KAJ BIRKET-SMITH

AN ETHNOLOGICAL SKETCH OF RENNELL ISLAND

A Polynesian Outlier in Melanesia

SECOND EDITION

Det Kongelige Danske Videnskabernes Selskab
Historisk-filologiske Meddelelser 35, 3

Kommissionær: Munksgaard
København 1969

Kr. 60.–

DET KONGELIGE DANSKE VIDENSKABERNES SELSKAB udgiver følgende publikationsrækker:

THE ROYAL DANISH ACADEMY OF SCIENCES AND LETTERS *issues the following series of publications:*

	Bibliographical Abbreviation
Oversigt over Selskabets Virksomhed (8°) *(Annual in Danish)*	Overs. Dan. Vid. Selsk.
Historisk-filosofiske Meddelelser (8°) Historisk-filosofiske Skrifter (4°) *(History, Philology, Philosophy, Archeology, Art History)*	Hist. Filos. Medd. Dan. Vid. Selsk. Hist. Filos. Skr. Dan. Vid. Selsk.
Matematisk-fysiske Meddelelser (8°) Matematisk-fysiske Skrifter (4°) *(Mathematics, Physics, Chemistry, Astronomy, Geology)*	Mat. Fys. Medd. Dan. Vid. Selsk. Mat. Fys. Skr. Dan. Vid. Selsk.
Biologiske Meddelelser (8°) Biologiske Skrifter (4°) *(Botany, Zoology, General Biology)*	Biol. Medd. Dan. Vid. Selsk. Biol. Skr. Dan. Vid. Selsk.

Selskabets sekretariat og postadresse: Dantes Plads 5, 1556 København V.

The address of the secretariate of the Academy is:

Det Kongelige Danske Videnskabernes Selskab,
Dantes Plads 5, 1556 København V, Denmark.

Selskabets kommissionær: MUNKSGAARD's Forlag, Prags Boulevard 47, 2300 København S.

The publications are sold by the agent of the Academy:

MUNKSGAARD, *Publishers,*
47 Prags Boulevard, 2300 København S, Denmark.

Réimpression inaltérée (1. édition 1956).
Uforandret genoptrykt (1. udgave 1956).
Offsettrykt i Bianco Lunos Bogtrykkeri A/S.

Det Kongelige Danske Videnskabernes Selskab
Historisk-filologiske Meddelelser, bind **35**, nr. 3

Dan. Hist. Filol. Medd. **35**, no. 3 (1956)

AN ETHNOLOGICAL SKETCH OF RENNELL ISLAND

A Polynesian Outlier in Melanesia.

BY

KAJ BIRKET-SMITH

København 1956
i kommission hos Ejnar Munksgaard

Printed in Denmark
Bianco Lunos Bogtrykkeri A-S

CONTENTS

Page

Introduction 5

I. Rennell Island and Its Inhabitants 8
1. Geographical Position, p. 8. — A Raised Atoll, p. 8. — Vegetation and Fauna, p. 11.
2. Discovery and Previous Visits to Rennell, p. 14. — British Administration, p. 17. — Contact with Other Islands, p. 19. — Acculturation, p. 20. — Future Prospects, p. 21.
3. The Universe and the Gods, p. 22. — Immigration of the Rennellese, p. 23. — Physical Characteristics and State of Health, p. 25. — Census, p. 30. — Dress and Ornaments, p. 33.
4. Chieftainships, p. 38. — Social Classes, p. 41. — Villages, Habitations, and Temples, p. 45. — Furniture, p. 54.

II. Economic Activities 56
1. Gardens, p. 56. — Cultivated Plants, p. 56. — Methods and Ceremonies of Cultivation, p. 57. — Land Tenure, p. 63.
2. Sea and Freshwater Fisheries, p. 64. — Canoes, p. 65. — Fishing of Flying Fish, p. 69. — Shark Fishing, p. 71. — Other Fishing Methods, p. 74.
3. Game and Domestic Animals, p. 75. — Bird Hunting, p. 77. — Catching of Flying Foxes, p. 80. — Food Gathering, p. 80.
4. Food and Beverages, p. 81. — Fire Making, p. 83. — Cooking, p. 84. — Meals, p. 84. — Betel, p. 86.

III. Manufactures 89
1. Stone Working, p. 89. — Adzes, p. 90. — Work in Wood and Shell, p. 92. — Decorative Art, p. 93.
2. Making of Bark Cloth, p. 94. — Tapa Beaters, p. 95. — Dyeing, p. 96.
3. Cordage, p. 98. — Netting, p. 99. — Basketry, p. 100. — Mats, p. 103. Plaited Designs, p. 104.

IV. Social Life 105
1. Pregnancy and Birth, p. 105. — Childhood, p. 106. — Tattooing and Incision, p. 107. — Marriage, p. 111. — Kinship, p. 112. — Death and Burial, p. 112. — Islands of the Dead, p. 115.
2. Salutation, p. 116. — Intertribal Relations, p. 116. — Weapons, p. 117. — Warfare, p. 124. — Conclusion of Peace, p. 127.
3. Musical Instruments, p. 127. — Dances and Songs, p. 128. — Calendar, p. 137.

V. The Cultural Position of Rennell Island 138
1. The Polynesian Outliers, p. 138. — Linguistic and Racial Affinities of the Rennellese, p. 139. — Polynesian Migrations, p. 145. — Differentiation within Polynesian Culture, p. 147.
2. Research Plan, p. 152. — Economic Methods and Implements, p. 152. — Canoes, p. 164. — Houses and Furniture, p. 166. — Clothing and Personal Adornment, p. 171. — Tools and Techniques, p. 178. — Weapons, p. 184. — Recreation, p. 189. — Social Organization, p. 192. — Religion, p. 199.
3. Proto-Polynesian Elements, p. 202. — Western Elements, p. 203. — Elements of Local and Uncertain Origin, p. 205. — The Relations of Rennell to the West Polynesian Culture and the Megalithic Complex of Melanesia, p. 205. — Conclusions, p. 206.

Bibliography 208
Abbreviations, p. 208. — List of Works, p. 209.

Spelling of Rennellese words.

In the spelling of Rennellese words the vowels are pronounced as in Italian and the consonants as in English. It is often difficult, however, to distinguish between *o* and *u*, and *b* and *v* are interchangeable, being in reality the same phoneme. Before *i* there is a tendency towards patalization of *t*, and in some cases *l* may approach a voiced fricative somewhat like *d* in Danish *"bade"*. Particular symbols are *ŋ* = *ng* in "singer"; *'* = glottal stop; and *g*, a voiced velar fricative as in North German *"Regen"*, Danish *"age"*, or Russian когда. It seems that in rare cases a glottal stop may be substituted for *g* in the compound *ŋg* (corresponding to *l* or *r* in other Polynesian dialects).

The dynamic accent is always on the penultimate, and even though the last syllable in a sentence is sometimes prolonged, especially by the women, in general all vowels seem to be short, thus giving the language a remarkable staccato character.

In the text, all Rennellese words taken down phonetically are printed in *italics*. For the recording of geographical names a simpler orthography has been used, *ŋ* being replaced by *ng*.

To my friend
Dr. PAUL RIVET
on his 80th birthday.

Introduction.

If you have spent a considerable part of your lifetime studying the Eskimo and American Indians of the Arctic and Subarctic, you may sometimes feel a yearning to stroll on a white sand beach in the shade of gently swaying coconut palms, and if then your dreams can be combined with a scientific purpose, it is easy coming to a decision. When therefore the preparations for the Danish Deep Sea Expedition Round the World 1950—52 were being made, my friend, Dr. ANTON FR. BRUUN, the leader of the Expedition, and I agreed upon the plan that I should take part in the cruise in the East Indian waters and the Western Pacific.

In June 1951 I arrived at Bangkok and joined the scientific staff on board the *Galathea*, a frigate of the Royal Danish Navy that had been placed at the disposal of the Expedition. Good luck enabled me to pay a short visit to the Bontoc Igorot in the Philippines and witness their rice-harvest feast, of which I have previously published a brief account in the present series (vol. 32, nr. 8, 1952). My main object was, however, a study of the ethnology of Rennell Island, one of the least known and most interesting islands in the Pacific. On October 9th I went ashore at Honiara, the capital of the British Solomon Islands Protectorate, together with two zoologists, Mr. TORBEN WOLFF, M. Sc., and Mr. HARRY KNUDSEN, B. Sc., and one of the photographers of the Expedition, Mr. MOGENS HØYER, who intended to take a moving picture of the native life. While the *Galathea* continued its voyage to the Solomon Deep, we proceeded to Rennell Island on the small Government motor boat, *Bina*, accompanied by District Officer A. MACKEITH, who was appointed by the Resident Commissioner to assist us in our work. On October 12th we arrived at our destination and were accomodated in Lavanggu in a large house built by the Government for the use of its officers on occasional

visits. Except for a short trip to Te Avaliangga in the western part of the island I spent the time in Lavanggu till November 14th, when we left for Honiara and thence returned to Port Moresby on New Guinea in the *Comworks*, a small trawler belonging to the Royal Australian Navy. A few days later I went by aeroplane to Sydney, N. S. W., where the *Galathea* had arrived in the meantime. On November 30th I left Sydney by air for Calcutta, spent a few days there and in Benares and Delhi, and was back again in Copenhagen on December 9th.

Various circumstances prevented me from making my investigations as complete as might be desired. An essential obstacle was the difficulty in mutual understanding. Unfortunately I spoke no Polynesian—let alone the fact that next to nothing is known of the Rennellese dialect—and all conversation was to be carried out in the local Pidgin, which is not only rather hard to master in the beginning, but of which the natives as a rule had only rather limited knowledge. Moreover, I had to stay nearly all the time in the one place, Lavanggu, for at the time I had finished my work there, we were every day expecting the boat which was to take us back, so that we did not dare to leave the village for longer excursions. Although many visitors from other parts of the island came to Lavanggu, this meant that I missed the opportunity of making observations and collecting information which would have proved useful both as an addition to the other material and as a check on its accuracy. I can only entertain the hope that the present "sketch", incomplete as it be, may act as a stimulant to other ethnologists and urge them to take up the study on a larger scale before it is too late, as it is bound to be within a very few years.

My journey was made possible by grants from the Wenner-Gren Foundation for Anthropological Research in New York and the Carlsberg Foundation in Copenhagen, to both of which institutions I beg to tender my respectful and sincere thanks. I likewise want to express my gratitude to Dr. Anton Fr. Bruun and to the commander of the *Galathea*, Captain Svend Greve, R.D.N. To His Honour Mr. H. G. Gregory Smith, late Resident Commissioner of the British Solomon Islands Protectorate, I am greatly indebted for the facilities he showed our party, and to Mr. John C. Grover of the Colonial Geological Survey for his hospitality in Honiara. I have been able to study the Rennell collections in

the British Museum, the University Museum of Archaeology and Ethnology in Cambridge and the *Musée de l'Homme* in Paris; the two first named institutions as well as the Bernice P. Bishop Museum in Honolulu have also supplied me with photographs. I am much obliged to the trustees in question and ask Mr. H. J. BRAUNHOLTZ, Mr. B. C. CRANSTONE, Dr. G. H. S. BUSHNELL, Dr. HENRI VALLOIS, and Dr. ALEXANDER SPOEHR to accept my heartfelt thanks for their helpfulness. My thanks are furthermore due to Mr. and Mrs. J. D. BRADLEY, who visited Rennell two years after our visit for entomological purposes but besides made a collection of ethnological specimens, which they allowed me to examine, and also supplied me with some valuable information. For assistance in translating the Rennellese texts I am indebted to Dr. J. PRYTZ JOHANSEN and for revising my manuscript to Mrs. MARGARET SHAW.

Last but not least I want to acknowledge the ever ready assistance and good comradeship of my four companions on Rennell, in particular that of Mr. WOLFF, who after my departure from the *Galathea* took notes of the Rennell material in the Museum of Auckland, the Otago Museum, Dunedin, and the Bishop Museum, Honolulu, and kindly placed them at my disposal.

I.

Rennell Island and Its Inhabitants.

1.

Geographical Position. — A Raised Atoll. — Vegetation and Fauna.

Rennell Island or, with its native name, Munggava, is one of the Polynesian outliers in Melanesia and was, together with the neighbouring island of Bellona or Munggiki, up to very recent years, the last stronghold of genuine Polynesian culture in the Pacific. It is situated at the southern extremity of the Solomon group, barely 180 km. south of Guadalcanal and about 160 km. south-west of San Cristoval (Fig. 1). Its direction is nearly west-northwest and south-southeast, or between lat. 11°34′30″ and 11°47′ south, and between long. 159°54′30″ and 160°37′ east. The total area is approximately 650 km². Bellona, which is much smaller and has a more northwest-southeasterly direction, lies to the north-northwest of Rennell, between lat. 11°16′ and 11°19′ south, and between long. 159°45′ and 159°51′ east. In clear weather it is possible to see both islands from one of the mountain tops in the Mole district on the south coast of Guadalcanal[1].

Rennell Island rises, surronded by coral reefs, like a nearly vertical, green wall out of the crystalline tropical sea. Originally an atoll it has been raised, probably in two stages in post-Pliocene times[2], 100—160 m. above sea level, so that at present it has a shape somewhat like a shallow basin sloping gently from the coasts towards a longitudinal depression. The whole island is

[1] Paravicini 1931, p. 103.
[2] Wolff 1955 b, p. 16.

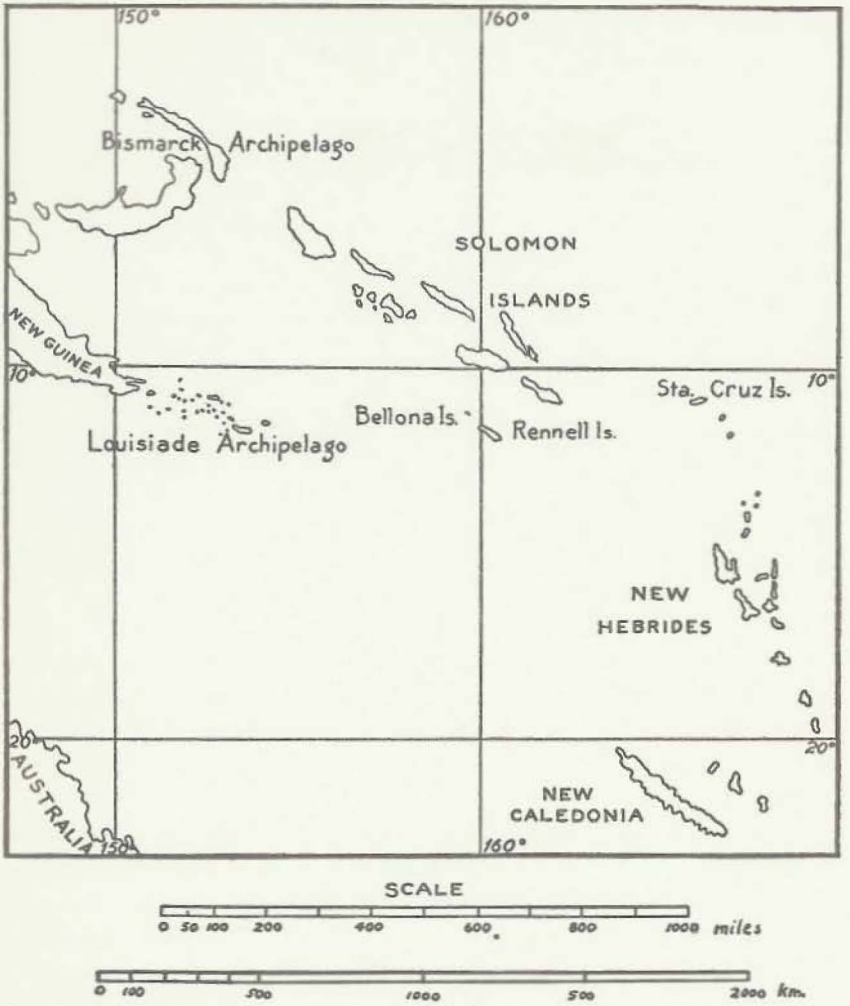


Fig. 1. Map showing the geographical position of Rennell and Bellona Islands. (After Amer. Mus. Nov.).

so narrow that it is almost cut in two by the semicircular Kanggava Bay on the south coast. In the eastern half of the island there is still a part of the old lagoon left, which is now a lake with slightly brackish water. It is known as Te Nggano and is supposed to be the largest lake in Oceania, 27.5 km. long by 8—10 km. broad. According to recent surveying it is only 21 m. above sea level. The western part is dotted with islets and shallower than the

Fig. 2. Cliff at Kanggava village. (T. Wolff phot.).

eastern part, which is at least 55 m. deep. DECK states that the tides are perceptible in the lake,[1] which would mean that it must be connected with the ocean by subterranean channels, but neither STANLEY[2] nor our party were able to observe any tidal movements.

Rennell is almost inaccessible (Fig. 2). Landing is possible only in a very few places where there is a short and narrow strip of sand, and in order to get inland it is necessary first to climb the steep cliffs surrounding the island on all sides. The best anchorage and landing place is in Kanggava Bay (Fig. 3). At Lavanggu at the head of the bay there is fairly easy access to the interior, where a trail runs lengthways through the western part of the island. On the other hand there is no direct route from Lavanggu to Te Nggano. One trail leads to the lake from Kanggava on the eastern shore of the bay, and there is a still shorter cut from Te Uhungganggo farther east on the sea coast, but in both places it means a steep and strenuous climb before the summit of the cliff is reached.

[1] DECK 1921, p. 475.
[2] STANLEY 1929, p. 21.

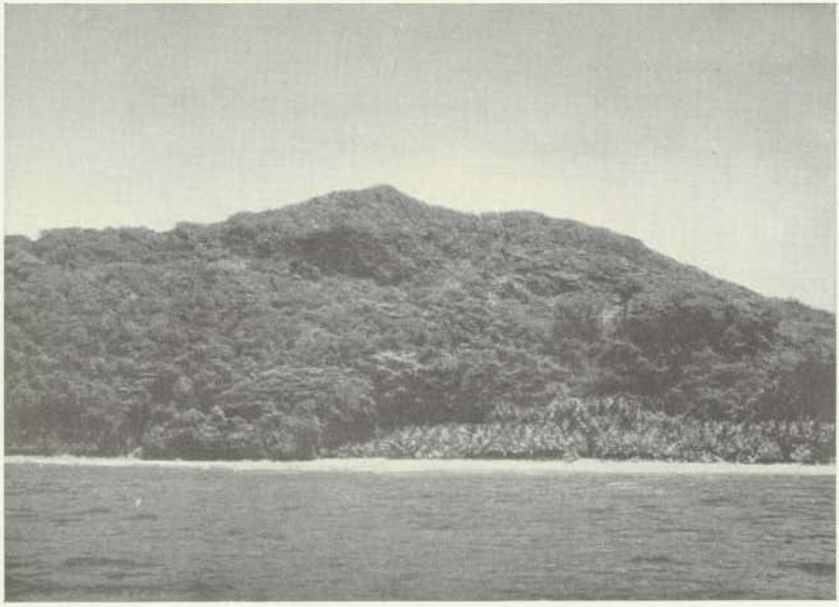


Fig. 3. The coast immediately N.W. of Lavanggu. In the foreground to the right a plantation of young coconut trees.

