

# The Modesty of Alfred Russel Wallace

THE PROTAGONIST:



Alfred Russel Wallace  
(1878)

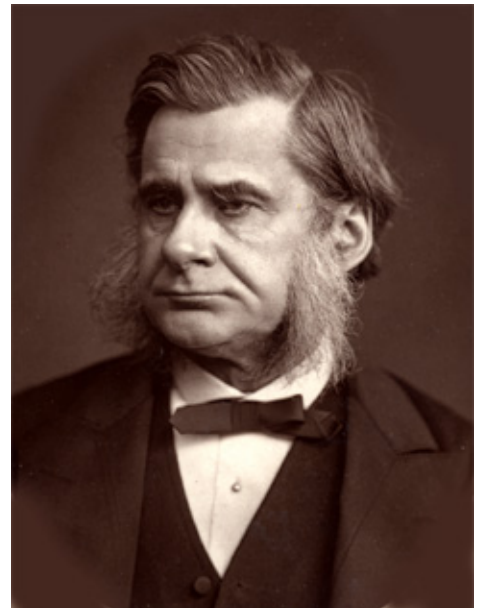
Alfred Russel Wallace was born on January 8, 1823 in the Welsh village of Usk in Monmouthshire, a remote pastoral district of low rents and country food. About the time that Darwin was secretively preparing the journal of his famous Beagle voyage for publication at his Down House estate in Kent, Wallace reached the age of fourteen and left home to glimpse the marvelous streets of London. He attended workingmen's lectures, read Thomas Paine's *Age of Reason*, and gazed into the windows of the best shops before he went back into the country to support himself as a surveyor.

Wallace spent the next seven years near the North Downs as a solitary student of the fossils he saw lodged in the ancient strata of wild streams and valleys he wandered through between intervals of surveying. Later, for a little over a year, he was a school teacher in Leicester. In the town library he

became a reader of Charles Lyell (*Principles of Geology*), Alexander von Humboldt (*Personal Travels in South America*), and Thomas Malthus (*An Essay on the Principles of Population*). There he also met and befriended Henry Walter Bates, the young entomologist who would later accompany him on his journey to South America.

When a death in the family called Wallace away to Neath, he read there Darwin's *Journal of Researches*; he also read Chamber's *Vestiges of the Natural History of Creation*. From Neath, Wallace wrote a letter to Bates. In it he expressed his desire to study some one family of life thoroughly – “with a view to the theory of the origin of species” – twelve years before the publication of Darwin's first famous volume.

#### THE ANTAGONIST:



Thomas Huxley (1880)

Thomas Henry Huxley (1825-1895), despite his youth, was one of the three scientists whose blessing Darwin sought before publishing his *Origins of Species*. (The other two were Sir Joseph Hooker and Sir Charles Lyell.) It was through him that science declared its independence from theology; but Huxley, with typical candor, never to the end of his life concealed

the fact that Darwin's theory was for him nothing more than a good working hypothesis.

Huxley himself was deeply interested in theology. He insisted that atheism was untenable on purely philosophical grounds and coined the term "agnostic" to indicate his own intellectual position. He occupied his later years with contributions to periodical literature on subjects touching philosophy and theology. A passage from "An Apologetic Eirenicon," an essay he wrote three years before his death, illustrates his personal creed, a kind of scientific Calvinism:

*The doctrine of predestination, of original sin, of the innate depravity of man and the evil fate of the greater part of the race, of the primacy of Satan in this world, of the essential vileness of matter, of a malevolent Demiurgus subordinate to a benevolent Almighty...faulty as they are, appear to me to be vastly nearer the truth than the 'liberal' popular illusions that babies are all born good; that it is given to everybody to reach the ethical ideal if he will only try; that all partial evil is universal good; and other optimistic figments...*

From his father, Huxley derived a quick temper and an artistic temperament; from his mother, her characteristic rapidity of thought. Huxley called his mother "a typical example of the Iberian variety" and admitted that he was "mentally and physically . . . a piece of her." T. H. Huxley himself generated a distinguished family line: He begot the biographer and man of letters Leonard Huxley, who begot two famous sons, the critic Aldous Huxley and the biologist Julian Huxley.

