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*The*  
HUMBOLDT

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CURRENT 

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A A R O N S A C H S

*Nineteenth-Century Exploration and the Roots of  
American Environmentalism*

VIKING  
2006

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## PROLOGUE

## Humboldt in America

1804–2004

It would have been easier to sail straight back to Europe. Politics and weather both favored the conservative course: to make the detour from Havana to Philadelphia, his ship would be forced to brave a British naval blockade and risk a dangerous stretch of water at the beginning of hurricane season. In any case, there was no question of staying on this side of the Atlantic. Alexander von Humboldt, now the world's most famous scientific explorer—after a five-year expedition up the Orinoco River and along the slopes of Andean volcanoes—could not finally unpack his brand-new maps, his bottles of curare, his pressed acacias and lianas, anywhere but in Paris, the scientific capital of the Western world. Indeed, he had already sent many of his collections to France, and, as he admitted to a colleague, "I think only of preserving and publishing my manuscripts. How I long to be in Paris!"<sup>1</sup> Yet he also longed to experience Philadelphia and Washington. "For moral reasons," he wrote to President Thomas Jefferson, "I could not resist seeing the United States and enjoying the consoling aspects of a people who understand the precious gift of Liberty."<sup>2</sup> So Humboldt made for the Bahama Straits.

Unsurprisingly, on the night of May 6, 1804, the wind and water started to rise. Each wave, Humboldt noted, felt like a boulder, and he saw the most seasoned sailors fall to the deck repeatedly when the ship convulsed. Water flowed down the ship's stairways and under its doors. The skies were so dark that candles had to be lit all day on the poop deck. For about a week, cooking was impossible, so it was salted cod at almost every meal; much of the crew, meanwhile, subsisted exclusively on brandy, explaining to the passengers that it was best to drown one's sorrows before actually drowning. The passengers were not amused. Most of them were drenched, sleepless, and somewhat terrified. Humboldt's thirty-five remaining specimen cases, and his life, were clearly in danger, but the determined scientist at least knew how to distract himself: desperately trying to maintain his mental as well as his physical

balance, he adhered as closely as possible to his routine of measuring air and water temperatures and examining the marine creatures swept aboard ship by the pounding waves. The wry entry in his scientific notebook said simply "that the Gulf Stream does indeed exist."<sup>3</sup>

In his private journal, to which he returned only after the storm abated on May 14, the thirty-four-year-old Humboldt was more expressive. "I have never been so concerned about my death as on the morning of May 9th," he scribbled. "I was thoroughly distraught. To see myself perish on the eve of so many joys, to see all the fruits of my travels perish with me, to cause the death of the two people accompanying me, to perish on a voyage to Philadelphia that was not entirely necessary . . ."<sup>4</sup>

As far as the twenty-first-century memory of Alexander von Humboldt is concerned, he may as well have gone down with his ship: many people have never even heard of him. But we're lucky he survived. In fact, he lived fifty-five more years, and his subsequent career, almost all of which he spent analyzing those precious specimens he had collected on his expedition, saw him become the nineteenth century's most influential scientist—especially in America—until at least 1859, the year he died and Charles Darwin published *On the Origin of Species*.<sup>5</sup> Darwin's explanation of the "struggle for existence" eventually seemed to eclipse Humboldt's more Romantic vision of the world, but the elder scientist's radical approach to nature and humanity makes him an astonishingly relevant figure for the twenty-first century. As Humboldt explained in 1799, at the very beginning of his expedition, his goal was to "recognize the general connections that link organic beings" and to "study the great harmonies of Nature." He seems to have been the first ecologist.<sup>6</sup>

Humboldt arrived at the port of Philadelphia just over two hundred years ago, on May 24, 1804.<sup>7</sup> Despite an aristocratic background, he had "simple unaffected manners," according to President Jefferson's personal secretary, William Burwell; Humboldt also came across as "remarkably sprightly" and "vehement in conversation."<sup>8</sup> Albert Gallatin, Jefferson's secretary of the treasury, reported to his wife that Humboldt spoke "more than Lucas, Finley, and myself put together, and twice as fast as any body I know, German, French, Spanish and English all together. But I was really delighted and swallowed more information of various kinds in less than two hours than I had for two years past in all that I had read or heard."<sup>9</sup> Throughout his six-week sojourn in the United States—he stayed only through the first week of July—Humboldt was hosted by members of the American Philosophical Society, the nation's most prestigious conglomeration of artists and scientists, founded by Benjamin Franklin. The painter and natural historian Charles Willson Peale, in particular, took a shine to the visiting explorer, and accompanied him as he

shuttled back and forth in rattling stagecoaches between Philadelphia and Washington, to meet various luminaries in government and science. Clearly, Peale noted, this man could empathize with the American spirit of restlessness: "He has been travelling ever since he was 11 years of age," wrote the founder of Philadelphia's world-famous natural history museum, "and never lived in any one place more than 6 months together, as he informed us." Humboldt knew how to keep still for at least a few hours at a time, though, when in the company of friends: Peale got him to sit for a portrait, which today hangs in Philadelphia's College of Physicians.<sup>10</sup>

