

Carla Bittel has written a pathbreaking biography of the accomplishments, personal complexities, and contributions of Mary Putnam Jacobi, the premier science-based female researcher/practitioner of the nineteenth century. This is the first full-length study of its kind and builds beautifully on previous research. It examines the interplay of Jacobi's scientific work, beliefs about gendered relations, social reform activism, and use of science as female empowerment. Bittel creates a chronological and thematic narrative based on scant written personal sources, yet she does a magnificent job of narrating a life by using public discourse, contemporaries' perceptions, and finely nuanced interpretations.

Bittel links the personal and the professional early on: Jacobi's privileged status as the educated eldest daughter in a middle-class New York Protestant family renowned for its publishing prowess created in her a disdain for sentiment and religiosity. She embraced science as a panacea, rather than the gendered expectations of her social class, which upheld moral authority in the private sphere and exulted maternity and reproduction as the primary markers of a woman's worth.

Jacobi's illustrious education and prestigious professional hospital appointments are extensive and charted meticulously. Bittel tells Jacobi's life story while sculpting her experiences, rewards, insights, disappointments, and discriminations into a professional identity and, ultimately, a medical legacy. Her contentious marriage to Abraham Jacobi is detailed for their shared commitment to improving the lives of women and children—a passion born from the death of two of their infants and their familiarity with the illnesses that were rampant in urban America.

Bittel's book offers several stellar strengths, including its emphasis on the contradictions in Jacobi's life: working to better the lives of women and children while often reinforcing social class and racial hierarchies; her commitment to feminist causes amid her tempestuous relationships with female students and political associates; her dislike of being seen as a practitioner of obstetrics and gynecology while focusing on the diseases of women and children; and her detachment from sentiment to the extent that the medical treatment of the whole

person was minimized. We see Jacobi challenge a hegemonic view of women's biological inferiority and reproductive vulnerability that was traditionally used to deny educational opportunities. Bittel is convincing in her assertion that Jacobi turned biological essentialism on its head by arguing that *bias*, rather than demonstrated proofs, created scientific claims that limited women. This was epitomized in her open criticism of Dr. Edward H. Clarke's infamous *Sex in Education; or, a Fair Chance for the Girls* (1875), expressed in her highly respected *The Question of Rest for Women during Menstruation* (1877). She uses the scientific method (interviews, measured pulse rates, records of neuromuscular strength) to argue that menstruation was a "nutritive process" that sustained women's health.

Bittel offers a complex portrait of a woman who refuted biological determinism, embraced social Darwinism, and rejected separatist politics that empowered so many nineteenth-century women. She raises profound questions: How do professional women negotiate authority, the legacies of sexual inequality, self-definitions, and the cost of embracing masculinist ideals? The book is a must-read; it richly enhances the scholarship in American cultural studies, the history of medicine, and women's studies.

Susan E. Cayleff
San Diego State University
San Diego, California

Nature's Ghosts: Confronting Extinction from the Age of Jefferson to the Age of Ecology. By Mark V. Barrow Jr. (Chicago: University of Chicago Press, 2009. xii, 497 pp. \$35.00, ISBN 978-0-226-03814-8.)

Nature's Ghosts is destined to be a classic in the history of American conservation. It fills lacunae in existing conservation histories by documenting how scientific understandings of species extinctions unfolded from the mid-eighteenth century onward; explaining in more detail than any other work the critical role that American scientific naturalists played, from the late nineteenth century, in fostering understanding, concern, and political action in response to anthropogenic species extinctions in America and internationally; and demonstrating the pro-

found changes in perceptions and values that have accompanied increasing concern about species extinctions in America and abroad.

Mark V. Barrow Jr. begins by showing how until the late eighteenth century the very idea of extinction was inconceivable. New scientific evidence, including from the fossil record, forced reluctant natural historians to recognize that species had and could become extinct. Then Barrow reviews the evidence that Alfred Russell Wallace and Charles Darwin drew upon to understand evolutionary processes, demonstrating not only that species evolve from earlier forms but that this necessarily involves the extinction of less well-adapted life forms.

Subsequent chapters trace the growing realization that human actions force the decline of many species populations—driving some to extinction—and periodically notes the feelings of loss and responsibility to prevent anthropogenic extinctions that were expressed by naturalists. Barrow notes the evidence that some naturalists and their collaborating conservationists had deep feelings of kinship with nonhuman beings. Barrow also contends that many of those naturalists were too quick to assume that a species was already doomed, while some also continued to kill endangered species or hinder their reproduction, ironically, in the name of science. He provided detailed case studies of species that have been saved (the American bison and the alligator), those that became extinct (the heath hen and passenger pigeon), and those that exist today only due to heroic if tardy intervention but whose fate remains uncertain (the whooping crane and the California condor). He also discusses species that are probably extinct but might still exist (such as the ivory-billed woodpecker). Barrow's account illuminates the influence of American naturalists on efforts to prevent extinctions in Africa, Latin America, and through international institutions, including environmental agencies under the United Nations umbrella.

To avoid misperceptions, such as the idea that naturalists were the central driving force behind America's conservation movement, *Nature's Ghosts* should be read along with the wider corpus of American conservation history, especially those by Donald Worster, Roderick Nash, Steven Fox, Catherine Albanese,

Lawrence Buell, and Robert Gottlieb. Barrow's work would have been richer had he explored in more detail the affective, religious, and ethical dimensions of those trends. He says little, for example, about the nature spirituality and biocentric ethics of Henry David Thoreau, John Muir, or Rachel Carson and overlooks the increasing deployment of religious terminology to argue for species protection. He also says nothing about academic biocentric philosophy, including that of Arne Naess's deep ecology and J. Baird Callicott's defense of Aldo Leopold's land ethic. Yet biocentric spirituality and ethics influenced many ardent biodiversity defenders, including the founders of the Society for Conservation Biology, whose importance Barrow properly notes. These comments do not denigrate Barrow's achievement in *Nature's Ghosts*, but they do illustrate that his work is mutually dependent on the body of scholarship on which it draws and to which it most admirably contributes.

Bron Taylor
University of Florida
Gainesville, Florida

Licentious Gotham: Erotic Publishing and Its Prosecution in Nineteenth-Century New York. By Donna Dennis. (Cambridge: Harvard University Press, 2009. x, 386 pp. \$29.95, ISBN 978-0-674-03283-5.)

The name Anthony Comstock stands out in the annals of nineteenth-century moral reform, but scholars have paid far less attention to Comstock's targets and the lengthy antecedents to his antiobscenity crusade. Moral reform organizations such as Comstock's New York Society for the Suppression of Vice left a paper trail that was much clearer than that left by pornographers, and scholarship has reflected this fact. Donna Dennis's *Licentious Gotham* serves as a corrective to this gap in the historical record.

Dennis breaks the anonymity surrounding obscenity publication in nineteenth-century New York, introducing us to a dense network of pornography producers who occupied Nassau Street in Manhattan. The sale of "fancy goods" (sexually explicit illustrations and stories) received little notice from legal authorities