Humboldt in the Orinoco and the Environmental Humanities

Jorge Marcone

Heraclitus's river, into which one cannot set foot twice, is a compelling abstraction, perhaps our most enduring metaphor for change. For nineteenth-century Prussian naturalist Alexander von Humboldt, a particular, material river, the tropical Orinoco he explored in 1800—with its falls and tributaries, its profusion of animals and vegetation, its geology, the rainforest it nourished, the humanity it supported—betokened the natural world's unfathomable complexity.

In this essay, I analyze two texts by Humboldt, whose 1799–1804 voyage to the Americas had far-reaching consequences for the development of the biological and geological sciences and for how Spanish America would relate to nature. These are "The Cataracts of the Orinoco" and "Nocturnal Life of Animals in the Primeval Forest," which were included in his *Ansichten der Natur* (1808) (*Aspects of Nature*, 1850). In them (and in prefaces to various editions of *Aspects*), Humboldt deploys his well-known methodology for apprehending the landscape, joining aesthetic perception to scientific observation. The Orinoco furnished some of the richest material for his innovative poetics—and, in its nearly ungraspable intricacy and vastness, some of the most daunting challenges.

Humboldt not only seeks to balance emotion with intellect and to vindicate literature's power to convey the experience of living or inanimate matter, but also approaches nature as a force composed of networks of interconnected elements, which are revealed to our consciousness as much by aesthetics—our inner responses to the perception of nature's phenomena—as by science. This holistic focus on nature's manifold interactions, internally and with humans, seems to underlie the resurgent interest in Humboldt, particularly in his *Cuadros de la naturaleza* (the first

Spanish translation of *Ansichten der Natur* in 1876).² Once more, Spanish American thought (as elsewhere) reassesses Humboldt's legacy. This reappraisal reflects a widespread conviction that Latin America is urgently in need of a culture of nature befitting the times and its own history.

Two obstacles interfere in efforts to interpret Humboldt in a way that informs Latin American environmental thinking. First, is the problem of how to reclaim these writings given recent critiques of Humboldt alleging his ideological legacy in European capitalist exploitation, allegations based on his presumed construction of South America as primeval nature, void of humans. I will argue first that, while Aspects of Nature contributes ideologically to the project of capitalist exploitation of the Americas, it also lays bare the relationship between natural history and the history of peoples as well as the scientific traveler's dependence on, and tensions with, the indigenous guides and missionaries who make his expedition possible. The Orinoco voyage obliges Humboldt to note both the intertwining of natural and social histories and the intervention of local and national political ecologies in the uses of the landscape. That is, the holistic understanding that Humboldt seeks neither elides the human nor promotes the ideology of "conquest of nature," against which his Romantic filiation, in any case, arrayed him.

Second, is the issue of how to reclaim as essentially "ecological" a book in which Humboldt ascribes falling short of his writing ideals to the experience of the tropics themselves. Despite the theory's (and book's) extraordinary popularity, Humboldt determines years later that he has failed at his own poetics. Paradoxically, "Cataracts" and "Nocturnal Life" simultaneously illustrate the deployment of the poetics of an aestheticscientific complementarity and its failure. I will also argue that the explanation for this contradiction lies not in Humboldt's limitations as a writer—as he himself conjectures—but rather in how the landscape intervened in his experience of the Orinoco. These interactions with human and non-human elements of the region exceeded Humboldt's expectations for his ecological scientific research and disturbed the holistic Romanticism that was the source of his thought. The greater was his wondrous reaction to the marvelous, the greater his disillusionment with his own attempts to achieve the cherished unity. Reading between the lines, we see the emergence of a new way of understanding the relationship between writing and the experience of landscape, one that surpasses the explicit project; indeed, we can discern glimpses, in Humboldt, of a post-Humboldtian poetics.

The Trouble with Humboldt

The phrase "the trouble with Humboldt" refers to the controversy in postcolonial studies over the legacy of Humboldt's views on nature. Mary Louise Pratt's Imperial Eyes: Travel Writing and Transculturation in 1992 anticipated another controversy several years later, which was spearheaded by environmental historian William Cronon in "The Trouble with Wilderness; or, Getting Back to the Wrong Nature." Both authors were precursors of the current field of postcolonial environmental studies, which argues for broadening the terms of environmental thinking to engage the history of imperialism, globalization, and neo-liberalism in understanding environmental problems. Pratt implied Humboldt's role in the legacy of the Americas by deconstructing the discourse of nature in *Aspects*. Humboldt's South America, for Pratt, is wilderness-primal nature-at a particular moment of European expansionism (112), and it was this understanding of nature in the Americas that laid the ideological foundations for European capitalist appropriation of natural resources. Pratt reads Humboldt as promoting a nature that overwhelms human understanding and thus leads the scientist-traveler to focus on occult natural forces (120); the book's lack of narrative confirms his erasure of the human. Such Romanticism, she argues, elides social realities and ties native peoples to nature in racist, colonialist fashion (125). The erasure of the human, moreover, silences the history and policies of the Spanish colonial administration (127).