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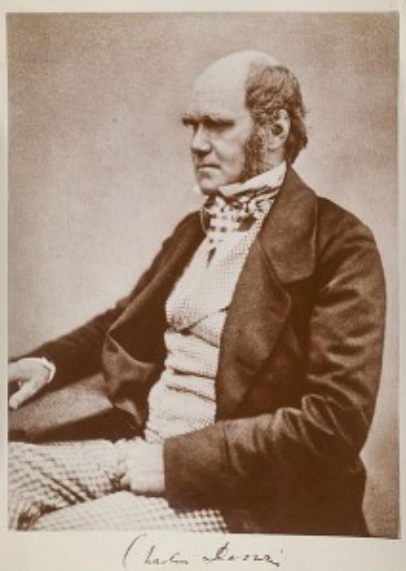
#### THE MODESTY OF A. R. WALLACE

To remember a man is to recall his name and give an account of his deeds. To celebrate him is to speak of those deeds as

victories of the spirit. At this celebration in honor of the naturalist Alfred Russel Wallace,(1) it would seem appropriate, therefore, to recount his theories and concepts on the spiritual nature of man. The list is long and varied . . . but Alfred Russel Wallace is a man we barely know. His counterpart Charles Darwin, however, is a man whose name and, to some extent, whose doctrine we are all acquainted with.

That is because history belongs to the victors. In our age, book burning is an ineffectual ritual; and the destruction of libraries in order to eclipse a people's knowledge of its origins and history is impractical – yet this truism of history remains valid.(2) Before Wallace's writings are completely extinguished – put out of print or removed from library shelves to make room for more current volumes – I want to make a note on the event that led to his almost complete anonymity. Today the event itself has been generally forgotten.

Wallace, by nature modest and retiring, led a life that was quietly spectacular. He was a collector of natural specimens who lived by his collections – for four years in the Amazon, and for eight years in Sumatra, Java, Borneo, the Celebes, the Moluccas, Timor, New Guinea, and the Aru and Ke Islands. He was a lecturer in Boston, New York, New Haven, and Baltimore. He was a botanizer in the Sierra Nevada, a visitor to the Yosemite Valley and the Redwood Forests, an essayist of clear and incisive style, an experimenter in spiritualism, and a discoverer of the law of natural selection. Above all, Wallace was a gentleman; and in 1858 he began to commit an extended act of courtesy that remains our misfortune to this day. A brief account should serve to explain.



Charles Darwin  
(1854)

In 1855 Wallace's first paper on species ("The Law which has regulated the Introduction of Species") is brought to Darwin's attention by the geologist Sir Charles Lyell. Lyell points out that the ideas bear an alarming resemblance to Darwin's own. Darwin replies to Lyell with vexation over the notion of writing for priority and over the possibility that someone else may publish his doctrines before him.

Two years later, Wallace initiates a direct correspondence with the well-known naturalist. His first letter to Darwin arrives at Down House in May. The young man (then in the Celebes) puts questions to his senior on varieties and the breeding of domestic animals. A second letter, which arrives in December, puts questions on distribution. Then a critical and unexpected event occurs. In February 1858, the theory of natural selection is born to Alfred Russel Wallace in the Moluccas. Muffled in blankets in the cold fit of a severe attack of malarial fever, Wallace begins to think of Malthus's *Essay on Population*; and the idea of the survival of the fittest flashes upon him. He thinks out the theory during the rest of the shivering fit, drafts it the same evening, writes it out in full during the two succeeding evenings, and sends it to Darwin by the next post.

Wallace's third parcel shocks Darwin and fills him with awe. The older naturalist recognizes that the conception of organic change which he has held for nearly twenty years, and pocketed for time to develop a larger body of evidence, has been given a viable and independent form by a stranger in the middle of a tropical rain forest. A marsupial, long evolved in isolation from her eutherian counterpart and bearing her own embryonic young in her pouch, might feel a similar awe at the witness of a live birth. Darwin (whose powers of conception resemble the characteristics of that branch of mammal – the lesser powers of integration, the embryonic offspring pouched until fully developed, the heart more like a bird's than a man's) cannot help noticing that the ideas, which are familiar to him, are conveyed with unfamiliar force and clarity.

On that same crucial day, Darwin writes to Lyell: "I never saw a more striking coincidence. . . . if Wallace had my Ms. sketch written out in 1842, he could not have made a better short abstract! Even his terms now stand as heads of my chapters . . . so all my originality . . . will be smashed . . . ." With his letter to Lyell, Darwin encloses Wallace's essay. Darwin begins another letter, one to Wallace, in which he will renounce all claims to the theory; but he cannot bring himself to finish it.