Even when the ascent is over the difficulties of the traveller are not at an end. The coral rock of which the island consists has been cut and furrowed by the erosion, so that now it appears like a miniature mountainous landscape of razor-sharp ridges and points. It is often necessary to balance oneself across heaps of loose blocks slippery with moss, or half-decayed trees knocked down by the wind. Everywhere the country is covered by a dense tropical forest, where the roots of the trees twist and writhe like fantastic giant snakes over the soil, because they are unable to penetrate the solid rock. The trees are overgrown with creepers and epiphytes, but as a rule they do not attain a very great size. Only now and then, in especially favourable places, can a giant tree be seen towering high over the surrounding vegetation. In other places, where the growth is less luxurious, for instance in abandoned gardens, a tangled creeper and a tropical fern (*Nephrolepis biserrata*) are the most common plants. Fertile soil consisting of characteristic red earth occurs only in "pockets" around the lake and scattered in a longitudinal zone running through the western part of the island. In some places there are caves, and

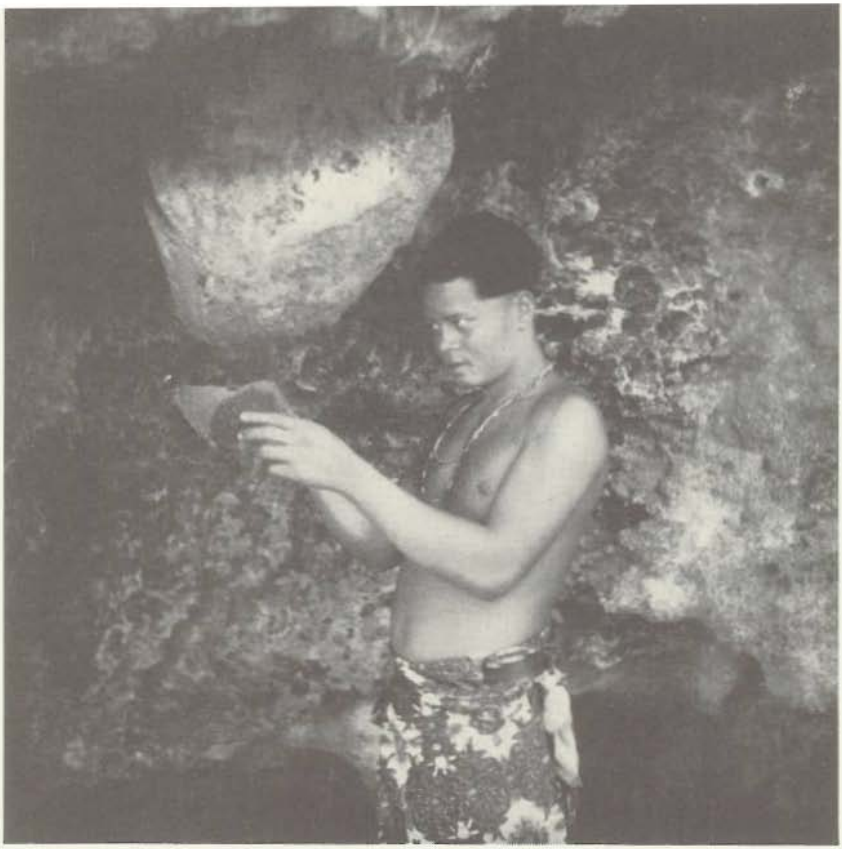


Fig. 4. Man fetching drinking water from a fissure in the coral rock. Lavanggu.

where their roofs have tumbled down they form small and deep fresh-water holes; but there are neither springs nor rivers, and often the only available drinking water is the brackich liquid oozing out from the cliffs at the coast (Fig. 4).

The climate is tropical with but slight variation of temperature all the year round. The monthly mean is probably around 27° C., but there is usually a cooling breeze. From the beginning of March till the end of November the southeasterly trade winds blow fairly steadily, though sometimes interrupted by calm and changing winds, whereas during the rest of the year they are replaced by northerly winds, which often blow with considerable force. This period is considered the rainy

season, but actually there is no month without some precipitation.

The fauna was studied as thoroughly as possible by the zoologists of our party, but so far only a minor part of their results are available[1]. As might be expected, the mammals are very few in number. Beside *Pteropus cognatus rennelli* previously known from the island there proved to be two other species of flying foxes (*P. tonganus geddiei* and *Dobsonia inermis*), no less than six bats (*Hipposideros cervinus, H. calcaratus, Aselliscus tricuspidatus, Emballonura dianae, Miniopterus australis* and *M. schreibersi*) as well as one species of rat (*Rattus exulans rennelli*). Bird life is, of course, far more abundant. The WHITNEY expedition found 38 species, of which 35 were breeding on the island. Our zoologists were able to add four more, and of the total no less than two thirds must be considered endemic species or sub-species. Among the most conspicuous birds near the lake are cormorants (*Phalacrocorax melanoleucus brevicauda*), white ibis (*Threskiornis æthiopicus pygmæus*), and reef herons (*Demigretta sacra albolineata*). At the lake there are also numerous ducks and teals (*Anas superciliata pelewensis* and *A. gibberifrons gibberifrons*), which are remarkably fearless because the Rennellese loathe eating them and therefore leave them alone. The monotonous green of the forest is brightened by the brilliant plumage of several pigeons (*Ducula pacifica pacifica, Macropygia mackinlayi mackinlayi, Ptilinopus rhodostictus cyanopterus*) as well as two species of parrots (*Geoffroyus heteroclitus hyacinthinus, Micropsitta finschii finschii*), a lory (*Lorius chlorocercus*), a white-collared kingfisher (*Halcyon chloris amoena*), and a honey-eater (*Myzomela cardinalis sanfordi*). Terns (*Sterna albifrons, S. anætheta*) are numerous at the coast, and also sparrow hawks (*Urospiza fasciata*) and ospreys (*Pandion haliaëtus*) occur.

The scarcity of fresh water explains why amphibia are entirely absent, whereas reptiles are common, although as far as we were able to ascertain only the green turtle (*Chelonia mydas*) is considered edible. There are, however, a big monitor lizzard (*Varanus indicus*), skinks, geccos, and several snakes, including the Pacific

[1] They are supposed to be published together with the results of the British Museum (Natural History) Expedition 1953 in a series of papers with the common title *The Natural History of Rennell Island, British Solomon Islands.*

boa (*Enygrus australis*) and a banded sea-snake (*Laticauda sp.*) living in the brackish water of the lake; the latter is the only poisonous species on the island.

Needless to say, fish are numerous in the waters around Rennell, but, as will appear later, the inhabitants are not deep-sea fishermen like the majority of Polynesians. Thus, for instance there is no doubt that both bonitos and dolphins appear outside the reef, but apparantly they are not regularly taken. Sharks, flying fish, and different species of small plectognaths living around the reef are, perhaps, the most important from an economic point of view, together with eels and freshwater gobeys.

It is unneccessary here to enter into details as far as the invertebrates are concerned. Suffice to say that many molluscs, crustaceans—for instance the big coconut crab (*Birgus latro*)—some insects, etc., enter into the ordinary diet (cf. p. 80 f). On the other hand mosquitos, flies, and leeches are highly irritating pests. However, our party did not succeed in finding a single *Anopheles* among the mosquitos, which agrees with the fact that malaria seems to be unknown except for af few cases that were evidently introduced from other islands[1].

2.

Discovery and Previous Visits to Rennell. — British Administration. — Contact with Other Islands. — Acculturation. — Future Prospects.

There seems to be some disagreement as to when and by whom Rennell Island was first discovered. Francisco Núñez was too far away to sight it when as a member af Alvaro de Mendaña's expedition he sailed along the south coast of San Cristoval in 1568[2], nor was it seen by Lieutenant Shortland as he passed along the south coast of Guadalcanal on his voyage from Sydney to Canton 1788. It was not, in fact, till the years around 1800 that the discovery took place, but in details opinions differ. Hogbin's statement[3] that it occured in 1790 and was due to Captain Bligh,

[1] Recorded by Lambert (1944, p. 319) and in a manuscript report by J. S. McKenzie-Pollock, Senior Medical Officer, Honiara.

[2] Cf. Mendaña 1891.

[3] Hogbin 1931 b, p. 554.

of mutiny fame, must be wrong, for BLIGH's voyages took place 1787—89 and 1791—93, and in another paper HOGBIN credits Captain BUTLER in the *Walpole* 1794 with the discovery, in accordance with the information given by BRIGHAM[1]. Both WOODFORD and RAY[2] mention BUTLER and the *Walpole* but date the event at 1801.

Be this as it may—I have not been able to find any record of BUTLER's voyages—it is certain that Rennell was again left alone for many years, except, perhaps, for casual visits of whalers and traders, but the inaccessibility and poverty of the island must soon have proved it to be so unattractive that if any attempt at closer contact was made it was as readily given up. The first recorded landing was that of Bishop SELWYN and Mr. (later Bishop) PATTESON in July 1856, and some years later, in 1863, PATTESON and Rev. CODRINGTON arrived at Bellona[3]. It was probably Bishop PATTESON who first realized the Polynesian character of the Rennellese language[4], and the earliest linguistic notes on the closely affiliated dialect of Bellona are based upon a short vocabulary and a few sentences written down by him[5]. Further observations on the language were afterwards published by RAY and W. VON BÜLOW[6]. In 1906 C. M. WOODFORD made some useful observations during a brief visit to Rennell, in 1908—11 Dr. NORTHCOTE DECK of the South Seas Evangelical Mission came there several times, but likewise for every short periods only, and in January 1925 the Resident Commissioner, Mr. RICHARD KANE, visited the island and was the first white man to penetrate into the interior[7].

About this time the LEVER Brothers had made a futile attempt at labour recruiting among the Rennellese, but fortunately soon had to abandon their project[8]. However, since then there has been

[1] HOGBIN 1931 a, p. 174. BRIGHAM 1900, p. 137.
[2] WOODFORD 1916, p. 46. RAY 1917, p. 170. Cf. also PARAVICINI 1931, p. 17.
[3] WOODFORD 1916, p. 46. RAY 1917, p. 170. LAMBERT 1931, p. 137.
[4] As early as 1859 Rennell is mentioned as a Polynesian island in SWANSON's *New Zealand and Its Colonization* (WAITZ 1870, p. 168). I have not had access to SWANSON's work.
[5] RAY 1896, p. 59 ff.
[6] VON BÜLOW 1898. Ray 1917. RAY 1919—20.
[7] LAMBERT 1931, p. 137 f. LAMBERT 1944, p. 253. Cf. WOODFORD 1907, 1910, 1916. DECK 1921.
[8] LAMBERT 1931, p. 138. In his later paper (1934, p. 102) LAMBERT states that the recruiting took place only on Bellona and not on Rennell.

a steadily growing contact, though the scientific exploration made very slow progress. H. Ian Hogbin, the well-known ethnologist, stayed for two months on Rennell in 1927, but owing to unfortunate circumstances his results were rather meagre[1]. When accompanying the Whitney and Templeton Crocker Expeditions 1928 and 1933, Dr. S. M. Lambert made a health survey of the island and later gave a delightful description of his experiences[2]. Gordon Macgregor had an opportunity of observing a religious ceremony and of collecting information about the Rennellese pantheon when, in 1933, he spent two weeks there as a member of the Templeton Crocker Expedition[3], and a French expedition on board the *Korrigane* arrived for a single week's stay in 1935[4]. A few ethnological notes have occasionally been published by other authors[5].

About 1930 the missionary efforts began to take form. As early as 1911 Northcote Deck had landed two Polynesian missionaries of the South Seas Evangelical Mission on the island, "leaving them with a supply of provisions and other stores, and tanks to hold water. The Rennell islanders promptly killed them—not that they bore them any ill-will, but desiring their provisions it saved much unnecessary argument and trouble to take the obvious course of first dispatching them"[6]. It is, indeed, an established fact that these missionaries were very soon killed, and the Rennellese readily admit the murder. On the other hand their own explanation as given to me was less flattering to the "martyrs": the missionaries ordered them to build a house and afterwards would not pay for it, which naturally aroused the anger of the workers[7]. However, in the beginning of the 1930'es, the Melanesian Mission made some abortive attempts at converting the Rennellese, but abandoned them when in 1934 the South Seas Evangelical Mission re-assumed its work and took a few men to

[1] Hogbin 1931 a. Hogbin 1931 b.
[2] Lambert 1931. Lambert 1944.
[3] Macgregor 1943.
[4] Ch. van den Broek d'Obrenan 1939. R. van den Broek d'Obrenan 1947.
[5] Trench 1940. Knibbs 1929. Luke 1945.
[6] Knibbs 1929, p. 199 f. The false accusation of robbery is repeated by Deck 1945, p. 50 ff.
[7] Lambert (1934, p. 103. 1944, p. 262) gives a similar account, the only difference being that the missionaries were dissatisfied with the house.

the mission school at One Pusu on Malaita[1]. During its visit to Rennell the following year, the *Korrigane* expedition met two missionaries, GRIFFITH and NORMAN DECK, a brother of the aforementioned NORTHCOTE DECK, who persuaded the high chief, *Taupoŋi*, to accompany them on their return[2]. There can be no doubt that this clever step was most effective in the subsequent christianization of the whole island. A few years later the Seventh Day Adventists started another mission on Rennell, and now paganism is entirely a thing of the past, the western half of the island belonging to the South Seas Evangelical Mission and the eastern part to the Adventists. Neither the social nor, for that matter, the religious consequences of this competition between rival sects can be very desirable, and their theological sophistries must have a rather bewildering effect on the untrained native minds. It should be noticed, however, that no white missionaries have ever lived permanently on Rennell, all work being carried out by native teachers.

During the heavy fighting with the Japanese on Guadalcanal in World War II, Rennell was for a short period used as a sort of U.S. Marine outpost, officers being landed in Catalina hydroplanes on the lake, on the shores of which they could enjoy a short rest. These visits may to some extent have speeded up the disorganization of the aboriginal culture, but on the whole their effects seem to have been remarkably slight.

On August 18th, 1898, both Rennell and Bellona were proclaimed parts of the British Solomon Islands Protectorate[3]. Like the other Polynesian outliers of the Protectorate (Tikopia, Sikaiana, Lord Howe, etc.) they do not belong to any district but are administered directly from Honiara, which, until 1952, was the seat of the Resident Commissioner, who again was responsible to the High Commissioner of the Western Pacific in Fiji. Since December 1952 the High Commissioner resides in Honiara, and from there not only the Protectorate but also the Gilbert and Ellice Islands as well as the British aspects of the New Hebrides Condominium are now administered.

[1] DECK 1945, p. 64 f.
[2] CH. VAN DEN BROEK D'OBRENAN 1939, p. 146. Cf. DECK 1945, p. 73.
[3] BRIGHAM 1900, p. 44, 137.

Rennell and Bellona are both closed territories[1]. No white people are allowed to settle on the islands, and any vessel wishing to call there must obtain a special permit which is not issued till after a medical examination of the crew. Every one or two months the Resident Commissioner used to make a trip to the islands to discuss problems of current interest with the native headmen, and at odd intervals a schooner will call at the islands in order to buy copra as well as fine pandanus mats and walking sticks made for sale to occasional tourists in Honiara, at the same time supplying the population with trade goods. For administrative purposes Rennell is divided into three districts, Te Nggano, Kanggava, and Te Manggihenua. Each district has a headman who is appointed by the Government with the common consent of the people and is paid a salary af £ 2 a month. During our sojourn the headmen were the three chiefs, *Taupoŋi*, *Tahua*, and *Tigesua*, but it must not necessarily be a chief. Both *Taupoŋi* and *Tigesua* were dignified old gentlemen, and *Taupoŋi* in particular, who was the old high chief of the whole island, possessed no little authority (Fig. 5). *Tahua* was somewhat younger and not very popular. Once during our stay the Resident Commissioner arrived at Lavanggu, and it was evident during the meeting the next day, which was attended by a great part of the population, that although he remained in office, *Tahua* met with considerable opposition. In his case the bad feelings seemed to have a purely personal background, but on the other hand frictions between the Government headmen and the old chief families are possibilities that must be kept in view.

Beside the headmen there are a few native teachers appointed by the missions and two or three "dressers", who have had a short medical instruction in Honiara and are provided with supplies of the most necessary medicaments. They are obliged to treat their countrymen free of charge and receive a salary of £ 5 a month. As the headmen have £ 2 only, here is evidently another reason for friction, although it should be said that we observed nothing of the kind.

[1] This most satisfying fact is, it seems, principally due to Dr. LAMBERT's indefatigable struggle for the welfare of the population. Cf. LAMBERT 1934, p. 121, 135 f. LAMBERT 1944, p. 316 f.

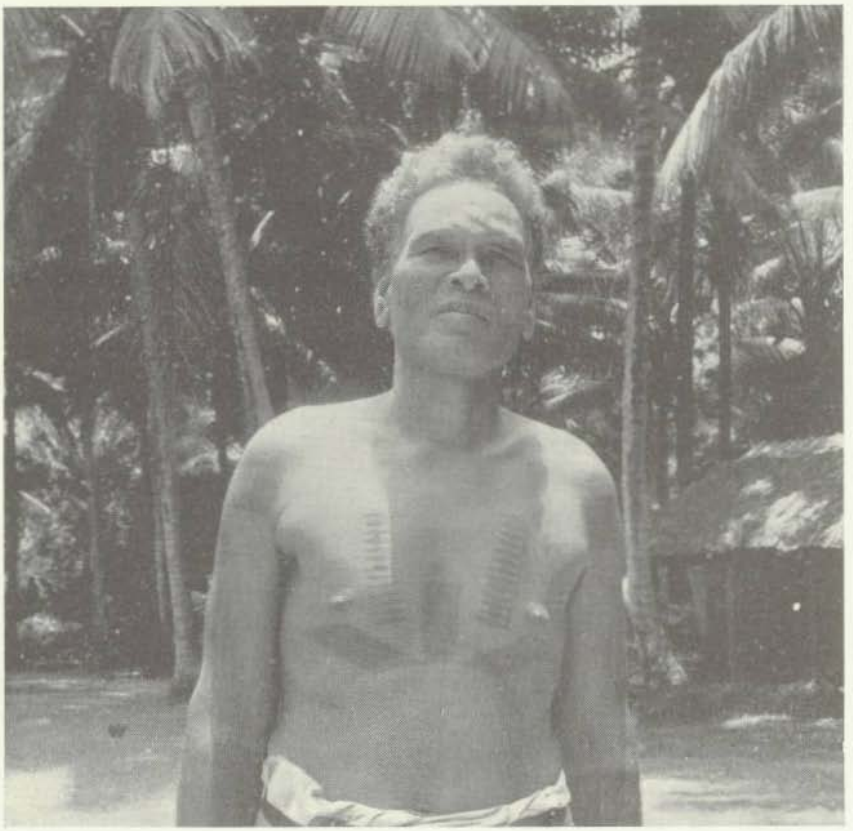


Fig. 5. The old chief of Te Nggano and head chief of Rennell Island.

If we may judge from conditions in the Kanggava district, nearly one fourth of the men and a few women have now been away for a shorter or longer period to other islands of the Protectorate, and many of them speak a more or less halting Pidgin English. Formerly communication with the Melanesian islands must have been insignificant. Rennell was certainly known on San Cristoval as Totohuti or Totohuke[1], but on Guadalcanal somewhat farther to the north it was told that Rennell was inhabited solely by women who had intercourse with flying foxes[2]. Al-

[1] Woodford 1907, p. 34. Woodford 1916, p. 47. Ray 1917, p. 171.
[2] Knibbs 1929, p. 209. Cf. the tradition recorded by Paravicini about the peopling of Bellona, mentioned here on p. 24 f.

though considerably more distant, the other Polynesian outliers seem to have had closer contact with Rennell. Thus, the people of Sikaiana probably knew it as Fenuanala or Fenuahala[1]. On Tikopia, Raymond Firth learned of at least two or three cases when natives from that island landed on Rennell; the last time, about 1926, they lived there for six months and were taken by a Japanese ship to Tulagi, whence they returned to Tikopia[2]. As will appear from the following description of Rennellese culture, some of its elements are stated to have been adopted from Tikopia.

The increasing contact with the outside world has, on the whole, resulted in some degree of acculturation. The most important innovations, apart from iron tools, are, perhaps, the introduction of new species of yams and taro, and of sweet potatoes and papaya. Less important are chicken and muscovy ducks, for although they are numerous, they are of but little use from an economic point of view. Quite recently a few goats and cats have been imported to the Lake district. There is a tendency towards gathering in larger settlements, and the old type of houses has now almost disappeared. Imported calico has entirely replaced the original native bark cloth, and small glass beads are often strung as ornaments. On Sundays one or two women may even put on a cotton gown, but fortunately this is as yet exceptional. Much in demand are wooden chests with locks, electric torches, and hurricane lanterns. Foot ball and card playing are common amusements, and sometimes a man who has been away to Honiara may be heard strumming a ukulele—to be sure without attempt at producing even the simplest tune, in contradistinction to the more sophisticated Melanesians, who often play remarkably well. Two types of fishing implements have appeared in recent times, viz. a three-pronged spear and a kind of catapult shaped rather like a wooden gun with a strong elastic band and an arrow made of a piece of heavy wire; the latter is so powerful that I once saw a young turtle the back shield of which had been pierced by one of these arrows.