Pratt's indictment of Humboldt for an ideologically charge naturalistic reductionism contrasts with another reading that also introduced his ideas into contemporary debates in environmental history and the history of science. For Donald Worster, in Nature's Economy: A History of Ecological *Ideas*, Humboldt shook the foundations of early-nineteenth-century Western science and ideas of nature by practicing an ecological biology devoted to observing complex phenomena as they occurred in living nature. This subversive science, in Worster's view, includes a theory on the integration of aesthetics and science as a means of achieving the unity of knowledge, one based on detailed, instrumental observation, and aesthetic sensitivity that not only facilitates the apprehension of the landscape but also triggers affective reactions that bring balance to an emotionally disturbed subject. These observations lead us to conjecture that "human/non-human" was less a binary opposition, for Humboldt, than it was a way of naming various levels of interaction between a knowing subject and the object-world that included cognitive and affective interdependencies. Pratt's concern with an excess of nature in Humboldt's texts either falls inadvertently into the "human/nonhuman" binary trap or expresses an anxiety over a lack of the "social" in the texts.

The scholarly controversy over Humboldt's possible implication in European capitalist expansion remains puzzling. Might Humboldt have pioneered a subversive science that studied natural processes in their context, combined aesthetic and scientific observation, and believed in natural landscapes as modes of secular redemption against industrial society while nevertheless being in effect—and despite Humboldt's own political liberalism—ideologically complicit in the European imperialism that followed? Could he have been both an ecological thinker and a facilitator of ecological imperialism?

Pratt's indictment has been disputed in the subsequent two decades. Cuban geographer Antonio Núñez Jiménez, in his *Hacia una cultura de la naturaleza* (Toward a Culture of Nature), embraced Humboldt for both his aesthetic-scientific synthesis and the inspiration he offers to an anticolonial environmentalism and economics. Chilean critic Miguel Rojas Mix inadvertently added fuel to the fire in his "Humboldt, la ecología y América" (Humboldt, Ecology, and the Americas), finding in the Prussian naturalist a trenchant critique of earlier travelers for depicting both humans and nature in a primitive manner, for the falsity of the "noble savage" image, and for the portrayal of a primeval continent where nature ran riot—a rejection, indeed, of all that Pratt had accuse him of earlier.

Similar to Pratt, Jorge Cañizares-Esguerra sees Humboldt as instating a view of the tropics "as spaces to study biodistribution, full of diverse plant and animal population, but *empty of humans*" (154, my emphasis). Nevertheless, he argues, Humboldt's depictions of Latin America also resisted the very erasure of the human from the landscape that was so characteristic of works of leading European and North American painters. He further proposes that as much as Humboldt learned from Spanish American scholars to read the Andes as a natural laboratory for studying the geography of plant communities, he also embraced the image of regional statesmen pursuing the global trade rather than seeking national self-sufficiency by transforming their countries into commercial emporiums based on Andean ecological attributes (121–28).

The thesis of human erasure in Humboldt's view of nature is far from proven. Even if the Humboldtian vision was complicit in a naturalistic reductionism of the Americas, this reductionism was nevertheless resisted (per Cañizares-Esguerra) by nineteenth-century Latin American artists and intellectuals. Nor has it been established that such a representation of the landscape was fundamental to capitalist exploitation of the Americas. The development of extractive industries for export was an old *criollo* aspiration that neither required, nor awaited, this allegedly Humboldtian view of nature. Moreover, despite arguments to the contrary, many from the early nineteenth to the late-twentieth centuries have seen Humboldt as precisely the opposite: an anti-imperialist intellectual hero.