A week passes, or perhaps a month, and Darwin begins to have second thoughts about establishing priority over Wallace. On June 25th, in another letter to Lyell, Darwin expresses his concern over publishing honorably. To this letter he adds a portentous note: "About a year ago I sent a short sketch, of which I have a copy, of my views to Asa Gray, so that I could most truly say and prove that I take nothing from Wallace." Shortly after Darwin posts the letter, scarlet fever appears in his household and consumes his infant daughter. Under the pressure of this morose circumstance, Darwin sends his short sketch and an abstract of his views on natural selection to his friend, the biologist Joseph Hooker, in London and writes:

“I cannot think now. . . . I am quite indifferent, and place myself absolutely in your and Lyell’s hands.”

Hooker and Lyell move rapidly. On July 1, 1858, Darwin’s two closest friends oversee the reading of Wallace’s uncorrected essay “On the Tendency of Varieties to depart indefinitely from the Original Type,” together with some of Darwin’s notes and sketches *as a joint paper* at the meeting of the Linnean Society of London. The natural sequence of events that leads to this conjunction, and the modifications of the future that result, ultimately develop only one variant of the theory of natural selection – Darwin’s – into the dominant species of thought.(3)

Neither Wallace nor Darwin attend the Linnean Society meeting. At the time, Wallace is traveling the Malaysian islands in pursuit of the rare bird of paradise and rarer butterflies. He does not learn that he has forced Darwin’s hand until three months later. By that time, Darwin has aborted the “Big Book” he was expecting and conceives of a series of papers made of the same materials; he begins a period of gestation at the King’s Head Hotel on the Isle of Wight and by 1859 recognizes that his “Abstract of an Abstract” too will be born a book. Wallace, still in the remote jungles, continues to increase his observations and collections, unaware that the moment of strange and wonderful insight he once felt is about to lead Western thought onto a new path.



Alfred Russel Wallace  
(circa 1860)

Darwin's book, *On the Origin of Species*, comes into print in 1859. Wallace receives his copy from the publisher early in 1860 while he is still in the islands. He reads the entire volume before he embarks at the end of February on his last and most hazardous exploration of the eastern Spice Islands. Later Wallace states in a private letter to his brother-in-law that he backs Darwin "in his conclusions" and looks upon him as "the *Newton of Natural History*." After Darwin's famous volume is published, its author still cannot point to a single case he has observed in the wild; unlike Wallace, Darwin has to draw analogies between what he has observed man do with *artificial* selection in English barnyards and what nature does with *natural* selection. As a result, his book ends up reading like a long legal argument prosecuting the Creation Theory. It is received by the public with outrage.

When the first wave of frivolous abuse dies down, criticism of a more serious nature arises. Questions come to face Darwin – who reads so slowly, writes so slowly, even thinks so slowly, that he always feels himself desperately behind, like the Galapagos tortoise who concentrates his energy on every next

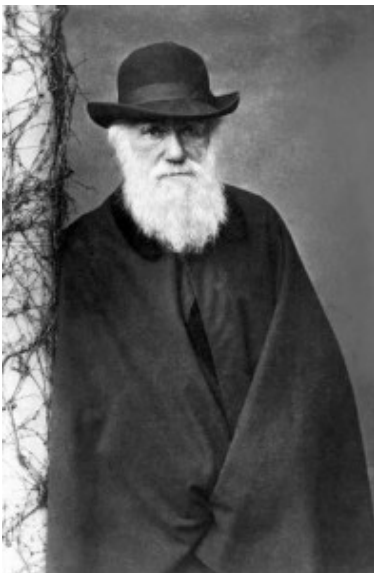
step as he creeps in haste towards the perpetual horizon. These questions Darwin's knowledge is inadequate to answer.

It is now that one of the cool young new thinkers present at the famous Linnean Society meeting, T. H. Huxley, takes up position as Darwin's general agent and bulldog. In a short time Huxley becomes the most formidable scientific debater of the century. He takes on the hostile armies of bishops and archdeacons while Darwin remains at home and conducts his program of biological experiments in the quiet of his garden at Down, content to answer his critics in successive editions (or mutations) of the *Origins*. Wallace, reassuring and generous, and sometimes a little trying, continues to anticipate Darwin's ideas and sends them to him from the jungle in the form of letters and collections of notes.

