

The Ultimate "Other": Post-Colonialism and Alexander Von Humboldt's Ecological Relationship with Nature

Author(s): Aaron Sachs Source: *History and Theory*, Dec., 2003, Vol. 42, No. 4, Theme Issue 42: Environment and History (Dec., 2003), pp. 111-135

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THE ULTIMATE "OTHER": POST-COLONIALISM AND ALEXANDER VON HUMBOLDT'S ECOLOGICAL RELATIONSHIP WITH NATURE'

(Slightly Abridged)

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ABSTRACT

This article is a meditation on the overlaps between environmentalism, post-colonial theory, and the practice of history. It takes as a case study the writings of the explorer-scientist-abolitionist Alexander von Humboldt (1769-1859), the founder of a humane, socially conscious ecology. The post-colonial critique has provided a necessary corrective to the global environmental movement, by focusing it on enduring colonialist power dynamics, but at the same time it has crippled the field of environmental history, by dooming us to a model of the past in which all Euro-American elites, devoid of personal agency, are always already in an exploitative relationship with the people and natural resources of the developing world. A close reading of Humboldt's work, however, suggests that it could provide the basis for a healthy post-colonial environmentalism, if only post-colonial critics were willing to see beyond Humboldt's complicity in colonial structures. In particular, this article attempts to rehabilitate Humboldt's reputation in the face of Mary Louise Pratt's canonical post-colonial study, *Imperial Eyes: Travel Writing and Transculturation*. Humboldt's efforts to inspire communion with Nature while simultaneously recognizing Nature's "otherness" can be seen as radical both in his day and in ours. In addition his analysis of the link between the exploitation of natural resources and the exploitation of certain social groups anticipates the global environmental justice movement.

.... What the environmental movement seems to need right now is a tradition of justice-oriented thinking on which it might draw, but post-colonialism teaches that no such tradition could exist, because of the all-encompassing power of the colonial system. Past elites had no agency, no chance of resisting. We are doomed to a model of history in which the industrial countries are always already exploitative, and the only hope lies sometime in the future, when we post-colonial scholars — smarter than any of

1. I would like to thank Lila Corwin Berman, Bill Cronon, John Demos, Christine Evans, John Mack Faragher, Paul Gilroy, Robert Johnston, Lou Masur, Bob Morrissey, Stuart Schwartz, Adriane Smith, Catherine Whalen, Bryan Wolf, and Sandy Zipp for helpful comments on earlier drafts of this article.

our forebears —will have helped start the revolution. As the environmental historian Richard Grove has pointed out, though, in *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860*, post-colonialists may have overlooked certain exceptions to their model. Indeed, Grove convincingly locates the rise of an environmental consciousness in the colonial project itself, especially on island colonies where local governors of necessity became resource managers.⁶ I would replace Grove's "environmentalism" with "conservationism," since his examples deal almost exclusively with the more efficient handling of limited natural resources. But at the same time I would take his argument one step further and suggest that the post-colonial view of the past has blinded us to an even more radical environmental tradition, one more fully in line with the social-justice orientation of post-colonialism itself.

A truly mature relationship between environmentalism and post-colonialism, it seems to me, would likely result in an embrace of something like the "social ecology" that Murray Bookchin has been developing over the last four decades. For Bookchin, ecological thinking means, first and foremost, considering the interconnectedness of the domination of nature and the domination of some people by others.* Yet post-colonialists have ignored Bookchin, perhaps because he is a somewhat cantankerous white male American. And neither post-colonialists nor environmentalists have ever paid much attention to the 200-year-old tradition on which Bookchin's theories are based —a tradition which I think can be traced to another white male with close ties to colonial power structures, Alexander von Humboldt.

H. HUMBOLDT CURRENTS

Alexander von Humboldt rarely stopped traveling. In his early twenties, he toured Europe with his older friend George Forster, who at Humboldt's age had

2. Grove explains that most post-colonial writers tend to "attach exclusively utilitarian and/or exploitative and hegemonic motivations to the early development of science in the colonial context and ignore the potential for contradictory reformist or humanitarian motivations." See Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860* (New York: Cambridge University Press, 1995), quotation on 8; and also Grove, "Colonial Conservation, Ecological Hegemony, and Popular Resistance: Towards a Global Synthesis," in *Imperialism and the Natural World*, ed. John M. Mackenzie (Manchester, Eng.: Manchester University Press, 1990), 15-51.

3. Among Bookchin's key works are: *Our Synthetic Environment* (New York: Harper and Row, 1962; published under the pseudonym Lewis Herber); *Post-Scarcity Anarchism* [1971] (Montreal: Black Rose Books, 1986); and *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy* [1982] (Montreal: Black Rose Books, 1991). Also see Janet Biehl, with Bookchin, *The Politics of Social Ecology: Libertarian Municipalism* (Montreal: Black Rose Books, 1998).

4. My investigation of this tradition is clearly a presentist project, but no more so than the post-colonialist project of holding figures from the past up to current standards of political correctness. I believe that the genealogy of social ecology goes back at least as far as Jean-Jacques Rousseau: "But," Rousseau explains in his *Discourse on the Origins and Foundations of Inequality among Men*, "from the instant one man needed the help of another, and it was found to be useful for one man to have provisions enough for two, equality disappeared, property was introduced, work became necessary, and vast forests were transformed into pleasant fields which had to be watered with the sweat of men, and where slavery and misery were soon seen to germinate and flourish with the crops." Rousseau, *A Discourse on Inequality*, transl. Maurice Cranston [1755] (London: Penguin, 1984), 116.

accompanied Captain Cook on his second expedition to the Pacific. Then, in 1799, shortly before his thirtieth birthday, he launched the most significant and best-known journey of his highly mobile career, setting sail from Spain for the American colonies. He would eventually publish some thirty volumes relating to the findings of this expedition, many of them attacking Spanish colonialism, slavery, and resource extraction, and in the process he became the most eminent scientist in the Western world, and, perhaps, the first ecological thinker. His efforts to inspire communion with nature while simultaneously recognizing nature's "otherness" can be seen as radical both in his day and in ours. Travel led him to a nascent theory of cosmopolitanism and environmental justice.

If Humboldt himself felt compelled always to move on, his ideas had remarkable staying power. All over the world, but in the United States in particular, he became known as the founder of a new science, a **grand** theory through which he sought to link all the physical elements of the world, including every kind of human being, in a web of interdependence, "to recognize unity in the vast diversity of phenomena" and to "study the great harmonies of Nature."¹⁰

Humboldt passed through Washington, D.C., in the summer of 1804, and President Jefferson found him so helpful in their discussions of American exploration and expansion, and, moreover, so similar to himself in the scope of his curiosity, that he corresponded regularly with the Prussian scientist for the rest of his life. Meanwhile, Albert Gallatin, Jefferson's Secretary of the Treasury, was inspired by his own friendship with Humboldt to produce one of the foundational works of American ethnology, *A Synopsis of the Indian Tribes within the United States* (1836). Ralph Waldo Emerson called Humboldt "one of those wonders of the world ... who appear from time to time, as if to show us the possibilities of the human mind"; Thoreau classified New England's climate zones according to Humboldt's model of plant ecology; and Whitman's poetry is suffused with the concept of "Kosmos," which served as the title of Humboldt's

5. I'm grateful to archivist Rob Cox for facilitating my research in the excellent collection of Humboldt materials at the American Philosophical Society in Philadelphia. Many of the documents in this collection were gathered and organized by Helmut de Terra in the 1950s. See de Terra, *Humboldt: The Life and Times of Alexander von I-Humboldt, 1769–1859* (New York: Knopf, 1955). Another useful biography is Douglas Botting, *Humboldt and the Cosmos* (London: Michael Joseph, 1973). De Terra also published a few extremely helpful articles based on his work at the Philosophical Society, including: "Alexander von Humboldt's Correspondence with Jefferson, Madison, and Gallatin," *Proceedings of the American Philosophical Society* 103 (December 1959), 783-806; "Studies of the Documentation of Alexander von Humboldt," (two articles with the same title) *Proceedings of the American Philosophical Society* 102 (February and December 1958), 136-141 and 560-589; and "Motives and Consequences of Alexander von Humboldt's Visit to the United States (1804)," *Proceedings of the American Philosophical Society* 104 (June 1960), 314-316.

6. The first quotation is Humboldt, in William H. Goetzmann, *New Lands, New Men: America and the Second Great Age of Discovery* [1986] (Austin: Texas State Historical Association, 1995), 59. The second quotation is Humboldt (my translation), in a letter written to the King of Spain in 1799 in explanation of his scientific goals in the colonies. The document, written in French and dated March 11, 1799, can be found at the Archivo Historico Nacional in Madrid, Seccion Estado, legajo 4709. The expert on Humboldt's time in Madrid is Miguel Angel Puig-Samper, who just discovered this document a few years ago, and for whose help I am grateful. I also could not have navigated the Madrid archives without the aid of archivist Pilar Castro and of my wife, Christine Evans. Note that Puig-Samper has reprinted this document in an article: "Humboldt, un Pruisano en la Cone del Rey Carlos IV," *Revista de Indias* 59 (May–August 1999), quotation on 354.

own final work, the daunting subtitle of which was "A Sketch of a Physical Description of the Universe." On September 14, 1869, towns all across America celebrated the centenary of his birth (he had died ten years earlier, just short of his ninetieth birthday), and, the next day, the *New York Times* dedicated its entire front page to an appreciation of his life."

In 2003, however, the so-called Rediscoverer of the Americas is virtually unknown in America; he himself needs to be rediscovered.² Of course,

7. Humboldt wrote to the Arctic explorer Elisha Kent Kane that he was "so devoted to America in heart and mind as to think of it as a second homeland," and he often called himself "half American"—referring specifically to the United States and the democratic, republican values he shared with this country. (American Philosophical Society, Elisha Kent Kane Papers [B:K132], letter of March 8, 1853 [in French; my translation]; also see Philip S. Foner, "Alexander von Humboldt on Slavery in America," *Science and Society* 47 [Fall 1983], 330-342, "half American" quotation on 335.)