Taking into account all of Humboldt's writings on Latin America, Pratt's reading emerges as highly selective, a conclusion that Laura Dassow Walls also proposes in her Passage to Cosmos: Alexander von Humboldt and the Shaping of America. The overall arc of his oeuvre plainly fails to reveal the characteristics that Pratt ascribes to Aspects, a text that, in any case, is unrepresentative of his vision of the Americas. It is the first book in which Humboldt writes of his travels and essentially covers only the first stage of his American voyage: six months between February and July 1800 in which he traversed the Orinoco basin before exploring other landscapes and cities in Cuba, Colombia, Peru, Mexico, and the United States. Pratt's focus in this book, popular in France but little read in Spanish (first translated in 1876) or English (1850), nonetheless rests on solid grounds. It successfully deploys a Romantic aesthetic of Latin American landscapes that has enjoyed enormous popularity among the region's intellectuals, despite evidence to the contrary marshaled by Cañizares-Esguerra. Pratt's and Cañizares-Esguerra's irritation with this Humboldtian aesthetic shows, then, that the debate shaping the reevaluation of Humboldt as ecological thinker (beyond his pioneering of ecological science) is the same one taking place over Romantic and "romantic" environmentalism and the rise of a postcolonial environmental criticism wary of environmentalism's implication in relationships of power, social injustice, racism, and patriarchy.

The debate over the Romantic tradition's ecological relevance (including Humboldt's recasting as environmental thinker) signals a hunger for the long-overdue integration of environmental thinking and the study of colonialism, class, race, gender, and other social inequities. I will argue later that, despite his deficiencies, Humboldt took genuine account of this need. Even within environmentalism, skepticism greets the inherited Romantic model of changing one's way of thinking by incorporating other organisms and/or inanimate matter into one's identity, thus ultimately transforming society. The implications for literature, especially nature writing—the genre to which we may assign Aspects of Nature—are serious. Thus Timothy Clark's troubling question in his recent The Cambridge Introduction to Literature and the Environment: is the celebration of a writing that reenchants us with the world by offering not just description but experience "the wishful illusion of an industrial consumerist society rather than a site of effective opposition to it?" (24). An important element in this Romantic structure of thought is, of course, the experience and narration of wilderness: the long-standing conception of deserts, forests, and other landscapes as "spaces of disorientation" and even terror, "conceived as sites of identity crisis and metamorphosis" that "may attract a number of meanings, hopes, and anxieties" (Clark 25). This tradition affirms wild nature as the setting for the potential fashioning of a deeper, truer, or more authentic identity, whether spiritual, political, or otherwise.

A year before Pratt's indictment of Humboldt, Jonathan Bate's reexamination of poets Wordsworth and John Clare had implications for Latin America's Romantic tradition. Bate argued that the Romantic poets' bond with Nature was not inescapably "a retreat from social commitment . . . a symptom of middle-class escapism" (qtd. in Clark 15). The debate on the role of Romantic ecology in contemporary environmentalism has helped refute the idea that ethics, religion, justice, and like concerns were elided by Romantics two centuries ago. Indeed, far more than a reductionist naturalistic discourse, *Aspects of Nature* embodies the complexities and paradoxes of early-nineteenth-century Romantic ecology.

Truth to Nature and Animated Description

In the preface to the first edition of Aspects of Nature, Humboldt warns readers (including fellow naturalists) of the threats facing the poetics he insistently advocates. In the preface to the second and third editions, Humboldt then apologizes for falling short of his ideal poetics. But what, indeed, is the poetics within which Humboldt seeks to inscribe nature? Like a good Romantic—but one also influenced by Kantian thought—Humboldt had in his book the ideal goal of balancing aesthetic experience with scientific observation and therefore unifying the two. His ideas in this vein are distilled in the phrase "truth to nature," which speaks to an imagining of the impressions of the external world on our inner depths. In Paris after his American voyage, Humboldt opens "Cataracts" by anticipating the effect of his recollections: he compares the delight that present-weary minds take in contemplating the "simple grandeur" of "the earlier youthful age of mankind" and affirms that "the remembrance of a distant, richly endowed land—the aspect of a free and vigorous vegetation—refreshes and strengthens the mind" (170).

The recollection of an aesthetic perception of wilderness, acknowledges Humboldt, is a momentary fleeing from a painful present. But seeing in Humboldt a retreat from social commitments or a form of middle-class escapism (typical accusations against Romantic ecologies) would be mistaken. In fact, the experience of wilderness, its recollection or its evocation in writing, can strengthen us intellectually and emotionally as wilderness, in true Romantic fashion, offers up norms of health, vitality, and beauty that can be transplanted to the city. The experiencing and reexperiencing of wilderness make one aware of a dimension of the human condition linked to an aesthetic experience of the landscape, whose defining elements ("the outline of the mountains... in the far-vanishing distance... the dark shade of the pine forests—the sylvan torrent rushing between over-hanging cliffs to its fall") are all "in antecedent, mysterious

