



BEHIND THE SCIENCE

The Adventures of Alexander von Humboldt. By Andrea Wulf, illustrated by Lillian Melcher. 2019. Pantheon. (ISBN 978-1-5247-4737-4). 272 pp. Hardcover, \$29.95.

The Prussian naturalist Alexander von Humboldt (1769–1859) is widely and variously commemorated – serving as the namesake of a predatory squid, the fifth largest of the lunar maria, a frigid ocean current off the western coast of South America, a medium-sized penguin, and counties in California, Iowa, and Nevada – but, until recently, seldom remembered. The upswing in his recognition is due mainly to Andrea Wulf’s elegant popular biography *The Invention of Nature: Alexander von Humboldt’s New World* (Knopf, 2015). With the aid of illustrator Lillian Melcher, Wulf retells a portion of that biography as a work of graphic nonfiction in *The Adventures of Alexander von Humboldt*.

From 1799 to 1804, Humboldt rambled through northwest South America, central Mexico, Cuba, and the northeastern United States along

with his friend the French botanist Aimé Bonpland, obsessively scaling mountains, taking measurements, collecting specimens, and recording observations all the while. These travels, described by Wulf in chapters 3–6 of *The Invention of Nature*, are the focus of *The Adventures of Alexander von Humboldt*, narrated by Humboldt himself from the vantage of his Berlin apartment in 1859 – and occasionally from beyond the grave. As a conversationalist, he was famously garrulous, conceited, and fascinating, and these traits are faithfully reproduced here.

Accordingly, the narrative is detailed but not solemn: a scene in which Humboldt and Bonpland discuss the supposed constipatory nature of tomatoes is particularly memorable. There is a certain shapelessness to the narrative, however, owing to Wulf’s understandable desire to base it closely on the historical record. A more satisfying model might have been Daniel Kehlmann’s carefully constructed novel *Die Vermessung der Welt* (2005) – translated as *Measuring the World* (2006) and adapted as a reportedly mediocre German film in 2012 – which takes Humboldt and the German mathematician Carl Friedrich Gauss as its contrasting protagonists.

A handsome, oversized, full-color volume, *The Adventures of Alexander von Humboldt* is a visual delight, although the decision to letter much of the text in hard-to-read *SERIFED ITALIC CAPITALS* is unfortunate. Melcher’s whimsical drawings are complemented by images from Humboldt’s own manuscripts as well as from a variety of nineteenth-century maps, engravings, and illustrations. There is a pleasing variety of page layouts, with a particularly striking spread halfway through the book, where Humboldt and Bonpland gaze over a South American landscape; the pages fold out to show the explorers climbing Humboldt’s map of plant distribution on the mountain Chimborazo.

As in *The Invention of Nature*, Wulf strives to emphasize Humboldt’s importance, with mixed

success. Figures such as Goethe, Bolívar, and Darwin are summoned to testify to their admiration for Humboldt, which amply demonstrates his contemporary reputation as “the greatest man since the Deluge” (to quote Friedrich Wilhelm IV of Prussia). It would be a stretch to regard Humboldt as the founder of biogeography, climatology, or environmental science, however, despite Wulf’s efforts to establish his continuing relevance. Significantly, his name is generally absent from today’s biology textbooks, while contemporary scientists such as Lyell and Cuvier are routinely mentioned.

Although the classroom utility of the book is thus limited, those interested in the history of science will find *The Adventures of Alexander von Humboldt* a nice addition to their libraries. But it is too gorgeous a volume to hide on a shelf; it belongs on a coffee table. That would be a fitting venue, in light of Humboldt’s fondness for black coffee, which (as Wulf writes in *The Invention of Nature*) he described as “concentrated sunshine”! And if a student happens upon it there, becomes entranced by the tales of exploration and the scenes of nature, and resolves to learn more about Humboldt and his contributions to science, so much the better.



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ENTOMOLOGY

Bugged – The Insects Who Rule the World and the People Obsessed with Them. By David MacNeal. 2017. St. Martin’s Press. (ISBN: 9781250095503). Hardcover, \$36.99.

Our ecological world is shaped by insects. With 1.4 billion of them for every human being, these six-legged arthropods are more numerous