, "The Art of Observation: Race and Landscape in 'A Journey in Brazil,'" *Surveying the Tropics: A Literary Geography From New York to Rio*. Edited by Maria Cristina Fumagalli, Peter Hulme, Owen Robinson, and Lesley Wylie (Liverpool: Liverpool Press, 2013): 313–345.
157. ECA, *Journey*, 144, 154, 156, 156, 334.
158. Ibid., 172, 183, 233, 254.
159. Ibid., 355.
160. ECA, *Journey*, 353. During the rainy season, the Amazon River triples the area it covers during the dry season. At its widest point during the dry season, it measures 6.8 miles, whereas during the rainy season, the floods can extend this up to 24.8 miles.
161. Ibid., 256.
162. Ibid., 443.
163. Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford: Oxford University Press, 1964).
164. ECA, *Journey*, 444.
165. Agassiz's declarations were part of a series of twelve lectures on the "Plan de la Création." In his last lecture, Agassiz stated that unlike all other organized beings, plants as well as animals were confined to a special area, "Man alone is spread over the whole surface of the earth." Jules Marcou, *Life, Letters and Works of Louis Agassiz* [1896] 2 vols. (New York: Macmillan 1896): 1: 247.
166. Humboldt, *Cosmos*, 1: 354; 358.
167. US Senator Charles Sumner was a key figure in US politics at the time and a passionate abolitionist.

168. Louis Agassiz to Rose Mayor Agassiz, Transcript, December 2, 1846, MS Am 1416 (66) Houghton Library, Harvard University. Stephen Jay Gould argues that Agassiz's revulsion, revealed in this letter, would lead him to develop his arguments supporting polygenism, in *The Mismeasure of Man*, rev. edn. (New York: W.W. Norton & Company), 76–77. On racial struggles in Boston at that time, see Stephen Kendrick and Paul Kendrick, *Sarah's Long Walk. The Free Blacks of Boston and How Their Struggle for Equality Changed America* (Boston: Beacon Press, 2004).
169. Morton's first influential publication, *Synopsis of the Organic Remains of the Cretaceous Group of the United States* (1834), positioned him as the founder of invertebrate paleontology in the United States.
170. For a succinct explanation of Morton's work, see Gould, *Mismeasure*, 82–101. Gould criticized Morton's system of measurements arguing that his "summaries are a patchwork of fudging and finagling in the clear interest of controlling a priori convictions" (86). In June 2011, a study from the University of Pennsylvania (where Morton's skull collection is housed) affirmed that Morton's measurements were in fact correct. The study, as reported in an article in *The New York Times*, states that "Dr. Gould did not measure any of the skulls himself but merely did a paper reanalysis of Morton's results," which lead the Pennsylvania team to state "Gould's own analysis of Morton is likely the stronger example of a bias influencing results." Rather than focus on who had a stronger bias (and noting that Gould also admitted that he did "not find evidence of conscious fraud" in Morton's analysis (86)), I would point to the fact that both critiques underscore that scientific data does not ensure objectivity, for it can be used and explained in ways that have serious ideological underpinnings. Hence, in addition to focusing on the data, we should also focus on how an argument is developed through the data. See Nicholas Wade, "Scientists Measure the Accuracy of a Racism Claim," *New York Times* (June 13, 2011) D 4.
171. Samuel Morton, *Crania Americana, a Comparative View of the Skulls of Various Aboriginal Nations of North and South America to Which Is Prefixed an Essay of the Varieties of the Human Specie*s (Philadelphia: J. Dobson, Chestnut Street, 1839).
172. Ibid., 5
173. Louis Agassiz quoted in ECA, *Louis Agassiz*, 417. As Agassiz's friend and biographer, Jules Marcou wrote, "I may say that after George Cuvier, Morton was the only zoologist who had an influence on Agassiz's mind and scientific opinions." Marcou, *Life*, 2: 29.
174. Known as the father of American herpetology, John Edwards Holbrook (1794–1871) was a recognized naturalist who studied with many leading

scientists, among them Georges Cuvier. He also studied medicine and founded the Medical College of South Carolina. He hosted Agassiz when he visited South Carolina, and they became good friends; Lewis R. Gibbes (1838–1892) was professor of mathematics, astronomy, and chemistry at the College of Charleston; Robert Wilson Gibbes (1809–1866) was professor of geology and chemistry, and was especially interested in vertebrate fossils; Francis Holmes (1815–1882) was a paleontologist. On the importance of this circle of naturalists and other scientists in Charleston, South Carolina, see Lester D. Stephens, *Science, Race, and Religion in the American South: John Bachman and the Charleston Circle of Naturalists, 1815–1895* (Chapel Hill: The University of North Carolina Press, 2000).