It is an interesting fact that not only European elements have found their way to Rennell. Near the small chapel in Lavanggu

[1] Woodford 1907, p. 34. Woodford 1916, p. 47.
[2] Firth 1931, p. 179 ff.

are two big and rather crudely made slit gongs of hollowed-out tree trunks which are used for calling the congregation to prayer. At Te Avamanggu there was another specimen. This type has only recently been introduced. Other foreign elements adopted in later years are ladders made of notched logs (used at the modern pile dwellings), and lime boxes of bamboo with Melanesian designs. The walking sticks made for sale in Honiara are often decorated with inlaid pearl shell; there can be no doubt that this is due to contact with the southern Solomons, but it is a question whether it is of recent date, as one of the old-fashioned war clubs shows the same kind of ornamentation (cf. p. 122). Combs carved from one piece of wood were expressly said to be imitations of Melanesian types but may also be rather old.

It is difficult to say how deep the influence of the white man goes. Apparently all Rennellese are now devout Christians whether they belong to one or the other of the two rival sects. In Lavanggu, every morning at day-break and every night at sunset, the booming of the slit drums summoned the inhabitants to prayer, and even if far from all of them answered to the calling, some people were always certain to come. Although there is no regular school teaching perhaps three fourths of the people are able to write. It was likewise obvious that the old taboo against naming the gods aloud had more or less completely disappeared[1]. On the other hand the tradition of the old-time accomplishments such as the making of bark cloth, the use of shell adzes and the fire plough was still very much alive. Shell adzes were, indeed, occasionally employed as late as 1945 according to a manuscript report to the Secretary of Government in Honiara[2]. It is highly probable that if for some reason the contact with the outside world was broken off now, the old culture might still be restored to life.

One serious problem which faces the island is the threat of over-population. Practically all arable land is now cultivated, and the number of inhabitants is slowly increasing. Some years ago the British Government had plans of removing the whole population to the small island of Tetipari in the New Georgia

[1] As early as 1933 many of the taboos noticed by LAMBERT in 1929 had broken down (LAMBERT 1934, p. 104).
[2] FORSTER (MS).

group, but, the Rennellese did not want to leave their old home. When during our stay the Resident Commissioner visited the island, they brought up the question again, however, and the Resident Commissioner promised to investigate the possibilities of a temporary transfer of about 50 families to one of the other islands; then, after two years an interchange with a corresponding number of other families was to take place, and thus the ties with Rennell would not be severed for good.

3.

The Universe and the Gods. — Immigration of the Rennellese. — Physical Characteristics and State of Health. — Census. — Dress and Ornaments.

In the beginning, everything was darkness (*te po-uŋgi*), but *Mau-tiki-tiki* created Daylight, Sun (*maŋgama*), Moon (*mahina*), and all kinds of fishes. By means of a hook and line he fished Rennell Island to the surface of the ocean, and his father, *Ataŋ-gaŋga*, who had the power of making all things live, covered it with vegetation. *Ataŋgaŋga* discovered a cave on the island, but he would not show it to his son. So they quarreled, and *Mau-tiki-tiki* was killed in their contest. Then *Ataŋgaŋga* repented his deed and called his son back to life, but *Mau-tiki-tiki* was so indignant that he turned the whole island upside down, and his father was drowned (or, according to another version, was killed when falling from a tree), whereas *Mau-tiki-tiki* himself ascended to the sky and became a star, *Tuŋgu-ŋa-maui*. Thus it is explained why Rennell is so rough.

This tradition was told one day when I was sitting together with several men on the beach of Lavanggu. Apparently there was some controversy as to the details, but finally they agreed that the version given above was correct. Nevertheless one point, viz. that *Mau-tiki-tiki* appears as the creator of the universe, seems rather doubtful, for at the same time it was unanimously stressed that he was a human being and not a god, *atua*.

The world is ruled by the gods to whom the chiefs owe their authority. Two great gods were generally recognized: *Te Haiŋgi-atua* and *Te Hua-i-ŋgaveŋa*. *Te Haiŋgi-atua* is also known as

Semoana or *Aŋgiki-e-ha*. According to MACGREGOR he is the principal deity and lord of the thunder whose personal name, Te Tonusanga must be spoken in a whisper; his earthly resting place is a knobby stick wound with bark cloth, Te Maungiti-henua, which was carried along from the original home of the Rennellese by their chief[1]. *Te Haiŋgi-atua* has a wife, *Mauloko*, and a servant, *Taŋaŋgoa*. *Taŋaŋgoa* is malicious and is fond of destroying the the crops. He seduced *Mauloko*, and when he was punished by *Te Haiŋgi-atua* he became so indignant that he flew up into the air and caused the lightening. MACGREGOR, who also describes him as a malignant deity, adds that he originally belonged to the sea but is now securely placed in a bluff at Toho on the northern shore of the island[2].

MACGREGOR tells us further that *Te Haiŋgi-atua* has a sister called Te Fafine-tautai or Tahakunga, a daughter, and three sons: Tafaki-ngangi (*Tahaki-ŋaŋi*), Te Angaitaku, and Sau[3]. The latter is also known as *Honomu'a*. *Te Haiŋgi-atua*'s grandson is *Te Hua-i-ŋgaveŋa* = *Te Aitu-tapu* = *Te Tupu-i-te-ŋeŋa*, who comes next in importance to himself. MACGREGOR cites a tradition according to which he first appeared miraculously in a bowl with turmeric and has twelve sons who are not, however, considered gods, *atua*, but only spirits, or *aitu*[4].

The Rennellese claim that their ancestors came to their present home from an island named *Ubea*, which may be identical with Uvea or Wallis Island west of Samoa. They were led by a chief by the name of *Kaitu'u* or, as he was also called[5], Kui. In addition, MACGREGOR mentions his brother Tonga and gives the following

[1] MACGREGOR 1943, p. 32 f. Another name of *Te Haiŋgi-atua* recorded by MACGREGOR is Ta Unga. Lambert (1931, p. 145 f.) mentions the following gods: Tainatua, Tanganggoa Tenga'a (whom he identifies with the sun), Tamaihina (the moon), and Maui. In his later paper (1934, p. 120) LAMBERT improves the name of Tainatua to Taiingatua. These names, though sometimes distorted, are easily recognized, but as formerly mentioned, Maui is not considered a god, and it seems doubtful whether the sun and the moon were gods in the proper sense of the word. According to Raymond Firth's Tikopia informants, the Rennellese gods were Semoana, Fainga Atua (= *Te Haiŋgi-atua*), Tupu i te Renga (= *Te Tupu-i-te-ŋeŋa*), and Fue Ravenga (= *Te Hua-i-ŋgaveŋa*). Cf. FIRTH 1931, p. 187.

[2] MACGREGOR 1943, p. 34.

[3] MACGREGOR 1943, p. 33.

[4] MACGREGOR 1943, p. 33. He was able to obtain only four names of these sons, viz. Tinatonu, Tuhai-te-Maungi, Hui Matangi and Tonusia.

[5] LAMBERT 1931, p. 138. LAMBERT 1934, p. 103. HOGBIN 1931 a, p. 178. MACGREGOR 1943, p. 32.

route of their journey: Rotuma, Tikopia, Anuta (Cherry Islands), Hutuna, Henua Tai, and Boungo (San Cristoval)[1]. Hutuna and Henua Tai cannot be identified, but if they occur in their proper places in the tradition they may be assumed to belong to the Santa Cruz or Reef Islands[2]. At a later period other immigrants arrived from *Ubea*, Tuma, and Taumako[3].

When *Kaitu'u* landed on Rennell, the island was inhabited by the *Hiti*, who were descendants of the first people created by *Mau-tiki-tiki*, but they were exterminated by the immigrants[4]. In the previously cited manuscript report by the District Commissioner MICHAEL FORSTER it is stated that the immigration took place about 27 generations ago[5]. The people landed at Mangoku on the north coast, but apparently not finding conditions suitable there they circumnavigated the island and settled at Niupani on Lake Te Nggano and afterwards at Lavanggu. Finally, they also went to Bellona. The *Hiti* looked very much like the Rennellese (i. e. they were not Melanesians), but *Kaitu'u* ordered them to be killed, because they practised sorcery[6].

Here it may be inserted that PARAVICINI recorded a tradition about the peopling of Rennell among the Melanesians in the Mole district on the south coast of Guadalcanal[7]. Long ago, he was told, there was heavy fighting between two chiefs in the district until the head chief ordered both of them to emigrate with their followers. So they embarked with their women, dogs, and pigs, one of them settling on San Cristoval and the other one of Rennell. At that time the island was already populated, but the new-comers killed all the men and married the women. Their own wives they sent over to Bellona, which was uninhabited, and here, for lack of their husbands, they had intercourse with flying foxes. The present inhabitants of Bellona are the descendants of the

[1] MACGREGOR 1934, p. 41. MACGREGOR 1943, p. 32 f.

[2] Cf. WOODFORD (1907, p. 34. 1916, p. 48) who believes that the main immigration came from these islands.

[3] HOGBIN 1931 a. p. 178.

[4] Cf. FIRTH 1931, p. 185 f. LAMBERT (1944, p. 311) cites a tradition according to which the *Hiti* or, as he calls them, Ko Fiti, fled to Bellona after first having removed the fertile soil from Rennell, thus explaining the barrenness of this island.

[5] MACGREGOR (1943, p. 41) says 20 generations, STANLEY (1929, p. 16) only 17 generations.

[6] According to HOGBIN (1931 a, p. 178) *Kaitu'u* = *Kui* also moulded the surface of the island and made the trees grow. Cf., however, the tradition about *Mau-tiki-tiki* and his father.

[7] PARAVICINI 1931, p. 103 f.

Fig. 6. Young straight-haired man, holding coconut crab. (J. D. Bradley phot.)

offspring resulting form this intercourse. Apart from the obvious exaggeration and the legendary tinge of this tradition, it may actually refer to some former immigration of Melanesians and subsequent intermingling with the original population.

The Rennellese are generally strongly built, though hardly as powerful as some Melanesians. Corpulence is, however, considered a sign of distinction[1]. The men are of medium height and sometimes possess a figure as fine as an antique bronze statue, whereas the women on the whole are rather clumsy, typically knock-

[1] LAMBERT 1934, p. 103. THILENIUS's statement (1902, p. 19) that they are remarkably tall is, on the other hand, erroneous.

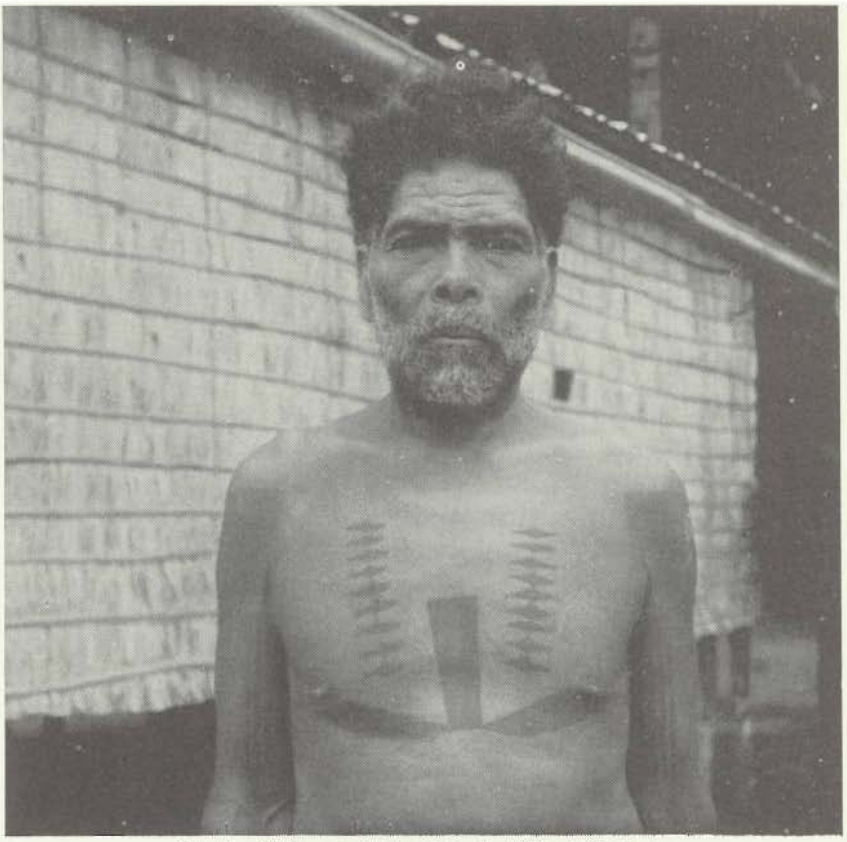


Fig. 7. Old man with characteristic tattooing.

kneed, and have an ungraceful walk, probably because they are accustomed from early childhood to carrying heavy loads in an extremely rough country[1]. The breasts of the young women are conical rather than hemispherical and far too often disfigured by the swelling around the nipples not uncommon in Oceanic races. The skin colour is tawny brown, but it is difficult to decide just to what extent the pigmentation is due to constant exposure to the sun, and the palm of the hands and the foot soles are, of course, decidedly lighter. Needless to say, the latter are always

[1] LAMBERT (1934, p. 103) says of the women's gait that it is "more awkward from the scantiness and tightness of their dress, which binds their knees together for reasons of decency. They sit down and arise with their knees together and feet apart."

Fig. 8. Elderly woman showing female tattooing pattern.

covered with a thick, horny skin which enables the people to travel on the sharp coral rock apparently without the slightest inconvenience. The hair is black and, as a rule, frizzly, although especially among children wavy or even straight hair may occur (Fig. 6). In old age the hair is apt to turn grey. The men have a rather abundant beard which, however, in most cases is removed.

Unfortunately, I was unable to undertake anthropometric measurements. STANLEY describes the skull as dolichocephalic but close to mesocephaly, 113 measurements resulting in a mean index of 74.84[1]. The blood groups are divided into nearly equal

[1] STANLEY 1929, p. 16. LAMBERT (1934, p. 103) gives the index 74.5.

portions of O and B, while A and AB are as good as absent[1]. The features of both men and women are definitely pleasing and sometimes quite European looking, even though the nose is somewhat broader and the lips fuller than in any European races (Figg. 7—8). The eyes are dark brown and sparkling, without any trace of an epicanthic fold. Sir HARRY LUKE refers to the "aquiline noses" of some of the men he met at Lake Te Nggano[2]. Real aquiline noses I have not seen, but on the other hand I have, both among men and women, observed several cases of curved noses with a slightly drooping tip like the shape common in the so-called Armenid race (Fig. 9). It is a well-known fact that a similar form often occurs in New Guinea. Whether this and the frizzly character of the hair may suggest the presence of another race element in the population remains an open question. On the other hand there is hardly any trace of recent admixture in spite of the contact with other nations within the last generation.

When LAMBERT visited Rennell in 1928 he found cases of chill, influenza, tuberculosis, dysenteria, hook worm, yaws, skin ulcers, gonorrhea, and an itch-like disease; ulcers had been introduced by European or Japanese ships[3]. LAMBERT's examination of one hundred persons in 1933 resulted in three cases of ringworm, twelve of tertiary yaws (no secondary and primary) and none of malaria; the hook-worm rate was 50 per cent. of a very light infection, but there was no evidence of clinical infection. As to tuberculosis he says that "on Rennell and Bellona I found the lowest rate of infection we had found in the South Pacific; I saw no cases of clinical tuberculosis although there are undoubtedly some deaths from it"[4]. In 1950 J. S. MCKENZIE-POLLOCK, Senior Medical Officer, noticed gonorrhea, which was brought along with Japanese fishermen in 1926, a few cases of malaria, and "probably" tuberculosis[5]. When we landed on Rennell, we were accompanied by some twenty Rennellese who had been working in other places in the Solomons, and shortly after our arrival many cases of chill sprang up. Later during our stay we noticed a small

[1] LAMBERT 1934, p. 123.
[2] LUKE 1945, p. 147.
[3] LAMBERT 1931, p. 161 ff.
[4] LAMBERT 1934, p. 122 f.
[5] MCKENZIE-POLLOCK (MS).

Fig. 9. Young woman with drooping nose tip.

epidemic of a dysenteria-like disease. The itch mentioned by LAMBERT and called by him *oŋa-oŋa*, may be the same as that on Guadalcanal known as "bukwa". It shows like dry discolourations of the skin, which eventually peels off, and it seems to be especially common around Lake Te Nggano. Gonorrhea had nearly disappeared at the time of our visit, because shortly after World War II the medical authorities of the Protectorate had seen to it that every person had a shot of penicillin. Yaws we did not observe at all, but that may be due to the fact mentioned by LAMBERT that all cases are isolated by the population itself[1]. However, the disease cannot be so widespread as for instance

[1] LAMBERT 1931, p. 166 ff. LAMBERT 1934, p. 122. LAMBERT 1944, p. 276.

on the small Alcester Islands at the southeastern tip of New Guinea where during a few hours' stay we had the opportunity of seeing several severe cases.

This rather impressive array of diseases should not be misunderstood. Generally speaking the Rennellese do not make an unhealthy impression, and the population is not declining but on the contrary slightly on the increase. The problem of the future is overpopulation rather than extinction of the inhabitants. In 1921 NORTHCOTE DECK estimated their number at 500, and some years later STANLEY and LAMBERT made it "at least" 700, and 12—1500 respectively[1]. Whereas the numbers first cited are certainly too small, LAMBERT no doubt overrated the size of the population. On the other hand HOGBIN's estimate that it "probably does not much exceed 1000" is very nearly correct[2]. During our stay Mr. MCKEITH made a rough census. Several men were sent to the districts with which they were particularly familiar, each of them carrying two long and two short sticks, representing men, women, boys, and girls respectively, and were told to make a notch for each person. The result was a total of 1009, viz. 538 males and 471 females, including 140 boys and 131 girls under six or seven years. While this number may not be absolutely correct—although its corresponds closely with the number obtained where a check was possible—there can be no doubt that it cannot be very far wrong. A highly conspicuous fact is the astonishing surplus of males as compared to females, a fact I admit that I am unable to explain unless we suppose an abnormal death rate among infant girls either due to infanticide or to more or less intentional neglect. We also noticed that children of the age class between 6 and 16 were virtually missing, and we are hardly wrong in ascribing this lack to the gonorrhea which just before and during the last war threatened the existence of the entire population. On the other hand there is at present no scarcity of children under six years of age.

[1] DECK 1921, p. 475. LAMBERT 1931, p. 147.

[2] HOGBIN 1931 b, p. 554. The Rennellese do certainly claim that the population was greater in former days, but in view of the scarcity of fertile soil this statement seems highly questionable.

Fig. 10. The chief of Te Mungginuku in old-fashioned attire.

In contradistinction to conditions among most Polynesians the cleanliness of the Rennellese leaves rather much to be desired. It is true that children often splash in the sea near the beach, but apparently grown-up persons do not bathe regularly, even if the men have an involuntary bath when fishing on the reef. In this context due consideration must, however, be given to the scarcity of fresh water as well as to the fact that most habitations are situated in the interior on account of the inaccessibility of the coast.