If any particular person in the young Republic could have quieted Humboldt's wanderlust for a more prolonged period, it would probably have been Thomas Jefferson himself. President not only of the nation but also of its foremost Philosophical Society, Jefferson seems to have been the real object of Humboldt's visit to the United States. In the aftermath of the post-revolutionary Terror in France, the best hope for democratic republicanism clearly resided with the American leader, and Humboldt yearned to connect with the man who had written the Declaration of Independence. Moreover, Humboldt loved the idea that the president of the United States was someone with whom he could talk shop. He ended his letter of introduction by referring to Jefferson's scientific writings: "As a friend of science," Humboldt fawned, "you will excuse the indulgence of my admiration. I would love to talk to you about a subject that you have treated so ingeniously in your work on Virginia, the teeth of mammoth which we too discovered in the Andes."<sup>11</sup> Here was someone obviously interested in Humboldt's brand of comparative, cosmopolitan research and, even better, in applying that research toward the more effective harmonizing of society and nature.

Jefferson was a much more settled man than the young Baron von Humboldt, with a deep attachment to his home.<sup>12</sup> Yet, as Humboldt sensed, his host at the presidential mansion had a wandering spirit. Since the 1780s Jefferson had been collecting books on the geography and exploration of western territories, dreaming of the seemingly limitless possibilities for American society. At his most idealistic, he saw the Garden of the West dotted with agrarian smallholders, envisioned the entire American hinterland as a cross-cultural, pastoral paradise where white migrants and Indians would intermarry and sustain an ethic of democratic participation in local communities. At other times, moments of pragmatism or even cynicism, he conceived of the West simply as a gigantic reservation for the Native Americans being forced out of the eastern states by continually expanding white settlement. In any case, more than any other political leader in the early Republic, Jefferson nurtured America's western obsession.<sup>13</sup> When the president purchased Louisiana



from Napoleon in 1803 for fifteen million dollars, he created an American empire, doubling the territory over which he presided and focusing Americans' attention on the Pacific. A few months later, Lewis and Clark started up the Missouri River—just a couple of days before Humboldt's ship dropped anchor at Philadelphia.

Humboldt missed Lewis and Clark, but virtually every other American expedition of the nineteenth century would bear the mark of his influence—in part because the explorer Zebulon Pike (of Pike's Peak fame) copied Humboldt's main map on the sly, while it lay open on Secretary Gallatin's desk in Washington,<sup>14</sup> but mostly because the Prussian's writings became so widely popular in the United States. Editions of his books sold out repeatedly. 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”; Henry David Thoreau classified New England's climate zones according to Humboldt's model of plant ecology.<sup>15</sup> The peripatetic painters George Catlin and Frederic Church both traveled to South America specifically to seek out the native peoples and Andean landscapes described in Humboldt's books.<sup>16</sup> Humboldt's profound respect for indigenous Americans inspired Secretary Gallatin to write his foundational work of American ethnology, *A Synopsis of the Indian Tribes within the United States* (1836).<sup>17</sup> A couple of decades later, Walt Whitman would start to suffuse his poetry with the concept of “Cosmos,” a term that suggested the world's overarching but mysterious harmony and that Whitman stole directly from Humboldt, who had plucked the word from ancient Greek to use as the title of his final work, the daunting subtitle of which was “A Sketch of a Physical Description of the Universe.”<sup>18</sup> And during the Civil War, some abolitionists even published an antislavery letter from Humboldt to be distributed in New York and New England “for the Benefit of the Sick and Wounded Soldiers in the U.S. Armies.”<sup>19</sup> It is quite possible that no other European had so great an impact on the intellectual culture of nineteenth-century America.<sup>20</sup>

In Washington, Humboldt and Jefferson compared their mammoths' teeth, discussed the sophistication of Indian languages, and debated the exploration of the American continent. The United States had just acquired a new border with New Spain; suddenly, there appeared at the president's dinner table a man fresh from the borderlands, a scientific traveler who had spent the past year digging in Mexican mines and archives. Jefferson naturally pumped his guest for information about the territory surrounding the Mississippi River, and the Red, and the Mexicana, and the Sabine—“Can the Baron inform me what population may be between those lines of white, red, or black

people? and whether any or what mines are within them?” And Humboldt was ecstatic to oblige, to unroll his maps and lay out his notebooks—for a few days, anyway.<sup>21</sup>