One of the foremost experts on Humboldt's relationship to the United States is Ingo Schwarz of the Berlin-Brandenburg Academy of Sciences, and I am grateful to Dr. Schwarz for his generous assistance. See, for instance, his article, "Alexander von Humboldt's Visit to Washington and Philadelphia, his Friendship with Jefferson, and his Fascination with the United States," in *Proceedings. Alexander von Humboldt's Natural History Legacy and Its Relevance for Today*, Special Issue 1 of *Northeastern Naturalist* (2001), 43-56.

On Jefferson, see also Felix M. Wasserman, "Six Unpublished Letters of Alexander von Humboldt to Thomas Jefferson," *Germanic Review* 29 (October 1954), 191-200, as well as de Terra, "Alexander von Humboldt's Correspondence."

Gallatin's book is *A Synopsis of the Indian Tribes within the United States* (Cambridge, Mass.: American Antiquarian Society, 1836).

Emerson is quoted in Louis Agassiz, *Address Delivered on the Centennial Anniversary of the Birth of Alexander von Humboldt, Under the Auspices of the Boston Society of Natural History, - with an account of the evening reception* (Boston: Boston Society of Natural History, 1869), 71-72, in the "account of the evening reception" section.

On Thoreau and Humboldt, see Donald Worster, *Nature's Economy: A History of Ecological Ideas* (New York: Cambridge University Press, 1977), 65; and perhaps the most sophisticated recent analysis of Humboldt written in English, Laura Dassow Walls, *Seeing New Worlds: - Henry David Thoreau and Nineteenth-Century Natural Science* (Madison: University of Wisconsin Press, 1995), 76-166.

On Whitman, see, for instance, the late poem "Kosmos": "Who includes diversity and is Nature who is the amplitude of the earth, and the coarseness and sexuality of the earth, and the great charity of the earth, and the equilibrium also," in Whitman, *Leaves of Grass* (New York: Signet Classic, 1980), 310. "Kosmos" is from "Autumn Rivulets," originally added to *Leaves of Grass* in 1881. In "Song of Myself" (1855), the poet proclaims himself "Walt Whitman, a kosmos," 67. In the English translations of Humboldt's work, "Kosmos" is usually rendered as "Cosmos": I've used the translation by E. C. Otté, *Cosmos. A Sketch of a Physical Description of the Universe*, 5 vols. (London: Henry G. Bohn, 1849, 1851, 1852, and 1870). There are several editions in English, published both in Europe and America, including a slightly earlier translation by Mr. and Mrs. Edward Sabine (vols. 1 and 2 came out in London in 1846 and 1848). The original German edition, in five volumes, with an index of more than 1000 pages, was published between 1845 and 1861. Note that the British editions were just as common as the American in the United States.

On the centenary, see the *New York Times*, September 15, 1869, 1. Getting the whole front page at a time when the entire paper consisted of only eight pages must be considered fairly significant.

8. "It is doubtful," lamented David McCullough in a 1973 essay, "that one educated American in ten today could say who exactly Humboldt was or what he did." McCullough's essay is "Journey to the Top of the World," in McCullough, *Brave Companions: Portraits in History* (New York: Touchstone, 1992), 5. The essay was first published as "The Man Who Rediscovered America," *Audubon* 75 (September, 1973), 50-63.

Humboldt was first called "The Rediscoverer of the Americas," apparently, by the German geographer Carl Ritter. See D. A. Brading, *The First America: The Spanish Monarchy, Creole Patriots, and the Liberal State, 1492—1867* (Cambridge, Eng.: Cambridge University Press, 1991), 534. Brading's book includes a full chapter on Humboldt, 514-534.

Humboldt's diminished reputation is due in large part to the ascension of Darwinian thought in the late nineteenth century, the supplanting of Humboldt's vision of a unified, harmonious world by Darwin's "struggle for existence."⁹ It wasn't until the past two decades, though, that Humboldt really started getting written out of American history.

Between 1955 and 1973—the years surrounding the centennial of Humboldt's death, in 1859, and the bicentennial of his birth, in 1769—American, European, and Latin-American authors produced a flurry of celebratory popular articles and biographies:⁴ as of the early 1970s, even the power of evolutionary theory had not extinguished the appeal of Humboldt's romantic science. Then, by the 1980s, though the topics of travel, exploration, and the environment were truly coming into fashion, most scholars of these topics wound up heaping scorn on people like Humboldt, the white male agents of imperialist domination. Just as common as such criticism, though, has been a seemingly willful silence, even in the emerging post-colonial literature that posits (certain) explorers, interpreters, migrants, and other "in-between" figures as the keys to cross-cultural understanding. James Clifford, writing in 1997 about the significance of "traveling cultures," felt he could sum up the career of the nineteenth century's most accomplished traveler in two dismissive sentences. Certainly Clifford and his scholarly compatriots (or co-itinerants?) have enriched the study of travel by focusing on "others"—nonwhite explorers, female tourists, mixed-blood guides—and have struggled justifiably and effectively "to free the related term 'travel' from a history of European, literary, male, bourgeois, scientific, heroic, recreational meanings and practices."⁵ But in so doing they have obscured any potentially useful, even radical, ideas that might have been developed by European, literary, male, bourgeois scientists. Humboldt, in many ways a worthy post-colonial environmentalist himself, has been "othered" by post-colonialism.

9. This argument is made at length in Aaron Sachs, "When Science Went Astray: Social Darwinism, Specialization, and the Forgotten Legacy of Alexander von Humboldt," *World IVafcfi* 8 (March/April 1995), 28-38.

10. For example: L. Kellner, *Alexander von Humboldt* (London: Oxford University Press, 1963); Anne M. Macpherson, "The Human Geography of Alexander von Humboldt," Ph.D. dissertation, University of California, Berkeley, 1972; Universidad Nacional Autonoma de Mexico, *Ensayos Sobre Humboldt* (Mexico City: Universidad Nacional Autonoma de Mexico, 1962); Hanno Beck, *Alexander von Humboldt*, 2 vols. (Wiesbaden: F. Steiner, 1959 and 1961); (this is one of the more authoritative works on Humboldt, but it has never been translated from the German); Charles Minguet, *Alexandre de Humboldt, Historien et Géographe de l'Amérique espagnole, 1779—1809* [1969] (Paris: L'Harmattan, 1997); and also see the previously cited works by Botting, de Terra, and McCullough.

11. On "in-between" figures, see Frances Karttunen, *Between Worlds: Interpreters, Guides, and Survivors* (New Brunswick, NJ: Rutgers University Press, 1994); Paul Gilroy, *The Black Atlantic: Modernity and Double Consciousness* (Cambridge, Mass.: Harvard University Press, 1993); and Stephen Greenblatt, *Marvelous Possessions: The Wonder of the New World* (Chicago: University of Chicago Press, 1991), especially 119-151. James Clifford's book is *Routes: Travel and Translation in the Late Twentieth Century* (Cambridge, Mass.: Harvard University Press, 1997); see 17-46 on "traveling cultures," reference to Humboldt on 35, quotation on 33. Other relevant sources include *Travel IVriling and Empire: Postcolonial Theory in Transit*, ed. Steve Clark (London: Zed Books, 1999) and *Touring Cultures: Transformations of Travel and Theory*, ed. Chris Rojek and John Urry (London and New York: Routledge, 1997).

III. BEYOND THE POST-COLONIAL CRITIQUE

There is no denying the value of the post-colonial critique and its relevance to all studies of travel and the environment. Post-colonialism, at its best, means recuperating the objects of the traveler's gaze. In a world so profoundly shaped — damaged, I would argue — by colonialism and imperialism, it is imperative that scholars focus on celebrating the colonized, on hearing the voices of "others." We must understand all the ways in which Western civilization has come to depend directly on forms of domination. Indeed, it makes perfect sense, as David Spurr has noted in *The Rhetoric of Empire* (1993), that "works once studied primarily as expressions of traditionally Western ideals are now also read as evidence of the manner in which such ideals have served in the historical process of colonization."¹⁶

The problem arises when scholars read Western texts *only* as evidence of complicity in colonialism. If Said can be said to have founded the post-colonial school with *Orientalism*, he also initiated its prejudices and overzealousness. Refusing to admit any exceptions into Orientalism's paradigm of the imperial Western gaze, he committed the same sin he so abhorred in his subjects: he essentialized all Westerners as essentialists. In order to salvage Said's worthwhile and penetrating critique of the West's orientalism, then, as Bruce Robbins has wisely remarked, we need to "break down the false unity of 'the West' and thus avoid the trap of a symmetrical 'occidentalism.'" ¹⁷ Surely not all Westerners were complicit in colonialism and imperialism to the same extent.

A close analysis of Humboldt's work reveals a complex, elusive character: there is ample evidence of the broad-thinking, liberal, republican abolitionist celebrated in the popular biographies; there are also certain facts linking him to structures of domination. As Mary Louise Pratt has suggested, in the most significant critique of Humboldt to date, 'his entire expedition through Latin America can be seen as a fact-finding mission in service to the Spanish crown. In his writings he occasionally seemed to describe the productions of nature simply as resources to be appropriated by colonial powers, and he was sometimes guilty of demeaning or even erasing the history and culture of the native peoples of the Americas. Yet he also suggested, in his journal, that "the very idea of a Colony is immoral."¹⁸

Pratt, in keeping with the tendencies of the post-colonial school, pushes her attack too far. Throughout his life, Humboldt came to various arrangements with

16. David Spurr, *The Rhetoric of Empire: Colonial Discourse in Journalism, Travel Writing, and Imperial Administration* (Durham: Duke University Press, 1993), 1.

17. Edward W. Said, *Orientalism* [1978] (New York: Vintage, 1994); see also Said's sequel, *Culture and Imperialism* (New York: Vintage, 1994). Bruce Robbins. "Colonial Discourse: A Paradigm and its Discontents," *Victorian Studies* 35 (Winter 1992), 210.

18. Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation* (London and New York: Routledge, 1992). Much of this essay is a response to Pratt's critique, which has achieved canonical status in the field. Her influence is clear, for instance, in the introductions to the new (1997) paperback editions of volumes one and two of *Cosmos* written by Nicolaas A. Rupke and Michael Dettelbach. The new editions, by the Johns Hopkins University Press (Baltimore and London), are excellent, accessible volumes that reprint an American edition of 1858 by Harper and Brothers.

19. Humboldt, in *Lateinamerika am Vorabend der Unabhängigkeitsrevolution. - eine Anthologie von Impressionen und Urteilen, aus seinen Reisetagebüchern*, ed. Margot Faak (Berlin: Akademie-

monarchs and emperors in order to improve his own circumstances, without ever overtly sacrificing his liberal beliefs. His petition to Carlos IV of Spain for safe passage through the colonies was merely a necessary first step in launching his expedition: he was using the crown as much as the crown was using him. Indeed, he financed the entire journey himself and remained free to determine his own itinerary. Moreover, in his writings, he launched an attack on the Spanish system of colonial government, even within his *Political Essay on the Kingdom of New Spain* (Mexico), which he presented to Carlos IV in 1808, in gratitude for the king's having granted him access to everything he wanted to see. Pratt, in painting Humboldt as beholden to the Spanish crown, never accounts for the passages in which he railed against Spain's hoarding of agricultural land, destruction of nature, violence against native peoples, and, especially, its brutal slave system. Indeed, Humboldt reported that throughout his travels in Latin America, he was haunted by the constant "recollection of the crimes produced by the fanaticism and insatiable avarice of the first conquerors."²⁰ And, later, writing to Thomas Jefferson, Humboldt explained quite forthrightly that "my book was dedicated to King Carlos IV so as to pacify the attitude of the Madrid government toward certain individuals in Mexico who furnished me with more information than the court would have regarded proper."²¹

In the end, Humboldt stands out as an important exception to the European colonial paradigm. He was no doubt a man of his time, but he also achieved enough distance from his society, both literally and figuratively, to transcend many of its prejudices. Indeed, the post-colonial critics themselves are deeply indebted to Humboldt's critique of Western hypocrisy.

Humboldt's significance, then, is hardly limited to nineteenth-century intellectual life, and his relevance to today's post-colonial struggles becomes particularly clear in light of current environmental concerns. A close reading of Humboldt's major writings reveals the extent to which he developed a socially conscious ecology, a positive vision of humanity in nature. Traditionally, as William Goetzmann has noted, "the explorer was a symbol of ... a kind of superhuman Odyssean vision, and ultimately mankind's biblical urge to 'dominate the earth.'"²² But Humboldt conscientiously upset that symbolism, asserting his intention "to depict the contemplation of natural objects, as a means of exciting a pure love of nature."²³ Combining a rational empiricism with a romantic sense

Verlag, 1982), 63. This is a scholarly compilation of excerpts from Humboldt's travel journals. All the commentary is in German, but the journal entries are given in their original language, usually French, as is the case with this quotation (my translation).

20. I've used the John Black translation, edited by Mary Maples Dunn: Humboldt, *Political Essay on the Kingdom of New Spain* [1811] (New York: Knopf, 1972), 34; hereafter cited as *Political Essay*. Note that Pratt even goes so far as to impugn Humboldt simply because the ship he happened to sail on from Spain was called the *PiZarro* (Pratt, *Imperial Eyes*, 116).

21. Humboldt, letter of June 12, 1809, in de Terra, "Alexander von Humboldt's Correspondence," 790. Pratt and those scholars who have followed her lead seem not to take these kinds of explanations seriously. See, for instance, Dettelbach, "Introduction" to volume two of the 1997 edition of *Cosmos*, xi, where he echoes Pratt in insisting that "Humboldt was quite sincere in his dedication" to the Spanish monarch.

22. Goetzmann, *New Lands, New Men*, 421.

23. Humboldt, *Cosmos*, II, 370.

of harmony, Humboldt stood apart from nature in order to observe its mysterious workings yet also included himself in its realm. He had an almost postmodern awareness that nature and culture are inextricably linked, yet he also felt a profound respect for nature's differentness. If, as Tzvetan Todorov has argued, cross-cultural understanding depends on "an affirmation of the other's exteriority which goes hand in hand with the recognition of the other as subject," perhaps a healthy environmentalism depends on a similar construction of our relationship to the natural world.²⁴ Nature is in some ways the ultimate "other"; Humboldt devoted his life to understanding and appreciating it on equal terms, and then acting as a translator, bringing it home to his readers. Some might argue that this translation was merely a step toward the appropriation of natural resources. From another perspective, though, it can be seen as the first step toward the development of a humane ecology—a socially conscious science with a humanistic, but not human-centered, approach. Moreover, Humboldt accomplished this critical scientific innovation despite the privileges he enjoyed as a European hero writing at the height of European imperialism. Working toward a healthy post-colonial environmentalism, in other words, must involve a much more serious questioning of post-colonialism's assumptions about history.

IV. ON SUBLIMITY AND SUBLIMATION

In Pratt's portrait, Humboldt rises up like an arrogant colossus: he "assumes a godlike, omniscient stance," Pratt accuses, "over both the planet and his reader." In contrast, the countless students of Linnaeus who sailed around the globe to gather and classify plants come across in her work as humble, innocent nature-lovers. Yet Pratt herself notes that the practice of applying Linnaean nomenclature to elements of the natural world was both "transformative" and "appropriative," because Enlightenment botanists self-consciously sought to impose a logical, human order on a world that they perceived as utterly "other" and chaotic.²⁵ Indeed, the key to nineteenth-century natural history is the huge shift, spurred by Romanticism and embodied by Humboldt, which made naturalists in general posit themselves as *less* godlike. Some historians of science, in noting Humboldt's innovative attempt to transcend the Baconian empiricism of the eighteenth century, have acknowledged his scientific radicalism, but they still tend to depict his search for unifying global theories as an expression of colonialist presumption.²⁶

24. Tzvetan Todorov, *The Conquest of America* (New York: HarperPerennial, 1984), 250. Lawrence Buell, in his new study of culture and the environment, emphasizes the importance of "maintaining a nonessentialist dualistic conception of nonhuman nature as an 'other' entitled to respect, notwithstanding the necessity of recognizing the actual inseparableness of the 'natural' from the fabricated." See *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond* (Cambridge, Mass.: Harvard University Press, 2001), 269.

25. Pratt, *Imperial Eyes*, 124, 31.

26. For Romantics, Nature was something to worship rather than control. Ias Elsner and Joan-Pau Rubies hint at the power of Humboldt's creative combination of Enlightenment and Romantic thought when they note that he "decisively married empirical observation with imaginative speculation." See their introduction to *Voyages and Visions: Towards a Cultural History of Travel* (London: Reaktion Books, 1999), 51.

The first historian of science to distinguish "Humboldtian science" as the avant-garde transforma-

To Humboldt, though, nature encompassed humanity rather than the other way around: the natural world was the source of order, and all he could do was attempt to understand it and submit to it. A fanatical empiricist, Humboldt classified as many plant species as any Linnaean, but he cared little for the false construct of naming systems, for the endless proliferation of new types. He wanted glimpses—and these were all he asked for—of the magic that tied all the species together, that connected vegetation to climate, rivers to trees, humans to animals. “The discovery of an unknown genus,” he explained in the introduction to the *Personal Narrative* of his Latin-American expedition, “seemed to me far less interesting than an observation on ... the eternal ties which link the phenomena of life, and those of inanimate nature.” By traveling as much as possible, and by soliciting observations from other travelers, Humboldt sought to determine how ocean currents affected mean temperatures all around the world, how geological formations affected vegetation patterns, and even how deforestation and monocropping affected the health of nearby rivers and lakes. He was looking for organic, messy connections, instead of imposing cut-and-dried distinctions; he was asking questions and seeking revelation rather than taming confusion with a set of pat answers.^{2*}

In a **sense**, Humboldt’s project was indeed more grandiose than that of the earlier herborizers—his “eternal ties” were imbued with great significance—but it did not require more hubris. His final goal was any sort of “insight into the connections of the occult forces” that unified the world—nothing more. Indeed, Humboldt stated quite forthrightly his belief that his ambitious cosmic vision

tion of Baconian empiricism that became the dominant paradigm in the first half of the nineteenth century was Susan Faye Cannon, *Science in Culture. The Early Victorian Period* (New York: Dawson and Science History Publications, 1978), 73-110. Cannon’s position is now Canonical, as it were, in her field, though her views have been elaborated and refined by other scholars—see, for instance, Michael Dettelbach, “Humboldtian Science,” in *Cultures of Natural History*, ed. N. Jardine, J. A. Secord, and E. C. Spary (Cambridge, Eng.: Cambridge University Press, 1996), 287-304; Felix Driver, *Geography Militant: Cultures of Exploration and Empire* (Oxford: Blackwell, 2001), 1-48; and *Geography and Enlightenment*, ed. David N. Livingstone and Charles W.I. Withers (Chicago: University of Chicago Press, 1999), especially the “Introduction” (1-28) and chapters by Anne Marie Claire Godlewska (236-275), Dorinda Outram (281-294), Paul Carter (295-318), and Nicolaas Rupke (319-339). General descriptions of Humboldtian science tend to emphasize Humboldt’s attempts to gather together measurements of temperature and terrestrial magnetism from all over the world and thus make generalizations about the global climate and atmosphere.

One essay that comes closer to recognizing how crucial Romanticism was in tempering Humboldtian science is Malcolm Nicolson, “Alexander von Humboldt and the Geography of Vegetation,” in *Romanticism and the Sciences*, ed. Andrew Cunningham and Nicholas Jardine (Cambridge, Eng.: Cambridge University Press, 1990), 169-185. Nicolson suggests the extent to which Humboldt accepted the critique of pure rationality popularized by his friends Goethe and Schiller. Also useful are Nicolson’s “Historical Introduction” and Jason Wilson’s “Introduction” to the Penguin Classics abridgement of Humboldt’s *Personal Narrative of a Journey to the Equinoctial Regions of the New Continent* (London: Penguin, 1995), ix-lxxii.

