

## Alfred Russel Wallace – the man and his work: a review of some recent publications

2019 was the 150<sup>th</sup> Anniversary of the publication of Alfred Russel Wallace's *The Malay Archipelago*, his most well-known publication, and it is entirely appropriate that this publication, perhaps his most lasting memorial, as well as other aspects of his life and work, should receive careful study at this time. Recent publications have attempted to ensure that Wallace gets his fair share of attention in the debate about the origins of the theory of evolution through natural selection. These have included arguments that there has been a conspiracy to down-play the role of Wallace. Some authors have argued that the letter from Wallace, containing his evolution paper, arrived much earlier than Darwin stated, e.g. in a letter to Charles Lyell dated 18 June 1858 (Burkhardt & Smith 1991), and that he plagiarised Wallace's ideas. This 'conspiracy view' is outlined in several of Roy Davies' publications, some of which go into considerable detail (see, for example, his 2012 paper in the *Linnean Society Biological Journal* with the provocative title: 'How Charles Darwin received Wallace's Ternate Paper 15 days earlier than he claimed'). This conspiracy theory has, however, been answered by van Wyhe & Rookmaaker (2012) with a close analysis of the timing of steamships and postal procedures. Several authors have recently attempted to evaluate Wallace's contribution to the various fields in which he worked: natural history, physical geography, political and social theory, as well as his strange interventions into what some have labelled 'pseudoscience'. Another theme amongst recent publications has been to compare the environment and ecology of south-east Asia as recorded by Wallace with that of today.

The titles of some earlier biographies imply that Wallace played 'second fiddle' to Darwin and was perhaps eclipsed by him; typical is *Darwin's Moon* (Amabel Williams-Ellis 1966). By comparison, *In Darwin's Shadow* Michael Shermer (2002) adopts a psychological approach, but the title clearly suggests that Darwin outshone Wallace. David Lloyd (2012) attempts to stress the importance of Wallace's contribution, and includes a compact biography and summary of his work. Unsurprisingly, the author, who writes from Cardiff, highlights Wallace's Welsh origins. The final words emphasise the paper's message:

'The inescapable conclusion is that if Wallace had not attempted to evoke the approval of his hero, but instead had submitted his theory to a journal as sole author, it would not be Darwin but Alfred Russel Wallace who would now be celebrated for our understanding of divergence, speciation and natural selection.'

Although he spent nearly four years in South America (1848–1852), Wallace lost most of his specimens and notes in a fire aboard the vessel that was taking him back to England. Despite this, the publications that followed from his Amazonia explorations were significant.

The Dutch East Indies (as they then were, now Indonesia), which Wallace explored during 1854–1862, had the greatest influence on his subsequent scientific work. *The Malay Archipelago* (1869) is not only a splendid tale of travel, derring-do and adventure but an important scientific survey. Nevertheless, it is not without error, for Wallace was sometimes cavalier on details such as dates and place-names. *The Annotated Malay Archipelago* (2015), edited by John van Wyhe, aims to point out these occasional errors, give the modern scientific names of the organisms mentioned, add details on the identity of some of the persons he met, and sometimes to compare the world of Wallace with that of today. No Wallace scholar should be without this volume, which include Wallace's original woodcuts supplemented by other period colour and monochrome illustrations.

Van Wyhe's (2013) volume, *Dispelling the Darkness: Voyage in the Malay Archipelago and the Discovery of Evolution by Wallace and Darwin*, excellently complements the above book. It briefly summarises Wallace's earlier years, and then provides a detailed itinerary of his Asian voyage, describing the voyage out to Singapore, and through the archipelago. Particularly important is his thorough account of the genesis of the Ternate essay (that set out Wallace's evolutionary hypothesis) and its journey to Darwin's home in Kent, demonstrating beyond reasonable doubt that the arrival date at Downe of 18 June 1858 is accurate and that the suggestion by some that it arrived two weeks earlier is incorrect.

The third of this trinity of works on Wallace's Asian experience is *Alfred Russel Wallace: Letters from the Malay Archipelago*, also first published in 2013, which includes some 88 letters written from (and to) Wallace during this sojourn. This book, edited jointly by John van Wyhe and Kees Rookmaaker, by including letters written by Wallace, unequivocally shows that he was extremely pleased with the handling of his Ternate paper by Lyell and Hooker as a joint presentation to the Linnean Society alongside Darwin's statement. Many other sources confirm that there was no lingering resentment.

