



# Rediscovering Humboldt

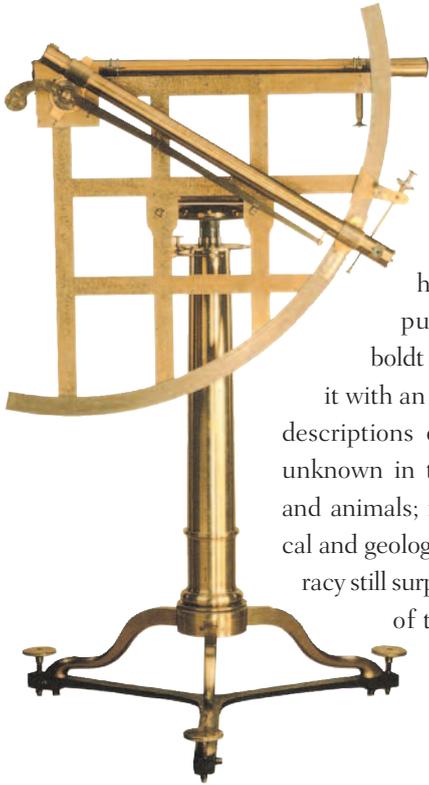
*We've been flitting from here to there like demented beings; in the first three days we have not been able to make up our minds; we constantly dropped one thing to grab another one.*

*Bonpland says he shall lose his mind if all these wonders do not stop popping up soon.*

Alexander von Humboldt  
*Travel Journal*

In 1799, at only 29, Alexander von Humboldt first set foot on the Western Hemisphere to begin a journey of exploration that would turn him into a second discoverer of America. Carrying sophisticated measuring instruments and in the company of his friend, physician and botanist Aimé Bonpland, Humboldt traveled

through what are now Venezuela, Cuba, Colombia, Ecuador, Peru, Mexico and the United States before he returned to Europe in 1804. He brought back with him more than 6,000 plants, sketched maps and landscapes, geological specimens and notebooks filled with data that would later make up 34 volumes illustrated with 1,400 engravings



Quadrant, John Bird, London, ca. 1740.

by renowned painters and engravers of his time.

After his five-year journey, in addition to the six years he took to make ready, and the 30 years that he spent analyzing and preparing the publication of all his results, Humboldt would astound Europe by presenting it with an unsuspected continent: punctilious descriptions of diverse flora and fauna, totally unknown in the Old World; drawings of plants and animals; innumerable specimens; geographical and geological calculations; maps whose accuracy still surprises; and even personal impressions of the social regimes of the places he visited.

To celebrate the 200th anniversary of his arrival in Mexico, the Old San Ildefonso College prepared the exposition “Humboldt’s Journeys. A New Vision of the World,” which

allows us to discover the discoverer. At the same time, it makes it possible to appreciate, from afar, the immense contribution the German explorer made to the philosophy of science, to scientific knowledge and methodology and to humanism, in an exhibit that includes photographs, engravings, live animals, measuring instruments, facsimiles, videos and interactive presentations.

#### A UNIVERSAL SCIENTIST

Humboldt’s impeccable scientific spirit was based on an immense capacity for wonder, a liberal education and totally independent thinking. His observations, in the service of the progress of the natural sciences, were never clouded by prejudices, much less by a conflict of interests; he paid all the expenses of his expedition to ensure that

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*The Nevado de Colima Seen from Zapotlán*, Johann Motitz Rugendas, 1834 (oil on cardboard).

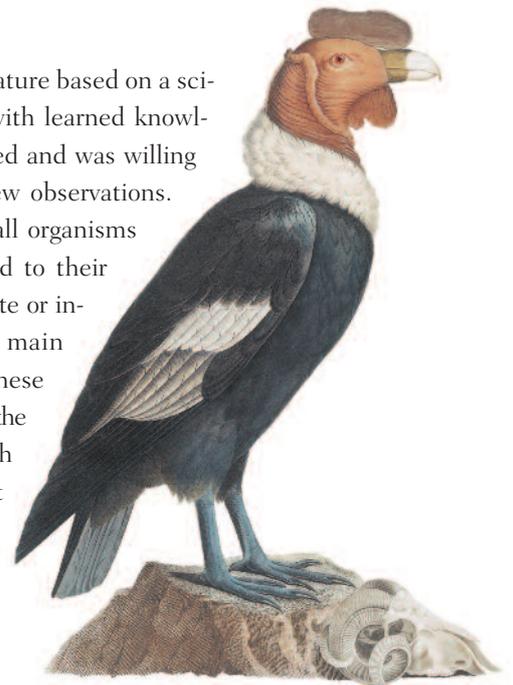
his research would not be plagued by secondary interests.