In 1862 Wallace turns homeward with birds of paradise as his companions. Two years later he publishes a paper on man in *Anthropological Review* ("The Development of Human Races under the Law of Natural Selection"). Darwin, who believes that he and Wallace should agree on everything scientific, invites Wallace to write the indispensable book on man and offers Wallace all his bibliography and notes. Wallace, busy with a book on his travels in the Malay peninsula, courteously declines. The current of opinion in the meantime moves strongly in favor of evolution. Darwin, fifty years old when the *Origins* appeared, is revered before he reaches sixty as the "Newton of Natural History" (a reiteration of Wallace's appreciative phrase), and "Darwinism" (another term generously advanced by Wallace) becomes almost a synonym for biology.

Wallace publishes a second article on man ("Limits of Natural Selection Applied to Man," 1870). In it he posits the natural origin and evolution of man's animal at the same time that he posits a supernatural origin to be the only possible origin for man's otherwise unaccountable faculties. Huxley – who senses deeply that the universe is really only a single hostile action – now steps out from the ring of educational

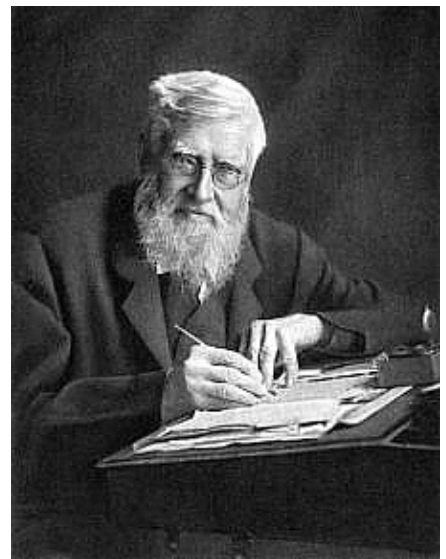
controversy and attacks Wallace ferociously in public. Joseph Hooker (one of the two scientists who originally communicated the papers of Darwin and Wallace to the Linnean Society meeting) writes to Darwin about Huxley's denunciation of Wallace with curious emotional enthusiasm: "The tumbling over of Wallace," he says, ". . . is a . . . service to science." Now, without too much reluctance, Darwin himself undertakes the project he once offered to Wallace; and in 1871, at the age of 62, he publishes the *Descent of Man*, the book in which he maintains that the difference between man and the lower animals is merely one of degree and not of kind.



Charles Darwin  
(circa 1880) near  
the end of his life

For the next several years, public disregard forces Wallace to earn a meager livelihood by grading examination papers. Darwin and Huxley, perhaps out of shame or embarrassment, arrange in 1879 to alleviate Wallace's impoverished condition (an arrangement in which Joseph Hooker refuses to take part). The modest government pension Wallace receives through the efforts of these two men, whose ignorance and bravado had done so much to injure him, allows Wallace to continue writing articles and books until he is nearly ninety-one. Darwin's last decade, by

contrast, is valedictory, even posthumous. Upon Darwin's passing, Wallace serves, with Hooker and Huxley, as one of the ten pallbearers who carry Darwin's body to lie in the grave beside Newton's in Westminster Abbey. On the golden anniversary of the Linnean Society meeting at which the Wallace-Darwin papers were first presented, the living members of the Society gather to celebrate the event and award the first Darwin-Wallace medal to Wallace. In 1908 Wallace claims for himself no more than he had claimed in 1858.



Alfred Russel Wallace  
(1913) near the end  
of his life

Thus the tale ends. It comes to pass that Wallace's portrait never appears beside Darwin's in our children's textbooks or in the innumerable books and journals that extol Darwin's scientific achievements. The respectful deference Wallace paid to Darwin throughout his life not only permitted but, it seems, even promoted Darwin's popular image as the originator of the theory of natural selection and all its related species of thought. Yet, what may not have been? A truly compelling science, one more comprehensive and accurate than our own, is still visible in the record of reasoning and observation which Wallace has left to us.

One final comment. I would have preferred to present you with something more than the documentation of a single historic moment – a review of Wallace’s argument for man’s place as a spiritual being in the world of life, for example, or an application of his first biological theorem to illustrate how on earth a spiritual variety of the human could grow into a new species of spiritual beings – but circumstances, and my ignorance, require that I first make *this* note, perhaps poorer (and longer) than you would have wished. Let us hope that the future will permit us other, more delightful and more useful, literary varieties.

Robert G. Petrovich

1996, 2010

#### ENDNOTES

(1) This note is based on a talk given at the Human Spiritual Rights Conference sponsored by the Advocates of Religious Rights and Freedoms, Reno, Nevada, Fall 1996.