27. Humboldt, *Personal Narrative of Trowels to the Equinoctial Regions of America, 1799—1804*, 3 vols. (London: Henry G. Bohn, 1852—1853), I, x-xi. Hereafter cited as *Personal Narrative*. I’ve used the translation by Thomasina Ross; as with most of Humboldt’s works, there were several other editions. The original text was in French, published in stages between 1814 and 1825. In *Cosmos* Humboldt explained further: “This science of the Cosmos is not, however, to be regarded as a mere encyclopedic aggregaLion” (I, 36). And yet Humboldt himself classified about 60,000 plant species. (This figure cited in de Terra, *Humboldt*, 375.)

could never be realized: "no generation of men will ever have cause to boast of having comprehended the total aggregation of phenomena." In 1834, he confided to his friend Varnhagen von Ense that he had "conceived the *mad* notion of representing in a graphic and attractive manner, the whole of the physical aspect of the universe in one work, which is to include all that is at present known of celestial and terrestrial phenomena, from the nature of the nebula down to the geography of the mosses clinging to a granite rock." Pratt emphasizes the bold, totalizing aspects of this approach. But Humboldt himself acknowledged that, though this might be an interesting method, yet there was madness in it.²

For Pratt, the very concept of the "planetary consciousness" Humboldt sought is merely an embodiment of European expansion, a naturalization of colonialism: we understand the entire world, therefore it belongs to us. Indeed, she approvingly quotes Antonello Gerbi's assertion that, "with Humboldt, Western thought at last achieves the peaceful conquest and intellectual annexation to its own world, the only Cosmos, of the regions which until then had been hardly more than an object of curiosity, amazement, or derision." Anthony Pagden, following the post-colonial model, sees in Humboldt's project an ultimate desire "to take cognitive possession" of the globe.²⁹ Encircling the planet with the rationalistic, homologizing isothermic lines that he invented to connect points on the map with the same mean temperature, Humboldt seemed to annihilate difference, packaging unruly realities in neat, easily transportable charts and graphs, bending American extremes to fit European norms.

28. Humboldt, *Views of Nature: or Contemplations on the Sublime Phenomena of Creation; with Scientific Illustrations* (London: Henry G. Bohn, 1850), x. I've used the translation by E. C. Otté and Henry G. Bohn from the German of the third edition, published in Stuttgart and Tübingen in 1849. *Views of Nature* was originally written in German and published in 1808; note that in another widespread English translation of this work, originally called *Ansichten der Natur*, the title is rendered as *Aspects of Nature*: translated by Mrs. Sabine (Philadelphia: Lea and Blanchard, 1849). Most of the quotations in this article are from *Views*, but I occasionally use passages from *Aspects* when they seem to me to have been translated more elegantly or evocatively. The second quotation is from *Cosmos*, I, 56; and the last quotation in the paragraph is Humboldt, in Goetzmann, *New Lands, New Men*, 59, my emphasis. Another translation yields Humboldt's original German as "the extravagant idea of describing in one and the same work the whole material world"; see Humboldt, *Letters of Alexander von Humboldt to Varnhagen von Ense, from 1827 to 1858*, translated from the second German edition by Friedrich Kapp (New York: Rudd and Carleton, 1860), 35.

Along these same lines, Humboldt elaborated, in *Cosmos*: "Experimental sciences, based on the observation of the external world, cannot aspire to completeness; the nature of things, and the imperfection of our organs, are alike opposed to it." And: "The attempt perfectly to represent unity in diversity must therefore necessarily prove unsuccessful. If then nature (understanding by the term all natural objects and phenomena) be illimitable in extent and contents, it likewise presents itself to the human intellect as a problem which cannot be grasped, and whose solution is impossible" (I, 56 and 63).

And, in his *Critical Examination of the History of the Geography of the New Continent* (5 vols., 1836—1839), he wrote, about "the extension of the sphere of knowledge" "Feeble spirits at each epoch believe that humanity has arrived at its culminating point of its progressive march; they forget that, by the intimate connection of all truths, with each step that we advance, the field to traverse reveals itself to be that much vaster, bordered by a horizon that endlessly retreats." See Humboldt, *Examen Critique de l'Histoire de la Géographie du Nouveau Continent* (Paris: Librairie de Gide, 1837), III, 154, my translation (this work has never been published in English to my knowledge).

29. Pratt, *Imperial Eyes*, 120 and 140; and see Anthony Pagden, *European Encounters with the New World* (London: Yale University Press, 1993), quotation on 36 but also see 24-38, 104-115, 166-169, and 183-188. Pagden in many ways subscribes to Pratt's post-colonial model, but, especially at the end of his book, he comes to a more nuanced conclusion about the potential for elite Europeans to challenge their home cultures and even to achieve a reasonably deep understanding of "other" cultures.

Scholars like Pratt and Pagden are correct to point out that the traveling scientist's attempts to make colonial worlds legible and knowable, whatever his own intent, could easily be used by European powers to further the taming of distant lands and peoples: maps, surveys, censuses, museums, even histories, all contributed to a kind of colonialist regulation which often went hand in hand with repression and violent resource extraction.³⁰ Nevertheless, Humboldt used his expanding consciousness to condemn the far-from-peaceful policies of European expansion and annexation. Part of his project, like that of present-day environmentalists, was to raise the consciousness of his fellow citizens regarding the impact of their actions on far-off places. Traveling through the Americas, he quickly recognized that famine, **unjust** land distribution, and general underdevelopment all resulted from "the restless and suspicious policy of the nations of Europe." After all, "a colony has for ages been considered useful to the parent state only in so far as it supplied a great number of raw materials."^{31*}

Moreover, while it is true that trying to make a foreign landscape or culture comprehensible inevitably involves distortion, since (among other reasons) the object of one's gaze must always be ripped from its original context (and then reposed in a book or painting or museum case), such distortion doesn't necessarily entail the appropriation of nature. Humboldt valorized American nature — writing, for instance, of "the feelings of admiration and delight which penetrated us when we first touched this animated South American soil"—and in turn questioned the "advances" of European civilization. It is not the wilderness that gets penetrated by the manly heroes, in this powerful reversal of classic exploration rhetoric; rather, the explorers themselves get penetrated, by traditionally feminine emotions. Whatever cultural baggage Humboldt may have brought with him to impose on the Americas, he was constantly forced to adapt to new, confusing landscapes and to adjust his assumptions and expectations.³²

Much of Humboldt's writing about the Americas emphasizes nature's ability to overwhelm humanity. This strategy is immediately recognizable as a funda-

30. See, for instance, Bernard S. Cohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton: Princeton University Press, 1996); Benedict Anderson, "Census, Map, Museum," in Anderson, *Imagined Communities. Reflections on the Origins and Spread of Nationalism*, rev. ed. (New York: Verso, 1991), 163-185, and Clifford, *Romes*, especially 197-219.

31. Humboldt, *Political Essay*, 185.

32. Humboldt, letter of February 3, 1800, to the Baron von Forell, in *Lettres Américaines d'Alexandre de Humboldt (1798-1807)*, ed. E. T. Hamy (Paris: Librairie Orientale et Américaine, 1904), 65, my translation. There is a fascinating and expanding literature on the problem of determining to what extent fieldwork might actually force explorers to abandon some of their cultural baggage. Particularly nuanced studies include Johannes Fabian, *Out of Our Minds. Reason and Madness in the Exploration of Central Africa* (Berkeley and Los Angeles: University of California Press, 2000) and Paul Caner, *The Road to Botany Bay. - Ay Exploration of Landscape and History* (New York: Knopf, 1987). Carter emphasizes the explorer's creative "engagement" with the land. In *The Road to Botany Bay* and also his later book, *The Lie of the Land* (London: Faber and Faber, 1996), Carter asserts the need to distinguish between such different (and differently colonialist) modes of landscape experience as discovery, exploration, surveying, and settlement. Better than anyone else, he has captured the ambivalence of explorers and their flexible, "dynamic" way of understanding what they observe — an approach not only encouraged by their intellectual backgrounds but also, quite often, necessitated by the physical conditions of exploring, by fog and sweat and insects and waterfalls. For a useful application of Carter's theoretical model, see D. Graham Burnett, *Masters of All The y Surve yed: Exploration, Geography, and a British El Dorado* (Chicago: University of Chicago Press, 2000).

mental expression of the sublime,³³ but it also points to something deeper than Humboldt's obvious attachment to Romanticism. At its most effective, Humboldt's technique forces readers to experience a reversal of the paradigm of western dominance over the environment. Having climbed to the crater of Pichincha, the volcano that towers majestically over Quito, Ecuador, Humboldt reported that he didn't "believe any view could be as dismal, lugubrious, and frightening as what we saw at that moment." Balanced on a ledge, staring into a void, and choking on sulfur fumes, with tremors shaking the mountain about every two minutes, Humboldt may have invoked the sublime, but the romance of mountaineering had disappeared from his narrative. It is striking that he was still trying to record the frequency of the tremors, despite his fear, but the image he paints is not of the heroic, confident scientist conquering nature through measurement. Rather, he is holding on for dear life, clutching at any detail that might eventually lead to some sort of enlightenment. And, at other moments, even the tropes of the scientific sublime fall away, as nature takes full control. "It is impossible," Humboldt explained, of his trip down the Orinoco, "not to be constantly disturbed by the mosquitos, zancudos, jejens, and tempraneros, that cover the face and hands, pierce the clothes with their long needle-formed suckers, and getting into the mouth and nostrils, occasion coughing and sneezing whenever any attempt is made to speak in the open air." Yet the difficulties and dangers of the natural world in the Americas never produced scorn in Humboldt. His most common response was something like awe:

The earnest and solemn thoughts awakened by a communion with Nature intuitively arise from a presentiment of the order and harmony pervading the whole universe, and from the contrast we draw between the narrow limits of our own existence and the image of infinity revealed on every side, whether we look upward to the starry vault of heaven, scan the far-stretching plain before us, or seek to trace the dim horizon across the vast expanse of ocean.

