

Foreign Orchids are Fertilised by Insects (1862). Here you can see how Darwin subsumed Owen's accomplishments to his own ends with the same ruthless but productive efficiency that characterized Owen's earlier appropriation of German transcendental morphology.

Richard Bellon
Michigan State University

C. U. M. Smith and Robert Arnott, eds., *The Genius of Erasmus Darwin* (Burlington VT: Ashgate, 2005), xvii + 416 pp., illus., \$130.

As we approach the bicentennial of Charles Darwin's birth we can reflect on how scholarship on the man and his ideas has changed even in the 50 years since 1959. The "Darwin Industry" has over that half a century produced increasingly sophisticated analyses of the history of evolutionary thought, the milieu within which Darwin operated, the genesis of his theory of natural selection, and lastly its subsequent fate. Put simply, we have come a long way from the Whig narratives of earlier times. The year 2002 saw a lesser known Darwin bicentennial – that of the death of Darwin's grandfather, Erasmus, and the prohibitively expensive volume under review offers papers from a conference (unselfconsciously described as an "Act of Pilgrimage," p. 1) held in Lichfield, Derbyshire, in that year. As I will argue below, the volume represents a form of scholarship similar to that exercised on the younger Darwin in past times.

Erasmus Darwin was born in 1731 and in many ways represents the archetype of the English polymath of the late Eighteenth century. A medical man by training, he and the members of the Lunar Society met to discuss, among other things, advances in science and technology, thus forming a clear exemplar of the Enlightenment belief in the "practical pursuit of Progress" (p. 17). Darwin himself made contributions not only to medicine but also to technology, chemistry, physics, and meteorology. Whether he was in fact a "genius," as the volume's title declares, is an open claim and one that is never adequately proved. He is nonetheless best remembered for two extended poems: *The Botanic Garden* (1789 and 1792) and *The Temple of Nature* (published posthumously in 1803), the later work expressing in poetic form some of the highly speculative ideas on evolution contained in his *Zoonomia* of 1793, a work read by his grandson "without producing any effect." Such writings led Samuel Taylor Coleridge to coin the phrase "Darwinising"

to describe the sort of wild speculation without empirical evidence that Darwin engaged in and that would be the antithesis of his grandson's *modus operandi*.

Twenty-one eclectic papers examine aspects of Darwin's contribution to education, technology, environmental studies, literature, medicine, and biology. The latter section (comprising four papers) is obviously that of the most interest to readers of this journal. Yet here an historian of biology is likely to be somewhat disappointed. The first paper – by John Pern – discusses the Australian scent myrtles assigned to the genus *Darwinia* by Edward Rudge in 1815 perhaps in memory of Darwin's botanical contributions. The connection delineated by Pern between Darwin and the myrtles is somewhat general – their “speciation and their variety of form mirror the fundamental themes of evolution, as espoused by Erasmus Darwin himself” (p. 108). One is left wondering how Pern's contribution works towards enlightening us regarding Darwin. In the second paper, Philip Wilson argues that Darwin supported a “deistic vitalism.” This paper – and a subsequent one by C. U. M. Smith – also argues that Darwin attempted to synthesize the spiritual and material aspects of the natural world. The final paper in this section sees Raffaella Simili discuss how Darwin believed in the importance of “animal electricity” and saw its relationship to “ordinary electricity” as providing a bridge between the organic and inorganic realms. Given these papers, I will leave it up to the reader to decide if Darwin's “genius” is apparent within the limited field of biology.

And this indeed is the major problem with the volume. Darwin's genius is asserted often but the work provides no sustained argument (comparative or otherwise) to support that assertion. Nowhere is this more evident than in the prolog provided by Desmond King-Hele whom in the past has written both a biography of Darwin and an extended study of his relationship with the Romantic poets. King-Hele struggles to make a strong case for Darwin's preeminence within the field of evolutionary thought and certainly fails to back up his claim that Erasmus Darwin was the “originator of modern biology” (p. 23). Indeed, relying on scholarship from 1959 (!), he states that “most people thought evolution was absurd, and its advocates convinced scarcely anyone (until after 1859)” (p. 22). He fails too at demonstrating that the elder Darwin pre-empted his grandson's mechanism of natural selection in claiming that that Darwin's statement that when males combat for females “the strongest and most active animal should propagate the species, which should thence become improved” (*Zoonomia* I, p. 507) expresses the “essence of natural selection” (p. 20). King-Hele's view

can be neatly summarized by his affirmative answer to his own question: “what about the idea that Erasmus Darwin’s achievement is *the greatest imaginative construct in the history of the world*, because he was the first person to arrive at and fully express and expound a nearly correct view of the development of life on Earth?” (emphasis mine, p. 26). His evidence for this extraordinary claim? The results of the Human Genome Project. Indeed, he goes so far to claim that the grandson Charles had “more limited achievements” than his grandfather (p. 24). This is not historical writing, this is Whiggish hero-worship.

The above aside, the volume under review is to be welcomed for providing information that goes beyond available works such as King-Hele’s *Doctor of Revolution* (Faber and Faber, 1977) and the popular account of the Lunar group provided in Jenny Uglow’s *The Lunar Men* (Faber, 2002). If one ignores the hagiography, it remains a useful albeit disunited introduction to the elder Darwin and the breadth of his ideas. What is missing, however, is a clear sustained examination of the origin of, nature of, and putative evidence for Darwin’s evolutionary thinking. There is therefore clearly much that remains to be done. One can still hope that the years up to 2052 will see the development of a richer and more nuanced portrait of this interesting figure, a portrait more like the one we have today of his grandson.

John M. Lynch
Arizona State University

D. Graham Burnett, *Trying Leviathan: The Nineteenth-Century New York Case That Put the Whale on Trial and Challenged the Order of Nature* (Princeton: Princeton University Press, 2007), xiv + 266 pp., illus., \$29.95.

Recently, many scholars have turned to the study of temporally specific and/or idiosyncratic events to illustrate larger and more general historiographic themes. Graham Burnett follows this trend in *Trying Leviathan*, a book examining an 1819 New York court case, *Maurice v Judd*, in which Samuel Judd defended his refusal to pay the inspector’s fee on fish oil, claiming his three casks of spermaceti oil were exempt since whales were not fish. Burnett seizes on this case to shed light on the philosophy of natural history at the time, to question “problems of knowledge” associated with what was known about whales, and to serve as a window into the contested territory of zoological classification. His