(2) The following titles by Wallace are still in print: *Contributions to the Theory of Natural Selection*, *The Action of Natural Selection on Man*, *Tropical Nature*, *The Malay Peninsula*, *Narrative of Travels on the Amazon & Rio Negro*, *Darwinism*, *Miracles & Modern Spiritualism*, *My Life* (2 volumes), and *Island Life*. Only one is a soft-cover trade book; the remainder are relatively inaccessible library editions.

Among the number of Wallace’s writings out of print are two that we should have considered essential to consult for this essay: *Man’s Place in the Universe; a study of the results of scientific research in relation to the unity or plurality of worlds* and *World of Life; a manifestation of creative power, directive mind and ultimate purpose*. Both of these volumes have been out of print for more than eighty years. Why this is so may be explained by a statement Wallace made in a letter to

a fellow scientist in 1913. These two works, he said, "form together a very elaborate, and I think conclusive, scientific argument in favour of the view that the whole material universe exists and is designed for the production of Immortal Spirits." The demise of these books, it would seem, is simply a matter of political science.

(3) To make clear the nature of the connivance carried out by Darwin's two friends requires the insertion here of a few specific details. First, the body of this joint contribution comprised four elements arranged in chronological order: an introductory letter signed by Lyell and Hooker; an abstract from an unpublished manuscript on species by Darwin "sketched in 1839, and copied in 1844"; an abstract of a private letter to "Professor Asa Gray, of Boston, U.S." dated September 5, 1857; and last, Wallace's essay "written at Ternate in February, 1858." Lyell and Hooker listed the parts of the joint contribution according to the date of composition in order to justify the order of their presentation. Most scientists would agree that the etiquette of publication would allow Lyell and Hooker, at best, to append their letter and Darwin's excerpts to Wallace's manuscript, which is complete and prepared for publication. To add fragments from Darwin's papers never intended for publication was exceptional. To assign these fragments priority in the presentation was unjustifiable.

Second, Wallace's manuscript was entitled "On the Tendency of Varieties to Depart Indefinitely from the Original Type." The title on the page of the Linnean Society *Journal of Proceedings* reads:

"On the Tendency of Species to Form Varieties; and on the Perpetuation of Varieties and Species by Natural Selection. By Charles Darwin, Esq. F.R.S., F.L.S., & F.G.S., and Alfred Wallace, Esq. Communicated by Sir Charles Lyell, F.R.S., F.L.S., and J. D. Hooker, M.D., V.P.R.S., F.L.S. & c."

The title of the Journal article magnifies Darwin and the communicators, Lyell and Hooker, with academic titles that diminish the standing of Wallace; the Journal title also presents a message that is quite different from Wallace's contribution. In his essay, Wallace presents a concept of how a variety could become a *new species*; the printed Journal title speaks to the formation of varieties from species, and to the perpetuation of both by natural selection. This is a drastic shift in emphasis.

The third detail concerns the introductory letter written by Lyell and Hooker. The text of the letter states:

"Two indefatigable naturalists, Mr. Charles Darwin and Mr. Alfred Wallace, . . . having independently and unknown to one another, conceived the same very ingenious theory to account for the appearances and perpetuation of varieties and of specific forms on our planet, may both fairly claim the merit of being original thinkers in this important line of inquiry. . . . neither of them having published his views. . . ."

Lyell was acquainted with Wallace's 1855 essay; for him to write that neither of them had published his views was a departure from the truth that was likely deliberate, and intended to justify publishing Darwin's private papers. From these three examples, it should be clear that these two powerful members of the scientific community – Lyell and Hooker – attempted to ensure Wallace's anonymity from the outset of his public career.

#### FURTHER READING

John Langdon Brooks: *Just Before the Origin: Alfred Russel Wallace's Theory of Evolution*. (Columbia University Press, New York, 1984) in which the twentieth-century biologist John Langdon Brooks provides a re-assessment of A. R. Wallace's contribution to the theory of organic evolution and attempts to reconstruct, step by step, Wallace's elaboration of his

ideas about the laws of organic change – what we now call evolution. The final three chapters re-examine the influence of Wallace's ideas on Darwin's own conceptions and expose the anomalies surrounding the events of Wallace's initial discovery, the presentation of Wallace's essay at the Linnean Society meeting, and Darwin's completion of the theory he published as his *Origins*.