The tropical climate does not make great demands on clothing, and small children are often seen scampering around as naked as when they were born. At present the ordinary dress of both sexes is simply a rectangular piece of coloured calico wrapped

around the loins and reaching to about the knees. Formerly they used bark cloth dyed with turmeric. As far as the women were concerned it was worn like the modern skirt but, according to LAMBERT[1], "barely covering the pubis", whereas the men, after having folded it lengthwise, passed it as a breechcloth between the legs and wrapped it several times tightly around the waist, leaving the ends to dangle in front and behind in such a way that the front flap was often stuck inside the wrapping. The ends reached to the knees, and at the top the wrapping sometimes came almost to the arm pits (Fig. 10). Both skirt and breechcloth were called by the same word: *koŋgoa*. The breechcloth, at any rate that of the chiefs, had a very considerable length; when *Tahua*, the chief of Te Mungginuku, showed me the arrangement, he first tied together two pieces of cloth, 2.35 by 0.36 and 2.46 by 0.40 m. respectively, which nearly corresponds to the average length of 20 feet mentioned by Lambert[2]. A small sitting mat, *gapa-gapa*, might be worn by the men outside the breechcloth. During heavy work it was sometimes placed on the chest in order to protect the breechcloth from perspiration. Two specimens, 71 by 45 and 56 by 33 cm. respectively, are now in the Bishop Museum, Honolulu.

In addition to the ordinary dress the chiefs and their male relatives wore a kind of turban, *ha'u*, another rectangular piece of bark cloth wrapped around the head and tied in front in a half-bow with one long end thrown backwards over the head and hanging down the nape of the neck. A specimen in our collection (I 5219) is 2.23 by 0.50 m. Moreover, the chiefs carried a simple fan, *iŋgi*, stuck inside the breechcloth on their back. It was triangular and plaited from the section of a coconut frond, with the strongly curved base distal to the natural midrib handle. On a fan in our collection (I 5221) the cut-off ends of the leaflets are bent backwards at the distal end, thus forming a sort of fringe along the edge. It measures 59 by 44 cm. (Fig. 11). A flat, rectangular bag, *kete-maŋgu*, plaited of strips of pandanus leaves and containing the indispensable betel outfit, usually completes the costume. It is carried either under the arm or suspended in a string across the shoulder (cf. p. 104).

[1] LAMBERT 1934, p. 102.
[2] LAMBERT 1931, p. 142.

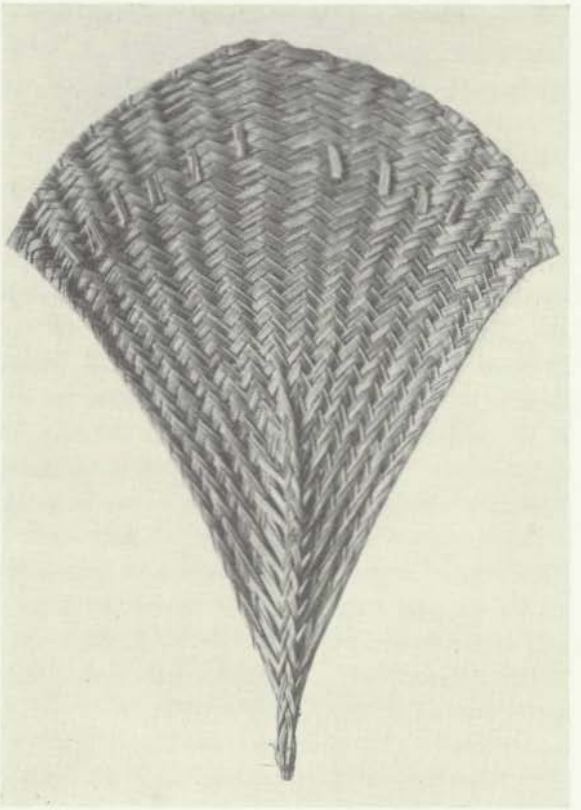


Fig. 11. Fan. (National Museum, Copenhagen).

Speaking of the women at Lake Te Nggano Sir HARRY LUKE says that "their skimpy skirts of smoked fibre (their only garment) rested not on their waists but low on their haunches"[1]. While bark-cloth skirts are mentioned by several other writers on Rennell[2], this seems to be the only reference to fibre garments, nor have I heard of them myself.

WOODFORD tells us that in his time the men had long hair, whereas the women cut theirs short[3]. According to LAMBERT the men used to tie their hair into a knot on ceremonial occasions,

[1] LUKE 1945, p. 147.
[2] WOODFORD 1907, p. 36. WOODFORD 1916, p. 48. LAMBERT 1931, p. 142. CH. VAN DEN BROEK D'OBRENAN 1939, p. 143, 145. R. VAN DEN BROEK D'OBRENAN 1947, p. 27.
[3] WOODFORD 1907, p. 36.

whereas the women cropped theirs like a tonsure, and the children had short hair until puberty[1]. However, the tonsure is actually a sign of mourning (cf. p. 114), an observation rightly made already by VAN DEN BROEK D'OBRENAN, who adds that young men shaved their eyebrows[2]. LAMBERT's statement that depilation of the face hair was performed by means of a pair of clam shells may well be correct, but he must, of course, be wrong when adding that a shark's "fin" was used for cutting the hair[3]. The implement was a tooth of a shark, *niho*, placed in a slit in one end of a short wooden stick; fig. 12 a shows a specimen (I 5231) now in the National Museum, length 7.6 cm. In the present day everybody, men and women alike, have short hair, because the missionaries thought that the old-fashioned style "had a definite part in their worship of the atuas"[4]. I rather doubt the legitimacy of this view, which seems foreign to Polynesian ideas in general, unless the point is the widespread fear of cut-off hair tufts being used in witchcraft. Combs, *seŋgu*, consist of a few pointed and rather long wooden sticks tied together with sennit or thin, split cane. In the collection there are two specimens (I 5232—33) with four and three teeth respectively; lengths 18.5 and 20.6 cm. (Fig. 12 b-c). Combs carved from a single piece of wood with a long handle also occurred. The specimen seen in Fig. 13 a belongs to the University Museum of Archaeology and Ethnology in Cambridge. This type was said to be of Melanesian origin.

At festivals and on similar occasions both sexes smeared their bodies with turmeric[5], and at certain rites the chiefs blackened their faces with charcoal (cf. p. 62). On incision and tattooing see p. 107 ff.

Personal adornment is rather inconspicuous. Sometimes, but not very often, a youth or a young girl will be seen putting a hibiscus or other bright flower in the hair. The most common ornament now is, perhaps, a simple necklace, *vaga*, consisting of small, coloured glass beads, but it seems significant that the beads we brought with us from Honiara were not very much in demand. Strings of seeds are also used for ornament (mus. spec.

[1] LAMBERT 1931, p. 141.
[2] CH. VAN DEN BROEK D'OBRENAN 1939, p. 145 f.
[3] LAMBERT 1931, p. 141. LAMBERT 1944, p. 259.
[4] DECK 1945, p. 103.
[5] KNIBBS 1929, p. 204. R. VAN DEN BROEK D'OBRENAN 1947, p. 28.

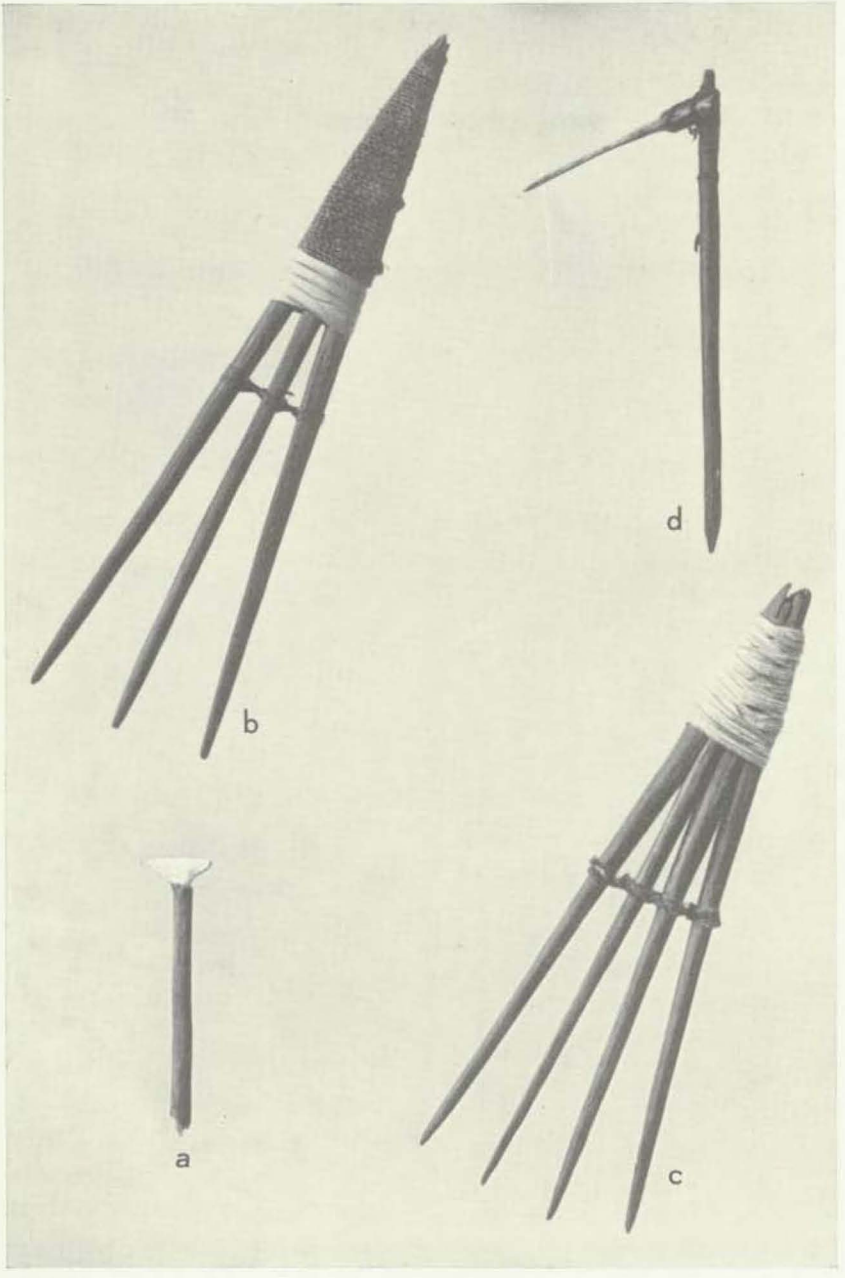


Fig. 12. Shark tooth razor (a), composite combs (b—c), and tattooing implement (d). (National Museum, Copenhagen).

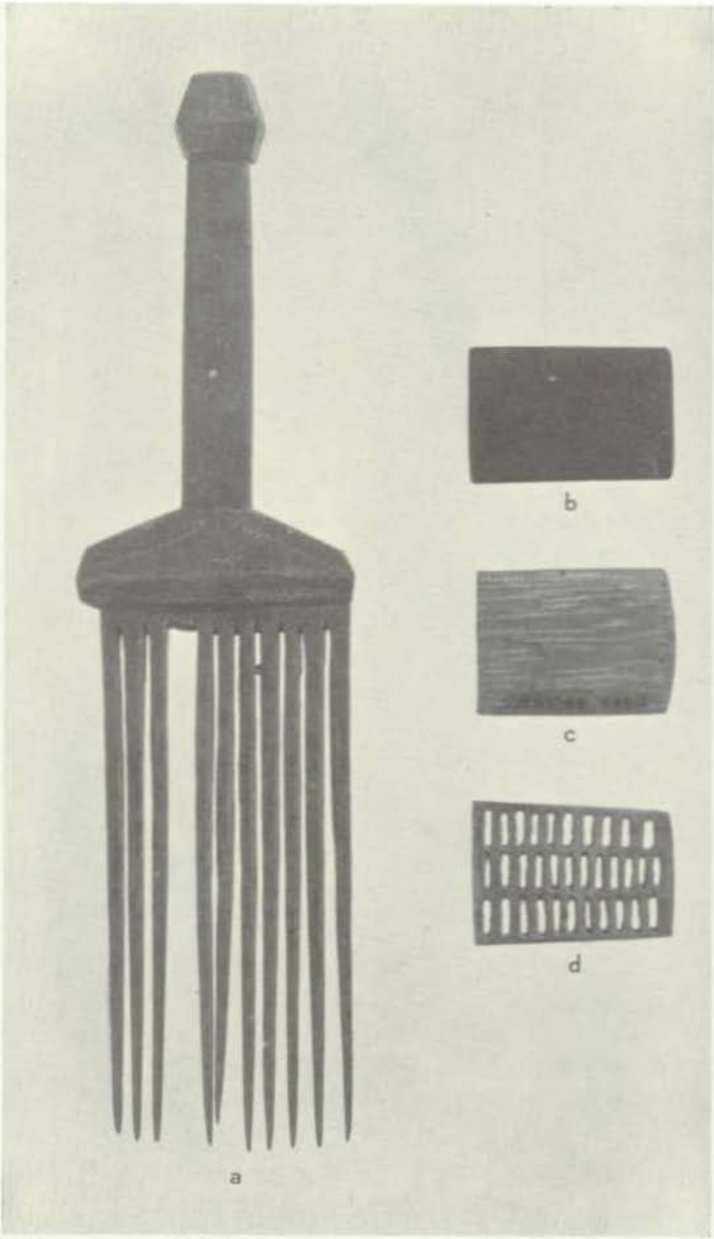


Fig. 13. One-piece comb (a) and ear ornaments (b—d). (Courtesy, University Museum of Archaeology and Ethnology, Cambridge).

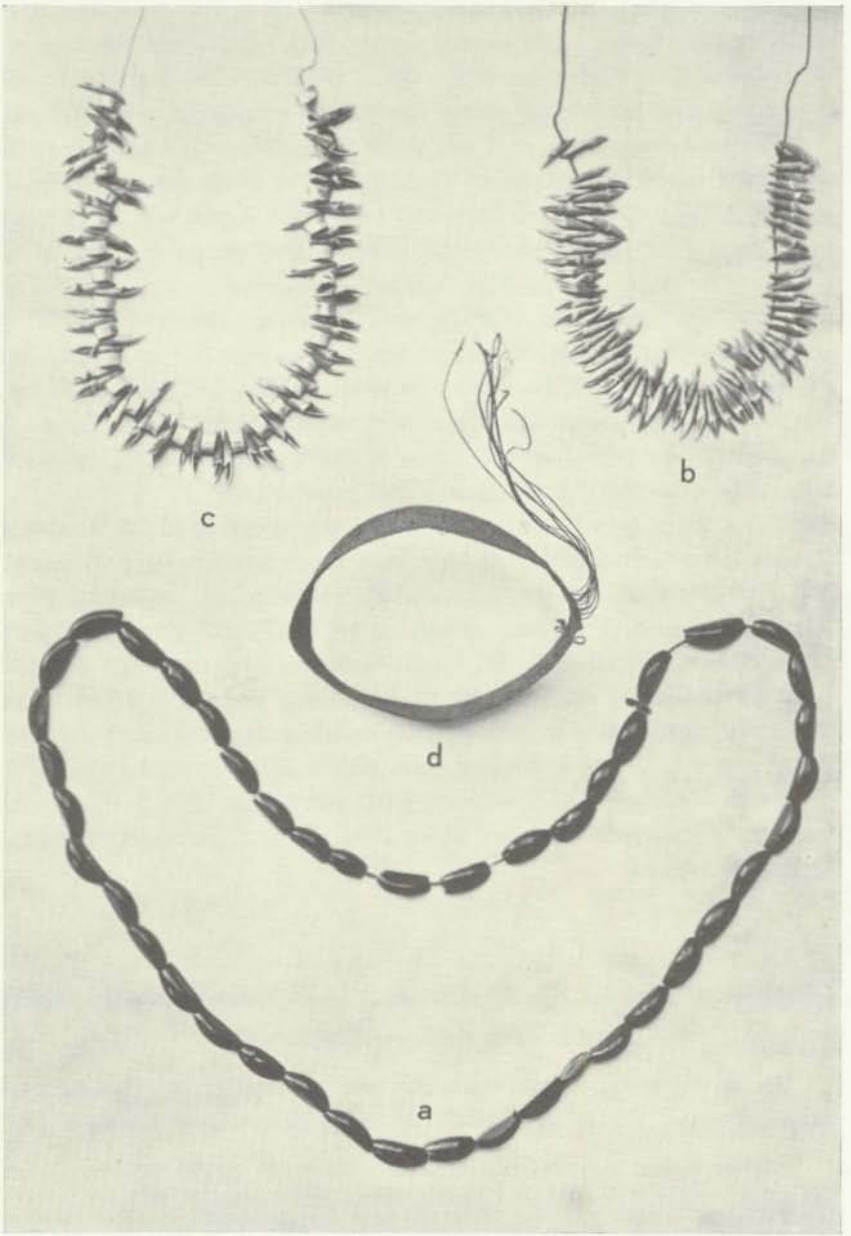


Fig. 14. Necklaces (a—c) and armlet (d). (National Museum, Copenhagen).

I 5225—26; fig. 14 a). Far more valuable, however, is a necklace, *tu'u*, made of the teeth of the flying fox, sometimes alternating with small fish vertebrae. Both types (I 5222—23) are illustrated in fig. 14 b-c. Strings of flying-fox teeth, *niho-peka*, are, indeed, a substitute for money and are used for paying damages[1]. Breast pendants were also made of scallop shells, shell discs decorated with concentric circles of dots, etc. (Fig. 15). Armlets are not very common, although formerly the nobility tied strips of bark cloth around the arm[2]. A pair of woman's armlets in our collection (I 5229, fig. 14 d) are of delicately braided sinnet plaited in a herringbone pattern, with the free ends of the strings forming a kind of thin tassels. Another armlet or wristlet (I 5262) consisting of ten small shells suspended from a common string might be used as a rattle during dances. Lime sticks for betel chewing were sometimes carried stuck inside the armlet[3].

Nose rings made of turtle shell are mentioned in a single source only[4], and must at any rate have been rather unusual. Ear ornaments, *kasiaya*, are, on the other hand, common even to-day. Two pairs in our collection (I 5227—28) consist of tiny rings of turtle shell, only 1 cm. in diameter; on one pair a small perforated disc of shell is slid on each ring. Formerly other types occurred, sometimes consisting of nothing but a coiled leaf, in other cases of a small, rectangular, either solid or perforated slab of wood, inserted into the lobe of the ear[5]. Fig. 13 b-d illustrates three specimens of the latter kind, now in the University Museum in Cambridge.

4.

Chieftainships. — Social Classes. — Villages, Habitations, and Temples. — Furniture.

As previously mentioned the native name of Rennell is Munggava or "the large island", in contradistinction to Munggiki,

[1] Deck rightly mentions this kind of teeth (1921, p. 475. Cf. Woodford 1907, p. 36). Lambert (1931, p. 149) erroneously states that the teeth are those of the porpoise. Though porpoise teeth are used for ornaments in other parts of Oceania I have never heard of them being employed on Rennell.

[2] R. van den Broek d'Obrenan 1947, p. 27.

[3] R. van den Broek d'Obrenan 1947, p. 32.

[4] Lambert 1931, p. 141. Lambert 1944, p. 257.

[5] Lambert 1931, p. 141. Ch. van den Broek d'Obrenan 1939, p. 143. R. van den Broek d'Obrenan 1947, p. 28.