communion with the inner feelings and life of man" ("Cataracts" 170). The role of "animated description" is not merely to offer a sensitive and vivid recreation of natural events and actors. Such description also renders the impressions received through the senses, allowing for the expression of thoughts, emotions, and sentiments elicited from the "inner depths of our being" via the contemplation of landscape—or by way of our interactions with actors in the environment. In other words, the goal of the "animated description" is to facilitate in the reader an experience of "truth to nature." This, for Humboldt, is best obtained by simplicity of narration and by closely tying text to landscape or "by limiting and individualizing the locality with which the narrative is connected" ("Nocturnal" 206). In such writing, the role of scientific observation is to enhance "by insight into the more hidden connection of the different powers and forces of nature" (Preface I: vi). In the English-language edition of Aspects of Nature, "Cataracts" consists of seventeen pages of essay and sixteen of "Additions," while "Nocturnal Life," in the same edition, contains ten pages plus two of "Additions." Curiously, these "Additions" differ little from the main text: they offer additional scientific information based on his own, or others', observation, no less than complementary accounts further emphasizing strange qualities of the geography, species, and histories of peoples, or further reflections on scientific-aesthetic integration.

Crucial to Humboldt's bedrock belief in the complementarity of scientific observation and aesthetic experience is that the latter is no mere supplement or adornment: "animated description" facilitates, through artistic rhetoric, the comprehension of scientific data. In addition, it "affords materials toward the study of the Cosmos, and also tends to advance it by the stimulus or impulse imparted to the mind when artistic treatment is applied to phenomena of nature" ("Nocturnal" 206). Intellectual projects like Humboldt's are taken seriously by scientists who reflect on art and science; as Edward O. Wilson affirms, "neither science nor the arts can be complete without combining their separate strengths. Science needs the intuition and metaphorical power of the arts, and the arts need the fresh blood of science" (211).

In fact, Humboldt's scientific holism derives from the subject's examination of his own experience of the landscape. In the words of Rojas Mix: "Justamente fue su concepción artística lo que le hizo entender la naturaleza como un todo y pasar de una concepción taxonómica de la representación de las especies, como la de Linneo, que estudia el vegetal aislado, a la concepción organicista, que sólo entiende las especies en su contexto" (170) (It was precisely his artistic vision that allowed him to understand nature as a unity, and to shift from a taxonomic conception of representing species, as is seen with Linnaeus, who studies plants in isolation, to the organicist conception, which can only understand organisms in their context).

Humboldt aims to plumb the depths of the subject's relationships with nature, particularly when the subject is embedded within the landscape—if only as a traveler. Cognition and affection take place in the environment as well as in the mind. One of the "meanings" of such relationships is the certainty of a holism, a network that demands interest in the occult forces that, for instance, shape the landscape and the distribution of species and plant communities. Humboldt, like twentieth-century phenomenology long after him, was interested in descriptions or narratives of lived experience that reveal the "meanings" or "truth" that things have for human beings before any theoretical interpretation and in relationship to other objects as well as to our own projects. Humboldt's "aesthetic perception" is but another name for a phenomenological exploration of the world as it is experienced by an embodied subject prior to any generalization, and "animated description" is the necessary recollection for reflecting on such experience.

Humboldt himself makes the point that language also happens in the environment. The "animated description" that helps the reader experience "truth to nature" is a path toward recovering an experience lost to language due to the fossilization or overuse of those symbols that each society creates as a means of accounting for nature while in the process of interacting with it. The poetics of "truth to nature" aims to bring into modern language the same interdependency with the natural environment that the languages of traditional societies have had: the richness of an "intimate acquaintance and contact with nature" and the expression of "the wants and necessities of a laborious life" ("Nocturnal" 205).

What sorts of texts would emerge from, and how would our reading of them be informed by, such a poetics? In the analysis that follows, I will outline how, in Humboldt's description of the Falls of Maypures and Atures in the Orinoco River, the objective of this "animated description" is not to provide an accurate and mimetic depiction of the landscape but to voice the recollection of the impression left by the landscape on the subject.

Truth to the Orinoco Watershed

Describing the Falls of Maypures, Humboldt conveys the expectation that textualizing the memory of what he perceived, at the very place and moment, will awaken in the reader an equivalent—though not, of course identical—response to the one the memory has awoken in him: contemplating a four-mile stretch of whitewater, he paints for the reader images of "iron-black masses of rock resembling ruins and battlemented towers" that "rise frowning from the waters" over which "a perpetual mist hovers . . . and the summits of the lofty palms pierce through the cloud of

spray and vapor" ("Cataracts" 181). Closely adhering to his own poetics, Humboldt refuses to follow these lines with further, explicit reflection on "the inner depths of our being" that the landscape stirs in him. Rather, what follows are two paragraphs of observation of various natural phenomena of the falls. He observes, for instance, that the roar of the current sounds three times louder by night than by day and speculates scientifically on the causes of these phenomena and wonders how they might inform the overall study of waterfalls. In these passages, aesthetic-scientific integration and "animated description" are used to elicit the reader's reaction to the landscape.