175. Upon Morton's death in 1851, two of his colleagues, Josiah Nott and George Gliddon, carried his ideas further, arguing in their monumental tribute to his work, *Types of Mankind*, that Morton's findings supported polygenesis. Agassiz contributed an essay to that volume supporting this view contending that the distinction between races coincided with their geographical distribution. See Louis Agassiz, "Sketch of the Natural Provinces of the Animal World and Their Relation to the Different Types of Man," in *Types of Mankind*, eds. J. C. Nott and George R. Gliddon (Philadelphia: Lippincott, Grambo & Co, 1854), lviii–lxxvi.
176. Lurie, "Louis Agassiz and the Races of Man," 227.
177. For a summary of the March 15 meeting and debate, in addition to the development of Agassiz's argument between 1846 and 1850, see Lurie, "Louis Agassiz and the Races of Man," 236–238; William Stanton, *The Leopard's Spots: Scientific Attitudes Towards Race in America, 1815–1859* (Chicago: The University of Chicago Press, 1960), 100–112.
178. The article was entitled: "The Diversity of Origin of the Human Races," *Christian Examiner* 49 (July, 1850): 110–145. In this article, Agassiz insisted that "the unity of species does not involve a unity of origin, and a diversity of origin does not involve a plurality of species" (113).
179. Agassiz quoted in Stanton, *Leopard's Spots*, 149.
180. LeConte, *The Autobiography*, 140. It is interesting to note that a few years later, when Agassiz debated evolution he would be praised by theologians, whereas his counterpart, Asa Gray, who had defended the unity of races, would be criticized for his defense of Darwinism.
181. Elizabeth Cary Agassiz to Louis Agassiz, Sunday morning [1849–1850], ECCA, A-3, folder 9.
182. Molly Rogers endorses this view in *Delia's Tears: Race, Science and Photography in Nineteenth-Century America* (New Haven: Yale University Press, 2010), 210–211.
183. Elizabeth Cary Agassiz to Louis Agassiz, Thursday morning [1849–1850], ECCA, A-3, folder 9.

184. Ibid.
185. Mary Karasch, *Slave Population in Rio de Janiero, 1808–1850* (Princeton: Princeton University Press, 1987), xi. The demographics of Rio de Janeiro changed substantially as of 1720, when the importation of African slaves to the port of Salvador in northern Brazil began to decline and was replaced by Rio de Janeiro, where approximately 20% of slaves imported each year remained. See also Philip D. Curtin, *The Atlantic Slave Trade: A Census* (Ann Arbor: University of Wisconsin Press, 1969), 239–240; Herbert Klein, *The Middle Passage: Comparative Studies in the Atlantic Slave Trade* (Princeton: Princeton University Press, 1978), 76–77; Manolo Florentino, Alexandre Vieira Ribeiro, and Daniel Domingues da Silva, "Aspectos comparativos do tráfico de africanos para o Brasil (Séculos xviii e xix)," *Afro-Asia* 31 (2004): 83–126; 87. Regarding the origin of the African slave population in Rio at the time of Agassiz's trip, see Flávio dos Santos Gomes, "Agassiz and the 'Pure Race' Africans in the City on the Atlantic," trans. by John Monteiro in *Traces of Louis Agassiz: Photography, Body and Science, Yesterday and Today/Rastros e Raças de Louis Agassiz: Fotografia, Corpo e Ciência, Ontom e Hoje* eds., Maria Helena P. T. Machado and Sasha Huber, (São Paulo: Capacete, 29th Bienal de São Paulo, 2010), 44–52.
186. Slaves in Brazil were classified based on birthplace: Brazilian born slaves were "sorted" by color, while Africans were classified by national origin. Karash, *Slave Population*, 3–28.
187. Lilia Moritz Schwarcz, *The Spectacle of Races. Scientists, Institutions, and the Race Question in Brazil, 1870–1930*, trans. by Leland Guyer (New York: Hill and Wang, 1999), 4. See also, George Ermakoff, *O Negro na Fotografia Brasileira do Século XIX* (Rio de Janeiro: G. Ermakoff, Casa Editorial, 2004) especially 283–286; Schwarcz, *The Emperor's Beard*, 184–231.
188. ECA, *Journey*, 48–49 (emphasis added).
189. ECA, *Journey*, 48, 49, 129, 155, 331.
190. Gould, *Mismeasure*, 79–82; Menand, *Metaphysical Club*, 114–116. See Agassiz's correspondence with Samuel Gridley Howe in Elizabeth Cary Agassiz, *Louis Agassiz*, 591–617.
191. Louis Agassiz, Letter August, 9, 1863, in Cary Agassiz, *Louis Agassiz*, 599.
192. ECA, *Journey*, 1–2.
193. The Battle of Five Forks, fought on April 1 in Dinwiddie County, southwest of Petersburg, Virginia, was a turning point for the South. A few days after this defeat, on April 9, 1865, Robert E. Lee surrendered to the North, thus ending the US Civil War.
194. ECA, *Journey*, 49.