*Natural Selection & Beyond* by Charles Smith and George Beccaloni, was published in 2008 and aims to cover the entire breadth of Wallace's work. It combines the output of 25 authors. A preface describes his field collecting methods in great detail. The first chapter describes the many houses Wallace lived in, which some have taken as indicating a rather restless life. The remainder of the book is divided into two: 'Part I: In the World of Nature' covers the vast range of Wallace's biological work: his early years as a beetle collector (a trait he had in common with Darwin), on animal coloration, on biogeography and his role as an early conservationist. 'Part II: In the World of Man and Worlds Beyond' discusses the remainder of this great polymath's contribution. Here we meet Wallace the socialist and consider his strange flirtations with the occult, his campaign against vaccination, his interest in astronomy and speculations concerning the possibility of life outside Earth (he was highly doubtful). Wallace was above all

an integrator, and this book argues that the whole of his work shows a belief in *progress* and *improvement*: in life, in society and in the human spirit.

Eleven years later (2019) Charles Smith edited (and contributed extensively to) a comparable work: *An Alfred Russel Wallace Companion*. This has a different set of authors (although there is some overlap), and is perhaps more conceptual: it aims to set the scene in terms of the main thrusts of the Victorian naturalist's work. Chapter headings include 'The early evolution as Wallace as a thinker', 'Wallace, Darwin and natural selection' and 'Wallace as social critic, sociologist and societal "prophet"'. Other sections discuss Wallace's approach to physical geography, biogeography and conservation biology. A final chapter gives an account of 'Wallace and extraterrestrial life'. The book provides an up-to-date overview of the products of Wallace's intellect, and shows something of the relationships that existed between the different themes displayed in his work.

It is sometimes argued that Charles Darwin moved from 'natural theology' to 'natural selection'. Natural theology, as expounded by William Paley (whose works Darwin read while a student at Cambridge), sought to demonstrate the existence of God, and gain some insight into the mind of the Creator through an understanding of the complexity, beauty and diversity of the natural world. Although Darwin found Paley's work of great interest, and his examples useful, he obviously later argued that natural processes were responsible for the nature and diversity of organisms. Recently, Michael Flannery's (2018) *Nature's Prophet: Alfred Russel Wallace and his Evolution from Natural Selection to Natural Theology* attempts to show how Wallace moved, in the course of his life and work, in the opposite direction. Flannery states:

'The argument is essentially this: Wallace's understanding of the natural and metaphysical worlds essentially became one – an integrated whole of scientific, social, political and scientific thought – through the latter part of his life, forming a revised natural theology over the moribund special creation of William Paley.'

There were, from the outset, differences in how Darwin and Wallace understood evolution, and these became more pronounced as the years went by. Chapter three of Flannery's book documents the 'parting of the ways'. Wallace maintained that although natural selection could explain many aspects of the form of organisms (including humans), he believed that 'man's moral sense', and certain other aspects of the living world could not. He maintained that there existed a 'creative power' and that there was a *directionality* in evolution; whereas natural selection emphasised random processes. At this, as he put it himself, Darwin 'groaned'. Flannery thus interprets Wallace's development as having moved from a point quite close to Darwin's natural selection towards natural theology. Wallace, furthermore, perceived the role of design in the whole cosmos. Humanity could be seen

as the 'goal' or end-point of evolution both organic and cosmic (chapter 7): hence Wallace's belief in the extreme unlikelihood of intelligent life existing elsewhere in the universe. Flannery's approach will not please all.

Several authors have attempted to 'follow in the footsteps of' both Wallace and Darwin: these modern travellers and scientists have compared the places visited by HMS *Beagle*, 1831–1836, with the same localities today, or to contrast the East Indies of Wallace's sojourn there with the islands of Indonesia as they now are. A well-received example of the latter is Tim Severin's (1998) *The Spice Islands Voyage: In Search of Wallace*: this provides a 'good read' and some local colour.

Recent publications have removed Wallace from the 'shadow' of Darwin, and allowed his intellect to illuminate the world in its own distinctive manner.

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