The "truth to nature" suggested by this monumental landscape includes astonishing aspects of the cataracts where non-human elements evoke the signs of human history, where minerals and vegetation are mixed, where no clear line divides water from cloud, where the subject is focused not on the instant but on the landscape's changes throughout the day, the seasons, and geological time: "When the rays of the glowing evening sun retracted in these humid exhalations, a magic optical effect begins. Colored bows shine, vanish, and reappear, and the ethereal image is swayed to and fro by the breath of the sportive breeze" ("Cataracts" 181). These passages convey a vision of the whole, in space and time, within which the interaction of various elements, including a mutual mimesis, is set forth. There is, apparently, more to Humboldt's writings on the landscape of the Orinoco than his "truth to nature," "animated description," and related theoretical notions might lead us to expect.

At the same time, he does not see the river as independent of its surrounding landscapes. In his quest for aesthetic-scientific fusion, he describes the Falls of the Atures with deep lyricism and a melancholic tone that contrasts his account of the Maypures:

From the foaming river-bed arise wood-crowned hills, while beyond the western shore of the Orinoco the eye rests on the boundless grassy plain of the Meta, uninterrupted save where at one part of the horizon the mountain of Unianua rises like a threatening cloud. Such is the distance; the nearer prospect is desolate, and closely hemmed in by huge and barren rocks. All is motionless, save where the vulture or the hoarse goat-sucker hover solitary in mid-air, or, as they wing their flight through the deep-sunk ravine, their silent shadows are seen gliding along the face of the bare rocky precipice until they vanish from the eye. ("Cataracts" 184)

For Humboldt, all of the Orinoco basin's landscapes are crucial to grasping the complexity that reveals the diversity and distribution of plant and animal communities. He recounts a one-thousand-five-hundred-mile, seventy-four-day journey by canoe near to the river's sources: "We enjoyed the repetition of the same spectacle at several different points,

and ... always with a new delight" ("Nocturnal" 211). The approach of varied groups of animals to the river to drink, bathe, or fish ("the larger mammalia being associated with many-colored herons, palamedeas, and proudly-stepping curassow and cashew birds") is arresting to Humboldt and elicits detailed enumeration ("Nocturnal" 211).

In Humboldt, the epistemological challenges that Wyman H. Herendeen poses for defining the river materially are met in all their rich complexity. For the naturalist, the "river" is no chaotic confusion of elements blurring into indistinct oneness. The river emerges, rather, as a whole, as a network of relationships interconnecting a myriad of things. Humboldt's river is all at once the water between its banks; the banks that embrace it; the springs and streams that feed it and all that circulates in the hydrological cycle; the meadows, fields, and forests that are the product of its movements; the cities and communities that grow on its banks; and much more. Underlying this writing of the river is its conception as a complex network of associations with no fixed center or borders. The Orinoco is the entire geographical area drained by its waters and tributaries, including living organisms and inanimate matter, humans and non-humans. The river is really a watershed. So, too, is the rainforest.

The previously cited passage underscores not only the biological continuity between river and forest, but also a fundamental and oftoverlooked element of the imaginary of the jungle: the part played by the interaction between the rivers of the Orinoco basin and of the Amazon basin in facilitating, or frustrating, the encounter with the jungle—the quintessence of nature in the Americas, according to the region's literary tradition. The great encounter with the jungle has been possible (at least through the middle of the twentieth century) only through protracted and perilous voyages on its waters. Nevertheless, unlike much prior travel literature—for instance, Gaspar de Carbajal, Cristóbal de Acuña, and Charles de La Condamine (in the sixteenth, seventeenth, and eighteenth centuries respectively)—in Humboldt the traveler ventures beyond the river's banks to penetrate the jungle. In this respect, Humboldt's writings on the Orinoco differ considerably from the earliest chronicles of the great interior rivers. His enthusiasm at signs of forest biodiversity visible from the river is entirely comparable to Fray Gaspar de Carbajal's excitement in 1542 at the direct or indirect evidence of cities and kingdoms along the Amazon River when Francisco de Orellana first navigated its course. Nevertheless, in the river basins of South America, it is often rivers themselves, and their component elements, that have caused the failure of economicmodernization projects they should have rendered feasible. As occurs in many texts describing the jungle, the waterfalls in Humboldt's writing those river canyons known as pongos, storms, and floods—are recurring phenomena in the imaginary of tropical or subtropical forest rivers and the setting for violent rites of initiation for the traveler.