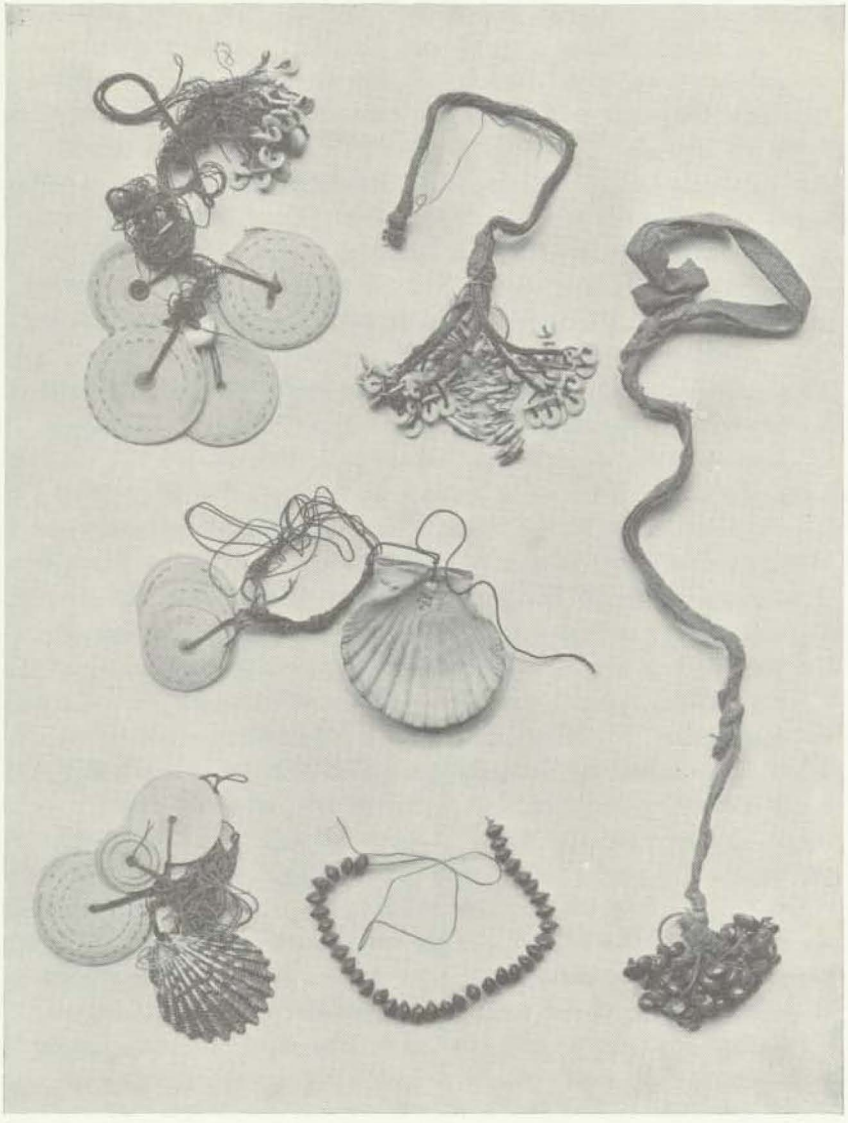


Fig. 15. Pendants and necklace of shells and seeds. (Courtesy, British Museum, London).

"the small island", also known as Bellona. Tradition[1] tells us that originally both islands were ruled by a common chief who lived on Bellona, but sixteen og seventeen generations ago the

[1] Forster (MS).

Bellona chief, *Taupoŋi*, was killed and his four sons separated. One of them, *Manu*, stayed on Bellona; another one, *Sao-e-maŋoŋena*, was killed like his father and his people scattered, whereas *Uaimaŋo* and *Maitoŋo* went to Rennell and settled at Lake Te Nggano. Up to the present day Te Nggano is considered the principal chieftainship, and its head occupies a position superior to that of the other chiefs of the island. Around Kanggava Bay, immediately west of Te Nggano, is the chieftainship of Te Mungginuku; it is also known as Te Manggavai, which is, however, more or less a nick-name. Then follows Banggikanggo, the principal settlement of which is Te Avamanggu, Te Tuakoi, and Taungganggoto with Hatanggoa as the main village, and farthest to the west Senggema, where the largest village is Kanggoa.

RAY supplies us with the following information: "The south-west portion of Rennell is known as Bethona (which appears to be the same word as Bellona). The part more to the eastward is Mangihamoa. The villages on Rennell are: Juguge on the south-west coast; Okeoke Kungava on the centre of the south coast; Deha Kungava on the south-east coast; Kungivi in the interior, at the west end of the lagoon, and Vinegau on the south coast of the lagoon. These names are due to Mr. WOODFORD"[1]. Evidently "Mangihamoa "is identical with Te Munggihenua, a name applied in common to Taungganggoto and Senggema, and Kungava is, of course, Kanggava, but some of the other names are even more misrepresented. Thus, Juguge should be Lugugi and is the name of a part of the coast, not a village[2]. LAMBERT has indicated the position of the chieftainships on a map[3], but as both the outlines of the island and the names are inaccurate, it is not very reliable. Moreover, the boundaries between the chieftainships are rather vague and do not follow definite lines.

KNIBBS makes this observation: "The most ludicrous example of the multiplicity of 'chiefs' which I have yet experienced was at the small island of Bellona, lying to the north-west of Rennell Island. Here the chieftainship extended apparently over but a few yards of soil, one 'chief' claiming to be lord and master of the beach, another of the land immediately to the rear"[4]. Nothing

[1] RAY 1917, p. 171.
[2] LAMBERT 1934, p. 104.
[3] LAMBERT 1931, p. 137.
[4] KNIBBS 1929, p. 54.

like this is found on Rennell, and I am inclined to believe that KNIBBS's statement must be due to to some misunderstanding.

I could find no suggestion of the "totemism"—or perhaps rather pseudototemism—described by RAYMOND FIRTH from Tikopia[1]. It is true that Te Nggano was a special coconut district in former times, and as a consequence its population was considered "coconut people" in preference to other inhabitants of the island; but this was merely due to local conditions, and no taboo was connected with the treatment of the coconuts.

The chiefs, *aŋgiki*, claim to descend from *Kaitu'u*, the leader of the first immigrants, and through him they also descend from *Te Haiŋgi-atua*. No wonder, therefore, that the chiefs of Rennell like those of other Polynesian islands were sacred. At intervals they were possessed by a spirit so that they fell into a trance, and they would also summon the gods to the assembling places or make them enter the sacred emblems. Their authority seemed to a great extent to depend upon their ability to being entranced, and in practice this might even influence the succession although the dignity theoretically passed to the oldest son[2]. MACGREGOR has given a description of how a chief fell into exstacy[3]. The common Polynesian idea that the head is the most sacred part of the body still seems to survive. When I wanted to take a photograph of *Taupoŋi*, the high chief of Te Nggano, and tried to raise his chin on account of the light, he immediately withdrew one or two steps with a half frightened and half embarrassed smile.

The badge of the chief was a wooden staff, *ŋata-uti-uti*, which was taboo like himself and consecrated to *Te Haiŋgi-atua*. It was always made according to the same pattern, which corresponds closely to the ordinary type of lime stick, though of course much greater. A specimen in our collection, formerly belonging to the chief of Te Mungginuku (I 5189) is made of a dark and hard wood, 1.24 m. long (Fig. 16a). It has a big knob, nearly hemispherical on top, with a sharp lower edge, below which it tapers concavely towards the end, where there is a winding of fine

[1] FIRTH 1936 a.

[2] MACGREGOR 1943, p. 34. This may be the reason why LAMBERT (1931, p. 145) makes the erroneous statement that chiefs are not hereditary. In his later paper this mistake is corrected (LAMBERT 1934, p. 119).

[3] MACGREGOR 1943, p. 35, 37.

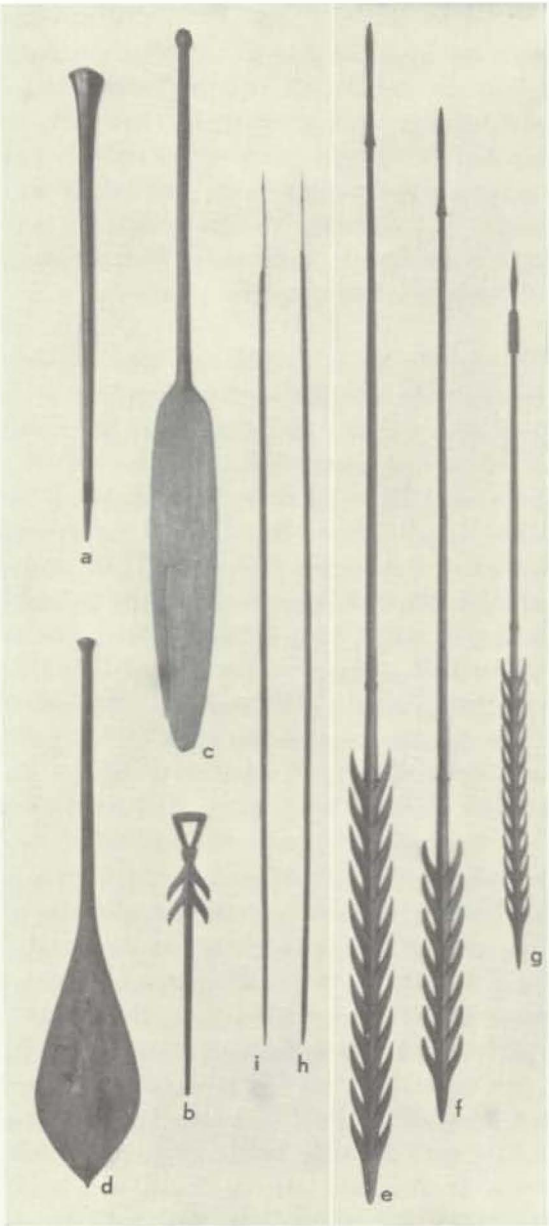


Fig. 16. Chief's staff (a), walking stick (b), paddle (c), ceremonial paddle (d), ceremonial spears (e—g), and javelins (h—i). (National Museum, Copenhagen).

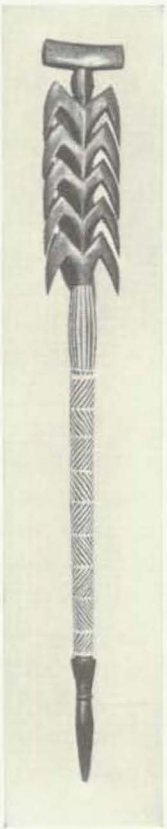


Fig. 17.

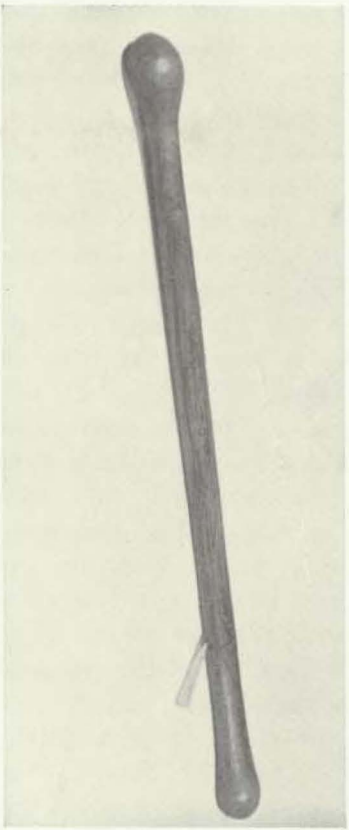


Fig. 18.

Fig. 17. Ceremonial staff. (Bradley collection).
Fig. 18. Dancing stick. (Bradley collection).

sennit braid. During the ceremonies the chief carried the staff on his shoulder, but when invoking the gods he held it in front of him, resting his chin on the knob. When travelling, a chief would carry nothing but his staff.

WRIGHT speaks of "adressing the atua only when holding the ritual prayer stick ... this stick being essential in Rennell to establish communication with the atua"[1]. His remark may refer to another type of stave used by some persons of lower rank than the chief when officiating of certain ceremonies. The shape appears from fig. 17, showing a specimen made to order for Mr.

[1] WRIGHT 1939, p. 292.

Bradley and called by him *haigaŋi*. Somewhat similar staffs are found in Otago Museum, Dunedin, and Bishop Museum, Honolulu (Fig. 24a—b). The characteristic barbs are supposed to represent frigate birds. A double-headed stick of heavy, brown wood, about 1 m. long, *tapanihutu*, was according to Mr. Bradley carried by all priests and possibly also by men of lower rank when attending religious dances (Fig. 18). It was last used in 1938. It may be added that more or less fancy walking sticks with big barbs and sometimes inlaid with pearl shell are now made for export to Honiara (cf. p. 21). One of the less elaborate specimens is seen in Fig. 16b. The prototype of these sticks is probably the ceremonial staffs just described.

To some extent the chief possessed judicial power. If a man was wronged he might claim damages from the offender, or he might ask the chief for his assistance. The chief was entitled to have a breaker of the customary laws beaten or even put to death, or he might order his gardens to be destroyed. Blood revenge was common in case of murder. If, however, a murder was committed in the district of a friendly chief, the latter might approach the chief of the murderer and insist on compensation. Even marriages were subject to the approval of the chief, who in such cases laid claim to gifts. On the other hand the chief had no right to special shares of the yield of horticulture and fishing. The most important of his privileges was, however, his right to impose taboo. Before the ripening of the crops, or if a ceremony demanding an abundance of food was forthcoming, he would make use of his power, but he might also abuse it in order to appropriate the belongings of his subjects. The usual taboo sign, for instance on a coconut palm, is a strip of bark cloth tied around the stem, and larger patches of land were enclosed by means of creepers.

Not only the chief but his whole family were sacred and formed a kind of nobility. We noticed that even to-day *Puia*, the son of the Banggikanggo chief, disapproved when his little son wanted to play with other children.

Both chiefs and noble families might have special servants called *guani*. They were handed over to them in childhood by their parents and had to work for their masters, who gave them food but no wages. They were not slaves, however, for if they

wanted to marry their master would arrange a match, after which they left his service. A separate priesthood does not occur[1].

The introduction of Christianity has recently caused a change in the type of settlement. As NORTHCOTE DECK has it: "The result has been a wonderful revolution in their social life. For whereas before, they lived scattered about in the bush, just one or two families together, so great has been their desire to be taught of God, that the whole population ... has come together in about ten large villages"[2]. Whether the good missionary's enthusiasm is legitimate from an economic point of view is, perhaps, questionable, and in actual fact it is somewhat exaggerated. There are still but three or four villages with more than about 50 inhabitants such as Lavanggu, which is a quite modern creation due to the anchorage in Kanggava Bay. Lavanggu was, indeed, taboo in former times, because it was supposed to be the place from where the souls departed for *Manukatu'u*, one of the Islands of the Dead. Other fairly large villages are Te Avamanggu in the western part of the island, Hutuna on the southern shore of the lake, and Tingoa at its eastern extremity. But in many cases people still live in small clusters of houses scattered over the island near the lake and along the fertile zone. The greatest number of dwellings originally observed by NORTHCOTE DECK in a single place was eight[3]. There is some reason for believing that each community consisted of an extended family[4]. LAMBERT mentions that the men lived apart in the main building, while there were smaller houses for the women. I suspect, however, that the latter were buildings for the less important members of the family, or they may simply have been cooking sheds, for I found no traces of such men's or club houses which are so common in Melanesia and Micronesia.

In front of the houses there is always an open space, the *ŋgoto-maŋgae*. This is the assembling place where ceremonies and dances are held and which was taboo to the women except during dances just as the cooking sheds were to the men[5]. Even

[1] Cf. HOGBIN 1931 a, p. 176.
[2] DECK 1945, p. 98 f.
[3] DECK 1921, p. 475.
[4] HOGBIN 1931 a, p. 175.
[5] Cf. HOGBIN 1931 a, p. 175. HOGBIN 1931 b, p. 554.

at a modern settlement like Lavanggu there is something like a *ŋgoto-maŋgae* close to the beach and surrounded by coconut palms; farthest inland a few decaying timbers suggest the site of a former chief's house. Except for the lack of trees there is nothing to indicate the character of these places, no pavement, no monoliths[1], nor do we find anything like construction of regular roads, simple trails serving to connect the house groups of the island. Wells, artificial harbours, etc., are also unknown. The graves are found close to the dwellings. "All houses", says HOGBIN, "have one or two graves before them, with a small house erected on top"[2]. Even at the present time, graves are situated near the habitations, for instance at Lavanggu, where some quite modern graves occur near the beach below the houses.

It is difficult now to form an accurate idea of the construction of the original dwellings. HOGBIN gives the following description of them: "They are simply roofs thatched with palm leaves that come down on all sides to within less than two feet of the ground. The space between the roof and the ground is left open without covering, and ingress is obtained by crawling underneath. Shark-flesh is a highly valued food, and inside each house numerous shark-tails hang as trophies"[3]. LAMBERT gives the size of the largest houses as 6--7.6 m. long and 3.6—4.6 m. broad, with a ridge pole about 3—3.6 m. in length[4]. Additional information is given by C. VAN DEN BROEK D'OBRENAN: "*Les poutres de la toiture sont recourbées et forment une sorte d'ogive. Cet abri est divisé en deux parties, dans le sens de longueur, par une série de petits poteaux sur lesquels on a fixé une planche qui va d'un bout à l'autre. La moitié du hangar située le plus près de la mer est rigoreusement* tabou *et il faut pénétrer par derrière*"[5]. It should be added that according to HOGBIN, curved rafters were peculiar to temples and grave houses only[6]. A picture of the interior of a chief's house shows, however, a construction of curved rafters, horizontal pur-

[1] MACGREGOR (1943, p. 35) mentions a stone slab outside a temple at Lake Te Nggano, cf. here p. 62. In Bellona there were two sacred stones of different colour, one "male" and one "female" which were visited on certain occasions, but they were smashed in 1938 by fanatical Seventh Day Adventists from Rennell (information kindly supplied by Mr. BRADLEY).

[2] HOGBIN 1931 a, p. 175. HOGBIN 1931 b, p. 554.

[3] HOGBIN 1931 b, p. 554.

[4] LAMBERT 1931, p. 142.

[5] CH. VAN DEN BROEK D'OBRENAN 1939, p. 147, cf. 149 f.

[6] HOGBIN 1931 a, p. 176.

Fig. 19. House. Te Avamanggu.

lins, a ridge pole resting in the angles formed by the upper ends of the rafters and, below the rafters, a second ridge pole; the sides are left open, but the gables are closed with walls evidently made of sewn pandanus mats[1].

The present-day village of Lavanggu is situated on a narrow sand beach covered with coconut palms, among which the houses are scattered. The cliff rises abruptly, clad with pandanus trees and dense jungle vegetation, immediately behind the beach, which is only a few hundred metres long and hardly more than 50 m. wide. Farthest away from the houses, at both ends of the sandy beach, are the places used for defecation. The twenty odd houses forming the village show all kinds of style (Figs. 19—21).

[1] Te Rangi Hiroa 1938 b, pl. at p. 114.

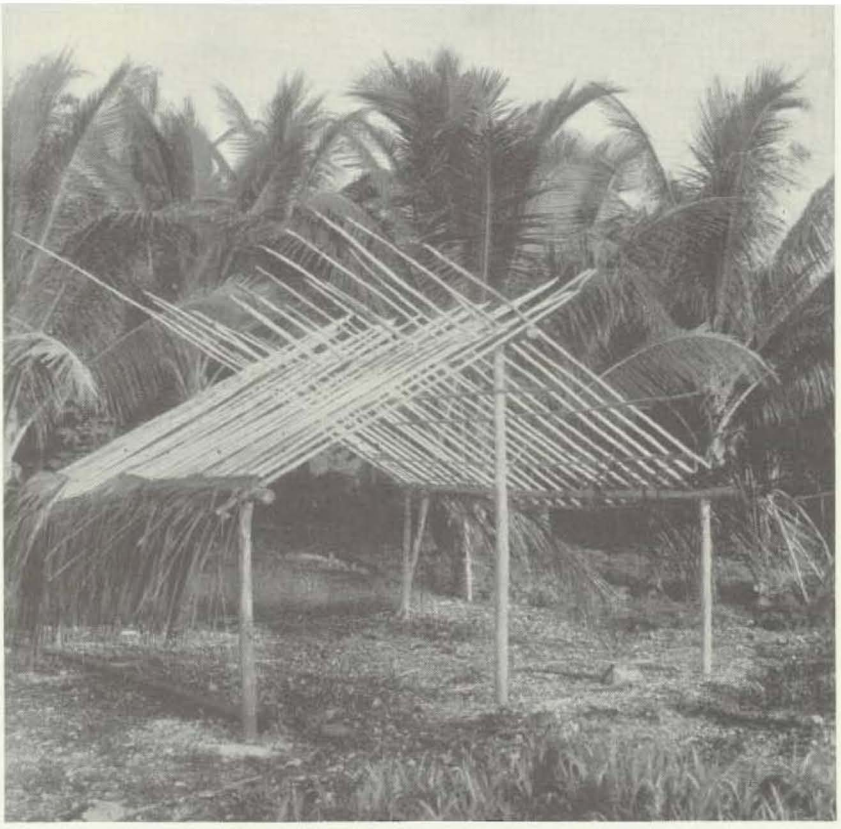


Fig. 20. House under construction. Lavanggu.

