Review: Pulp Nonfiction: Commotion over Evolution Before Darwin
Reviewed Work(s): Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of Vestiges of the Natural History of Creation by James A. Secord
Review by: Robert J. Richards
Published by: Sigma Xi, The Scientific Research Society
Stable URL: http://www.jstor.org/stable/27857533
Accessed: 30-10-2017 12:54 UTC
Pulp Nonfiction:
Commotion over Evolution Before Darwin

Robert J. Richards


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 in-
stances, since they have penetrating in-
sight 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 de-
tails how Vestiges was physically made
(with steam presses, but with hand com-
position of the lines of print), the way in
which prices of the various editions de-
termined 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
for Vestiges rather than on the argu-
ment 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 Dar-
win’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 her-
Oes. “Like all readers,” Secord allows,
“we are free to make what we can out
of books in the context of our own in-
terpretative communities.” But we
should not look in Darwin’s book for
genius, nor seek there a revolutionary
thinker who changed the course of in-
tellectual history—except that we rec-
ognize these are meanings we read into
his book, not out of it. On this basis,
Secord suggests, we might even come

UNSHIELDED

City as Ecosystem

Nature is supremely practical. In
New York, it eats sidewalks, not
skyscrapers. Spurge is the first
plant to soften an aging concrete
slab, a sudden flourish of tiny
green leaves with red chevrons.
Then comes carpetweed, climbing
the concrete edges. Grasses crack
the weakened sidewalk. Water
seeps in, freezes, then levers up
slabs. Ants arrive, and beetles.

Naturalists observing one razed
SoHo lot found that dozens of
baby trees sprang up within five
years—cottonwood, honey locust,
willow, silver maple—all from
seeds windborne, or birdborne,
or carried into lower Manhattan
on muddy tire treads or some-
body’s shoe sole. Coltsfoot, aster,
chicory, Queen Anne’s lace, plan-
tain, mugwort, wild lettuce, and
bindweed arrived the same way.
... All exploited every edge,
every niche. Decaying paper and
cardboard dumped in the lot be-
came impromptu compost. Dis-
carded cement makes the soil al-
kaline, which clover and locust
like. Rain collects in the mounds
of dirty gravel; one leaky hydrant
can save dozens of species. In
half a decade, if such a lot is not
scraped clean for a luxury high-
rise or a Gap outlet, it will look
remarkably like New York after
the last great glacier withdrew:
gravelly rubble firmly colonized
by a rush of green.

Wild Nights:
Nature Returns to the City
Anne Matthews
North Point Press, $22

Unshelved offers a glimpse of books re-
cently received at the Bookshelf. A com-
plete list of such books can be found at
http://www.americanscientist.org/
bookshelf/newbooks.html.

2001 September–October 455

This content downloaded from 150.135.165.126 on Mon, 30 Oct 2017 12:54:39 UTC
All use subject to http://about.jstor.org/terms
People Eaters: Skeeters, Parasites and Sharks

Mosquito: A Natural History of Our Most Persistent and Deadly Foe (Hyperion, $22.95) leaves its readers with a deep respect for both the blood-sucking insect and its power to shape our world. Authors Andrew Spielman, professor of tropical public health at Harvard, and Pulitzer Prize-winning journalist Michael D’Antonio resist the urge to delve too deeply into taxonomical minutiae, choosing, instead, to explore the battle people and mosquitoes have waged over every continent, in every era. Controlling workers’ exposure to mosquitoes, including the Aedes aegypti (shown below), allowed America to build the Panama Canal where, less than 20 years earlier, France had lost thousands of lives and the equivalent of $3 billion attempting the same task. Evidence suggests controlling workers’ exposure to mosquitoes, including the Aedes aegypti (shown below), allowed America to build the Panama Canal where, less than 20 years earlier, France had lost thousands of lives and the equivalent of $3 billion attempting the same task. Evidence suggests that mosquitoes prevented Genghis Khan from conquering Russia, killed Alexander the Great and played a pivotal role in both world wars. This is a collection of stories about war, politics, scientific innovation and humanitarian intervention: human history told as the exploits of a killer no larger than a grape seed.

Skeeters, Parasites and Sharks

Eating our most persistent and deadly foe. 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.

A Gift for Language

Gary F. Marcus


Seldom is the talent of a would-be Mozart or Einstein overlooked. But the real prodigies are the millions of ordinary young children who learn to talk every day. Your three-year-old child may know nothing of politics or calculus, but she’s a genius at learning language. Pathways to Language: From Fetus to Adolescent, written by noted language researcher Annette Karmiloff-Smith and her daughter Kyra Karmiloff, is a comprehensive introduction to the field of language acquisition. Pathways would serve as an excellent text in an undergraduate course on language acquisition or cognitive development and should be of interest to parents and other lay readers who are curious about how children learn language. Chapters devoted to topics such as word learning and grammar learning review virtually all of the major studies