A concern with the overall impact of the river and the jungle on the traveler does not conflict, as Jonathan Bate argues for other early Romantics. with an awareness and criticism of the political ecology enforced by the State or, in its de facto absence, surrendered to private interests. At the junction of the Apure and Orinoco, Humboldt identified two indigenous nations fiercely inhabiting the plains watered by both rivers in order to sustain their independence: the Yaruros and Achaguas. He notes that, even though the mission villages call them savages, "their manners are scarcely more rude than those of the Indians in the villages," who though baptized "are still almost entirely untaught and uninstructed" ("Nocturnal" 210). Humboldt remonstrates the Spanish imperial administration for lack of vision and action along the Orinoco's banks. He narrates the painful and laborious methods that the natives are forced to use when navigating the cataracts: "Sometimes, and it is the only case which gives the natives any uneasiness, the canoe is dashed in pieces against the rocks; the men have then to disengage themselves with bleeding bodies from the wreck and from the whirling force of the torrent, and to gain the shore by swimming" ("Cataracts" 180). The Indians themselves pointed out to him "ancient tracks of wheels. They speak with admiration of the horned animals (oxen), which in the times of the Jesuit missions used to draw the canoes on wheeled supports, along the left bank of the Orinoco" ("Cataracts" 182). Before leaving Venezuela, Humboldt proposed to the Governor-General a topographical plan for a navigable canal along the river that would spare the natives that dangerous stretch.

Humboldt precedes these descriptions of the Falls of the Maypures with some observations about environmental history inferred from reading the landscape and from indigenous informants. He observes that, around the cataracts, the powerful Orinoco once must have covered considerable extensions of territory, the water level must have been higher, and the landscape he has just described submerged—something repeatedly signaled to Humboldt by his indigenous guides. Told of a high, isolated granite rock near Uruana bearing carved representations of crocodiles, boas, as well as the sun and the moon more than eighty feet above the ground, Humboldt marvels at the impossibility of scaling this cliff without mechanical aid and reports that, when asked about the carved images, the natives replied that they were done "when the waters were so high that their fathers' boats were only a little lower than the drawings" ("Cataracts" 179). Humboldt's relationship to the natives, reliance on their knowledge for his discoveries, and his awareness of political and ethical implications of his research, all emerge throughout the narrative of the journey: "We left the cave at nightfall, after having collected, to the great displeasure of our Indian guides, several skulls and the entire skeleton of a man" ("Cataracts" 185).

Pratt and Cañizares-Esguerra's reservations notwithstanding, Aspects repeatedly inquires into the impact of natural history on human history and

on the political ecologies governing appropriation of the landscape and natural resources. Humboldt's subject is not the presumably self-absorbed "I" of nature writing, narrating the encounter with wilderness "as a transformation of the self" and its subjectivity (Clark 28). This early narrated journey as well as the ensuing texts reveal the aforementioned Romantic traits as not necessarily incompatible with economic pursuits nor with the recognition of social issues or colonialism. There is no erasure of the human, native or colonial, nor is there a depiction of a primeval, untouched nature. On the contrary, Humboldt broaches issues that we would recognize as proper to the Orinoco's environmental history and political ecology, though (in these texts, at least) they assume a secondary place within his underlying poetics of "truth to nature." Furthermore, the texts themselves suggest that we cannot take his theoretical formulations of scientific-aesthetic harmony at face value, nor assume that such harmony, if achieved, would bring serenity of mind, strengthen the spirit, or dissipate melancholy.

In the two prefaces to Aspects, Humboldt elaborates on falling short of his own ideals for writing. He recommends writing impressions on the spot, under the immediate influence of the phenomena, rather than through recollection later ("Nocturnal" 210). However, the "impressions of the external world into our inner depths," particularly holistic certainty, may emerge from writing rather than perception, he writes, and are exceedingly difficult to attain when writing the Orinoco. Once embedded in the landscape, cognition for the embodied subject is no simple application of an aesthetic-scientific methodology nor is its outcome certainly the harmonious unity of both processes. Humboldt diverts that goal to the process of writing, and yet overcoming this tension is not truly successful there, either. The naturalist-author's daunting task is to re-write, shaping the fragments into a coherent whole: "The unbounded riches of Nature occasion an accumulation of separate images; and accumulation disturbs the repose and the unity of impression" sought; moreover, narrating the emotional impact of landscape requires "a firm hand...to guard the style from degenerating into an undesirable species of poetic prose" (Preface I: v).