Whether because of its power and darkness, or its chaos, or even its mind-bending harmony, nature is "other," for Humboldt: it is bigger than we **are**.³⁴

For Pratt, Humboldt's emphasis on nature's hugeness signals an "erasure of the human." But even at its most sublime, Humboldt's writing actually avoids sublimating human beings. Perhaps most fundamentally, Humboldt based his science on the search not only for links between living and inanimate phenomena, but also for "the connection between the physical and *intellectual* world." His was in every sense a *human* geography, as Margarita Bowen has argued in her illuminating study, *Empiricism and Geographical Thought*.³⁵ The empirical

33. On his trip to England in 1790, Humboldt had heard Edmund Burke speak in Parliament, and was well acquainted with the British statesman's theory of the sublime. Where he differed with him was on the question of whether the well-informed naturalist could have a sublime response to nature: "I cannot, therefore, agree with Burke when he says, 'it is our ignorance of natural things that causes all our admiration, and chiefly excites our passions'" (*Cosmos*, I, 19).

34. Letter to his brother Wilhelm of November 25, 1802, *Lettres Américaines*, 132, my translation; *Personal Narrative*, II, 273; *Cosmos*, I, 3. Humboldt was sometimes more emotional in his letters, just because they were less public than his books. But his correspondents were also the people he thought of as the main audience for his publications, so there is generally a close correlation between the rhetorical tropes of his published works and the language of letters he wrote while in the field.

35. Pratt, *Imperial Eyes*, 125; *Personal Narrative*, I, xiv, my emphasis. See also Margarita Bowen, *Empiricism and Geographical Thought: From Francis Bacon to Alexander von Humboldt* (Cambridge,

method, normally conceived as utterly separate from the subjective lenses of art and philosophy, was insufficient for Humboldt: science had to be balanced by the humanities, Enlightenment rationality by Romantic sentiment. Near the beginning of the third volume of *Cosmos*, he explained that he had always “considered Nature in a two-fold point of view. In the first place, I have endeavored to present her in the pure objectiveness of external phenomena; and, secondly, as the reflection of the image impressed by the senses upon the inner man, that is, upon his ideas and feelings.”³⁶

Just as important, though, was Humboldt’s commitment to include human beings and their civilizations in his portrait of the Americas. As Pratt herself notes, one of Humboldt’s most popular texts, *Views of the Cordilleras and Monuments of the Indigenous Peoples of America*, was equally divided between natural history and archaeological anthropology, and Humboldt wrote both halves of the volume in a celebratory mode. Moreover, this book and many others reveal the author’s awareness of the catastrophic impact that Europeans had on native American societies. One of Pratt’s most inappropriate attacks on Humboldt is her claim that he covered up the human disasters of the conquest by portraying America as pure nature, “a landscape imbued with social fantasies —of harmony, industry, liberty, unalienated *joie de vivre* —all projected onto the non-human world.” Pratt fails to acknowledge that, in the third volume of his *Personal Narrative*, a book she derided as a simple expression of “Euroexpansionist teleology,” Humboldt included a long section exposing and condemning Spanish slavery and the plantation system in Cuba. Although he certainly subscribed to some contemporary assumptions about what constituted cultural “progress,” Humboldt never hesitated to point out the fatal flaws in “advanced” European societies or the considerable accomplishments and worthiness of many of the civilizations he encountered in the Americas. It may be true that he constructed the New World primarily as nature, but not in order to avoid social issues.³⁷

V. A SOCIALLY CONSCIOUS SCIENCE

Pratt chose not to do any deep analysis of Humboldt’s explicitly social texts, like *The Political Essay on the Kingdom of New Spain*, but she nevertheless incorporated them into her post-colonial framework. Just like his studies of the natural world, she argues, these writings suffer from “ahistoricity and the absence of culture.” And she is indignant about the (admittedly) disastrous aftershocks sparked

Eng.: Cambridge University Press, 1981), passim. Bowen’s book is one of the very few positive treatments of Humboldt written in the last two decades. It argues compellingly for Humboldt’s science as a tenable model for contemporary geography.

36. *Cosmos*, III, 1. This approach is analyzed especially well in Nicolson, “Alexander von Humboldt and the Geography of Vegetation.”

37. Pratt, *Imperial Eyes*, 125 and 130. I’ve used a French edition of *Views of the Cordilleras*; this is the original language in which it was written and published, in 1810. *Vues des Cordillères et Monument des Peuples Indigènes de l’Amérique*, 2 vols. (Paris: Chez L. Bourgeois-Maze, 1840). Hereafter cited as *Vues des Cordillères*. Pratt’s direct translation of the title (which I’ve used above, in my text) is her own. For Humboldt’s condemnation of Cuban slavery see his *Personal Narrative*, III, 153-284, esp. 228-284. This long section is also sometimes referred to as the “Political Essay on the Island of Cuba.”

by a few of his publications. Humboldt did bring guano back to Europe to demonstrate its effectiveness as a fertilizer (a practice he first observed in Peru), and the resulting guano boom revealed just how enmeshed he was within the colonialist machinery. But is it really fair to imply that he "caused a war between Peru and Chile and brought the latter's economy into total dependence on British bankers"? The main comment Pratt makes about Humboldt's *Political Essay* on Mexico is that it caused a rash of British investments in Mexican silver mines. Yet several long passages in the book, which is full of both history and culture, describe the mining industry in Mexico as crippling the entire country. Humboldt's actual recommendation was to cut back on the mining of precious metals and to invest more in agricultural crops to feed the Mexican population, or at least in the mining of iron and lead, which might benefit Mexican society as a whole rather than a few members of the elite classes. "If the labor of man in America has been almost exclusively directed to the extraction of gold and silver," Humboldt lamented, "it is because the members of a society act from very different considerations from those which ought to influence the whole society."³⁸ Humboldt's withering attack on colonialism at times reads as though it were written in the twenty-first century by a left-leaning expert on international environment and development issues. He anticipated current critiques of unjust land distribution, cash cropping, the tragedy of the commons, violence against isolated indigenous groups who refuse to submit to governmental settlement plans, and even oppressive work environments.³⁹ "All the vices of the feudal government," he explained, "have passed from the one hemisphere to the other..... The property of New Spain, like that of Old Spain, is in a great measure in the hands of a few powerful families who have gradually absorbed the smaller estates. In America as well as Europe, large commons are condemned to the pasturage of cattle and to perpetual sterility." Emphasizing economic factors that organizations like the World Bank and the World Trade Organization still sometimes refuse to acknowledge, Humboldt questioned Mexico's reliance on foreign commerce. Although profits from mining and cash cropping usually allowed Mexico to purchase certain necessities from other countries, the vulnerable members of Mexican society tended to go hungry whenever trade faltered for diplomatic reasons or when the international market for Mexico's main commodities happened to crash. Again, Humboldt attacked the colonial elites for pursuing personal prof-

38. Quotations from Pratt, *Imperial Eyes*, are on 131, 136, and 140; quotation from Humboldt is in his *Political Essay*, 145; see 42 on what Humboldt calls "the barbarous law of the *mita*," and see the chapter on "The Indians," 45-70, as evidence of just how much history and culture Humboldt included in this work.

39. The land issues are elaborated in the text. On violence against native peoples, see, for instance, the concluding chapter of the *Political Essay*, in which Humboldt condemns "the petty warfare carried on incessantly by the troops stationed in the presidios with the wandering Indians" (235). On work conditions in Mexico, see the chapter entitled "State of Manufactures and Commerce" (185-220). Here, Humboldt details "the unhealthiness of the situation and the bad treatment to which the workmen are exposed" (189). further: "Every workshop resembles a dark prison," and "all are unmercifully flogged if they commit the smallest trespass" (*ibid.*). We could easily be in present-day *maquiladoras*. Humboldt would once again focus on "the savage cupidity of whites" and "the crimes which in the conquest of America have forever sullied the history of humanity" in his *Examen Critique*, III, 291 and 262 (my translations).

its rather than attending to the welfare of the country: “Whenever the soil can produce both indigo and maize, the former prevails over the latter, although the general interest requires that a preference be given **to those** vegetables that supply nourishment to man over those which are merely objects of exchange with **strangers.**” His definition of national wealth was based on self-sufficiency. “The only capital of which the value increases with time consists in the produce of agriculture,” he insisted; “nominal wealth becomes illusory whenever a nation does not possess those raw materials which serve for the subsistence of man or as employment for his industry.”

The Political Essay and several other of Humboldt’s writings also refute Pratt’s charge that he “remained relentlessly disparaging of the achievements of pre-Colombian civilizations.” Humboldt even admired many post-Colombian Americans, whom he described in the *Political Essay* as “humiliated but not degraded by long oppression” at the hands of Europeans.⁴¹ In South America, he encountered groups who impressed him as “free” and “self-governing,” not to mention “industrious” and “wise.” He even reserved some kind words for cannibals. He recognized that many Indians had the kind of local scientific knowledge that cosmopolitan transients like himself could only taste. They could cure fevers with roots and leaves; they could distinguish the water—by flavor alone—of several different rivers; and they could navigate rapids, thick jungles, dusty plains seemingly devoid of any landmarks, with startling accuracy: “The Indians, I repeat, are excellent geographers.”⁴²

In addition, Humboldt specifically warned his readers not to judge the Indians too harshly based on their present conditions, because he could attest to the evidence revealing just how complex their civilizations had been before the conquest. “I have also been quite occupied with the study of American languages,” he wrote to his brother Wilhelm, the noted linguist, “and have seen the utter falsity of what La Condamine said regarding their poverty. The language of the Caribs [for example] is at the same time rich, beautiful, energetic, and polite. It is not at all lacking in expressions for abstract ideas; one can speak of posterity, eternity, existence, etc.” For good measure, he asserted that “**there** is scarcely any work of modern literature that might not be translated into the Peruvian.”⁴³ And

40. *Political Essay*, 141, 142, 145, and 183.

41. Pratt, *Imperial Eyes*, 134; Humboldt, *Political Essay*, 240. Pratt emphasizes that this disparagement often took the form of unfavorable comparisons with Mediterranean civilizations, yet even this is not completely true. In the *Political Essay*, for instance, Humboldt noted that the native Mexicans made calendrical calculations “with more accuracy than the Greeks, Romans, and Egyptians” (*Political Essay*, 54).