Some are erected on poles 1 m. high or so, others are built direct on the ground, some of them have four walls, others only three. Sometimes the roofs and walls are made of sewn pandanus leaves, sometimes they consist of coconut fronds, or the walls may be of one kind of material and the roof of another. Two houses had even roofs of corrugated iron, from which the rain water was led to big iron tanks and saved for drinking. A few huts, used mainly for storing copra, had roofs of palm leaves coming right down to the ground. Outside some houses shark-tail trophies were placed.

Temporary shelters are of the simplest type. During our sojourn at Lavanggu visitors often arrived from distant parts of the island, and if no other sleeping place was available they would erect a shelter of two rows of coconut fronds tied together at the top, or

Fig. 21. Old-fashioned house. Lavanggu.

they might even be content with a single row, or with two or three fronds placed obliquely into the ground. In one case I noticed a shelter where the fronds were set in a circle and tied together at the top, thus forming a small, conical hut. Formerly natural caves were sometimes used for habitation[1].

In Te Avamanggu, another inhabited place in the western part of the island, and supposed to be the largest settlement in the district of Banggikanggo, the number of houses is much smaller than in Lavanggu, but their construction is similar, showing the same abandonment of the original style, and this seems, indeed, to be a general trait everywhere on the island.

[1] KNIBBS 1929, p. 212. LAMBERT 1931, p. 143. LAMBERT 1934, p. 102. LAMBERT 1944, p. 268.

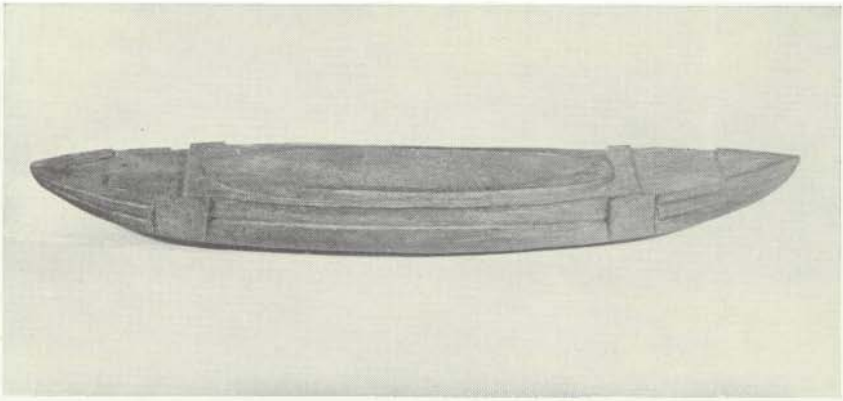


Fig. 22. Model of canoe-shaped shrine. (Bradley collection).

The temples, *ha'etuŋa*, did not differ essentially from the habitations except for the curved rafters, if really the latter did belong exclusively to this kind of structures. Now the whole island has been christianized, there are, of course, no temples left. On our way to Te Avamanggu we passed a place where one of the temples dedicated to *Te Haiŋgi-atua* had been situated, but nothing could be seen except a roof supported by poles. It was the chief who ordered a temple to be built, just as he kept it under supervision and, if necessary, ordered it to be repaired. There was no ceremony connected with the process of construction. In front of the temples there was the usual open space which was taboo to the women, and nobody was allowed to carry weapons within the sacred precincts. The temples were only visited during the ceremonies, previous to which the open space was to be cleaned of weeds.

A shrine of a special kind was described to Mr. Bradley by the head chief *Taupoŋi*. It was called Te Haungua and was shaped like a dugout canoe without an outrigger, about 4.25 m. long, and situated in the forest near Lake Te Nggano where it was visited only on certain occasions once or twice a year when the head chief placed food in it. Fig. 22 shows a model of this canoe made according to *Taupoŋi's* directions. The original one was destroyed after the missionaries came.

Inside the temples were the holy emblems of the gods. The stick representing *Te Haiŋgi-atua* and brought along to the island

by *Kaitu'u* has been mentioned formerly (p. 23). It was kept in the temple called Mangama Uvea at Baingau near the lake and is described as a stick about 1.37 m. long and 10 cm. thick, with

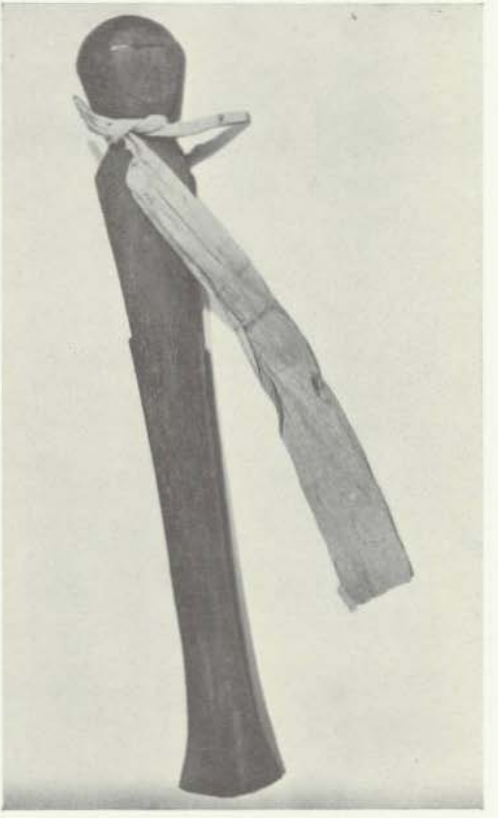


Fig. 23. Replica of god emblem. (Bradley collection).

a knob at each end, wrapped in bark cloth, and with the upper end covered with turmeric[1]. Mr. Bradley had a replica made of the stick (fig. 23). It is carved from heavy brown wood and only about 1 m. in length. He kindly adds the following information. It was kept in the house of the high priest (?), who was the only person allowed to touch it. Death overtook anyone breaking the taboo. The stick was stood on end. The rounded part representing the head was called Te Uga (*te uŋa*? *te uŋu*?). From the neck

[1] Hogbin 1931 a, p. 176. Macgregor 1943, p. 36.

was tied a piece of bark cloth, Te Hau, in the form of a bow which kept in place a very long, narrow strip of bark cloth a few inches wide and many yards long and hung round the wall

Fig. 24. Ceremonial staffs. (Courtesy, Bishop Museum, Honolulu).

of the house. The four-sided basal part of the stick was called Te Noko (*te nuku*?).

The symbols of *Te Hua-i-ŋgaveŋa* were the fantastically carved spears, *masahu*, which caught the attention of most of the previous visitors to Rennell but were erroneously interpreted as weapons by NORTHCOTE DECK[1]. They were kept in the temples or the

[1] DECK 1921, p. 475. STANLEY 1929, p. 17. WOODFORD 1916, p. 48. LAMBERT 1931, p. 142. HOGBIN 1931 a, p. 176. R. VAN DEN BROEK D'OBRENAN 1947, p. 28. Cf. KNIBBS (1929, p. 44) who mentions similar spears from Bellona believing they are "dancing clubs".

houses of the chiefs stuck under the rafters and carried during certain ceremonies (cf. p. 60 ff). According to the manuscript report of FORSTER the type was "invented" in a dream ten generations

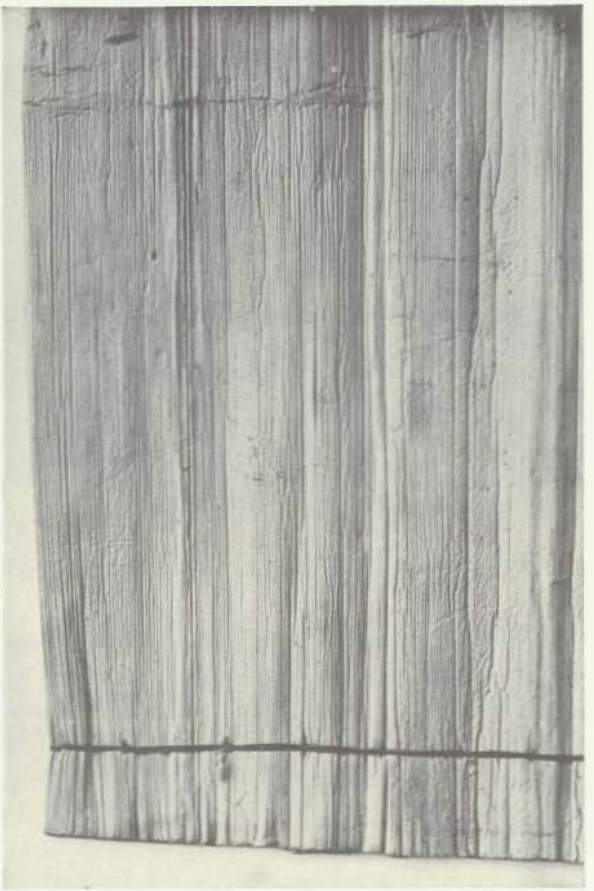


Fig. 25. Detail of sewn pandanus mat. (National Museum, Copenhagen).

ago by the chief of *Te Muŋgihenua*. Three of these spears, now in the Copenhagen Museum (I 5186—88), are shown in fig. 16 e–g. They are all made of dark, heavy wood with spindle-shaped points and two rows of powerful barbs pointing upwards at the rear ends. In addition, one specimen has four rows of smaller, downward pointing barbs near the top. On the two other specimens there are lashings of thin sennit braid. Lengths 1.88 m., 2.66 m., and 3.09 m. respectively. An aberrant type with nine points tipped

Fig. 26. Women carrying loads. (H. Knudsen phot.).

with human (?) bone is now in the Bishop Museum; length 115 cm. (fig. 24c).

A certain kind of paddle, *sua*, differing in shape from the ordinary paddles, and a small mat, *kope-tapu*, were the emblems of the goddess *Tahakuŋa*. Like the ceremonial spears, these paddles were kept in the temples. The specimen in our collection (I 5192, fig. 16d) is made of brown wood. The blade is oval, terminating in a point and with a low median ridge on one side. The shaft widens upwards to form a knob. Length 1.42 m., width of blade 27 cm. Mats were also spread on the ground for the gods to sit upon when they appeared during the invocations, some of them insisting on large mats, others being content with smaller ones.

The original furniture of the ordinary houses was very scanty, being limited, apart from baskets, food containers, etc., to mats and head rests. The ordinary sleeping mat, *bagu*, is made of broad strips of pandanus leaves laid double, the overlapping edges being pinned together with small thorns and sewn at the long sides with stitches of thin fibre thread. A mat of this type (I 5260, fig. 25) is 1.35 by 0.86 m. On journeys the women wrap

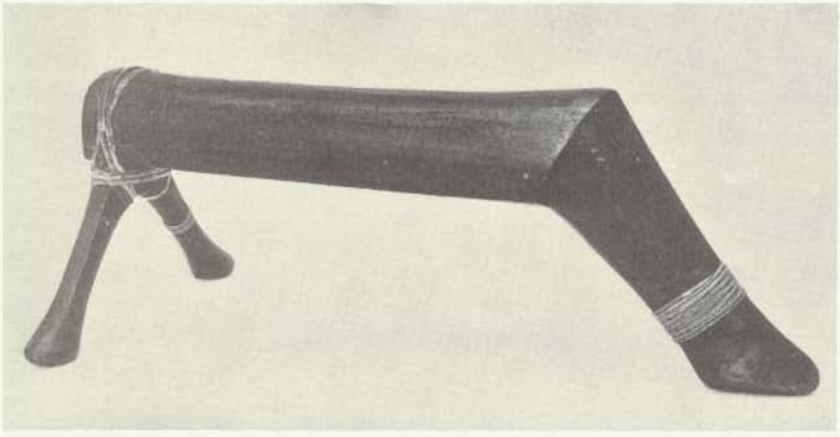


Fig. 27. Wooden head rest. (National Museum, Copenhagen).

up the family's belongings in such mats and carry them by means of straps across their chests (fig. 26). Finer mats, *malikopi*, are plaited of thin strips of the same material in diagonal weave and often decorated with dark lines forming a simple, geometrical pattern. Thus, in the mat I 5259 there are narrow quadruple stripes running obliquely and producing large lozenges on a light background; size 2.03 by 0.82 m. The head rest, *uŋguŋa*, has a rather extraordinary shape as will appear for instance in the specimen (I 5249, fig. 27) in our collection. It consists of a horizontal bar, round on top and flat with a low longitudinal ridge on the underside. The bar continues at one end in a slanting leg widened at the foot, where there is a lashing of thin sennit braid, while at the other end two diverging legs carved from a single piece of wood are lashed to the bar by means of narrow cane strips. Round one of these legs there is a narrow lashing of sennit. Length 40 cm., height 14.4 cm.

In the house occupied by the "teacher" at Lavanggu I noticed a cylindrical box carved out of a single block of wood and provided with a lid, a type well-known throughout western Polynesia, where it is commonly employed for holding fish hooks and similar small things. At that time the teacher was away to Honiara, and I did not succeed in ascertaining whether this was a genuine Rennellese container or had been imported from some other island, but I feel most inclined to accept the latter alternative.

II.

Economic Activities.

1.

Gardens. — Cultivated Plants. — Methods and Ceremonies of Cultivation. — Land Tenure.

From an economic point of view the Rennellese are primarily horticulturists, provided, of course, that "gardens" are taken here in the same sense as in other parts of the South Seas, viz. simple clearings in the forest where the cultivation takes place. The uncultivated bush is called *mo'uku*; a garden, *ma'aŋga*. When a new garden is to be laid out, the men will unite in felling the trees in such a manner that all the crowns fall in the same direction. If they grow on a slope, the workers will begin cutting half through those situated lowest down and finally fell the uppermost ones in order that they may upset the others when tumbling down. The trees are then left to dry for two or three months, after which the women will set the vegetation afire, and the planting takes place immediately afterwards to prevent the weeds from springing up. As neither wild boars nor any other animals threaten the crop, fences are not built around the gardens.

The principal food plants are yams and taro. There are two species of yam (*Dioscorea elata* and *D. esculenta*), known as *uhi* and *uhi-ŋgava*, i. e. big yam, respectively; the latter is commonly called pana on the Melanesian Solomons. Ordinary taro, *taŋo* (*Colocasia antiquorum*) has been cultivated from early times, but the giant taro, *kape* (*Alocasia macrorrhiza*), remarkable for its enormous tubers, is a recent acquisition, and the same is true of the sweet potato, *patato* (*Ipomoea batatas*). Equal in importance

to the tubers are the fruits of the coconut palm, *niu*—the nut itself being called *polo*—and the pandanus tree, or *haŋga*. The cultivation of coconuts has no doubt increased in later years, since copra is the only product of the island which is exported to any notable extent, but I found no support for STANLEY's statement[1] that they were considered sacred in former times. Among the original cultivated plants is also the Indian mulberry (*Morinda citrifolia*) mentioned by WOODFORD[2]. Nowadays papaya (*Carica papaya*) is very common and strange to say it was considered an original, i. e. pre-contact crop, although not only botanical evidence but probably its very name, *mamiapu* (mammy apple?) point to the contrary[3]. On the other hand both banana, *huti*, and breadfruit, *mei*, are definitely known to have been introduced in modern times[4]. At present also maize occurs but in quite negligible quantities. Of stimulants areca nuts, *pua*, and betel pepper, *pita*, are cultivated, and of late years also a little tobacco. Kava (*Piper methysticum*) is entirely unknown, Turmeric, *aŋu* (*Cucurbita longa*) is as far as I know the only plant grown for technical purposes.

The agricultural methods are the simplest imaginable. Irrigation is, of course, out of the question, since there are no rivers and the rain water disappears immediately in the fissures of the coral rock. The ashes left from the burning of the primeval vegetation are the only fertilizer. All garden work is performed with the dibble, which is a simple stick, 1.5 m. or more in length. Even though the gardens are private property, the men co-operate in digging, and afterwards the helpers will be rewarded with a part of the yield according to the good-will of the owner, for there are no fixed shares. It is especially the proprietor's own relatives who are asked to assist. When working, they thrust the dibble into the ground, and the upper end is given a quarter or a half turn in order to form a conical hole, and if yams are to be planted

[1] STANLEY 1929, p. 17.

[2] WOODFORD 1907, p. 35.

[3] R. VAN DEN BROEK D'OBRENAN's statement (1947, p. 31) that both coconut trees and papaya were introduced recently is, of course, erroneous. The reason why papaya was considered indigenous may possibly be that it was introduced from some other island in pre-European days.

[4] This is in accordance with the fact that LAMBERT (1931, p. 143) did not find breadfruit on the island.

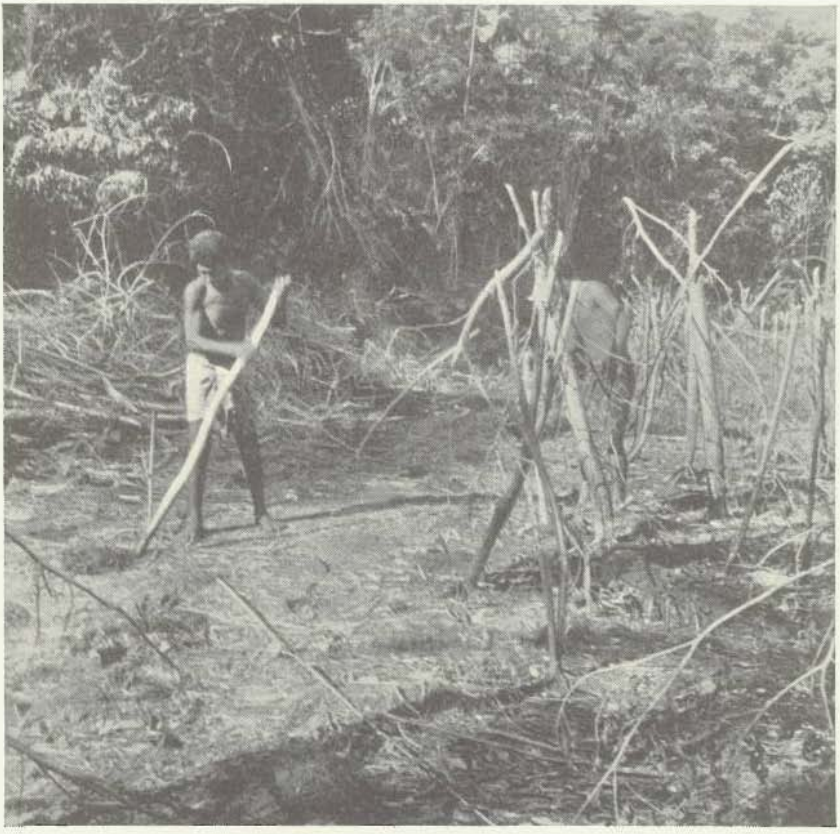


Fig. 28. Man with digging stick. To the right tripods for yam vines. Te Avamanggu.

a primitive tripod of thin stakes is erected over the hole for the vines to twine around (fig. 28). The various species of plants are, to some extent at least, kept apart. Thus at Lavanggu coconut palms were cultivated on the sand beach and pandanus on the bluff, and on top of the latter were small patches of papaya plantations. In a clearing near Te Avamanggu, taro was grown in a corner of the garden, while most of the ground was taken up by yam (fig. 29).

Yams are planted in the beginning of the dry season, i. e. April or May, which is considered the proper planting period, *te gapu*, whereas taro can be planted at any time. Both yam and taro are grown only for one year in a garden, and when the har-

Fig. 29. Men working in a taro garden. Te Avamanggu.

vest is over, the land must lay fallow for the next two or three years. Before the planting begins the gods are invoked, and during the work the ancestors are besought to provide an abundant harvest. Whereas the digging is done exclusively by men, both sexes join in the planting. During the growing season it is necessary to weed the gardens twice. If in this period the rains fail, a cup made of half a coconut shell filled with water is placed on the graves of the ancestors. If, on the other hand, there is too much rain, *Te Haiŋgi-atua* is implored to stop it. This is done privately and not at any public ceremony. On the whole, however, very few prayers are made during the growing season.

