ance of Wallace's 1855 paper not only caused Darwin to start his species book but also provided him with his tree simile. This latter contention is clearly false because Darwin included two drawings of an irregularly branching "tree of life" in his 1837 notebooks. More importantly, Brooks claims that Darwin received Wallace's paper on 18 May, 1858, not 18 June. As Brooks construes the evidence, Darwin immediately sat down to write Lyell a letter, but did not mail it. Instead, he went back to re-read Wallace's 1855 paper and then proceeded to re-write his discussion of the Principle of Divergence. Only after he had reported the completion of this section did he send his letter to Lyell along with Wallace's manuscript. Darwin himself dated the letter only "18th". According to Brooks, the pencilled notation "June 1858" was added later and indicates when Lyell received the letter, not when Darwin sent it.

I suppose the proper thing for Darwin to have done when he received Wallace's manuscript was to forward it to Lyell as requested and then to write Wallace in Malay for permission to publish it. Six months to a year later, the time it would have taken Darwin to receive an answer from Wallace, he could then have seen the paper into print. If he had, I suggest that the history of evolutionary theory and the apportioning of credit would not have changed in the least. Darwin's critics could then complain at Darwin's inexcusable delay in publishing Wallace's paper. Scientists are very interested in priority and rarely miss a chance to engage in vicious priority disputes. For once two scientists declined the opportunity, but commentators such as Brooks will have none of it. They turn over every bit of nastiness that they can discover or invent. I have no idea what took place in Down between 18 May and 18 June in 1858, but if the choice is between Brooks's circumstantial evidence and the testimony of a long life lived in the public spotlight, I am inclined to go along with Wallace and opt for Darwin.

In Clements's book Wallace is the sun, and Darwin is only a dim though benign spectre circling in the distance. As Clements portrays Wallace, he was an honourable and decent, though somewhat unworldly, man. Darwin consciously built a reputation as a serious scientist before declaring himself on such a controversial subject as evolution. Wallace was thrust into the public eye immediately upon his return from his second trip. A more judicious man might have followed Darwin and written a series of technical monographs elaborating his views on the transmutation of species. He did publish works of this sort, but he also came out in favour of supernaturalism, phrenology, mesmerism, the nationalization of land, and eventually socialism, while opposing vaccination, vivisection and any form of militarism. Wallace's fellow evolutionists were not pleased. Upon receipt of a paper by Wallace arguing for the scientific validity of certain reports of supernatural phenomena, Huxley replied that he had "never cared for gossip, and disembodied gossip, such as these worthy ghosts supply their friends with, is no more interesting to me than any other" (p.114).

When it came to human beings, Wallace was not a Social Darwinist. He thought that most of the illnesses of the time were due to the conditions under which people had to live, and he urged radical social change to alleviate them. He was less enthusiastic about intervening in non-social phenomena. He was highly critical of the claims that the medical establishment was making at the time for vaccination. He thought that once people lived in healthy surroundings with ample food and clean air, vaccination would be unnecessary. A healthy person need not fear being attacked by disease. At the very least, Wallace argued that the figures available indicated that vaccination was causing more illness than it was preventing. For both moral and economic reasons, Wallace also favoured vegetarianism, but he himself was unable to practise it, especially after a diet of hot water and lean meat advocated by a Dr Salisbury cured him of his chronic fevers.

My main reservation about Clements's book is his repeated contrast between Darwin, who "kept within the narrow limits of his natural selection orbit" (p.xix) and the more pluralistic Wallace, who eventually came to believe that no naturalistic explanation could be given of the origin of either life or mind. To the contrary, Wallace was the one who argued for the all-sufficiency of natural selection, while Darwin acknowledged subsidiary roles for a variety of additional forces. When Wallace became convinced that natural selection was inadequate to account for the superabundant powers of the human brain, he had no auxiliary naturalistic hypotheses to fall back on and was forced to posit a supernatural agency.

For anyone who wants to follow the genesis of Wallace's theory of evolution, the early chapters of Brooks's book are helpful. For anyone wishing to understand Wallace as a total person, Clements's biography is a good place to begin. □

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Eye of the beholder

Jonathan Silvertown's textbook, Introduction to Plant Population Ecology, *was published by Longman in November 1982. To date some ten reviews have appeared, with more still to come. No one who has written a book and then followed the subsequent reviews will be surprised that reviewers found different things in the book:*

On the one hand . . .	. . . but then, on the other
"Ecological curiosities — parasitic angiosperms, carnivorous plants, the vine habit — have been neglected." (*Ecology*)	"The vine of evergreen tropical forest whose oskars store food reserves in large tubers and whose central stem suddenly 'sprints' upwards to the tree canopy . . . provides a splendid focus for a discussion of dormancy." (*J. biol. Educ.*)
"Another annoying problem with the book is that the 'summary' section at the end of each chapter seems superfluous . . ." (*Ecology*)	"A particularly useful feature is the use of summaries at the end of each chapter. . ." (*J. biol. Educ.*).
"In places the text is extremely condensed and may cause some difficulty, especially for the less numerate student." (*Ann. Bot.*)	"The book will be readily understood by those with little background in mathematics." (*Times Higher Education Supplement*)
"There are, however, some significant omissions. For example, the reader might be excused for concluding that pathogens have no effect on births and deaths of plants and that herbivores have little effect." (*Times Higher Education Supplement*)	"Though it is not apparent from the list of contents the role of pathogens and animal predators is dealt with in relevant sections." (*Ann. Bot.*)
"Subjects such as natural selection (p.5) and seed and pollen movement (p.22) are regarded as beyond the scope of the book . . ." (*J. appl. Ecol.*)	"Silvertown makes many pertinent comments on the work he is quoting, and always has an eye for the evolutionary implications of the subject under discussion." (*Biologist*)