42. The short quotations about native groups are my translations of letters written on November 24, 1800, and December 23, 1800, to Citizen Delambre and D. Guevara Vasconcellos, in *Lettres Américaines*, 92 and 105. The last quotation of the paragraph is from Humboldt’s *Personal Narrative*, II, 377. On cannibals, Humboldt wrote (on February 21, 1801, to Karl Ludwig Willdenow, *Lettres Américaines*, 112, my translation): “What a delight it is to live in these forests of the Indians, where we meet so many independent Indian peoples, in whose domains we find traces of Peruvian culture! Here one sees nations of people who effectively cultivate the earth, who are hospitable, who appear mild and humane, much like the inhabitants of Tahiti.” Only as an afterthought did he mention that some of these particular Indians ate other people.

43. Humboldt, letter of November 25, 1802, to Wilhelm von Humboldt, in *Lettres Américaines*, 135-136; and *Personal Narrative*, I, 310-330, quotation on 328. Humboldt’s appreciation of native languages clearly flouts what J. M. Blaut, in a classic work of post-colonial geography, has called “the

in *Views of the Cordilleras and Monuments of the Indigenous Peoples of America*, Humboldt admiringly described Mexican hieroglyphics, calendars, and pyramids, as well as Incan gardens and fortresses. "The great Inca Trail, not only one of the most useful but also one of the most gigantic works ever accomplished by men," seemed particularly impressive to him, given the challenges the engineers must have confronted at such high altitudes.⁴⁴

Humboldt's respect for the natives he encountered did not stem from a true cultural relativism. He was disgusted by certain native practices which he considered vicious or even inhuman, such as infanticide based on "false notions of propriety and family honour" that forbade the raising of twins. Indeed, he occasionally mocked Rousseau's idealization of "man in the state of nature," because he was such an environmental determinist that he inevitably saw the dark side of the jungle reflected in its inhabitants. To his credit, though, he did remark that the natives' "acts of cruelty" were "less frequent than they are believed to be" in Europe, and when he complained of their "indolence" he explicitly denied that this was a racial characteristic, assuming rather that it was induced by the sweltering, stagnant atmosphere of the tropics. He rarely mentioned what he considered to be the Indians' blameworthy traits without also mentioning their admirable ones, without noting "the contrast between the virtue of a savage and the barbarism of civilized man!"⁴⁵

Humboldt's most sustained attack against civilized barbarism focused on slavery, which, Humboldt wrote, "is no doubt the greatest evil that afflicts human nature." He felt he had a moral responsibility to expose as frauds those people who tried to "veil barbarous institutions by ingenious turns of language": "It is for the traveller who has been an eyewitness of the suffering and the degradation of human nature, to make the complaints of the unfortunate reach the ear of those by whom they can be relieved." Thus did he conceive of his humanistic empiricism: an expedition was no mere vacation, observation no mere positivist exercise. Even in 1858, at the age of 88, Humboldt remembered what he had seen in Cuba, and wrote about how he abhorred "the sufferings of our colored fellowmen, who, according to my political views, are entitled to the enjoyment of the

colonizer's model of the world": "Closely connected to this theory [of the 'primitive mind']," Blaut writes, "was the notion that there are 'primitive languages,' languages incapable of expressing higher theoretical and abstract thought. This old notion (which had been used in one form by William [Wilhelm] von Humboldt) was joined to the proposition that people cannot think beyond the limitations of their natural language, and so a primitive language entails a primitive mind." See J. M. Blaut, *The Colonizer's Model of the World: Geographical Diffusionism and Eurocentric History* (New York: Guilford Press, 1993), 97. On the complexity of pre-Columbian civilizations, see the letter of November 25, 1802, to Wilhelm von Humboldt, in *Lettres Américaines*, 136, and Humboldt's *Political Essay*, 48-49 and 53-70. In the *Personal Narrative*, he notes that the natives "whom we designate under the name of savages, are probably the descendants of nations highly advanced in cultivation" (I, 293).

44. *Vues des Cordillères*, II, 331, my translation. Of course, despite Humboldt's clear respect for many native cultures, it is important to remain aware of the ways in which his methods of cataloguing and analyzing them did contribute to a colonialist program of simplification and regulation. See, for instance, Cohn, *Colonialism and Its Forms of Knowledge*, and James Clifford, *The Predicament of Culture: Twentieth-Century Ethnography, Literature, and Art* (Cambridge, Mass.: Harvard University Press, 1988).

45. *Personal Narrative*, II, 248-249; I, 300; and II, 346.

same freedom with ourselves.” His science, he believed, also demonstrated that all races were equally human and equally capable of what his society considered civilization—or of something just as worthy, which he and his compatriots were not necessarily able to appreciate. Arguing against Aristotle by harnessing the evidence he had gathered through ethnography, linguistics, geography, and natural history, Humboldt closed the first volume of *Cosmos* with a bit of moral philosophy. “Whilst we maintain the unity of the human species,” he asserted, “we at the same time repel the depressing assumption of superior and inferior races of men. There are nations more susceptible of cultivation, more highly civilized, more ennobled by mental cultivation than others—but none in themselves nobler than others. All are in like degree designed for freedom.”⁴⁶

VI. “OCCULT FORCES INDEED!”⁴⁷

In *Cosmos*, Humboldt finally tried to weave everything—and everyone—together. “The principal impulse by which I was directed, was the earnest endeavor to comprehend the phenomena of physical objects in their general connection, and to represent nature as one great whole, moved and animated by internal forces.”⁴⁸ To some critics, this impulse simply demonstrated Humboldt’s irresponsibility. Pratt scoffs at his “occult forces,” arguing that he deferred to mysticism in order to avoid tangling with the real *social* forces that divided humanity from nature, and different classes of human beings from each other. The great irony of this criticism lies not just in Pratt’s failure to engage with Humboldt’s lifelong commitment to social justice, but also in her unwillingness to see the **deeper** significance of his mystical “forces.” We might forgive earlier critics for writing off Humboldt’s seemingly naive romanticism, but Pratt, writing during a time of strong environmental awareness, could have recognized Humboldt’s holistic vision for what it was: a new ecological paradigm.

After years of observation, Humboldt wanted to know why the vicious insects swarming in Venezuelan rainforests were not the same as those in the marshlands along the coast of Colombia, why the snow line of mountains at precisely the same latitude could differ by thousands of feet. “In considering the study of physical phenomena ...,” he explained, “we find its noblest and most important result to be a knowledge of the chain of connection, by which all natural forces are linked together, and made mutually dependent on each other.” Interconnection and interdependence are the keys to what we now think of as ecology, a word not actually coined until the 1860s. But even if Humboldt called it “geography,” or “physical geography,” or “earth physics [*le physique du monde, le physique générale*],” he was clearly thinking in ecological terms as he synthesized his research findings during the first decade of the nineteenth century: “Observation of individual parts of trees or grass is by no means to be considered plant geography,” he wrote; “**rather, plant** geography traces the connections and relations by which all plants are bound together.” Thanks to his relentlessly inter-

46. *Personal Narrative*, HI, 272 and 271; quoted in Foner, 342; *Cosmos*, I, 368, my emphasis.

47. Pratt, *Imperial Eyes*, 140.

48. *Cosmos*, I, ix.

disciplinary approach, he had stumbled upon what ecologists now refer to as the web of life: pull on one strand, and the whole structure quivers.⁴

Humboldt's scientific vision was not entirely new: he developed his approach in dialogue with Enlightenment figures like Kant and Laplace, and leading Romanticists like Goethe, Schiller, and Schelling. The harmonious blending together of life forms, after all, was a central idea in the German school of "nature philosophy," and Kant (1724-1804), in his lectures on "Physical Geography," explicitly attempted to transcend Linnaean natural history by proposing that scientists study environments holistically rather than just plant by plant.⁵⁰ And when Humboldt described the world as "one great whole animated by the breath of life," he was also invoking Eastern spiritual beliefs which he had learned primarily through the orientalist writings of Johann von Herder. As Richard Grove has pointed out, Humboldt had considerable knowledge of Hinduism and its gentle treatment of the natural world, based on the belief that there is, in Herder's words, "one being in and behind all that there is." "Vishnu is in you, in all things," suggested one of the many Indian texts that Herder quoted. Too, Humboldt's own brother, Wilhelm, made him aware of the Jainist philosophy of never harming any living organism.⁵¹

Humboldt's "oneness," though, was not just an abstract ideal, nor merely aesthetic or religious; his respect for the unity of the world was also based on his field work, on the sort of precise empirical observations upheld as the building blocks of science by his colleague Cuvier. What made his theorizing innovative and radical was his hard evidence that certain natural laws — whether relating to climate, forest ecosystems, or languages — operated similarly in all the places to which he had traveled. Moreover, he did not simply posit a unity of nature, which whitewashed the world's differences; rather, he deduced a "unity in diversity," a unity that explicitly depended on the full richness of life he had seen in the tropics. He cared about each element of nature not because it was created by the same divine being (Humboldt seems to have been agnostic), but because every weed, stinging insect, and poisonous snake played a crucial role in what he came to think of as particular ecosystems, all of which seemed to thrive on biodiversity. "Ecosystem" and "biodiversity" are anachronistic terms — Humboldt did not use them — but they accurately reflect his emphasis on the interconnectedness of nature. He insisted to readers of *Cosmos* that no plant or animal was "merely an isolated species," and, throughout his writings, he emphasized the importance of even the most frail and finespun filaments in the web of life, those "phenomena which naturalists have hitherto singularly neglected." "Our imagination," he

49. *Ibid.*, 1; on plant geography, Humboldt is quoted in Richard Hartshorne, "The Concept of Geography as a Science of Space, from Kant and Humboldt to Hettner," *Annals of the Association of American Geographers* 48 (1958), 100. (This quotation is actually from an article Humboldt published, in Latin, in 1793.)