Certainly, Humboldt would have been favorably impressed by Jefferson's description of the Lewis and Clark expedition. Perhaps Jefferson even showed his visitor the long list of instructions he had issued to Captain Lewis (a copy of which he had kept for himself). Humboldt undoubtedly approved of the president's insistence on a methodical topographical survey, complete with “celestial observations” (to determine latitude and longitude), temperature readings, and notes on flora and fauna. The most striking thing about Jefferson's attitude toward the West, though, was his respect for its human inhabitants. The president entreated Lewis to meet all native groups on equal footing and negotiate with them “in the most friendly and conciliatory manner,” and then, if fortune permitted, to come back with information about their “language, traditions, monuments . . . , their laws, customs and dispositions,” even “their relations with other tribes of nations.” It was not Jefferson who inaugurated the myth of the American West as a blank, unpeopled space, ready for the taking.<sup>22</sup> Without doubt, the Lewis and Clark expedition served to consolidate the president's empire building (ethnographic information can be used in negotiations); yet, in sponsoring the trip, Jefferson seemed genuinely to be acting as both president of the United States and president of the American Philosophical Society. The zoological specimens Lewis and Clark collected and most of the materials they received from Native Americans wound up in Peale's museum in Philadelphia.<sup>23</sup>

The one thing about Jefferson to which Humboldt objected, and which probably sent him sailing back to Europe that much faster, was that the president was a slaveholder. Just a few months earlier, in an otherwise beautiful Cuban valley—sugarcane and coffee can look quite lovely—Humboldt had noted his horror upon realizing that “these plains are watered with the sweat of the African slave! Rural life loses its appeal when it is inseparable from the misery of our species.”<sup>24</sup> Americans, he now learned, were perhaps more similar to the Spanish colonists than he had realized: clearly, they did not *fully* understand the “gift of Liberty.” Humboldt, like virtually all his contemporaries, took the “improvement” of wild lands for granted as a symbol of human progress, so the sharing of scientific data that would facilitate that effort seemed to him a professional responsibility—though he did always argue, with a proto-environmentalist logic, that development ought to be undertaken with the greatest care, so valuable lands were not wasted. What was truly radical about his views, though, was his insistence that the benefits of such

development be shared equally among all social groups—natives and blacks, too. The extension of national boundaries should never mean the extension of any kind of slavery, which he called “the greatest evil that afflicts human nature.” Just before leaving the United States, in June 1804, he sent a letter to William Thornton, one of his new acquaintances from the Philosophical Society, in which he expressed his scorn for the “abominable law” that allowed the importation of slaves into the American South. If Americans pursued “the only humane course” and ended this practice, then the only negative consequence would be that “at the beginning you may well export less cotton. But alas! How I detest this Politics that measures and evaluates the public good simply according to the value of Exports! A Nation’s wealth is just like an individual’s—only the accessory to our happiness. Before being free, we must be just, and without justice there can be no lasting prosperity.”<sup>25</sup>

For the rest of his life, Humboldt would hold up the United States as the world’s model republic, but always with the caveat that it would have to abolish slavery in order to live up to its own ideals. Speaking with a *New York Times* correspondent shortly before his death in 1859, Humboldt said, “I am half American; that is, my aspirations are all with you; but I don’t like the present position of your politics. The influence of Slavery is increasing, I fear. So too is the mistaken view of negro inferiority.”<sup>26</sup> He could endorse American expansion to the West in the early nineteenth century because development under Jefferson was clearly preferable to development under Napoleon or the Spanish Crown: Humboldt knew that Napoleon had reinstated slavery in Haiti in 1802, and he had seen the brutality of Spain’s plantation system with his own eyes. Indeed, he realized that Jefferson was morally opposed to the extension of slavery, and his respect for the president led him to write a letter in 1809—the two scientists would correspond regularly until Jefferson’s death in 1826—apologizing if his friend had taken personal offense at the general attack against slaveholders that he had just published.<sup>27</sup> But, in 1804, Humboldt must have winced if Jefferson tried to portray himself as a kind and enlightened master. Back in Paris, writing up the narrative of his expedition, Humboldt would return several times to the subject of slavery: “I have observed the condition of the blacks in countries where the laws, the religion, and the national habits tend to mitigate their fate; yet I retained, on quitting America, the same horror of slavery which I had felt in Europe.”<sup>28</sup>

America would expand in every direction in the nineteenth century, usually with overtly imperialistic goals. “East by sunrise,” wrote a Philadelphia newspaper editor in 1853, “West by sunset, North by the Arctic Expedition, and South as far as we darn please.”<sup>29</sup> But the actual explorers dispatched to America’s various frontiers tended to have more complicated motivations.

Often, they focused on understanding the interrelationships of the peoples and landscapes they encountered in the wild, and they wound up questioning the values of their home civilization—in part, at least, because they were trying to follow in Humboldt’s footsteps. Two hundred years after Humboldt braved the Bahama Straits, it is worth remembering his determination to make connections.