195. Curtin, *The Atlantic Slave Trade*, 20.
196. Burns, *A History of Brazil*, 229.
197. Highlighting Dom Pedro's abhorrence to slavery, Cary Agassiz introduced a footnote stating that since her writing, the Emperor had liberated all slaves belonging to the crown, and that a general scheme of emancipation has been announced, thus in her opinion, "slavery in Brazil will disappear within the century by a gradual process, involving no violent convulsion, and periling neither the safety of the slave nor the welfare of his master," *Journey*, 66.
198. On the war's effects on the Brazilian national identity, see Luís Cláudio Villafañe G. Santos, "As Conseqüênças da Guerra da Tríplice Aliança na Definição de Identidade Brasileira," *Militares e Política* 3 (July-Dec, 2008): 42–58, accessed September, 28, 2012, http://www.lemp.ifcs.ufrj.br/revista/anter.html.
199. During the war, in particular after the defeat of the Battle of Curupaytí (September 22, 1866), the political debate in Brazil focused on whether the prohibition of drafting slaves for military service should continue. On November 6, 1866, the Imperial government issued a decree emancipating slaves in exchange for military service. Thomas Skidmore, *Black Into White: Race and Nationality in Brazilian Thought* (Chapel Hill: Duke University Press, 1993), 12.
200. She is referring to the systematic recruitment of disreputable men by British soldiers in markets fairs and public houses, who often tricked them to become soldiers.
201. ECA, *Journey,* 290. Although Cary Agassiz criticizes Brazil for its recruitment system, she also recognizes that even though it altered the demographics of the interior of the country and forced women to fend for themselves, it also enabled women to lead extremely independent lives.
202. Ibid., 65
203. Ibid., 65.
204. Ibid., 129.
205. Ibid., 93.
206. Ibid., 291.
207. Ibid., 292, 197.
208. Ibid., 292.
209. Ibid., 154.
210. Ibid., 230, 282.
211. Ibid., 223.
212. ECA, *Journey*, 317. The Mundurucu Indians are undoubtedly striking, as two illustrations of them are included in the text (313, 314) with a note signed by Louis Agassiz, stating that the illustrations do not do justice to the pair.

213. Ibid., 318.
214. Ibid., 317–321.
215. Ibid., 224. The illustration of Alexandrina is from a sketch by William James.
216. Ibid., 236 (emphasis added). In his fifth appendix, Louis Agassiz uses the same characterization to describe the black population in the Amazon: "Like *long-armed monkeys* the Negroes are generally slender, with long legs, long arms, and a comparatively short body" (529) (emphasis added).
217. Gould, *Mismeasure*, *66*
218. Ibid., 67.
219. ECA, *Journey*, 246.
220. LA, *Journey*, 247.
221. Domingo Faustino Sarmiento, *Facundo o civilización* [1854] (Buenos Aires: Espasa-Calpe, 1970). Sarmiento would emphasize education as the means to transform society whereas Juan Bautista Alberdi, a compatriot of Sarmiento's, advocated an aggressive immigration policy to attract Northern Europeans (because "there is Europe and Europe") to improve the constitution of the Argentine family. See Juan Bautista Alberdi, *Bases y puntos de partida para la organización política de la República Argentina* (1853), texto revisado y con una advertencia de Francisco Cruz (Buenos Aires: La Cultura Argentina, 1915), 18; 215.
222. Vinente dos Santos' study focuses in particular on Cary Agassiz's portrayal of women, "'Gold Earrings, Calico Skirts'," 13.
223. Ibid., 13.
224. ECA, *Journey*, 223, 234.
225. Ibid., 177
226. Ibid., 232.
227. Cary Agassiz in Paton, *Elizabeth Cary Agassiz*, 90.
228. ECA, *Journey*, 266, 267.
229. ECA, *Journey*, 227.
230. Ibid., 292.
231. ECA, *Journey*, 128–129.
232. LA, Journey, 293.
233. *A Journey in Brazil* includes several illustrations: Two illustrations of a Mina Negress are copied from photographs by Stahl and Wahnschaffe, the imperial photographers; two of the Mundurucu Indians are from photographs by Dr. Gustavo; and the head of Alexandrina is from a sketch by William James. Other illustrations are of trees from photographs by Swiss photographer George Leuzinger and three landscape drawings by Jacques Burkhardt.
234. LA, *Journey*, 529, 530.
235. The complete collection of photographs of the Thayer expedition originally comprised three albums. For conservation purposes, the

