CREDIT WHERE CREDIT IS DUE

Colin Hendrie

School of Psychology, University of Leeds, UK. c.a.hendrie@leeds.ac.uk

A Review of the Book

Dispelling the darkness: Voyage in the Malay Archipelago and the discovery of evolution by Wallace and Darwin by John van Wyhe. 2013.

World Scientific Publishing Company, 420 pages. ISBN 13: 978-981-4458-79-5 (Hardcover, \$62.38).

For many the name Darwin is synonymous with the Theory of Evolution. This is however as great an injustice as Rosalind Franklin not being given full credit in the public eye for her contribution to the discovery of the structure of DNA. The first presentation of the theory of evolution was of course a joint paper "On the Tendency of Species to form Varieties; and on the Perpetuation of Varieties and Species by Natural Means of Selection" by Charles Darwin and Alfred Wallace read to the Linnean Society on 1st of July 1858.

The exact date is important because the disparity between Darwin and Wallace's social positions (Darwin was from a privileged background, Wallace bought up in 'genteel poverty') plus Wallace's then remoteness from London has led to speculation that Darwin may have taken credit for ideas that were not his own. It is easy to see in these more cynical days how a younger, more junior scientist entrusting his novel and insightful thoughts to a very much more senior figure, who then claimed to have had the same ideas many years earlier but not published them could arouse this suspicion.

John van Wyhe's excellent book addresses this issue in amongst some wonderfully atmospheric prose, where the reader is given a rich taste of the then remote and exotic places Wallace lived and worked in and the social milieu of the time. 'Dispelling the Darkness' (a phrase coined by TH Huxley in "On the Reception of the Origin of Species" (1887)) is divided

into twelve chapters (Great expectations, Empires of steam, Singapore, Malacca and Borneo, Testing the waters, Crossing the line, In search of paradise, Struggle and spice, The Longest day, Darwin's delay, Crossing back and Counting up) and these recount in varying levels of detail Wallace's travels in SE Asia, the development of his thinking and his interactions with Darwin.

There are few if any better qualified to tell this story than John van Wyhe. He has published extensively in this area and is founder and director of 'The complete works of Charles Darwin online' (http://darwin-online.org.uk/). He has through this website distributed more of Darwin's work to the public than all the publishers in history combined. His credentials are equally impressive when it comes to Wallace, where he has not only written papers and published this riveting book but is also the director of Wallace online (http://wallace-online.org/). Van Wyhe's writings reveal that he quite rightly has much respect for Wallace as a thinker and describes how even though Wallace's primary reason for being in the Malay Archipelago was to make money, publications such as his Sarawak Law essay (Wallace, 1855) showed that he was no 'mere collector'. That said Van Wyhe also very clearly makes the point that Wallace's essays need to be read in historical context, so that whilst 'On the Law Which Has Regulated the Introduction of New Species' reads to the modern eye like a first outline of the theory of evolution, minus only natural selection, there were too many other missing pieces (such as genealogical descent) for this theoretical leap to have been made at the time.

With regard to the suggestion that Darwin may have taken credit for Wallace's ideas the author addresses this point in forensic detail. The thinking is that if Darwin had plagiarised Wallace's work then he would have needed time to do so. The timing of the correspondence between Darwin and Wallace and the length of time Darwin had Wallace's letter outlining his theory before discussing the ideas with anyone is therefore crucial. Regrettably the rudimentary communications of the time, where letters were transported by steam packet and could take weeks to reach their destination make this a difficult matter to resolve.

The most widely accepted version of events is that Wallace sent his Ternate essay on the March mail boat and that Darwin received this on 18th June 1858, whereupon he immediately wrote to Lyell forwarding the essay as requested. However another letter sent by Wallace that left on the same steamer has postmarks to show that it arrived in Leicester on the 3rd June 1858. It is possible therefore that Darwin could have been in possession of Wallace's Ternate essay for over a fortnight before contacting Lyell. Van Wyhe is adamant that this was not the case and gives a detailed account of his reasons for holding this position (see also Van Wyhe, J., & Rookmaaker, K. (2012)). Others however remain less convinced (e.g. Davies, 2008; Lloyd, Wimpenny & Venables, 2010).

Nonetheless and even though he was given equal billing on the paper read out to the Linnean Society on 1st July 1858 it remains the case in the modern era that Wallace is better known for his line rather than being the co-author of the theory of evolution. The question, then, is to whom do we attribute the theory of evolution? For myself, I credit both Darwin and Wallace when writing and lecturing about the theory of evolution and would encourage

others to do the same if they are not doing so already. Credit where credit is due as the saying goes, which is why whenever I am in Cambridge I also make a point of visiting Crick and Watson's local pub 'The Eagle' and raising a glass to Rosalind Franklin.

ABOUT THE AUTHOR

Colin Hendrie's research interests are in applying the ethological approach to both animals and Man. He has published over 60 peer reviewed papers and an edited volume. He teaches courses to do with ethology and evolution. He was voted his department's Lecturer of the Year 2012/13, is co-author of Academia.edu's 'Most Viewed Paper' 2012 and was elected as a Fellow of the Royal Society of Arts, 2014.

REFERENCES

- Davies, R. (2008). The Darwin conspiracy. London: Golden Square Books
- Huxley, T. H. (1887). On the Reception of the Origin of Species In F Darwin (Ed) The life and letters of Charles Darwin Volume II (179-205) London, John Murray
- Lloyd, D., Wimpenny, J., & Venables, A. (2010). Alfred Russel Wallace deserves better. *Journal of Biosciences*, 35(3), 339-349.
- van Wyhe, J., & Rookmaaker, K. (2012). A new theory to explain the receipt of Wallace's Ternate essay by Darwin in 1858. *Biological Journal of the Linnean Society*, 105(1), 249-252.
- Wallace, A.R. (1855). On the Law which has Regulated the Introduction of New Species, Volume 16 (2nd Series), Annals and Magazine of Natural History.