In true phenomenological fashion, Humboldt is reflecting, through the recollection of perception, on the enabling conditions of perception, memory, emotions, and linguistic activity. In the second preface, he is more self-critical about his ability to balance the "literary" and the "purely scientific," stating that the "endeavor at once to interest and occupy the imagination, and to enrich the mind with new ideas . . . renders the due arrangement of the separate parts, and the desired unity of composition, difficult of attainment" (Preface II: vii). Still, readers had long received his "imperfectly executed" work "with friendly partiality" (Preface II: vii).

Is this a case of false modesty? It seems highly improbable that the prolific and polyglot Humboldt would, at the height of his fame, admit deficiencies as a writer—particularly when measured against the yardstick of

his own poetics. Even had he feared using language similar to the "literary men" he occasionally criticized, the apologetic tone was unwarranted. The popularity of *Aspects* was such that Humboldt published multiple German versions and there were several French translation editions in the first half of the nineteenth century. Yet the changes introduced in those editions amounted to a few new chapters and updated scientific data; the prose—the author's self-doubts notwithstanding—remained basically unchanged. It is precisely in light of the book's success that Humboldt's self-critique allows us to read his prose as the product of something different from the poetics he articulates—indeed, as a vacillation from that poetics.

The ultimate "truth to nature," the impression of the external world of the Orinoco on to our inner depths, is not the anticipated "serenity of mind," "dissipation of melancholy," "mysterious communion," or "unity of knowledge." The problem here, however, lies not in authorial ineptitude but in the ungovernable excess arising from the subject's open encounter with the materiality of nature. The "true impress of nature" finally leads to doubts regarding unity or harmony and to an acceptance of the de facto accretion of elements. Pratt eloquently conveys Humboldt's struggle to express nature's titanic vastness: "A dramatic, extraordinary nature... capable of overwhelming human knowledge and understanding... No wonder portraits so often depict Humboldt engulfed and miniaturized either by nature or by his own library describing it" (120).

Experiencing the Orinoco brings confusion, melancholy, a sense of nature's violence, and a glimpse of human hardships along its shores. The focus on the occult forces of nature extends from the complexity with which animal and plant communities are embedded to the complexity of what experienced wilderness was supposed to be. In comparing sea and river, Herendeen concludes that, "one suggests the harmony between our arts and nature, the other the limitations and frustrations of that ideal" (5). Here Humboldt's texts and Pratt's commentary signify an *environmental complexity* that the former never managed to formulate theoretically—though his self critique does point the way there.

These tensions, however, hardly distance Humboldt from the Romantic ecological tradition. The Orinoco has become a site of identity crisis and disorientation that, as I earlier argued with Timothy Clark, supplements notions of enlightening journeys to the wilderness. Humboldt's network of associations has antecedents in the Western literary tradition, as Herendeen has elucidated. Still, I wish to emphasize the contemporary implications of the tension between poetics and writing—and Humboldt's noting, if only briefly, this tension. His so-called failure of the poetics can be read as a success of the texts. His "truth to nature" is also an ethics of writing, just as writing constitutes an ethics of the apprehension of nature. Humboldt is wary of falsifying the experience of the landscape and the link between perception of nature and writing. Evaluating *Aspects*, he refuses to discredit

his poetics, but avoids (at least in this book) what Aldous Huxley charged Wordsworth with: "Weary with much wandering in the maze of phenomena, frightened by the inhospitable strangeness of the world, men have rushed into the systems prepared for them by philosophers and founders of religions, as . . . from a dark jungle into the haven of a well-lit, commodious house" (338).

Aspects of Nature and the Environmental Humanities

Far from the ahistorical nature Pratt charges him with, Humboldt's texts offer up explicit statements on the biodistribution of species and other fundamentals of ecological science as well as a series of observations that easily find a place in environmental history and political ecology. By intertwining aesthetic experience with scientific observation of the nonhuman, the human, and the relationships between them—and then by falling short of a desired unity of these elements—these texts challenge Humboldt's own holistic methodology but not the hypothesized interconnection of methods of knowing by using the various disciplines' objects of study. The discourse of unity of knowledge and nature is muddied by the self critique, thanks to which emerges a subjectivity dedicated not solely to disciplined scientific observation but also to the scrutiny of phenomenological perception and of speculation on the landscape's historical and natural mysteries. Vexed at its own fragmentation, this subjectivity nonetheless surrenders in wonder before the enigmatic connections between human and non-human.

