reviews

James A. Secord, *Victorian Sensation: The Extraordinary Publication, Reception, and Secret Authorship of Vestiges of the Natural History of Creation* (Chicago / London: The University of Chicago Press, 2000)..

By Bernadette Bensaude-Vincent [*]

Although it came out in 2000, James Secord's *Victorian Sensation* still deserves a review because it is a case study written as a manifesto for a different kind of history, comparable to the publication of *Leviathan and the Air-Pump* published in 1986. Whereas Shapin and Schaffer promoted the social studies of science in describing a connection between scientific knowledge and political thought, Secord advocates the history of the book and reading.

Victorian Sensation is a kind of biographical account of a book, which was one of the most controversial best-sellers of the nineteenth century.

Vestiges of the Natural History of Creation was anonymously published in 1844 and went through eleven of

[*] Université Paris X. France

its twelve editions before the author's name was unveiled. It has been translated in German, Dutch and went through twenty editions in the United States. *Vestiges* caused a great commotion in the Victorian society as it raised intense public debates in the 1840s. Secord argues that the controversy about creation versus natural laws was not raised by Darwin's *Origin of Species* in 1859. Rather Darwin's *Origin* was dropped "into a saturated solution like a crystal around which all diverse elements coalesced" (p. 522). The so-called Darwinian revolution was prepared by the anonymous *Vestiges*.

Despite this strong claim, Secord's study is not meant to provide an additional account of the controversies around Darwinism. Historians exclusively interested in scientific doctrines were extremely disappointed because they learnt nothing about the contents of *Vestiges*. For instance the review by Arianne Chernock in the *New York Times* (May 20, 2001) concluded: "Unfortunately, another book on "Vestiges" itself rather than this intelligent analysis of its production and reception is needed to determine whether Secord's argument here is well founded". Had Secord's main goal been to demonstrate that *Vestiges* should be taken into account as a precursor of Darwin, he would have followed the usual pattern: describing its contents and context of publication, then its reception. Instead the only information provided by Secord is that *Vestiges* was an ambitious narrative tackling the big questions, from the formation of the solar system to the formation of the human species as descendent of apes. So if *Victorian Sensation* is not a book about evolutionary doctrines, what is it about?

Secord takes *Vestiges* as a field to experiment a new approach to the history of science. His aim is "to see what happens when a major episode is approached from the perspective of reading" (p. 518). For this purpose he explored a considerable volume of sources ranging from book reviews, diaries, correspondence, publisher's archives, conversations at the Geological Society and the British Association for the Advancement of Science... He borrowed methods and concepts from literary critics, cultural history and the history of book pioneered by Roger Chartier. The result is fascinating since the 'exercise' opens promising avenues of research and demonstrates how our standard practices of history of science distort the past. Let me retain here three major historiographical lessons:

The first one concerns the materiality of books. Secord convincingly argues that the material form of books greatly determines its meaning. The paper used, the number of illustrations, the binding and the prize of the book, as well as the railways network available for their distribution are integral to its reception. The book is the product of the publisher as much as of its author. The present case study is extremely relevant to make the point since the anonymous writer proved to be Robert Chambers, a famous publisher of popular books.

The second lesson concerns the creative role of reading. As he approaches *Vestiges* through the eyes of its readers and displays its various interpretations, Secord argues that the meaning of a book is not given by its author. The printed matters never carry stable and fixed messages that would be delivered everywhere. Readers are free to

make what they want out of books. The interpretive role of reading has been usually emphasized for literary texts, fictions and poetry. Secord argues that even the meaning of scientific books, which are supposed to objectively reflect nature is also constructed by their readers. Furthermore Secord argues that not only readers create the meaning of the book, but their reading is not "socially constructed". Readers of texts are not just reflecting the local context of reading nor are they just reinforcing existing attitudes. Reading is a subversive activity, raising questions and crossing all conventional boundaries. This is a daunting conclusion with far reaching consequences. In particular authors are not fully responsible for their writings since books can be the ferment of revolutions despite their own intentions. Secord also emphasizes that historians should not use the notion of Victorian society or Victorian mentality because there is no uniform view or stereotype. It is misleading because in various contexts people built up very different views of the progress of mankind out of the same book. In this respect the various interpretations of a best seller could be used as indicators or ideological markers of social groups.