Most histories and textbooks credit Ernst Haeckel, a German Darwinian, with founding the science of ecology in the 1860s. See, for instance, Forster, *Nature's Ecortoty*, 192, and Anna Bramwell, *Ecology in the Twentieth Century - A History* (New Haven: Yale University Press, 1989), 39-63.

50. See Nicolson, "Alexander von Humboldt and the Geography of Vegetation."

51. Humboldt, *Cosmos*, I, 3. And see Grove, *Green Imperialism*, 364-379. Herder is cited on 370. Also see Alexander Gode-von Aesch, *Natural Science in German Romanticism* (New York: Columbia University Press, 1941), 89-135 and 183-208.

explained, “is struck only by what is great; but the lover of natural philosophy should reflect equally on little things.” After his experience on the Orinoco, Humboldt was not exactly imbued with sympathy for mosquitoes, yet he felt compelled **to remind** prejudiced Europeans that even “these noxious insects . . . , in spite of their minute size, act an important part in the economy of nature.”⁵²

A representative contribution Humboldt made to the development of ecological thought is his theory relating the geographical distribution of vegetation to the effects of climate—a radical idea which remains a cornerstone of our understanding of plant ecosystems. At the base of peaks like Chimborazo and Cotopaxi in Ecuador, he found the vines and bright orchids and tall hardwoods of the rain-forest, while on their snowclad summits he found only the hardiest mosses and lichens. On mountain after mountain, vegetation got sparser at higher altitudes, as if during his ascent he were walking from the equator to one of the poles: vertical geography mirrored horizontal geography. Humboldt’s “habit of viewing the globe as a great whole” had allowed him to identify climate as a unifying global force, proving, in a sense, that we all live under the same roof. Meanwhile, by pioneering the use of isotherms and isolines, and proposing boundaries for temperate, tropical, and boreal vegetation zones, he established permanent scientific structures that would enable future generations to attain the planetary consciousness he so cherished. Indeed, his innovations in comparative climatology underlie current attempts to understand the threat of global warming.⁵³

Perhaps most remarkably, this sort of ecological thinking eventually led Humboldt to a nascent conservation ethic. Attempting “to explain the progressive diminution of the lake of Valencia,” in Venezuela, he immediately pointed to “the destruction of forests, the clearing of plains, and the cultivation of indigo.” Other analysts argued that there simply had to be a hidden outlet somewhere underground. But Humboldt’s model of interdependence helped him understand that

52. Humboldt, *Cosmos*, I, 2, my emphasis; I, 22; and *Personal Narrative*, II, 287-288 and 276. Humboldt’s agnosticism is clear from his correspondence with Varnhagen von Ense; see his *Letters*, 182-183, 194, 239, 271, 339, 385, and 397. On ecosystems, which he usually referred to as geographical “regions,” he wrote: “the character of different regions of the earth may depend upon a combination of . . . the outline of mountains and hills, the physiognomy of plants and animals, the azure of the sky, the forms of the clouds, and the transparency of the atmosphere”; quoted in Nicolson, “Historical Introduction.” On biodiversity, he also wrote of the need to respect “the universal profusion of life,” and he constantly insisted that any real understanding of the cosmos depended on opportunities “to contemplate nature in all her variety”; see *Views of Nature*, 210, and *Personal Narrative*, I, 2.

53. Quotation is from *Personal Narrative*, I, 105. Also see *Personal Narrative*, I, 81 and 114-121; Humboldt, *Essai sur la Géographie des Plantes* (Paris: F. Schoell, 1807), passim. with its accompanying plate, published separately and entitled *Géographie des Plantes Equinoctiales*; Malcolm Nicolson, “Alexander von Humboldt, Humboldtian Science and the Origins of the Study of Vegetation,” *History of Science* 25 (June 1987), 167-194; and Klaus Dobat, “Alexander von Humboldt as a Botanist,” in *Alexander von Humboldt: Life and Work*, ed. Wolfgang-Hagen Hein (Ingelheim am Rhein: C. H. Boehringer Sohn, 1987), 167-193: the English edition of this book, which I consulted, is translated from the German original (Ingelheim am Rhein: C. H. Boehringer Sohn, 1985) by John Cumming and edited by Peter Newmark and is extremely useful in making some relatively recent German scholarship on Humboldt available to a much wider audience. Note, also, that it was thanks to Humboldt’s requests that observation outposts were established throughout Russia, the United States, and the British Empire in the 1830s for the tracking of meteorological, climatological, and geomagnetical trends on a global basis. See Botting, *Humboldt and the Cosmos*, 253-254.

human intervention had caused the lake's level to drop. Diversion of water from nearby streams in order to irrigate indigo crops was one obvious proximate cause; to Humboldt, though, the key issue was deforestation. He explained that the surrounding soils, once deprived of the trees' root systems, had a greatly diminished capacity for water retention, so they could no longer recharge the springs that fed the lake. In addition, he noted, flooding and soil erosion had increased dramatically:

As the sward and moss disappear with the brushwood from the sides of the mountains, the waters falling in rain are no longer impeded in their course ; they furrow, during heavy showers, the sides of the hills, bearing down the loosened soil, and forming sudden and destructive inundations. Hence it results, that the clearing of the forests, the want of permanent springs, and the existence of torrents, are three phenomena closely connected together.

These interconnections spurred Humboldt to recognize nature's limits, and insist on caution in the use of natural resources for the sake of posterity. "By felling the trees which cover the tops and sides of mountains," he asserted, "men in every climate prepare at once two calamities for future generations; want of fuel and scarcity of water."⁵⁴

This undeniable environmentalist perspective is simply impossible within Pratt's post-colonialist framework: according to her critique, Humboldt had no choice but to use his writings to point out "exploitable resources." Yet her only textual evidence that he actually endorsed the rampant European exploitation of American nature is in a brief, ambiguous passage she cites from Humboldt's *Personal Narrative*, in which Humboldt described his Indian guides pointing out some particularly beautiful trees, with red and golden wood, "which will one day be sought for by our turners and cabinet-makers." This remark is cryptic at best. It is even possible that Humboldt's tone is meant to be ominous here, especially given his contention elsewhere that "forests are destroyed . everywhere in America by the European planters, with imprudent precipitancy." It would no doubt be foolish to try to claim Humboldt as a preservationist, as opposed to a conservationist, but it seems just as foolish to paint him as the greedy agent of a colonial resource grab. He recognized the inevitable need to extract nature's bounty for the sake of human survival and development, but he approached this process with prudence, seeking to maintain the environment's putative balance — just like the CLASSIC AMERICAN CONSERVATIONISTS of the early twentieth century.⁵⁵ To Pratt, any reference to the use of resources made people like Humboldt conquerors and commodifiers of nature. But for Humboldt himself, who had an unconditional love for the natural world despite his assumption that its products

54. *Personal Narrative*, R, 9.

55. Pratt, 130; Humboldt, *Personal Narrative*, I, 232; *Personal Narrative*, II, 9. On occasion, Humboldt in fact did go beyond a basic sustainability argument and advocate a profound respect for all natural things regardless of their usefulness to human beings: "The view of nature ought to be grand and free, uninfluenced by motives of relative utility" (*Cosmos*, I, 66).

Of course, today's environmentalism is not founded on as pure a faith in nature's balance as Humboldt had. Indeed, change is now seen as one of nature's central characteristics. Yet modern chaos theory has demonstrated that beneath almost every manifestation of disorder lurks some sort of pattern or equilibrium: in the end, Humboldt has been vindicated, at least to a certain extent. As Daniel

were meant at least in part for human beings, the point was to achieve *sustainable* use —“a more enlightened employment of the products and forces of nature.”⁵⁶

VU. HOMELESSNESS AND THE SEEDS OF A NEW
POST-COLONIAL ENVIRONMENTALISM

It is perhaps not surprising that Humboldt focused so much of his intellectual energy on the concept of interconnection, since for so much of his life, despite his astounding fame and unfailing popularity, he was in many ways an outsider. His own brother acknowledged that “there is between us, when it comes to his intimate life, a veil that neither he nor I would dare to lift.”⁵⁷ Humboldt hated the barren Prussian culture into which he was born, and wound up spending much of his youth with people who were literally outside that culture—mostly Jews like Moses Mendelssohn and Marcus Herz, who had no civil rights in Berlin but whose intimate circles represented the heart of the city’s scientific and artistic avant-garde.⁵

At the heart of Humboldt’s feeling of marginalization was his preference for intense bonds with other men. He spent a good part of his boundless energy simply covering up the truth about his personal life —thus the veil described by Wilhelm, who understood Alexander well enough to avoid prying. Though Humboldt cherished his position as a public figure, he destroyed much of his private correspondence. Pratt’s most insightful comment about him, consigned to a footnote, is that his “wanderlust undoubtedly consisted in part of a need to escape the heterosexist and matrimonialist structures of bourgeois society.”⁵⁹ Indeed, it may be true that many would-be explorers found themselves possessed of what Anatole France called “a long desire” specifically because they could not find a comfortable homosocial niche at home. Exploring expeditions in the nineteenth century have commonly been viewed as offering a rugged, masculine alternative to effete Victorian societies; just as often, though, they may have supplied explor-

Botkin, author of *Discordant Harmonies: A New Ecology for the 21st Century* (New York: Oxford University Press, 1990), has noted, “certain rates of change are natural, desirable, and acceptable, while others are not” (12). On conservation, see, for instance, Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920* (Cambridge, Mass.: Harvard University Press, 1959). Also note Grove’s treatment of earlier European conservationists in *Green Imperialism*.

56. *Cosmos*, I, 33. On conquest and commodification, see Pratt, *Imperial Eyes*, 34.

57. Quoted in Pierre Gascar, *Humboldt L’Explorateur* (Paris: Gallimard, 1985), 38, my translation.

58. See, for instance, Botting, *Humboldt and the Cosmos*, 13-14. Throughout his life, Humboldt made a point of supporting the rights of Jews and lobbying for their equal treatment not only before the law but in society. His principle of unity was truly meant to include all social groups. For one example from his correspondence with Vamhagen von Ense, see his *Letters*, 120-121: “In the last number of the *Bourne/ des Débats* there is a strong and very fine article against the abominable Jew Bill, with which we are threatened, and against which I have already protested. The bill is a violation of all the principles of a wise policy of unity.” On this topic, also see E. R. Brann, *The Political Ideas of Alexander von Humboldt: A Brief Preliminary Study* (Madison, Wis.: Littel Printing, 1954), 44-46.

