living mostly in lowland rain forests, is tropically adapted; the latter, by contrast, inhabits dry, open savannas and woodlands. Tropical rain forest is poorly developed in Australia, being restricted to a few pockets in the northeast and east. As would be expected, the rain forest biota of Cape York has strong Papuan affinities (as do those of intervening islands like the Arus), those of coastal central and south Queensland less so. The Australian dry woodlands and savannas extend into southern New Guinea, where they are inhabited by typical Australian forms (though the biota needs better analysis).

Rain-forest–woodland junctions, both in Australia and New Guinea, are marked by a biotic change that is abrupt, striking, and fairly complete. This is the case in plants, insects, birds, and mammals, as well as other groups. This steep biotic changeover was, of course, noted long ago by Tate and others; one of the big achievements of this symposium volume is to document how widespread and basic it is. The real factor keeping the Australian and Papuan biotas distinct, then, is not the physiographic barrier of Torres Strait but the basically different adaptations of the two biotas and the fact that the climatic and vegetation transition between the two regions has remained so steep that adaptation from one to the other has been difficult.

Moreover, the persistently Asian character of the New Guinea rain forest plants and insects shows that it has been much easier for these forms to "island hop" through Indonesia, a west-east journey that though it is very long does not entail switching latitudinal and climatic belts, than it has been for them to move southward over land into the drastically different climatic zones of Australia.

The book concludes with a series of chapters on the cultural and ethnic relationships of the native peoples of the Torres Strait. As would be expected, the Strait turns out not to be a linguistic barrier but a transition zone. Thus, an "old Australian influence" is discernible in the Trans-Fly languages of New Guinea, and there appears also to be a recent Papuan influence in the Cape York Peninsula languages (S. A. Wurm). Studies on the physical anthropology of the Torres Strait peoples are inadequate to provide a proper picture of relationships. However, serum protein and enzyme genetic markers show populations in New Guinea and northern Australia, but not central Australia, to share a significant proportion of genetic traits (R. L. Kirk). One major human cultural problem has long puzzled anthropologists, how the Australian aborigine was able to maintain his "hunter-gatherer" economy despite some thousands of years of marginal contact with Papuan agriculture. This is the more surprising since three important food plants used wild by aborigines, the yam (*Dioscorea bulbifera*), the arrowroot (*Tacca leontopetaloides*), and the tree *Terminalia catappa*, are widely cultivated in Malaysia. Again, 35 of the 36 genera which provide the 43 plant species that supply the northern aborigines with edible roots, fruits, seeds, and leaves are Malaysian in origin (J. Golson). The explanation earlier suggested was that the best soils for cultivation were covered by tropical rain forest in Australia and hence were inaccessible for agriculture. Rain forest margins (where most of the gardens are established in the Port Moresby area of New Guinea) are readily modified by fire, however, and fire is extensively used by the aborigines in hunting. Two more plausible reasons for the cultural conservatism of the Australian aborigines are advanced by Golson: (i) the hunter-gatherer economy remained unaffected by the marginal contacts because it was "buttressed" by the considerable population of gatherers behind the contact zone, and (ii) in the environment of Torres Strait conversion to horticulture would require a greater labor input than a hunter-gatherer economy. The Australian aborigine, moreover, with his adequate "family planning," was never placed in the position where he was forced to adopt agriculture to support a rapidly increasing population. There may be a parallel, it is suggested, in the retention of the spear against the bow and arrow. Large kangaroos are a dominant food source in Australia, whereas in New Guinea the largest mammal is a small wallaby: the spear, it is suggested, is the better weapon for big game. Support of this comes from the eagerness with which the islanders of western Torres Strait sought mainland spears and spear-throwers: they were demonstrably more efficient than the bow and arrow in both fishing and fighting.

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