The third lesson that I would like to emphasize concerns the attention to genres in scientific literature. Historians of Darwinism usually mention *Vestiges* as a popular book advocating evolutionary views on a vague and week basis, whereas Darwin's *Origin* belongs to technical scientific literature. As a consequence Darwin is the revolutionary hero while Chambers's *Vestiges* is mentioned as a failed attempt to establish a law-bound view of the

evolution. One major merit of Secord's case study is to demonstrate that this standard view has been shaped by Darwin himself and feeds the cult of the revolutionary hero. It is only when the identity of the author of *Vestiges* was known that the book has been dismissed as "popular" and "amateurish". Rather than taking for granted that *Vestiges* belongs to the genre of popular science and *The origins of species* to academic publications, Secord argues that this divide was the outcome of the debates about evolution. Huxley's and Darwin's dismissive evaluations of *Vestiges* helped establish the divide between professional and amateur practices of science. In Secord's view, Darwin's *Origin of Species* was not the origin of a crisis, rather it resolved the tensions raised by the impressive amount of scientific literature that flooded the market during the controversy raised by *Vestiges*." The triumph of Darwinism was not one of doctrine – there was no consensus, neither about the meaning of evolution nor of the truth of natural selection. Rather, Darwinism was a convenient label for an arena of public discussion, structured by new relations between professional science and professional journalism". (p. 514) In my view, the phrase "professional journalism" may be a bit anachronistic since professional science journalism only emerged in the 1920s. However it does not affect the relevance of Secord's argument. As historians of science, we should pay more attention to the whole spectrum of scientific literature without adopting the hierarchical categories that came to prevail. Popular narratives and elementary textbooks are as important sources as research articles for understanding scientific revolutions. As the

construction of a hierarchy of publications plays a key role in the validation of scientific claims it should be integral part in the history of scientific discoveries. Finally, Secord's emphasis on the construction of literary genres in scientific publications sheds new light on the mechanisms at work in the manufacture of scientific heroes. To be sure there are many contributions on the construction of founder myths in science and the heroic images of famous scientists – such as Descartes, Newton, Lavoisier, Faraday, Pasteur… However such studies at the borderline between the history of science and the history of ideas would greatly benefit from Secord's attention to the construction of a hierarchy of values embodied in the materiality of books.

Ana Simões, Maria Paula Diogo, Ana Carneiro, *Cidadão do Mundo. Uma Biografia Científica do Abade Correia da Serra* (Porto: Porto Editora, 2006.), pp. V+185.

By José Luís Cardoso[*]

The scarcity of biographies of relevant characters of Portuguese history has been widely acknowledged. However, from the sorrows often expressed on the apparent lack of inclination of Portuguese historiography towards the biographic genre, a recent but promising tradition of portrayals

[*] Institute of Social Sciences, University of Lisbon.

and biographies of figures that marked Portuguese political and cultural life has finally emerged. The present book is one example, but it widens the scope of recent Portuguese biography by focussing on the life of a person whose merit derives, above all, from his contributions to science.

The life and work of José Correia da Serra (1751-1823) offer multiple reasons and pretexts for a biography. Citizen of the world (as written in the expressive title), traveller and pilgrim, man of science and culture, political refugee and diplomat, regular presence in *salons*, little inclined to Church rituals and duties, the life of the Abbé Correia da Serra is an epitome of his time; a time marked by significant events through which one can reach a deeper understanding of the evolution of Portuguese society, and especially of the construction of science at the end of the eighteenth and early nineteenth century.

