

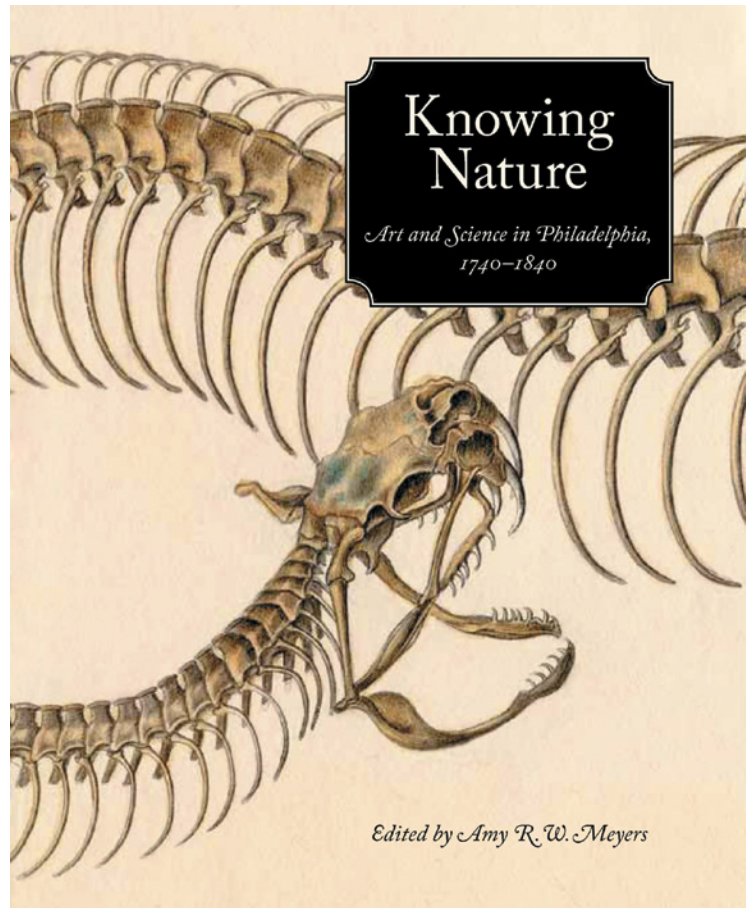
Book Review: *Knowing Nature: Art and Science in Philadelphia, 1740–1840*

Peter Del Tredici

Knowing Nature: Art and Science in Philadelphia, 1740–1840
Edited by Amy R. W. Meyers with the assistance of Lisa L. Ford
New Haven: Yale University Press, 2012. 417 pages.
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It's hard to fully appreciate this high quality, large format (10 by 12 inches) book without actually picking it up and thumbing through its stunningly beautiful pages. It is at once a graphic and an intellectual tour de force that examines the passion for the arts, sciences, and culture that characterized Britain and America during the dynamic years from 1740 to 1840, immediately before and after the American Revolution. The thirteen historians who contributed articles to the book come from a variety of backgrounds and specialties, but all are experts in their fields and share a deep passion for their subjects. Together they have created a portrait of this time period that overwhelms the reader with many exquisite eighteenth-century illustrations of plants, animals, human anatomy, architecture, and decorative arts.

Perhaps because so many of the contributors are art historians or curators (the editor is the Director of the Yale Center for British Art), the book has the look and feel of a museum exhibition. More than anything else, the book presents the art and artifacts of the era in their historical context such that their deeper social meaning becomes visible. Nowhere is this more apparent than in the chapter by Alexander Nemerov on "The Rattlesnake," which discusses a spectacularly beautiful illustration once thought to have been drawn by Benjamin Smith Barton, but now attributed to the British-born architect



Benjamin Henry Latrobe. Not only does Nemerov carefully dissect the drawing and relate it to Latrobe's architectural work but he also explores the symbolic significance of the rattlesnake during the period of the American Revolution.

A common thread that runs through the book is the life and work of William Bartram, as seen most clearly in the articles by Joel Fry and Amy Meyers who, taken together, create a masterful portrait of the scientific, horticultural, and artistic context in which he worked. More than any other historical figures, the Bartrams (father John and son William) personify the complex and highly fruitful interchange between Europe and North America both before and after the Revolution. I was particularly fascinated by the



One of the images of ginseng in the book is *The Whip-Poor-Will and the Ginseng, or Ninsin of the Chinese* from Catesby's *Natural History of Carolina, Florida, and the Bahama Islands*.

story of John Bartram's involvement in the discovery of ginseng in Pennsylvania (1739) and his efforts to collect plants for his patron, Peter Collinson, who was interested in establishing a business exporting American ginseng from England to China. While I have read about this story before, the six beautiful images of ginseng (including a botanical specimen collected by Bartram) that illustrate Janice Neri's chapter on the China trade give this version a vitality that text alone does not provide.

Mark Laird's chapter on "The American Connection in Georgian Pleasure Grounds" traces how the interest in and importation of North American plants and animals into England changed the nature of designed English landscapes. In a similar vein, I found Lisa Ford's chapter about François-André Michaux's *North American Sylva* particularly enlightening. She not only discusses the history of this incredibly beautiful and scientifically seminal work, but also the story behind its creation, including a copy of the questionnaire that Michaux used when gathering information about the local uses and distributions of native trees. Again, her discussion of the larger rationale for producing such a lavishly illustrated book, namely that Napoleonic France was anxious to replant its forests after centuries of unchecked exploi-

tation, puts the focus not just on the object itself but its historical context. Alicia Weisberg-Roberts contributes a chapter on the relationship between eighteenth-century textile design and Philadelphia natural history, and James Green deftly covers the salient details in the important transition between hand coloring and color printing in natural history books.

The second to last chapter of the book covers the pictorial history of the Lewis and Clark expedition and the role played by eminent citizens of Philadelphia, including Benjamin Smith Barton, Benjamin Rush, Caspar Wistar and Charles Willson Peale, whose natural history museum housed many of the animal skins and skeletons Lewis and Clark collected on their journey. The last chapter of the book is devoted to an analysis of how the work of Philadelphia naturalist John Goodman (author of *Rambles of a Naturalist*) and *Birds of America* creator John James Audubon "democratized" the subject of natural history, making it accessible to a much wider audience. In short, this wonderful book puts the panorama of early American natural history studies into its proper social and historical context in a most beautiful and elegant way.

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