In any case, the environmental complexity that suffuses Humboldt's texts, no less than his philosophy of aesthetic-scientific unity, locates him even more solidly within the humanities' "material turn," that trend of inquiry that explores how the environment and the material world as a whole signify, act upon, and otherwise affect human bodies, forms of knowledge, and practices (Cf. Alaimo and Hekman 7–8). Humboldt realizes how environmental actants influence his evolving thought and writings about human and non-human elements. "Actant" is Bruno Latour's alternative to the subject-centered language of "agents" (Bennett). An "actant"—a source of action, something that acts or to which activity is granted by others—can be human or otherwise and its existence implies neither intention nor motivation. By virtue of location and timing, it makes things happen. Neither object nor subject, it is an "intervener." To "begin to experience the relationship persons and other materialities more horizontally . . . is to take a step toward a more ecological sensibility" (10).

This analysis of *Aspects*, its focus on alternate possibilities for interpreting the texts—instead of viewing them as variations or fragments of

a "Humboldtian discourse" abstracted from the corpus of his work on the Americas—better places the texts in dialogue with recent developments in ecological thought. Through his theory of holistic apprehension of nature, his aesthetic-scientific poetics, his confronting of the materiality of the landscape's actants, his texts' articulation of their own tensions and disorientation, and his close account of mutual impacts of environment and society Humboldt plainly anticipates contemporary methodologies and questions. Where traditional environmental studies stressed physical sciences and policy studies, today's environmental humanities, as they are called, venture beyond this, inquiring how nature permeates our imaginative lives culturally, ideologically, and aesthetically.

Undoubtedly, Humboldt's work and the recent emergence of environmental humanities suggest promising approaches to nature in Latin American literature. The Humboldtian reconciliation of aesthetics and science, and the many environmental-historical and political-ecological concerns that have emerged in our exploration of two texts that presumably constructed the Orinoco as a merely natural space, find echoes in Latin American literature—but not a trace in literary criticism. Latin Americanist critics still cling to an ahistorical virgin rainforest, chaotic nature, and grim environmental determinisms. Critic Fernando Aínsa, for instance, omits mention of Humboldt, despite his own interest in Latin American discourses of nature underpinning discourses of identity. We are reminded instead of Octavio Paz in "Paisaje y novela en México" (Landscape and Novel in Mexico): "Un paisaje no es la descripción . . . de lo que ven nuestros ojos sino la revelación de lo que está detrás de las apariencias visuales . . . un más allá" (qtd. in Aínsa 209) (A landscape is not the description . . . of what our eyes behold, but rather the revelation of what lies behind those visual manifestations . . . something beyond). Both Paz and Ainsa illustrate the Latin Americanist critical penchant for metaphysical approaches to the study of nature in literature, which come at the expense of a phenomenological engagement with the empirical and material that is equally interested in the human interrelation with nature.

The Orinoco stretched Humboldt's poetics to its limit—or past it: the river's staggering excess and complexity at times beggared his narrative powers. Yet his texts, in grappling self-reflexively with their own attempt to convey the materiality and experience of nature, anticipate the manifold concerns of today's environmental humanities, to which his achievements and frustrations alike can still speak.

Notes

 Many versions are extant; the attribution to Heraclitus is doubtful. Plato's Cratylus contains this passage: "Heraclitus, I believe, says that all things pass and nothing

- stays, and comparing existing things to the flow of a river, he says you could not step twice into the same river" (qtd. in Graham). I would like to thank Pablo J. Davis for his translation and generous comments on this essay.
- 2. Both texts have been published in Spanish as "Sobre las cataratas del Orinoco, cerca de Atures y Maipures" (Of the Falls of Atures and Maipures) and "La vida nocturna de los animales en las selvas primitivas" (The Nocturnal Life of Animals in the Primeval Forest) in Biblioteca Ayacucho. Ansichten der Natur was translated into Spanish by Giner de los Ríos as Cuadros de la naturaleza (Scenes from Nature). A 2003 edition of this translation was published by Los Libros de la Catarata and in 1961 by Editorial Iberia. Also in 1961 came the Spanish-language edition of the popular Del Orinoco al Amazonas: Viaje a las regiones equinocciales del nuevo continente (From the Orinoco to the Amazon: A Journey to the Equinoctial Regions of the New Continent). This follows the second German edition of Von Orinoko zum Amazonas, a translation of Voyage aux régions équinoxiales du Nouveau continent (A Voyage to the Equinoctial Regions of the New Continent).
- 3. I explore connections between voyages of return to, and from, nature to the city, in "De retorno a lo natural: La serpiente de oro, la 'novela de la selva' y la crítica ecológica" (Back to Nature: La serpiente de oro, the 'jungle novel', and ecological criticism); "Jungle Fever: The Ecology of Disillusion in Spanish American Literature"; and "A Painful Pastoral: Migration and Ecology in Chicana/o Literature." Wilderness, the pastoral, and Romantic ecologies in general no longer belong exclusively to white, male, urban middle-class subjects.

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