the history of the bogs themselves. The recognition of distinct layers of the remains of the giant sword sedge (*Cladium mariscus*) and their relationship to the prehistoric trackways in the peats of the Somerset Levels enabled Godwin (working initially with A. R. Clapham) to piece together their basic history. The substantial part of the book given over to this work is not only a compelling detective story: it also includes a rather charming love story for good measure! The treatment of the Somerset Levels is particularly valuable. It brings together in an easily digestible form material from a number of scattered papers. Like the work as a whole, this account can be read with equal pleasure and profit by the research student and the general reader with interests in natural history and archaeology.

The latter part of the book deals with the discovery of the effects of prehistoric farmers on the vegetation of Britain, and the impact of the new technology of radiocarbon dating on the subject. There is shorter coverage of climatic influences and sea-level changes, the origin of blanket bogs and their subsequent erosion.

Godwin's account ends intentionally at about 1960, though with most of his topics he does allude to subsequent work. How happy it is that he has been inspired to write it as a personal story. In doing so he has in no way compromised his science. The book is a pleasure to read: a book to be re-read and re-enjoyed, not only used as a work of reference. □

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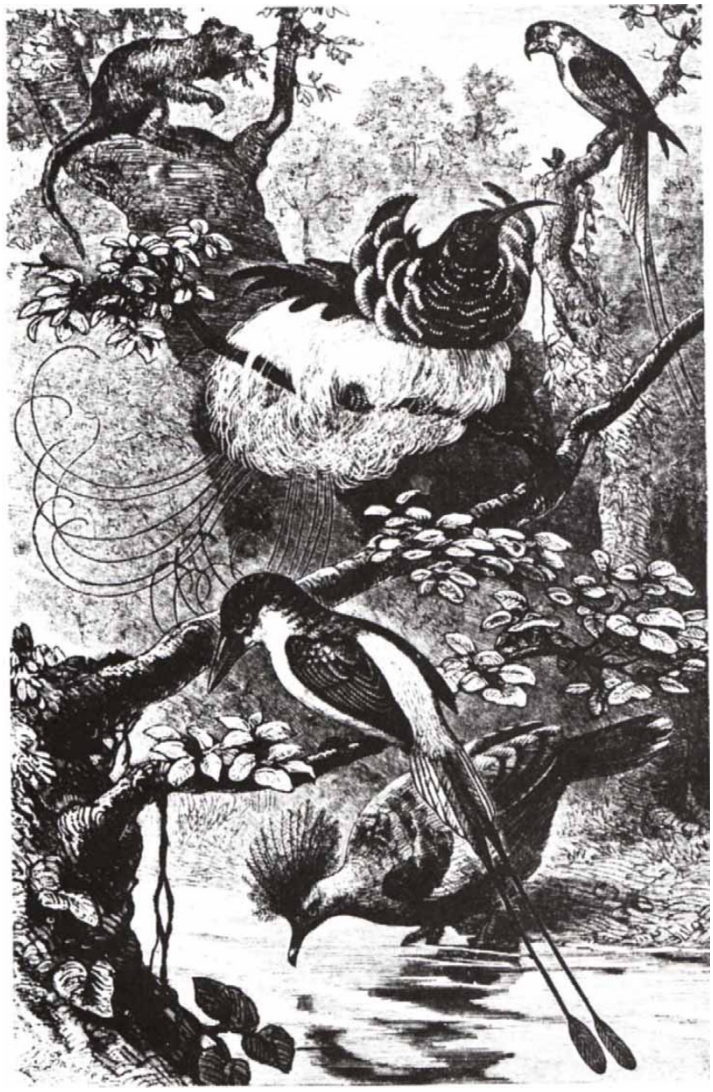

Scene in New Guinea with characteristic animals (from the *Geographical Distribution of Animals*, 1876), showing Wallace's selection of Papuasian animals to contrast with the Sundaic animals. Left to right and top to bottom: a tree kangaroo *Dendrolagus inustis*, the fairy lory *Charmosyna papou*, the twelve-wired bird of paradise *Seleucides melanoleuca*, the common paradise kingfisher *Tanysiptera galatea*, and a crowned pigeon *Goura cristata* (*coronata*). In the companion plate to illustrate the Sundaic fauna, Wallace chose the western tarsier, flying lemur, pentail treeshrew, Malay tapir and lesser mousedeer.

Drawing the line

Peter D. Moore

Wallace's Line and Plate Tectonics. Edited by T.C. Whitmore. Pp.91. ISBN 0-19-854545-2. (Oxford University Press: 1982.) £15, $39.

IT WAS in a letter to H.E. Bates, written in 1858 from the Malay Archipelago, that Alfred Russel Wallace first drew attention to the two distinct and rigidly circumscribed faunas which are found in that region. They are as different, claimed Wallace, as the faunas of Europe and North America, yet there is no obvious geographical reason for their separation. Often the line of demarcation passes between islands lying close together.

The cause of this biogeographic discontinuity has provided much fuel for debate and the area featured strongly in the proposals of Wegener in support of his theory of continental drift. With the modern developments in plate tectonics much of the mystery has been removed from the subject, but the area remains one of the clearest demonstrations of the biogeographical consequences of moving continents. This book is a collection of essays by various authors setting forth the current state of knowledge concerning relationships between various plant and animal distribution patterns and the tectonic development of the area.

An historical background to the subject is used as an introduction and emphasis is placed on Wallace's own indecision regarding which side of the islands of Celebes his line should lie. As a result of a succession of faunal and floral analyses during the past 120 years, the line has often migrated in the minds of men. Two essays trace the continental movements leading up to the establishment of the discontinuity, and are accompanied by some detailed cartographic reconstructions. On the basis of geological data, Audley-Charles considers that the line of convergence of the Australia–New Guinea plate with Asia actually runs through the island of Celebes, thus explaining its biogeographical complexity.

The collision was a relatively recent one, occurring about $15–5 \times 10^6$ years ago, but there has still been considerable time for floral and faunal migration, mixing and even evolution, and the remainder of the book consists of a series of analyses of the biogeography of specific groups of organisms (vertebrates, palms, and other plants) in the light of recent palaeoclimatic and palaeoenvironmental reconstructions.

The papers presented in this book are concise, clear, well-illustrated reviews of a variety of specialist subjects, all of which impinge upon the modern view of Wallace's line. □

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