first group misunderstood the meaning of his term "selection" and accused him of speaking of "natural selection as an active power or deity" and imputing conscious intent to nature (p. 112). The second group worried that his theory undermined moral and religious consciousness itself. Hence the geologist Adam Sedgwick remarked to Darwin, "Passages in your book . . . greatly shocked my moral taste" (p. 112).

Dear's book also contains insightful chapters on the mechanistic physics of Descartes and Newton; the natural histories of Buffon, Linnaeus, Jussieu, and Cuvier; and the chemical theories and experiments of Lavoisier, Priestley, and Dalton. These case studies, together with the chapters on Darwinian evolution, nineteenth-century electromagnetism, and twentieth-century quantum mechanics, provide the reader with excellent introductions to the scientific and philosophical problems that defined key episodes in the history of modern science.

Readers may hope that in a future study Dear will address the question of how his transhistorical thesis of the dual-purpose ideology of science can be related to his account of scientific intelligibility as an ultimately irreducible category, a fundamental principle whose particular application in a given intellectual and cultural setting is unique to that setting. Might it be the case that there would be no such thing as scientific intelligibility *in any setting at all* if, as Dear believes, what counts as intelligible must function as an ideology?

LYNN S. JOY

R. J. W. Evans; Alexander Marr (Editors). *Curiosity and Wonder from the Renaissance to the Enlightenment*. xvi + 265 pp., illus., figs., index. Burlington, Vt.: Ashgate Publishing, 2005. $94.95 (cloth).

There was no simple passage from a medieval, Christian suspicion of curiosity to a modern, secular approval of it, nor a contrary passage of wonder from delightful to embarrassing emotion. The authors of the eleven essays in this interdisciplinary volume agree about that with Lorraine Daston and Katharine Park, whose book *Wonders and the Order of Nature, 1150–1750* (Zone, 1998), they cite frequently. Rather, curiosity and wonder must be examined closely in their specific settings, not only as cognitive emotions but also as rhetorical strategies.

Alexander Marr's introduction offers a thoughtful overview of scholarship on curiosity and wonder. The colossi who bestride the field are Hans Blumenberg, who is targeted for criticism by several authors; Krzystof Pomian, whose work, more contextual and nuanced, nonetheless suffers in Marr's view from making curiosity an "extra-linguistic concept"; and Daston and Park, whose book raises as many questions as it answers. Marr resolutely champions using contemporary terms and avoiding "convenient, but historically inaccurate, conceptual categories" (p. 4). Neil Kenny clarifies what "curiosity" actually meant in early modern France and England, distinguishing a discourse of curiosity—the emotion or passion—from a discourse of *curiosities*—that is, objects labeled "curious" (or one of its cognates) by early modern writers. He is careful to distinguish this "discursive tendency" (or "semantic thread") from a more specific "epistemological paradigm," noting that the discourse of curiosities could be associated with many different social or epistemological ends—or with none at all. Kenny's rich, instructive analysis nonetheless reveals an unresolved tension between his call for a study with "exclusive focus on the language of curiosity" (p. 51) and the fact that such language is always embedded in particular social practices and cannot be understood apart from them.

The remaining essays in *Curiosity and Wonder from the Renaissance to the Enlightenment* approach several such nexuses of speech and practice across Europe from the sixteenth through the eighteenth century, though the extent to which they problematize curiosity and wonder varies. Two essays address travel. Wes Williams argues that curiosity, travel, and danger were interwoven in the "poetics of witness" in sixteenth-century English and French travel narratives. Travelers like Pierre Belon, Henry Timberlake, and André Thevet claimed that the dangers they underwent guaranteed the truth of the curious facts they related. Paola Bertucci investigates the abbé Jean Antoine Nollet's 1749 journey to Italy. Nollet set out to debunk the idea that Italy was a land of wonders. But he also presented himself as a master of rational wonder, offering electrical demonstrations and lessons while hawking the products of his instrument workshop back in France. For Nollet, wonder and curiosity were also marketing tools.

