

AMERICAN Scientist

BOOK REVIEW

Pulp Nonfiction: Commotion over Evolution Before Darwin

[Robert J. Richards](#)

Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of Vestiges of the Natural History of Creation. James A. Secord. xx + 624 pp. University of Chicago Press, 2001. \$35.

Time was, that when the brains were out, the man would die," observed Macbeth on a chilling occasion. In 1854, Thomas Henry Huxley borrowed this remark to introduce a devastating review of *Vestiges of the Natural History of Creation*, a book that had begun to agitate the British public when it first appeared in 1844 and was still rattling chains in a 10th edition a decade later. The commotion the book provoked would only gradually fade in the more powerful light of *On the Origin of Species*, which dominated scientific debate after its publication in 1859. Like Darwin's book, *Vestiges* advanced an evolutionary hypothesis and argued that the dispositions of the physical world could best be understood by appeal to natural law rather than by flight to an intervening Deity.

The materialistic tone of the work counseled that its authorship remain veiled through 11 of its 12 editions. Indeed, part of the fascination of the book was the puzzle of the writer's identity. Was it perhaps the Prince Consort, Albert? Maybe the young naturalist Charles Darwin? Because of the attractive literary style and poor command of the details of systematic zoology, some authorities suspected that a woman was the author. Darwin himself guessed correctly that Robert Chambers, who with his brother William ran a well-known publishing house, had written the book. A conversation Darwin chanced to have with Chambers was simply too suspect.



Most historians of science have treated *Vestiges* as a minor remnant of mid-Victorian culture. It has been typically regarded as an indicator that the evolutionary ideas earlier formulated by Erasmus Darwin and Lamarck continued to intrigue and trouble, even after they had been thoroughly repudiated by established scientists. Chambers's book is certainly remembered because Charles Darwin feared that the clever but amateurish "Mr. Vestiges" would render the intellectual public ill-disposed to any evolutionary understanding of life. James Secord conceives of Chambers's book in quite different terms. In *Victorian Sensation* he contravenes the usual presumptions. Because of his striking erudition and extraordinary scholarship, he has produced an argument that cannot be ignored, even if it must be resisted.

In his sprawling account, Secord undertakes to write the history not of Chambers's ideas, which for the most part we catch only reflected in the responses of readers; rather, he provides an extensive history of *reading* during the early Victorian period, with Chambers's book as the inductive basis. (Scientists employ significantly larger inductive grounds and apply rigid statistical tests for their generalizations; philosophers are content with a few instances, since they have penetrating insight at their disposal; historians try to get by with an induction from a single case, if it is a rich one?and *Vestiges* does offer particularly generous material.)

Through some 16 chapters, Secord details how *Vestiges* was physically made (with steam presses, but with hand composition of the lines of print), the way in which prices of the various editions determined its public (it became a cause only with the "people's edition"), and the manner in which different segments of British society (from working-class mechanics, to radical reformers, to Whig scientists, to Tory churchmen, to the Queen herself) read the message of the book and what meanings they imparted to their reading. Middle-class consumers, for example, took up the book with the same enthusiasm they felt for the latest novels of Sir Walter Scott. High Churchmen condemned its materialistic message, whereas radical reformers thought it supported their efforts. Scientists quite generally dismissed its shoddy zoology and botany.

Through Secord's history, we get a comprehensive account of the complex reactions the book stimulated throughout Victorian society. As a historian of reading of this particular book, he has done an astounding job, searching through mountains of published materials and unpublished documents. The illustrations, more than 150 of them, tell their own story of the penetration of *Vestiges* through the many layers of Victorian culture. Secord's account gives the impression that Chambers's book had a significant and unique cultural impact at mid-century. Yet a comparable analysis of the reading publics for the novels of Scott or Dickens or Darwin's *Origin* would produce, I wager, a mountainous history that would look out upon those *Vestigial* remains as if they were mounds heaped up by industrious moles. Nonetheless, the picture we get of the Victorian reading public is sharply etched and quite telling.

Just below the surface of Secord's history lies an argument that, when exposed, should evoke a reaction from many historians and scientists comparable to the reactions of 19th-century professionals to *Vestiges*. Secord's history has focused on the reading public for *Vestiges* rather than on the argument and evidence presented in the book. His reasons for this approach are subversive. First, he wants to claim that books such as *Vestiges* and *Origin of Species* have no intrinsic meaning, "no meaning apart from what readers make out of them." This implies that the status we have bestowed on Darwin's *Origin*--as a book producing a revolution in culture and

science--is really a reflection of our own interests and of our own need for scientific heroes. "Like all readers," Secord allows, "we are free to make what we can out of books in the context of our own interpretative communities." But we should not look in Darwin's book for genius, nor seek there a revolutionary thinker who changed the course of intellectual history--except that we recognize these are meanings we read into his book, not out of it. On this basis, Secord suggests, we might even come to think of Chambers's work as the more significant, given the reactions of the reading public. After all, the novel argument of the *Origin* was not the descent hypothesis itself, which Chambers had already advanced, but natural selection, which "was rejected by almost all readers for the first seventy-five years after publication." Such judgment, I think, must be tempered by recognition of the central role accorded to natural selection by the likes of Huxley, Alfred Russel Wallace, August Weismann, Carl Gegenbaur, Ernst Haeckel, William James, George Romanes and James Mark Baldwin. But I suppose these are, indeed, relatively small in number compared with the legions of dismissive clergymen.

The second subversive reason for focusing on the reaction of the reading public is that it allows us to advance another model of science. We need no longer be in thrall to the heroes of science. We can, rather, look to underlaborers such as Chambers who made Darwin's so-called genius possible: "Like all forms of hero-worship, this celebration of the author undermines possibilities for individual action, for none of us can be a Darwin, at least in the terms that the myth provides. It sets an unobtainable ideal--the genius revealing great discoveries--as the model of what a scientist should be." So histories such as Secord's have a pragmatic, even a moral purpose. It is troubling, though, to recommend Chambers as a model for even the mid-Victorian scientist. As far as we know, he never identified a fossil, never cracked a rock with a geology hammer, never charted the course of the planets.

The annals of science are indeed filled with the remains of many a mute inglorious Newton who made the subsequent discoveries of genius possible. Neglecting the less sung would be a mistake; but a greater one, I think, would be to flatten the significance of works of genius such as Darwin's. There is, after all, the salient fact that virtually every reputable British scientist rejected the evolutionary hypothesis when *Vestiges* advanced it, whereas in the wake of the *Origin* virtually every naturalist accepted it--so powerful were Darwin's evidence and arguments. Secord's main epistemological assumption--that "books are not the interpretative property of authors," having only the meaning individual readers confer on them--must, I think, fail for a host of reasons. But one will suffice: If the assumption were correct, there could be no objection, certainly none by the author, to this reader's reaction to the masterful and provocative book under review.