59. Pratt, *Imperial Eyes*, 240; the most useful sources on this aspect of Humboldt’s personality are de Terra, *Humboldt*, and Gascar, *Humboldt L’Explorateur*.

ers with opportunities for fraternal cooperation and intimacy that were hard to find amid capitalist competition and narrowly defined domestic relationships.

It is impossible to know exactly how intimate Humboldt ever got with his various partners. What is undeniable, though, is that he never settled into the type of domestic sexual relationship that was expected of him, and his awareness that his private life was anomalous left him, at times, pained and alienated.⁶¹ Usually, Humboldt's research and writing were enough to keep him sane, and the countless volumes he produced in Paris attest to the energy he derived from work. When even writing failed him, though, he had to resort to his two eternal means of solace: travel and nature.

"When, under the relentless bludgeonings of our time," Humboldt wrote in *Views of Nature*, "the charms of intellectual life fade and the productions of creative art begin to perish, let us remember that the earth continues to teem with new life."⁶² Even if his readers could not in reality escape their over-civilized lives, Humboldt invited them to travel with him in their imagination to the enchantingly overwhelming environment of the New World. His love of nature went well beyond a utilitarian conservation ethic to a deep belief in the power of wilderness to move people spiritually: "To **minds** oppressed with the cares or the sorrows of life, the soothing influence of the contemplation of Nature is peculiarly precious.... May they, 'escaping from the stormy waves of life,' follow me in spirit with willing steps to the recesses of the primeval forests, over the

60. For an elaboration of the Anatole France quote, see the wonderful collection of essays by Evan S. Connell, *A Long Desire* (New York: Holt, Rinehart, and Winston, 1979). On the theme of the explorer's escape from society see Paul Zweig, *The Adventurer: The Fate of Adventure in the Western World* [1974] (Pleasantville: Akadine Press, 1999). A classic statement of the exploration-as-masculinist-alternative position can be found in Lisa Bloom, *Gender on Ice: American Ideologies of Polar Expeditions* (Minneapolis: University of Minnesota Press, 1993). I think exploring expeditions, in some nineteenth-century cases, may have functioned more like fraternal organizations, as described, for instance, by Mark C. Carnes, in *Secret Ritual and Manhood in Victorian America* (New Haven: Yale University Press, 1989) and "Middle-Class Men and the Solace of Fraternal Ritual," in *Meanings for Manhood.- Constructions of Masculinity in Victorian America*, ed. Mark C. Carnes and Clyde Griffen (Chicago: University of Chicago Press, 1990), 37-66. As Carnes suggests, while these ritual-based associations of men in some ways propped up the bourgeois status quo "by providing [temporary] solace from the psychic pressures of social and institutional relationships," they simultaneously posed a legitimate challenge to Victorian culture. Many fraternal rituals—like Humboldt's writings—"repeatedly contravened basic tenets of capitalism," and the men who experienced them did not all go straight back to their jobs refreshed and rededicated to profit-making (Carnes, "Middle-Class Men," 51). Moreover, the very concept of "fraternity" offered men a chance to express long-stifled emotions, and some, like Humboldt (and Walt Whitman), decided never to accept the mantle of male stoicism, and lived out their lives in the exclusive company of affectionate men. This theme is developed in a few recent studies in the history and literature of sexuality. For instance: Jonathan Ned Katz, *Love Stories: Sex between Men before Homosexuality* (Chicago: University of Chicago Press, 2001); Caleb Crain, *American Sympathy: Men, Friendship, and Literature in the New Nation* (New Haven: Yale University Press, 2001); and Leila J. Rupp, *A Desired Past: A Short History of Same-Sex Love in America* (Chicago: University of Chicago Press, 1999).

61. It makes sense, as Leila Rupp suggests, that "if not all men in fact forgot their male friends in the interests of marriage and manhood, the persistence of such attachments began to shade into more questionable behavior." Rupp also notes that, while it is incredibly difficult to interpret the evidence of sexual behavior in times past, "it would be a mistake to assume that the social acceptance of romantic friendship means that sexual acts never occurred between romantic friends." See Rupp, *A Desired Past*, 48-50.

62. Quoted in de Terra, *Humboldt*, 207; see also *Views of Nature*, 173, for a slightly different translation.

boundless surface of the Steppe, and to the higher ridges of the Andes.” In particular, Humboldt believed that images of tropical profusion could convey a kind of life force, that an imaginary trip to “a distant, richly endowed land—the aspect of a free and vigorous vegetation—refreshes and strengthens the mind.” And so he did his best to share his sense of natural beauty, to paint simple, striking word-pictures of the lush South for his temperate, housebound audience, to evoke the “lianas which creep on the ground, reach the tops of the trees, and pass from one to another at the height of more than a hundred feet.”⁶¹ Moreover, these verbal transports, no mere escapes, were politically charged. Within a certain tradition of radical Romanticism, as Raymond Williams has argued, “a conclusion about personal feeling became a conclusion about society, and an observation of natural beauty carried a necessary moral reference to the whole and unified life of man.” Invoking the power and worth of nature, leading his readers into the wilderness, Humboldt was questioning the core values of his rapidly industrializing society.⁶²

Of course, one danger of treating nature as a sanctuary is that true communion with the natural might then be superseded by simple projection or solipsism: Humboldt’s readers might see nothing in nature but a comforting reflection of themselves. But while Humboldt sought solace in exploring the natural world, he did not seek sameness. As Todorov has noted, again in reference to cross-cultural understanding: “If it is incontestable that the prejudice of superiority is an obstacle in the road to knowledge, we must also admit that the prejudice of equality is a still greater one, for it consists in identifying the other purely and simply with one’s own ‘ego ideal’ (or with oneself.”⁶³ Humboldt was too much of an “other” in his own society to think that he could ever escape that fundamental condition: travel was lonely, too, and nature, if comforting to some degree, **was** also threatening. Yet it was precisely his **own sense** of “otherness” that allowed him to accept nature’s dark side. He did not mean to spur in his readers a mere romantic sympathy for nature; Humboldt sought empathy. Critics could complain that he over-exoticized the “torrid zone,” but he was explicit about his reasons for emphasizing the differentness of tropical nature: he argued that people were already alienated from the natural world, so a striking change of scenery might help them reconnect with it. Certainly, many people actually living in the tropics have responded positively to his attempts at the respectful depiction of “otherness.” As Pratt has acknowledged, “Humboldt is steadfastly

63. Humboldt, *Aspects of Nature*, vi and 170, and *Personal Narrative*, I, 216.

64. Raymond Williams, *Culture and Society: 1780-1950* [1958] (New York: Columbia University Press, 1983), 30. In his introduction to the new edition of this book, Williams went on to note that “What had been confidently analyzed, and in some cases dismissed, as the merely romantic critique of industrialism or industrial capitalism [has] returned ... to make startling connections with the new ecological and radical-ecological movements” (*Culture and Society*, xi). Jonathan Bate has made a similar argument with regard to Wordsworth in his compelling study, *Romantic Ecology: Wordsworth and the Environmental Tradition* (London: Routledge, 1991). On travel writing as being more than escapism, Paul Zweig argues that, simply because the traveler comes back to tell his tale, “his escape from society is a profoundly socializing act.” After all, the traveler’s tales have the potential of “providing alternative lives, modes of possibility.” See Zweig, *The Adventurer*, 96 and 83.

65. Todorov, *The Conquest of America*, 165.

revered and revived in South American official culture precisely for his unconditional, intrinsic valorization of the region."⁶⁶

For scholars in Europe and the United States, though, Humboldt is still an "other." Post-colonialists, in particular, have not been able to see beyond his work's complicity in imperial constructions of nature and native Americans. What they don't seem to recognize is that Humboldt's brand of science, in Todorov's phrase, is "at once the child of colonialism and the proof of its death throes": it may be totalizing, but that leads it to validate the conquered as well as the conquerors. Indeed, despite his whiteness, his maleness, his Europeanness, Humboldt is in many ways James Clifford's ideal interpreter or guide, a mediator between worlds. Certainly he fits Todorov's model of the exile "who has lost his country without thereby acquiring another."⁶⁷

Humboldt's vision was international, cosmopolitan, inclusive of all he encountered. His instinct to value "otherness" helped him appreciate nature and culture in all their forms, linking them while simultaneously distinguishing them: he could be a naturalist without naturalizing social relations, an anthropologist without anthropomorphizing nature. He particularly appreciated the ability he saw in certain American peoples to gain access to nature's balance through their religion and other cultural practices—a human ability which Europeans were in the process of destroying. As Todorov has put it, the colonization of the Americas, this conquest "from which we all derive, Europeans and Americans both, delivers a terrible blow to our capacity to feel in harmony with the world, to belong to a preestablished order; its effect is to repress man's communication with the world."⁶⁸ Today, the Western **way** is to adapt nature to our **needs** rather than adapt to nature. As Humboldt suggested, true harmony—as in music—requires the ability to hear different voices: the scientist must be worldly and open-minded, must acknowledge **vast** diversity before **attempting to** recognize unity. A post-colonial environmentalism in the Humboldtian mold would emphasize connection across very real boundaries, humility in the face of nature's sublime power, respect for the interdependence of certain "occult" forces, and an earnest attempt to reform social relations so that all people have equal access to fresh food, clean air and water, and, occasionally, a change of scenery—the wilder the better. Current theorists of environmental science and politics tend to emphasize the importance of rootedness, of treating the earth like a home. But perhaps the best scientists and policy makers, the ones truly capable of formulating a humane ecology, are those who understand what it means to be homeless.

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66. Pratt, *Imperial Eyes*, 141.

67. Todorov, *The Conquest of America*, 250, 249.

68. *Ibid.*, 97.