Regular first-fruit offerings to *Te Haiŋgi-atua* and *Te Hua-i-ŋgaveŋa* were made of taro and of both species of yam, as well

as of coconuts the first time the tree bears fruit, but not of a certain other tree which unfortunately I failed to identify (perhaps *Morinda citrifolia*), because it was given by *Te Haiŋgi-atua* to mankind expressly for eating. Nor were offerings made of the recently introduced sweet potatoes. The ceremonies took place on the *ŋgoto-maŋgae*, where the fruits provided for *Te Haiŋgi-atua* were placed in front of the chief's house, because he was the supreme god, and those offered to *Te Hua-i-ŋgaveŋa* behind the house. I heard nothing of the offering at the ancestral graves mentioned by HOGBIN[1]. According to the same author the offering of the first yams to *Te Haiŋgi-atua* takes place in March and is called *te kapu*[2]. It may be the same ceremony described by RAYMOND FIRTH's Tikopia informants as *te riuŋa* or *te kava*, in spite of the fact that kava is unknown on the island[3].

MACGREGOR has given a detailed account of the food offering he witnessed during his stay at Te Nggano[4]. Yams and taro were piled on the *ŋgoto-maŋgae*, and dancing commenced at sunset to be continued at daybreak. During the morning dance the chief—the same *Taupoŋi* who was still high chief at the time of our visit—was sitting in his house on a new mat spread over two coconut fronds, and on the western side of the *maŋgae* was placed a mat-covered board spread over more fronds and intended for seats for the visiting gods. When the dance was finished, the chief sat down on the board and invited the god (*Te Haiŋgi-atua*?) to his seat of honour in front of the house. Then, with a ceremonial spear in his hand, he took some yams, spoke over them and ordered three "headmen" (nobles?) to put them aside in baskets, whereas the rest were divided into piles in a line at the side of the assembling place. After another invocation he led the men in a dance, at the close of which he again addressed the gods before the yams, and now the men formed a line moving backwards and forwards with bowing gestures in order to lead the god into

[1] HOGBIN 1931 b, 554

[2] HOGBIN 1931 a, p. 176.

[3] FIRTH 1931, p. 186 ff. FIRTH cites the invocation used on this occasion such as it was rendered by the Tikopians.

[4] MACGREGOR 1943, p. 34 f. During his visit in 1928 LAMBERT witnessed a similar ceremony. At that time the assembling place was surrounded by a fence made of sticks and coconut fronds in order to prevent the women from observing the rites, but that was not the case when MACGREGOR was present. Cf. LAMBERT 1944, p. 272 f, 309 f.

the house from which he was supposed to depart, in conclusion slapping the roof of the house while the chief delivered a short speech. Finally the men carried the yams to the women behind the house where the earth oven had been prepared in which the yams were cooked during the day. In the evening they were taken to the chief, who placed them on a sacred mat before the middle post on the front side of the house, partook a little of four yams on behalf of the god, and gave the rest to his household.

MACGREGOR also describes a ceremony which he interprets as an invocation of an ancestral spirit[1]. It is not quite clear whether it has any connection with the first-fruit rite, although this is suggested by the offering of yams, nor am I entirely convinced that Tupui, to whom the offering was made, is to be understood simply as one of the ancestors. It should be remembered that *Te Tupu-i-ŋeŋa* is one of the names ascribed to *Te Hua-i-ŋgaveŋa*, and LAMBERT asserts that the chiefs communicated with the gods with their ancestral spirits as intermediaries[2]. Another circumstance which makes me believe that the ceremony in question had reference to a god is the fact that it took place at a temple, for as far as I know, temples were consecrated to gods only. On the other hand the distinction between gods, *atua*, and spirits, *aitu*, is not always sharp, and as a high chief *Taupoŋi*, who conducted the rites, was supposed to descend from *Te Haiŋgi-atua*, the grandfather of *Te Hua-i-ŋgaveŋa*, so after all the difference may not be great.

After having announced his intention before the ceremonial mat in his house at the lake, *Taupoŋi* left in a canoe accompanied by a few men and carrying with him his chief's staff and ceremonial spear, which was erected on the platform of the outrigger. He likewise brought with him a coconut-shell cup with charcoal ground by "using the head of a short, black, pin-head stick as a pestle"[3]. When the party arrived at the temple, Te Ngangnenga,

[1] MACGREGOR 1943, p. 35 f.

[2] LAMBERT 1934, p. 120.

[3] In a note MACGREGOR writes as follows: "Every household had numbers of such sticks, said to be 'tabu' sticks. We saw them used to knock through the eyes of coconuts with their points, and for tapping off the top of coconut shell with the sharp rimmed heads. Their only tabu nature discerned was their association with the sacred coconuts which are tabu". They are, however, principally used as lime sticks for betel chewing (cf. p. 87), and their "tabu nature" seems to be rather questionable.

Taupoŋi spread his mat inside it with his ceremonial spear across, and seated himself on a mat at the west side of the *ŋgoto-maŋgae*. While his followers knelt behind him invoking the spirit (god?), he fell into a trance caused by Tupui entering his head and stomach. From this he was restored by the men, who tied a strip of bark cloth around his waist and tugged at the ends, at the same time imploring the spirit to return to his seat.

Leaning on his chief's staff *Taupoŋi* then addressed the temple. Four yams were placed at the north end of the *maŋgae*, and two ceremonial paddles[2] were brought from the temple, one of which was laid before an upright stone slab at the side of the assembling place and the other one erected before it. After having blackened his face with charcoal the chief sat down before the slab, resting his hand upon it and muttering requests for advice to the spirit. Then the charcoal was wiped off, and standing up he again made several speeches at different places, finally touching the pile of yams with his spear, and distributed them in small trays and piles. Again he spoke over them and the four yams previously placed at the end of the *maŋgae*. He then stuck his staff and spear in the ground and entered the temple, where he delivered a final address to the spirit, after which the yams were gathered and the whole party left.

On the return trip they visited the temple of *Aŋgiki-e-ha* (*Te Haiŋgi-atua*). While the followers remained outside husking coconuts, *Taupoŋi* and his son entered the building, where the chief first addressed the god stick (cf. p. 51), which was supported in a rack formed by a purlin and a stick running parallel to it under the rafters. Then he took it down and leaned it against the house shelf, spoke again three times and rubbed the stick with turmeric mixed with coconut oil, after which it was put back in the rack. The husked coconuts were laid beneath the god stick and the ceremonial spear placed across them. Meantime, the chief had again blackened his face with charcoal. Now he addressed the god, who was summoned by the annointing of the stick, after which he sat down on a mat spread over two coconut fronds with the offering of coconuts before him. By this time the god had passed into the stick. A second man seated himself on the mat and spoke,

[1] Called "digging paddles" by MACGREGOR since they are used for digging the graves (cf. p. 114).

the house from which he was supposed to depart, in conclusion slapping the roof of the house while the chief delivered a short speech. Finally the men carried the yams to the women behind the house where the earth oven had been prepared in which the yams were cooked during the day. In the evening they were taken to the chief, who placed them on a sacred mat before the middle post on the front side of the house, partook a little of four yams on behalf of the god, and gave the rest to his household.

MACGREGOR also describes a ceremony which he interprets as an invocation of an ancestral spirit[1]. It is not quite clear whether it has any connection with the first-fruit rite, although this is suggested by the offering of yams, nor am I entirely convinced that Tupui, to whom the offering was made, is to be understood simply as one of the ancestors. It should be remembered that *Te Tupu-i-ŋeŋa* is one of the names ascribed to *Te Hua-i-ŋgaveŋa*, and LAMBERT asserts that the chiefs communicated with the gods with their ancestral spirits as intermediaries[2]. Another circumstance which makes me believe that the ceremony in question had reference to a god is the fact that it took place at a temple, for as far as I know, temples were consecrated to gods only. On the other hand the distinction between gods, *atua*, and spirits, *aitu*, is not always sharp, and as a high chief *Taupoŋi*, who conducted the rites, was supposed to descend from *Te Haiŋgi-atua*, the grandfather of *Te Hua-i-ŋgaveŋa*, so after all the difference may not be great.

After having announced his intention before the ceremonial mat in his house at the lake, *Taupoŋi* left in a canoe accompanied by a few men and carrying with him his chief's staff and ceremonial spear, which was erected on the platform of the outrigger. He likewise brought with him a coconut-shell cup with charcoal ground by "using the head of a short, black, pin-head stick as a pestle"[3]. When the party arrived at the temple, Te Ngangnenga,

[1] MACGREGOR 1943, p. 35 f.
[2] LAMBERT 1934, p. 120.
[3] In a note MACGREGOR writes as follows: "Every household had numbers of such sticks, said to be 'tabu' sticks. We saw them used to knock through the eyes of coconuts with their points, and for tapping off the top of coconut shell with the sharp rimmed heads. Their only tabu nature discerned was their association with the sacred coconuts which are tabu". They are, however, principally used as lime sticks for betel chewing (cf. p. 87), and their "tabu nature" seems to be rather questionable.

Taupoŋi spread his mat inside it with his ceremonial spear across, and seated himself on a mat at the west side of the *ŋgoto-maŋgae*. While his followers knelt behind him invoking the spirit (god?), he fell into a trance caused by Tupui entering his head and stomach. From this he was restored by the men, who tied a strip of bark cloth around his waist and tugged at the ends, at the same time imploring the spirit to return to his seat.

Leaning on his chief's staff *Taupoŋi* then addressed the temple. Four yams were placed at the north end of the *maŋgae*, and two ceremonial paddles[2] were brought from the temple, one of which was laid before an upright stone slab at the side of the assembling place and the other one erected before it. After having blackened his face with charcoal the chief sat down before the slab, resting his hand upon it and muttering requests for advice to the spirit. Then the charcoal was wiped off, and standing up he again made several speeches at different places, finally touching the pile of yams with his spear, and distributed them in small trays and piles. Again he spoke over them and the four yams previously placed at the end of the *maŋgae*. He then stuck his staff and spear in the ground and entered the temple, where he delivered a final address to the spirit, after which the yams were gathered and the whole party left.

On the return trip they visited the temple of *Aŋgiki-e-ha* (*Te Haiŋgi-atua*). While the followers remained outside husking coconuts, *Taupoŋi* and his son entered the building, where the chief first addressed the god stick (cf. p. 51), which was supported in a rack formed by a purlin and a stick running parallel to it under the rafters. Then he took it down and leaned it against the house shelf, spoke again three times and rubbed the stick with turmeric mixed with coconut oil, after which it was put back in the rack. The husked coconuts were laid beneath the god stick and the ceremonial spear placed across them. Meantime, the chief had again blackened his face with charcoal. Now he addressed the god, who was summoned by the annointing of the stick, after which he sat down on a mat spread over two coconut fronds with the offering of coconuts before him. By this time the god had passed into the stick. A second man seated himself on the mat and spoke,

[1] Called "digging paddles" by MACGREGOR since they are used for digging the graves (cf. p. 114).

the chief answering in affirmation of his words. The spear was removed from the coconuts, and after a long invocation all of them except four were distributed amongst those present. After further intonations the chief and after him the rest of the men took a drink each of the four nuts and left the temple. However, the chief had still some rites to perform in his own house where, with a lighted torch in one hand and his chief's staff resting on his shoulder, he addressed the god seat and spoke over some coconuts placed on a mat. Afterwards these nuts were given to the household as part of their evening meal.

After this summary of the harvest ceremonies related with further particulars by MACGREGOR, we may conclude the description of horticulture with some remarks on land tenure. Land belongs formally to the chief[1], but in actual fact it is private property, and the plants growing in a garden always belong to its owner. The Rennellese seemed astonished at the custom reported from some other parts of Polynesia, viz. that a coconut or breadfruit tree might be the property of another person than the one who held the ground. It was emphatically stated that such a case would inevitably result in trouble.

Land may be acquired by clearing the forest, by inheritance, and, more exceptionally, by exchange or by force. A man is allowed to lay out a garden where he thinks fit, provided he keeps within his own district. A person from another place must first obtain permission from the chief who is in charge of the district in question, and the chief will probably consult his people before a decision is made. Quite exceptionally a man may be given a garden already laid out, but that is, of course, a special favour. It seems that apart from his formal rights the chief owns land in his capacity of a private person only and not by virtue of any kind of privilege, social or divine. As formerly mentioned the boundaries between the chieftainships are rather vague, and in the border areas anybody is allowed to make a clearing and acknowledge the chief he prefers.

Gardens are inherited by a man's sons, since women are not entitled to own land, and if he does not leave male offspring they will pass to his brothers or to the nearest male relative. The

[1] LAMBERT 1931, p. 145.

testator will as a rule make sure of apportioning his property before his death, allotting the greatest part to the first-born of his sons or, perhaps, to the most energetic one. It was said, indeed, that an especially powerful younger son might occasionally disregard the right of primogeniture and take possession not only of the gardens but also of the house and other property of his father.

In certain cases land may be exchanged as a sign of particular friendship. Nowadays it may also be bought for calico and even for cash, but this is an entirely modern custom.

There are some, though probably not very many people who have no gardens but live as a kind of tenants, cultivating the land of their more fortunate countrymen. In such cases the owner gets the surplus of the yield only. Otherwise there are no fixed rules for the disposal of an eventual surplus. Probably it was never very great, although for instance at Lavanggu many decaying coconuts were seen scattered under the trees even now when copra is an export article.

2.

Sea and Freshwater Fisheries. — Canoes. — Fishing of Flying Fish. — Shark Fishing. — Other Fishing Methods.

Even though fishing is by no means of little economic importance, the Rennellese are hardly as expert fishermen as most other Polynesians. The reason being of course, primarily the fact that owing to the steepness of the coast there are comparatively few settlements near the sea. It is significant that there are no private fishing grounds belonging either to individual persons or to a chieftainship as a whole. Most fishing is done in the lake and inside the reef or in its close vicinity, but rarely do the canoes venture far out to sea, since they are rather small and not suitable for long voyages. Thus bonito fishing, which plays such a prominent part in both the economic and ceremonial life on the Melanesian Solomons, is here of little consequence. It is true that the Rennellese recognized a rough sketch of the bonito, which they called *kamuŋgi*, but evidently it was not caught except more or less casually. Most important among salt-water fish are probably sharks, *maŋo*, and flying fish, *sasabe*. Sometimes also a ray, *hai*,

Fig. 30. Canoe. Kanggava Bay.

is caught. Besides, many of the plectognaths living around the reef are taken, for instance boxfish, *moa-moa* (*Ostracion sp.*); triggerfish, *sumu* (*Balistes sp.*); surgeonfish, *aŋgoŋgo* (*Acanthurus sp.*); rabbitfish, *manini* (*Siganus sp.*); and unicorn fish, *akaŋgeko* (*Naso lituratus*). This list is, however, far from complete. Of fresh-water fish eels, *upo* (*Anguilla pacifica*), and gobies, *pagavu* (*Eleotris sp.*), seem to be most appreciated.

The canoe, *baka*, is indispensable for many methods of fishing. It is a rather crude dugout provided with a single outrigger (Fig. 30). The hull is by means of fire hollowed out of a tall tree called *gaimeŋga*. It has hardly any sheer, and at the ends the bottom curves upwards to form a fairly sharp stem and stern. In their

Fig. 31. Detail of outrigger attachment. (M. Høyer phot.).

description of the Rennellese canoe, Haddon and Hornell speak of a "slight horizontal spur"[1], but if it is found at all it is so small as to be practically non-existant. The sides are inclined slightly inwards, and the bottom is rounded. A number of narrow thwarts are fastened with split cane to the gunwales through holes in the hull, and along each gunwale, resting on the ends of the thwarts, a round strake is lashed. According to STANLEY, the middle thwart was formerly taboo and nobody was allowed to sit upon it[2]. The outrigger consists of a float and three—rarely two—booms with attachments. The booms are straight poles lashed to the gunwale strakes and at the other ends connected indirectly with

[1] HADDON & HORNELL 1936—38, II p. 61.
[2] STANLEY 1929, 21.

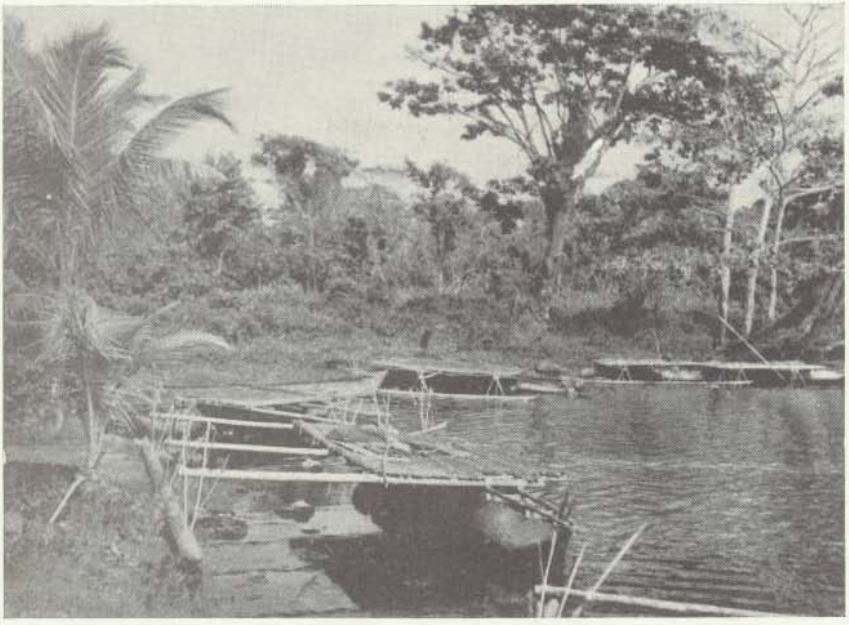


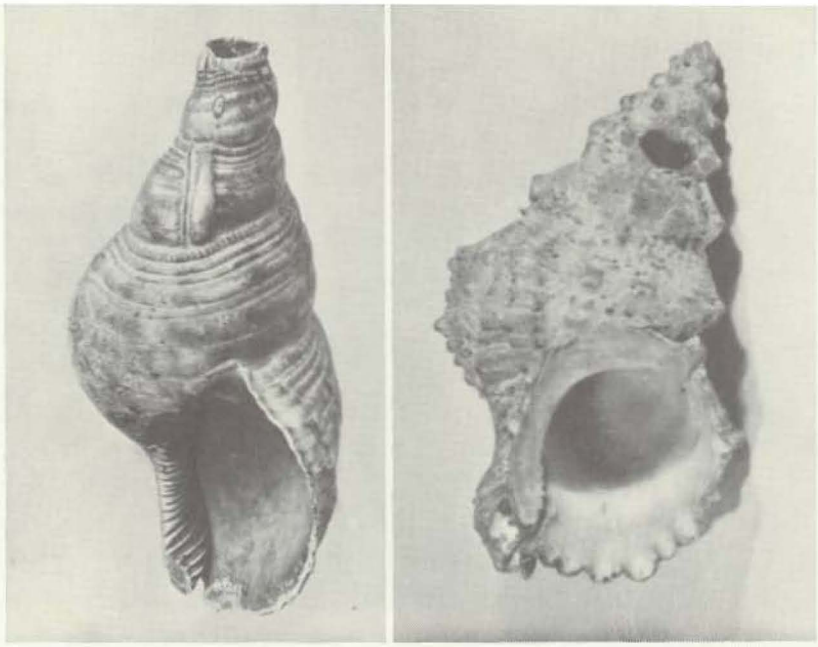
Fig. 32. Canoes. Lake Te Nggano. (H. Knudsen phot.).

the float by means of five or six slanting sticks pegged into the top side of the float (Fig. 31). Four of the sticks are always overcrossed, parallel or slightly diverging, whereas nos. five and six may be undercrossed. The attachments of the central boom are often simpler than those of the outer booms. The float is somewhat shorter than the hull and pointed at both ends. On the lake there is a small platform of close-lying longitudinal poles resting on the booms, which are accordingly somewhat longer than those of the sea canoes (Fig. 32). The platform reaches about halfways between hull and float, the poles covering the hold being rather shorter than the others. The hull of the lake canoe is also said to be a little wider than that of the sea craft[1].

