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ALFRED RUSSEL WALLACE: IN A COURT OF HIS OWN[1]

JOHN VAN WYHE
Department of History and Philosophy of Science, Cambridge University, Cambridge CB2 3RH, United Kingdom
E-mail: jmv21@cam.ac.uk

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Admirers of Alfred Russel Wallace (1823–1913) often bemoan his obscurity compared to Charles Darwin. If Wallace is not an ''elusive Victorian'' or a ''forgotten naturalist,'' he is ''Darwin's moon'' or ''in Darwin's shadow'' (all titles of Wallace biographies). Most recently he is a ''heretic in Darwin's court.'' Relegating Wallace's name to the subtitle hardly helps. Nevertheless, if one considers the large number of Wallace biographies that have appeared in the past five years or so, the complaints that Wallace does not get his due are not as credible. Hundreds if not thousands of articles and books have been written on Wallace in the past 30 years and continue to appear. Wallace certainly receives a full and generous treatment in Ross Slotten's fine new biography of Wallace *The Heretic in Darwin's Court: The Life of Alfred Russel Wallace.* Yet Slotten, a family physician and self-professed amateur historian, cannot resist the temptation to insist that his subject is rather more important than is generally believed. Slotten tries to suggest that Darwin's theory of the 1830s and 1840s was substantially different than what appeared in *On the Origin of Species* (1859). This is meant to suggest that Darwin was not really 20 years ahead of Wallace when the latter hit on the idea of evolution via differential survivability in 1858. (Readers of Darwin's 1842 and 1844 essays, however, will not agree with this assessment; see http://pages.britishlibrary.net/charles.darwin/texts/foundations/foundations_fm.htm.)

In his famous essay ''On the Tendency of Varieties to depart indefinitely from the Original Type,'' Wallace, like Darwin, pointed out that the potential Malthus effect of geometrical population increase did not occur because so many creatures are destroyed by predation, etc. Escaping destruction was due to the properties of the organisms. (Wallace referred most often to birds, which he was then collecting in the Malay Archipelago). Therefore *varieties* that had favorable variations would outlive the parent species should circumstances change. By reiteration this process would lead to the ever further divergence of varieties from their ancestral stock and thus to the formation of new species. It was a brilliant insight, yet it was one that had been made, if less fully, several times before. Nevertheless, it contradicted the common view of the time that species only varied within set limits.

One might guess that Darwin is primarily remembered because he preceded Wallace, or because he was of higher social and scientific status, or because his book *On the Origin of Species* (1859) came out before Wallace could complete a book, or because Wallace has been unfairly forgotten. Yet it seems that Darwin, hero worship aside, fully deserves his high reputation as the man who explained the general process whereby all the kinds of living things in the world came to be: diverging common descent via individual differential reproduction.

The sewing machine was not invented by Isaac Singer, yet his name is the only one we remember because his useful machines were the first to be diffused throughout the world. Darwin *did* precede Wallace with the idea of natural selection *and also* undertook the labor of making it work and convincing the scientific world with exhaustive examples. Wallace himself never ceased to refer to Darwin as the originator and to point out that his vague essay of 1858 would never have convinced anyone, whereas Darwin's work changed our understanding of life forever.

A lengthy list of differences between the two men could be compiled to demonstrate that modern evolutionary biology, ecology, and a dozen other disciplines owe far more to the work of Darwin than Wallace. Wallace believed that selection occurred only when the environment changed, whereas Darwin argued that natural selection occurred continuously. Wallace did not believe that domestic plants and animals shed any light on evolution the way Darwin did. Wallace rejected sexual selection because he could not see how it could work. Wallace later insisted that, because he considered that human intelligence was greater than necessary to survive, it therefore could not be the product of natural selection. This evaluative reason was used to support his conclusion that man must be somehow quite separate from the rest of nature. He then proceeded to attribute this assumed separateness, without any evidence, to a supernatural designing intelligence (*Contributions to the Theory of Natural Selection,* 1870). Wallace did not spend more than 40 years scouring the scientific literature for relevant information, experimenting, and observing heredity, variations relevant to survival, natural means of dispersal, anatomical and behavioral evidences for common descent, and so on, as did Darwin. This is not to mention Wallace's many years of credulous devotion to spiritualism, phrenology, animal magnetism, antivaccination, radical social reforms, and the sun being at the center of the universe. Though it may not be politically correct to praise the more famous man and not try to raise up the man of lesser fame, anyone who has read all of the works of Darwin and Wallace will not find their posthumous reputations anything other than should be expected. Wallace *is* widely respected and his name *is* well known; perhaps not in comparison with Darwin, but when compared with hundreds of other 19th-century naturalists who are now quite forgotten and who do not have new biographies appearing every year almost a century after their deaths.

Slotten's book is weakest when discussing scientific

[1] *The Heretic in Darwin's Court: The Life of Alfred Russel Wallace.* Ross A. Slotten. 2004. Columbia Univ. Press, New York and Chichester. viii + 602 pp. HB $39.50, ISBN 0-231-13010-4.

thought in the Victorian period, as in his anachronistic assumption that men of science were working to solve a ''problem,'' which only subsequently came to be seen as such a kind of thing at all. Wallace is often described as thinking over problems in a certain way during his walks—but the evidence for this is only the conclusions Wallace came to in his writings. Historians of Wallace may regret that little new evidence is brought to the story apart from that already well known by readers of Wallace's books and autobiography. But these are merely quibbles about what is, on the whole, a delightful biography of Wallace. Slotten's book is well written and flows well. This is never truer than for the scientific journeys of Wallace through South America and Southeast Asia. This may be due to Slotten's own excursions to the jungles once studied by Wallace. The book's 600 pages provide a much more complete and colorful story of Wallace than can be found in other recent biographies. The other personalities Wallace encountered, from Henry Walter Bates to Sir James Brooke (the White Rajah of Sarawak) to Darwin and George John Romanes, receive well-researched and sympathetic introduction. Wallace's major works like *The Malay Archipelago* (1869), *The Geographical Distribution of Animals* (1876), and *Island Life* (1880) are lucidly surveyed but perhaps not as fulsomely as might have been hoped in a book of this length. Episodes of Wallace's dark side (to continue the Darwin's moon metaphor) are covered in great detail. One example was Wallace's disastrous inclusion, as president of the Biology Section and its Anthropology Department, of spiritualism and phreno-mesmerism to the 1876 meeting of the British Association for the Advancement of Science. Wallace was never again elected to such high office in the Association and he stopped attending its meetings—shunned and misunderstood. As interesting as these episodes are, and as well described by Slotten, it is unfortunate that they take so much attention away from Wallace's other activities, such as his work on zoogeography. However, Slotten's discussion may actually provide space commensurate to the years Wallace spent on these subjects. It is a pity that the book ends without a proper conclusion or more lengthy assessment of Wallace's life. The absence of fashionable theories intruding their way into Slotten's account is also refreshing. Rather than pointing toward Wallace's birth order, personality type, or social class values driving his behavior, Slotten simply tells Wallace's story from his correspondence and publications. While some historians of science might regard this as old-fashioned biography, their tastes are not shared by the majority of readers. Slotten's book is a pleasure to read and provides a well-researched and detailed account of an intelligent, imaginative, and intriguing Victorian naturalist. It is highly recommended reading for anyone interested in knowing more about Wallace.

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