Born in Berlin in 1769 into a noble Prussian family, his mother brought him and his brother up, giving them a solid education in the natural sciences, languages and literature. Because his family was noble, Humboldt was supposed to enter politics and the military, but he had other interests. He studied economics, mathematics, sketching and engraving, and took university courses in geography, botany, geology and physics, although he never finished a degree. His inclination for research and exploring took him first to France and England. Thus, he began to have contact with travelers, biologists and geographers. When his mother died, he inherited a large fortune that made him independent, allowing him to become a true explorer at the service of science.

Humboldt was no amateur: his trip to the Americas was conscientiously prepared. The aim was

clear: overall knowledge of nature based on a science that was not content with learned knowledge, but rather experimented and was willing to recreate itself through new observations. Humboldt maintained that all organisms were inter-related and linked to their surroundings, whether animate or inanimate, and therefore his main objective was to discover these relationships. This makes him the first ecologist, even though the term “ecology” did not yet exist.

The scientific instruments he took with him were the most advanced of his age; each had its *raison d'être* and all would be used: sextants, chronometers, barometers, telescopes, thermo-



*Vultur gryphus* (condor), watercolored engraving by Bouquet after Humboldt's sketch corrected by Barraud.

His European origins did not prevent him from criticizing slavery, mistreatment and insulting judgments made by Europeans in the Americas.



*The Tip of the Popocatepetl*, Johann Motitz Rugendas, ca. 1831 (oil on cardboard).



Alexander von Humboldt, Emma Gaggiotti-Richards, 1855  
(oil on canvas).



*Humanitas, Literæ, Fruges*. Frontpiece, Barthélemy Roger  
(copper engraving after a sketch by François Gérard).

meters, quadrants, achromatic lenses and rain gages were just some of the instruments he used with methodical precision and insatiable curiosity to measure temperatures, altitude and longitude, establish coordinates, predict atmospheric and astronomical phenomena, draw maps and describe the light of the zodiac. In addition, he spent days and weeks collecting and sometimes dissecting unknown plant and animal species and cultivating relations with scientists and intellectuals in the places he visited, which increased his fame in Europe and America. Nothing escaped his log. Humboldt described each moment of his trip exactly, each river navigated, each mountain and volcano climbed, each sample taken, each phenomenon observed, each route followed. That this was a titanic undertaking is proven by the 30 years it took to analyze and publish the results.

But the baron was not a scientist foreign to the social conflicts that existed in the colonies he visited. “The idea of colonies is today in and of itself an immoral idea,” he said.<sup>1</sup> His liberal convictions, born of the rallying cry of the French Revolution, liberty, equality and fraternity, led him to make personal observations about slavery, the exploita-

tion of the native population and the discontent that powered the struggle for independence in New Spain. His European origins did not prevent him from criticizing slavery, mistreatment and insulting judgments made by Europeans in the Americas. “How uninhabitable the world becomes with European ferocity.”<sup>2</sup>

Until his death in 1859, Humboldt dedicated his life to science and the support for liberal causes. Encompassing his discoveries, publications and personal attributes is impossible in a brief text. It is only to be hoped that this homage paid in Mexico will enable people to understand that modern science and morality still have much to learn from a scientist who lived two centuries ago. **MM**

**Elsie Montiel**

*Editor*

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#### NOTES

<sup>1</sup> The sentence is taken from Humboldt’s quotes from his essay on the island of Cuba, projected on the wall of one of the rooms of the exhibit.

<sup>2</sup> *Ibid.*

Photos courtesy of the Old San Ildefonso College.