photographs have been individually protected by Mylar sleeves and placed in boxes, housed in the Archives of the Peabody Museum at Harvard University. I would like to especially thank India Spartz, Patricia Kervick, and Jessica Desany-Ganong for their assistance and information regarding the photographs. The collection includes the studio photographs as well as Hunnewell's photographs for Agassiz. For a discussion of Agassiz's photographs, see Gerassi-Navarro, "The Art of Observation," 313–345; Gwyniera Isaar, "Louis Agassiz's Photographs in Brazil. Separate Creations," *History of Photography* 21, no. 1 (Spring 1997), 3–11; Nancy Leys Stepan, *Picturing Tropical Nature* (London: Reaktion Books, 2001), 85–119.

236. Crary, *Techniques of the Observer*, 5.
237. Ibid., 6.

Conclusions

As the political map of the Americas shifted during the nineteenth century, travel within the continent became a means to appraise the challenges and opportunities offered by new territories, which had once been thought of as remote and foreign. Travelers embarked on economic ventures, exploratory journeys to acquire scientific knowledge or assess territorial possessions, or simply to contemplate new landscapes and peoples. At the same time, while travel narratives explored the shifting landscape, they also created a sense of place and fixity as a means to counter the uncertain flux. By distinguishing "us" from "them," "here" from "there," these narratives reaffirmed in a circuitous manner clear and distinct boundaries, not only in terms of geography or politics but also culturally as well. This double movement of self-fashioning and othering highlights the self-referential aspect embedded in many travel narratives as a way of ordering the world to secure one's own place. In Maria Frawley words, "Travel was all about the boundaries."[1]

Yet, as Calvino's *Invisible Cities* reminds us, the boundaries of travel narratives are shapeless, because travel accounts can take on many narrative styles and can be as much documentary as imagined. This mixture of fact and fiction, interlaced with objective observations and subjective perspectives, allows for a broad diversity of narrative forms that entangle any comprehensive definition of the genre. In fact, taking into account the eclectic combination of factors, Jan Borne argues that travel writing should not even be considered a genre, but rather a collection of texts both fictional and non-fictional that simply have travel as their main theme.[2]

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Indeed, travel accounts are open-ended and versatile in form; as Glenn Hooper and Tim Youngs underscore, nineteenth-century travel narratives shared a distinct approach to travel determined by a shifting global context that in turn opened up the political and social landscape as empires were reconfigured.[3] Women were well aware of the political shifts, and despite their social constraints and the discursive restrictions imposed on their narratives, many of their travel accounts can be read as a reflection on the uncertainty of those changes.

The travel accounts written by Frances Calderón de la Barca and Elizabeth Cary Agassiz reflect the prejudices and interests of their authors, while they also give us insight into the political and cultural contexts surrounding their travel. Both authors are aware of the uniqueness of their travels given the context and circumstances surrounding their trips. Perhaps, an important aspect of their journeys is that their travel has no distinct intention beyond accompanying their husbands. They are not seeking anything in particular; they are simply fulfilling their mandate as the dutiful wife who accompanies her spouse. Yet, during their travels, they develop an awareness of difference and place that ironically gives them a sense of purpose, which is to observe.

As the wife of the first Spanish Ambassador to Mexico, Fanny Calderón knows her husband's arrival in Mexico is an historical event. Her diary-like letters documenting her daily life are filled with informative assessments about customs and habits, political uprisings, architecture and landscape, alongside her impressions, likes, and dislikes. In documenting her daily life, her purposelessness becomes meaningful because she learns to observe beyond the traditional forms of her time. She describes, compares, and ponders. Highlighting everything that stands out in her view about Mexicans and their country, she not only uncovers many aspects of the culture until then unexplored by US Americans and Europeans but also discusses the significance of what she sees. In the process, she asserts her authority as a well-informed and serious observer.

