WALLACE IN THE MALAY **ARCHIPELAGO**

Dispelling the Darkness: Voyage in the Malay Archipelago and the Discovery of Evolution by Wallace and Darwin. John van Wyhe. World Scientific, 2013. 420 pp., illus. \$49.00 (ISBN 9789814458795 cloth).

Dispelling the Darkness: Voyage in the Malay Archipelago and the Discovery of Evolution by Wallace and Darwin is the latest book by science historian John van Wyhe, who is currently a senior lecturer at the National University

of Singapore and the editor of both Darwin Online and Wallace Online. This title, one of many appearing this year for the 100-year anniversary of Alfred Russel Wallace's death, concentrates on Wallace's grandest adventure his 8 years in Indonesia and Malaysia. During this period (1854-1862), Wallace made a number of notable discoveries in biology, biogeography, physical geography, and ethnography. Among these, his independent discovery of the principle of natural selection surpasses all others. Not surprisingly, dozens of authors have treated this story from various biographical and analytical angles, but Dispelling the Darkness is the first to purport to offer an overview of the adventure's unfolding from start to finish.

After receiving a grant from the Royal Geographical Society, Wallace was able to travel to Singapore. From that point, he was on his own, sink or swim. It was the spring of 1854, and his hope was to finance a series of expeditions using the sales of specimens that he collected. This hope was realized, and Wallace remained in the East for 8 years. Van Wyhe takes the reader on these expeditions, bringing out many details of the cultural and natural environments along the way (to the extent of providing photographs of some of the vessels on which he traveled).

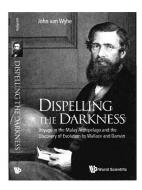
The author's thorough descriptions are excellent, but within them are subtle, underlying views on Wallace's intellectual evolution. For example, van Wyhe seems to lean toward the notion that Wallace's voyages to South America and the Malay Archipelago were mere collecting expeditions and unconnected to any search for evolutionary mechanisms. There is compelling evidence to the contrary, including the following words from Wallace's "Sarawak Law" essay of 1855:

The great increase of our knowledge... has accumulated a body of facts which should afford a sufficient foundation for a comprehensive law embracing and

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explaining them all, and giving a direction to new researches. It is about ten years since the idea of such a law suggested itself to the writer of this paper, and he has since taken every opportunity of testing it by all the newly ascertained facts with which he has become acquainted. (Wallace 1855, p. 185)

Wallace is referring here to his reading of *Vestiges of the Natural History of Creation* ([Chambers] 1844), a transformist tract that focused his attention on the subject of evolution. At least a dozen of Wallace's letters and writings from that time and later attest to his interest then in evolution and how it might work.



Another argument that van Wyhe makes is that Wallace was not thinking in evolutionary terms until he came on some interesting variations in tiger beetle coloration on the island of Sulawesi and related them to local conditions of the environment. If that were the case, we would all know of Wallace's tiger beetles just as we know about Darwin's finches. But nowhere in any of his writings does Wallace give more than mere mentions to tiger beetles, as examples of mimicry or adaptive coloration; no such epiphany was independently documented. By contrast, Wallace later related in print no fewer than seven times the story of how he arrived at the concept of natural selection during a period of illness and fever, an event that led to his writing what has become known as the "Ternate paper" (published as part of Darwin and Wallace 1858).

Van Wyhe also brings up the issue of Wallace's memory loss in his later years and how this detail may complicate the story. It is true enough that, in some of his later writings, Wallace's memory was apparently faulty (he often cited dates and places that were not accurate), but perhaps this is a forgivable offense. However, it is in the context of those writings and in what other people have said about them that certain relevant facts remain. Van Wyhe argues, for example, that Wallace sent his "Ternate paper" to Darwin a month later than Wallace said he did—a claim that Wallace made on five separate occasions spanning more than 30 years. Van Wyhe points (see also van Wyhe and Rookmaaker 2012) to the only existing evidence supporting the later-date theory: a remark Wallace made in his autobiography that seemingly shows his mailing was a reply to a letter from Darwin that arrived on 9 March 1858. But, according to Charles S. Peirce, in a review of that same autobiography (1906), Wallace habitually wrote long compound sentences combining disparate thoughts, a result of his early instruction in Latin. Understanding this, we can see that the point of Wallace's comment has been mistaken, and the laterdate theory is left without supporting evidence.

Irrespective of its subtitle, *Dispelling the Darkness* is mostly about Wallace, and the book slants toward the supposed "darkness" surrounding his discovery of the principle of natural selection. It appears to this reviewer, however, that Professor Van Wyhe is creating more darkness than he is dispelling. Despite the great adventure story and the author's penchant for geographical detail, there remain good reasons to doubt many of the historical conclusions that have been reached.

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CHARLES H. SMITH

Charles H. Smith (charles.smith@wku. edu) is professor and science librarian in the Department of Library Public Services at Western Kentucky University, in Bowling Green.