The book begins with a brief historiographic overview in which the authors revisit and analyse critically the extant literature on the life and work of Correia da Serra. In this review they take the opportunity to outline their aims and methodological orientations by clearly stating their options within history of science. Their purpose is to analyse Correia da Serra's scientific legacy by focussing, not only on the content of his scientific contributions – concepts, instruments and approaches –, but also on the various contexts, environments, languages, institutions and people; in short, the world which renders historically intelligible Correia da Serra's scientific enterprise. It is thus essential to bear in mind the limitations and stimuli to the creation and diffusion of scientific knowledge in Portugal as the authors aim at

'showing the relevance of this case to the growing awareness of one aspect of eighteenth-century Portugal in the wider scope of the study of local contexts in clarifying the pluralism of appropriation of the sciences, which have always taken place in the European peripheries.' (p.12)

The chapters proceed at the chronological pace of the places where Correia da Serra lived, or visited, the influences he received, the contacts he established, the work he produced, the institutions he attended.

His trajectory began in Italy between 1757 and 1777. Those were the years spent in Naples and Rome where he was educated and influenced by one of the Portuguese illuminati then residing in Italy, Luís António Verney. Equally important were his direct contact with Genovesi, especially relevant to the understanding of the economy of the natural world, and the epistolary exchanges with Linnaeus, an early sign of Correia da Serra's scientific inclinations.

His return to Lisbon where he lived from 1777 and 1795 was marked by his contribution to the foundation of the Lisbon Academy of Sciences, in whose early activities he participated with remarkable energy and organizational ability, and by establishing a network of national and international scientific contacts essential to his future career. His initial scientific contributions to geology and botany date from this period, as well as his methodological reflections on the utility of science.

For political reasons not yet totally clear – the protection he gave to the French Girondist Broussonet does not seem enough to accuse him – Correa da Serra sought refuge in London, from 1795 to 1801. The British capital provided

the conditions for his accumulated knowledge to blossom. He participated in the activities and publications of the *Royal Society* and of the *Linnean Society*, and established a close relationship with Joseph Banks. Correia da Serra's knowledge and the modernity of his thinking are unveiled in his most famous botanical investigations on the sex of algae and the reproduction of *Cryptogamia*.

His publications on botany, the establishment of a network of friendships and his participation in the networks of academic sociability proceed in the next stops of his itinerary, first in Paris, between 1801 and 1812, and in the USA, from 1812 to 1820, where he held the position of Portuguese diplomatic representative. His friendship with Jefferson and his involvement in teaching in the recently created Universities of Philadelphia and Virginia are salient features of the American period.

Back to Portugal in 1820, following the Liberal Revolution, Correia da Serra was to die in 1823, without his fellow countrymen recognizing the international dimension of his scientific legacy.

It is precisely this legacy, which constitutes the central axis of the biography written by Ana Simões, Maria Paula Diogo and Ana Carneiro. By resorting to the existing literature and to unpublished sources kept in national and foreign libraries and archives, the authors' pleasant writing accessible to a non-specialized audience take the readers through the eighteenth-century paths of scientific observation and experimentation, and to Correia da Serra's engagement in sharing, disseminating and appropriating knowledge.

Like the science practiced by Correia da Serra this book is useful and necessary. It is a decisive contribution, which promotes and dignifies the history of science in Portugal.

Lorraine Daston, ed., *Things that Talk. Object Lessons from Art and Science* (New York: Zone Books, 2004). 447 pp.

By Palmira Costa[*]

Things that Talk: Object Lessons from Art and Science is the result of a collaboration between a group of historians of art and historians of science that met at the Max Planck Institute for the History of Science over the course of the academic year 2001-2002. The common core of the project was to take materiality as a serious challenge and as an excellent opportunity to reflect on the various and interlocked meanings of materiality and culture. If materiality has always been of crucial importance for historians of art, only recently has it received due attention from historians of science. In part, this volume belongs to this recent historiographic trend in the history of science. It can also be associated with the burgeoning interest in

[*] (CHFCT/DCSA, Faculty of Sciences and Technology - New University of Lisbon).