Another nexus is that of occult curiosity and wonder. Peter Forshaw explores the distinction between wonder and curiosity in the works of the alchemist Heinrich Khunrath. Khunrath saw himself as a student of God's wonders as objects not of passive awe but of active investigation, aided by divine revelation. But critics condemned his pernicious, perhaps diabolical, art as excessively curious. Dangerous curiosity is also

the focus of Stephen Clucas's admirable contribution. Why did Meric Casaubon take the trouble to edit and publish John Dee's conversations with angels, while informing his readers that Dee had been misled by demons whom he mistook for angels? Clucas concludes that he saw Dee's text simultaneously as proof of spirits and a warning against enthusiasm—but he hints that Casaubon, despite his cautions, could not avoid a certain curious admiration for Dee.

Perhaps surprisingly, only two essays address collecting and curiosity. In her study of New World items in the collections of the grand dukes of Tuscany, Adriana Turpin underscores the danger of grand claims about the political, social, or metaphysical import of collecting. The collections were repeatedly moved and inventoried as they grew and as display space was rearranged; New World items might be grouped by their origin, but also by their form or material, in ways that were more closely related to the Italian *studiolo* tradition than to that of the northern European *Kunstkammer*. Claire Preston investigates imaginary, impossible "bundles of curiosities" in Thomas Browne's late works. Mocking the fragmentation of antiquities in his learned satires *Urne-Buriall* and *Musaeum Clausum, or Bibliotheca Abscondita*, Browne implied that it was impossible to forge a coherent vision of the past and the world.

The remaining three essays address distinct topics. Alexander Marr explores the ambivalent moral and intellectual status of automata as objects of curiosity and wonder. Did such "thaumaturgy" (wonder working) produce vulgar or noble wonders? Was it natural, and therefore licit, or demonic? Writers like Salomon de Caus strove to make automata respectable, linking them to ancient texts and to natural philosophy. Still, some critics wondered whether they were examples of vain, useless curiosity; the question was debated well into the eighteenth century. George Rousseau, in his sketch of the life of John "Proteus" Hill, addresses what it means to describe people as well as things as "curious" objects. "Obscure" and "unretrieved" today, Hill was famous (or infamous) to his contemporaries as virtuoso (desperately eager to be admitted to the Royal Society), said society's vicious satirist, publisher, naturalist, and (twice) bankrupt. Rousseau's article is suggestive rather than conclusive, but then Proteus is notoriously difficult to grasp.

Deborah Harkness sketches a fascinating "culture of therapeutics" in early modern England. Early modern English people showed intense curiosity about their bodies and were unwilling blindly to follow their doctors' advice. In this case, though, "curiosity" is the historian's category, not a contemporary notion. *Pace* Marr's introduction, the essay is none the worse for that, even if it offers less of a contribution to elucidating early modern notions of curiosity and wonder. This volume complicates and enriches the reader's understandings of what curiosity and wonder used to mean. But Harkness's paper reminds us that we can identify what we would call curiosity or wonder in the past even if it did not bear that name. As long as we are careful not to conflate our terms with actors' categories, we can profitably use our own notions of curiosity and wonder as part of our hermeneutic enterprise. At the same time, we are prompted to reflect on what we find wonderful or curious about the early modern discourses of curiosity and wonder.

BRIAN W. OGILVIE

Guihan Luo. *Jin dai xi fang shi Hua sheng wu shi [History of Western Botanical and Zoological Studies in China].* (Zhongguo jin xian dai ke xue ji shu shi yan jiu cong shu.) 434 pp., illus., tables, bibl., index. Jinan: Shandong jiao yu chu ban she [Shandong Education Press], 2005. ¥46 (paper).

The relation between trade, European expansion, and natural history has received increasing attention from historians of science for more than two decades. Compared with the flourishing scholarship on European natural history in areas such as the Indian subcontinent or the Atlantic world, however, China is badly neglected. Following Fa-ti Fan's *British Naturalists in Qing China* (Harvard, 2004), Guihan Luo's volume is a welcome addition to the modest but growing literature. The book chronicles Western naturalists' collecting activities in China from the seventeenth to the early twentieth century. It is the product of a larger project, launched by the Chinese Academy of Sciences in 2000, of compiling a series of books on the history of science and technology in China. The author's preface indicates that he was initially trained as a biologist but was "assigned" to study the history of science after receiving his undergraduate degree.

The book is divided into ten chapters. Chapter 1 presents a brief description of the biodiversity of China, while Chapter 2 offers a general account of European naturalists in China before the Opium War, mainly focusing on the Jesuit missionaries and the Russians. Chapters 3 and 4 are devoted to British collecting activities in the treaty-port areas and the interior regions of