In the case of Elizabeth Cary Agassiz, cognizant that few travelers had been authorized to explore the Amazon, much less with the help and freedom her husband was granted, she compellingly narrates all that she observes of the Brazilian landscape almost as a means to complement her husband's circumscribed research. He is so focused and determined to find what he expects in the Amazon—including traces of glaciers—that

he observes far less of Brazil than his wife. Furthermore, as she is mindful of her lack of scientific expertise, she carefully scrutinizes what she observes. In the end, her detailed observations of everyday life and tropical nature in Brazil are much more substantial than her husband's eccentric scientific views.

Both authors present rich and informative narratives, yet neither refrains from acknowledging her subjective views. Travel is as much about describing the outside world as it is about how the self is positioned in relation to that world. Cary Agassiz reminds her readers of her outsider gaze when she reiterates expressions such as "to my eye," and when she cautions them to remember that her remarks refer to just one or two examples. Fanny Calderón openly acknowledges her linguistic blunders and reminds readers that even Europe is accountable for some of the same criticisms she makes of Mexico, thus relativizing her critique. Unlike most men who traveled with a specific purpose or public duty during this period, women, especially those accompanying their spouses, displayed a peculiar kind of freedom, which allowed them to unveil their own subjectivity as they explored different regions or countries. This allowed them to read their surroundings with an interest and detail that their husbands lacked. Although women were often faulted for their "purposelessness," as the reviews of Fanny Calderón remind us, it is precisely this "purposelessness" that transforms both women's narratives into richly textured documents. In her discussion of women traveling West in the United States during the nineteenth century, Susan Roberson concludes that: "These women use travel narratives and geographic metaphors of boundary crossings to interrogate their positions as women and citizens."[4] By acknowledging their subjectivity within their narratives as they weave important information regarding other cultures, both Fanny Calderón de la Barca and Elizabeth Cary Agassiz expand the geographic boundaries for women as well as the cultural, political, and scientific boundaries. Their accounts sway back and forth with a pendular rhythm exposing their negotiations between the subjective and objective, intimacy and distance, "us" and "them." The newly acquired knowledge in their host country reshapes their impressions, altering not only the way they observe the foreign culture but also the way they think about their own cultures and of themselves. In essence, "purposelessness" blurs boundaries, allowing for a multiplicity of perspectives and readings.

The narratives of Frances Calderón de la Barca and Elizabeth Cary Agassiz form part of a valuable historical archive that records not only

informative aspects of both the culture of origin and the culture visited but also the emotional elements that are tied into travel itself. If such accounts can teach us anything, it is that they are far more textured and complex narratives than they first appear, and as readers, we must unpack their multiple perspectives and contradictions. By placing them within the political, scientific, and cultural framework surrounding the travelers, my reading of *Life in Mexico* and *A Journey in Brazil* seeks to understand why the travelers see what they do. By contextualizing the authors' gaze, we can uncover how observations are framed and their political significance. As new critical studies delve into a more in-depth understanding of the interconnections within the Americas, women's travel narratives are just one example of an extensive body of texts that needs to be re-examined for the knowledge they convey.

Notes

1. Although Frawley is referring to Victorian travelers, the same holds true for travelers across the Americas during this time. Maria H. Frawley, "Borders and Boundaries, Perspectives and Place: Victorian Women's Travel Writing," *Intrepid Women: Victorian Artists Travel* ed. Jordana Pomeroy (Aldershot; Burlington VT.: Ashgate, 2005), 27.
2. Jan Borne, "Defining Travel: The Travel Book, Travel Writing and Terminology," *Perspectives on Travel Writing*, eds. Glenn Hooper and Tim Youngs (Aldershot; Burlington, VT.: Ashgate, 2004), 13–26.
3. Glenn Hooper and Tim Youngs, "Introduction," *Perspectives on Travel Writing*, 3.
4. Susan L. Roberson, "Geographies of the Self in Nineteenth-Century Women's Travel Writing," *American Literary Geographies: Spatial Practice and Cultural Production 1500–1900*, eds., Martin Brückner and Hsuan L. Hsu (Newark: University of Delware Press, 2007), 293.

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Folder 14. Schlesinger Library, Radcliffe Institute, Harvard University, accessed November 10, 2016, http://nrs.harvard.edu/urn-3:RAD.SCHL:2026873.

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