

never formed part of a continent or any large mass of land, and bases his arguments concerning the origin of their plants and animals thereon. Their volcanic or coralline formation, with the exception of the Seychelles,¹ New Caledonia, and New Zealand, and the total absence of indigenous mammalia and amphibia, are accepted as proof of their having always been isolated.

The following extract contains his definitions of continental islands:—

“Recent continental islands are always situated on submerged banks, connecting them with a continent, and the depth of the intervening sea rarely exceeds 100 fathoms. They resemble the continent in their geological structure, while their animal and vegetable productions are either almost identical with those of the continent, or if otherwise, the difference consists in the presence of closely allied species of the same types, with occasionally a very few peculiar genera. They possess in fact all the characteristics of a portion of the continent, separated from it at a recent geological period.

“Ancient continental islands differ greatly from the preceding in many respects. They are not united to the adjacent continent by a shallow bank, but are usually separated from it by a depth of sea of a thousand fathoms or upwards. In geological structure they agree generally with the more recent islands; like them they possess mammalia and amphibia, usually in considerable abundance, as well as other classes of animals; but these are highly peculiar, almost all being distinct species, and many forming distinct and peculiar genera or families. They are also well characterised by the fragmentary nature of their fauna, many of the most characteristic continental orders or families being quite unrepresented, while some of their animals are allied, not to such forms as inhabit the adjacent continent, but to others found only in remote parts of the world. This very remarkable set of characters marks off the islands which exhibit them as a distinct class, which often present the greatest anomalies and most difficult problems to the student of distribution.”

The zoological characteristics of these three classes of islands are often associated with parallel botanical peculiarities; but, owing to the more numerous and potent agencies operating in the distribution of plants, their peculiarities are usually very much less pronounced.

In illustration of his classification, Wallace examines and discusses the composition of the faunas, and less fully of the floras, of the Oceanic Azores, Bermudas, Galapagos, St Helena, and Sandwich Islands; of the Recent Continental Islands, Great Britain, Borneo, Java, Japan, and Formosa; and of the Ancient Continental, the Madagascar group; while the Celebes and New Zealand are treated as Anomalous Islands, because their plants and animals exhibit a blending of those characteristic of “oceanic” and “continental” islands.

The more complete botanical researches for the present work have brought to light some additional facts confirming generally the views enunciated by Darwin, Hooker, and Wallace, and more fully set forth by Wallace in the book under consideration. There is, however, one important exception. All Wallace’s speculations on former land connections

¹ Eruptive rocks have been discovered in these islands. See Velain, *Mission de l’Ile de St Paul*, pp. 440–450.