The measurement of an ordinary canoe at Lavanggu gave the following results:

Length of hull: 5.30 m.
- - float: 4.20 m.
- - booms: 2.60 m.

[1] R. van den Broek d'Obrenan 1947, p. 32.



Figg. 33—34. Shell trumpets. (National Museum, Copenhagen, and Bradley collection).

Length of stem: 0.78 m.
- - stern: 0.69 m.
Maximum width of hull inside at gunwale: 0.20 m.
— - - - outside: 0.40 m.
— circumference of hull outside: 1.45 m.
Thickness of hull at gunwale: 0.008 m.

The characteristic Polynesian bailer with an interior handle seems to be unknown, a half coconut-shell cup being used instead. Shell trumpets, *pelo*, are blown to advertize the arrival of a boat. Figs. 33—34 illustrate two specimens, one in the Copenhagen Museum (I 5261; length 24 cm.) made of a *Tritonium* shell with an apical hole, the other one belonging to Mr. BRADLEY made of *Ranella* with a lateral hole. The position of the hole varies according to the species of shell employed.

It is not uncommon to punt a canoe inside the reef by means of an ordinary long pole, but otherwise paddles are used. The typical paddle, *hoe*, has an elliptical blade and a round shaft

terminating in a knob shaped like a truncated double cone. A specimen in the Copenhagen Museum (I 5191) has a total length of 1.86 m., the blade measuring 96 by 17.3 cm. (Fig. 16c). Another paddle measured at Lavanggu was 2 m. in length, the blade being 1 m. by 18 cm.

On the lake, but never on the coast, mat sails were formerly in use[1]. They have now entirely disappeared and the only available description has been given by HADDON and HORNELL, based upon HOGBIN's observations and photographs: "Hogbin saw one which was 18 feet long by 6 feet broad at the widest part; it was made of pandanus-leaf matting and supported by two sticks at the bow ... The sail .... is pyriform coming to a narrow point below, and is not fastened closely to the spars. One spar is supported by a mast which is about as high as the broadest part of the sail; no other rigging is visible. Hogbin .... illustrates a different kind of sail. It is extremely long and narrow, one side is straight and the other bowed; the upper end is square and the lower pointed; it is placed at an angle of about 45 degrees. The sail is but loosely attached to the upper spar, which is supported by a raked mast amidships. There appears to be a strut or mast-shore on the outrigger side and a vertical spar on the off side, but it is not evident to what part of the rigging it is fastened. I must confess that I do not understand this rig"[2]. On the lake "a leafy branch lashed upright" was often employed as a makeshift instead of the regular sail[3].

Previous to a fishing expedition the help of the ancestral spirits was invoked, but there was no offering at the graves. If the catch was particularly abundant, offerings were afterwards made to *Te Haiŋgi-atua* and to *Te Hua-i-ŋgaveŋa*, who was the patron god of fishing.

Dark, moonless nights are the proper time for catching flying fish with torches and scoop nets, a method known as *kaŋgame*. The torch, *puŋgu*, consists of charcoal made of *Ficus* wood, wrapped up in dry pandanus leaves wound with a shred of bark. A specimen in the Copenhagen museum (I 5248) is about 60 cm.

[1] KNIBBS 1929, p. 208. HOGBIN 1931 a, p. 178. Cf. fig. in HOGBIN 1931 b. R. VAN DEN BROEK D'OBRENAN 1947, p. 32.
[2] HADDON & HORNELL 1936—38, II p. 62 f.
[3] STANLEY 1929, p. 21.

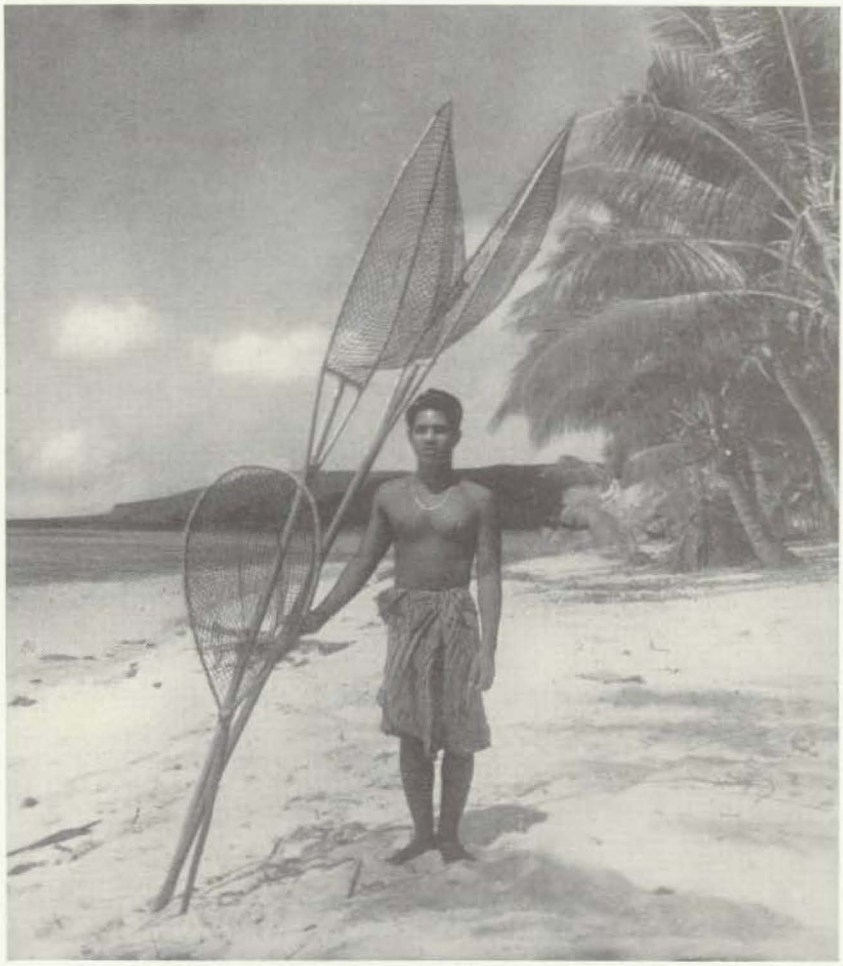


Fig. 35. Man with flying-fish and spiny-lobster nets. Lavanggu.

in length. The net, *kupeŋa*, is rather shallow and attached to a pointed-oval frame made of two wooden rods tied together at both ends, with a short stick near the proximal end acting as a spreader. The handle, which is flush with the frame, is a long pole lashed both to the frame and to the cross bar. The whole implement may have a length of nearly 3 m. (Fig. 35).

Mr. Wolff had the opportunity of accompanying a fishing party on one of the nocturnal expeditions off Lavanggu and gave me the following description. The crew consisted of four paddlers

who also acted as fishermen, one man who attended the fire, and a half-grown boy in charge of the slow-torch, which was kept in a tube of sheet metal. Besides, they had a bundle of dry coconut fronds tied together in four places, thus forming five sections, and placed across the outrigger booms covered with a piece of canvass so that only one section projected. On the way to the reef the man sitting at the bow, apparently the leader, recited a long invocation, but whether to the old deities or to the Christian God is not clear. When they arrived outside the reef at a depth of some five or eight metres, the fishing started. A section of the leaf bundle was set on fire by means of the torch, which immediately afterwards was put back into the tube. As soon as the fire blazed up, the bundle was raised, and by its light the flying fish were seen skimming across the waves. The leader of the party spoke in a sort of excited staccato voice, at the same time beating the gunwale with the shaft of his net, and when the fish were sufficiently close they were scooped up from the surface of the water. Then the fire was put out with a stick, the canoe proceeded for a distance of about 200 m., another section of the leaf bundle was ignited, and the whole procedure was repeated. When only one section was left, the bundle was turned over so that the man who attended it could hold the scorched end. Besides flying fish a few specimens of the genus *Hemiramphus* were caught in this way. All the time a baited hook was trailed after the canoe, but without success. Afterwards the catch was shared between the men. Probably the distribution is made by the leader of the party who is also the owner of the canoe.

Shark fishing, *a'aŋgu* or *aŋgohaŋga*, takes place in the daytime as well as in the night. Before the undertaking a sacrifice was formerly made to *Hua-i-ŋgaveŋa* and, when the party returned, to *Te Haiŋgi-atua*. A lucky shark fisher is greatly respected and will, as formerly mentioned, hang the shark tails as trophies on his house. Sharks are taken on a wooden hook of considerable size, *gauŋ'akao*, with other fish as a bait. A typical specimen in our collection (I 5195) is illustrated in fig. 36. It is made of one piece and has a rather butt point, slightly flattened and shouldered off from the rest of the curved limb, but without a barb. The shank limb is straight, terminating in a knob and flattened on

the upper part of the inside. The snood is of heavy sinnet wound around the shank in such a way as to form two lashings separated by a slightly projecting ledge except on the flat inside of the shank

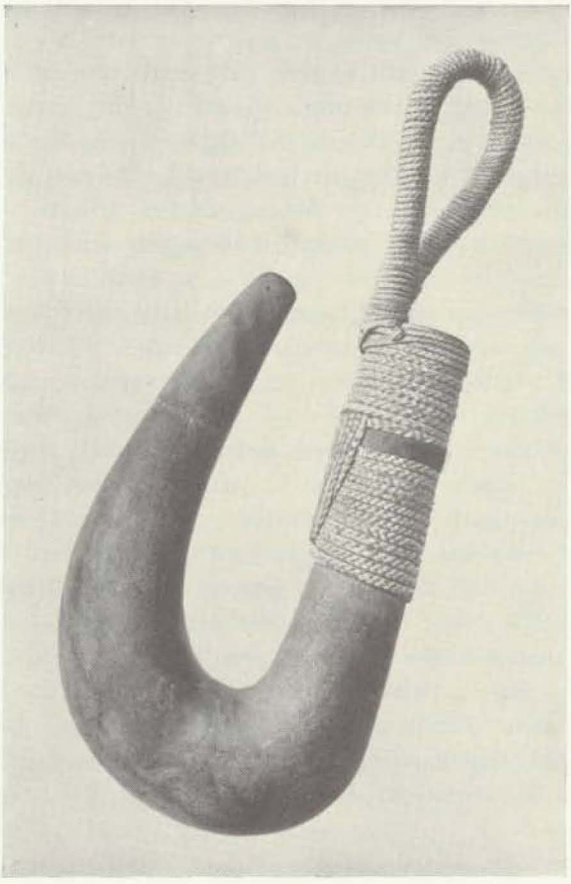


Fig. 36. Wooden shark hook. (National Museum, Copenhagen).

where a herring-bone pattern is produced. At the top the snood forms a large loop with a seizing of somewhat finer sennit. Length of hook 23 cm.

No sharks were caught during our stay at Lavanggu, but CH. VAN DEN BROEK D'OBRENAN gives a description of the method[1]. Having first stated that the hooks are not taken to the canoe till everything is ready he continues: "*Deux pêcheurs prennent place*

[1] CH. VAN DEN BROEK D'OBRENAN 1939, p. 147 f.

en laissant libre le banc du milieu qui est réservé au Bon Esprit. L'un des hommes se met à l'eau et frappe la coque de son embarcation avec un bâton tabou *spécialement orné. L'autre reste dans la pirogue, ouvre un poisson en deux et l'attache sur l'hameçon, la tête étant fixée à ce qui, dans un hameçon normal, constituerait la pointe. Le poisson prend ainsi la forme d'un arc de cercle. Un petit câble est fixé dans l'œillère de l'hameçon et accroché ensuite à l'avant et à l'arrière de la barque. On laisse un certain mou dans le câble. Le pêcheur resté dans la barque tient l'appât dans la main, tandis que son compagnon continue à frapper le long de la coque. Si un requin est dans les parages, il paraît qu'il s'approche attiré par ce bruit insolite. L'homme qui est dans l'eau n'a rien à craindre: son bâton* tabou *le protégera. Le requin ne fera même pas attention à lui et foncera à l'appât que l'autre homme lâchera rapidement. Le requin avale poisson et hameçon avec un morceau de câble qui, amarré à l'avant et à l'arrière de la pirogue, force sur les commissures de la bouche, empêchant celle-ci de se fermer complètement et s'opposant aussi à ce que le crochet descendie dans l'estomac. Les ouïes du squale s'ouvrent alors et l'hameçon s'introduit doucement dans l'une d'elles. Le requin se débattra. Un nœud coulant autour de la queue l'amenera parallèlement à l'embarcation et une série de coups de bâton* tabou *sur le nez le tueront. Pendant que l'un des hommes frappe le requin avec son bâton de bois dur, l'autre récite les prières rituelles.*"

I am not sure what the author means when he speaks of "taboo sticks". They cannot be the same as those mentioned by MacGregor (cf. p. 61), which are certainly far too small to kill a shark, and the ceremonial spears would at best be uncommonly awkward for such a purpose. The chiefs' staffs would be better suited, but on the other hand shark fishing was not a privilege of the chiefs. From what has been stated it appears that shark fishing had certain ritual aspects, and Stanley tells us that the hook was in fact considered taboo[1]. It is probably shark fishing to which Northcote Deck refers when mentioning that the Rennellese "have given up certain forms of fishing in which the atuas were invoked", on a later occasion adding that shark fishing was abandoned when Christianity was introduced but resumed afterwards[2].

[1] Stanley 1929, p. 16.
[2] Deck 1945, p. 94, 112 f.

In addition to the flying-fish net there is a very similar net which is likewise known as *kupeŋa*. Here, however, the frame is round in front and the shaft is shorter (Fig. 35). It is used for instance for catching spiny lobsters, *tapa-tapa*, by torch light.

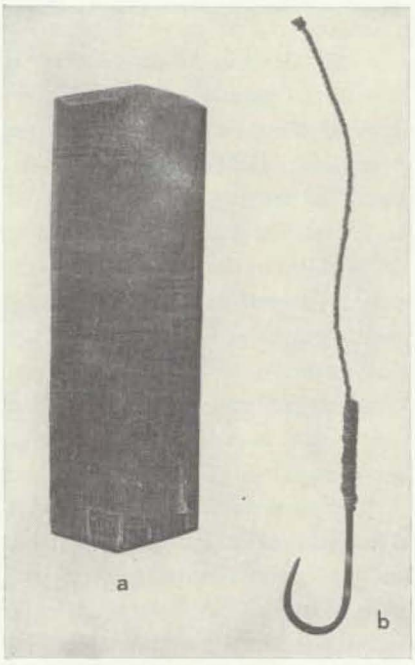


Fig. 37. Mesh gauge (a) and turtle-shell fish hook (b). (National Museum, Copenhagen).

The same type of net, but deeper, is employed for torch fishing in the lake.

A small U-shaped hook, *gauŋgoku*, made of turtle shell and without a barb, is used for instance for fishing eel. Two specimens in the Copenhagen Museum (I 5196—97) have a length of 7.7 and 7.5 cm. respectively. They are sub-quadrangular in cross-section and apparently bent by means of heat (Fig. 37b). The hook is attached without any special device to a line made of fibre, *uka*. Hook fishing in deep water is termed *mata'au* and on the reef, *sisi*, but neither method seems to be very common; at any rate the iron hooks we brought along for barter were not in great demand.

Rectangular frameless nets, *buko*, are employed in different ways. In a method known as *gahoaba* a row of men will keep the net stretched along the outside of the reef while a number of others drive the fish towards the net by splashing and making noise. In case there is a shortage of men, it may be fastened to the coral rocks. Calm pools inside the reef where the fish are hiding under the stones are surrounded by men holding a net, and the fish are then drugged by beating out the sap of a certain creeper called *luba* (*Derris sp.*?). Fish poisoning is known as *punu*. Seining is not used, the uneven sea bottom full of coral blocks and holes being, of course, unsuitable for this method.

For fish spearing, *veŋgo-veŋgo*, a simple, one-pronged spear of hard wood was formerly in use, but at present is replaced by a spear with three iron prongs. The old-fashioned type was also used for catching turtle, *honu*, which was speared in the neck. Nowadays a catapult is common (cf. p. 20). In the British Museum there are from the adjacent island of Bellona some fishing arrows with four or five diverging points, and it seems highly probable that they formerly occurred on Rennell too.

There are no fish traps in the proper sense of the word, but in the lake a kind of weir, *lipa*, is made of two converging rows of coconut fronds. At the end of the weir an open, funnel-shaped basket, *haŋa*, is placed, and the fish are then driven into it by beating with a sweep of fronds, *obe*, against the side of the canoe. When the basket is raised it is closed with the sweep. The term for this method is *haimala*.

3.

Game and Domestic Animals. — Bird Hunting. — Catching of Flying Foxes. — Food Gathering.

Needless to say, hunting means next to nothing from an economic point of view. The animals that might be taken into consideration for this purpose are but few and altogether of small size. The wild ducks living at the lake are taboo and so is also the white phase of the reef heron (but according to Mrs. Bradley not the melanistic phase), nor are snakes, geccos and skinks eaten. The flying fox, *peka*, is considered a delicacy. Among the

birds the following are hunted, but probably there are others as well[1]: Dabchink, *manusiŋi*; cormorant, *manukitai*; ibis, *tagoa*; osprey, *maŋivae*; sparrow hawk, *taba*; booby, *kanapu*; frigate bird, *kataha*; brown-winged tern, *baŋabaŋa*; noddy, *ŋoŋo*; Pacific

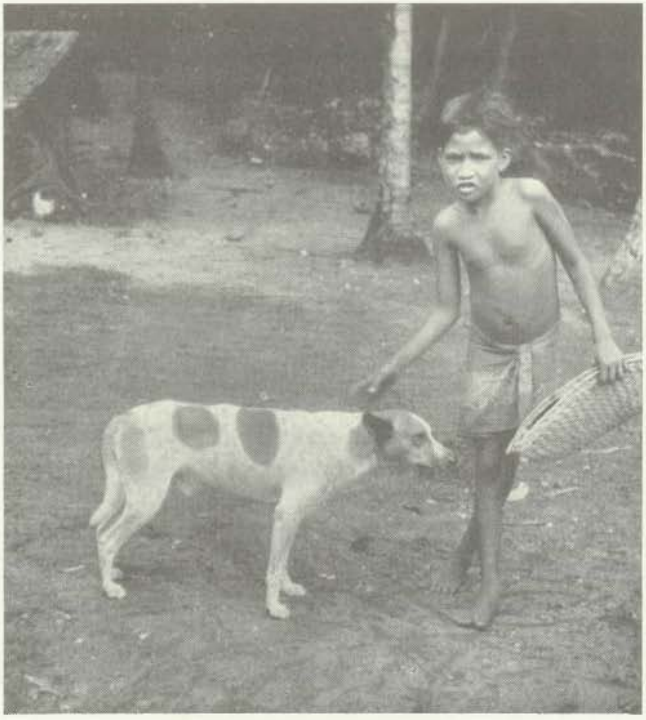


Fig. 38. Dog and boy. Lavanggu.

pigeon, *ŋgupe*; pheasant dove, *katoŋua*; fruit dove, *hiŋi*; ground pigeon, *tu*; Nicobar pigeon, *kaŋaegaŋi*; lory, *sibiŋi*; song parrot, *gisua*; glossy swiftlet, *peka-peka*; graybird, *liŋobai*; warbler, *loke-loke*; Rennell shrikebill, *gogoviu*; whistler, *taŋa*; starling, *gapilu*; honey-eater, *vagigo*; Woodford's white-eye, *susuvaŋu*; Rennell white-eye, *gaga*. Women were only allowed to eat cormorants and parrots.

Under the circumstances it might be imagined that domesticated animals would have meant a welcome addition to the food

[1] Many of the names were collected by Mrs. Bradley and Mr. Wolff (cf. Wolff 1955 a, p. 60 ff.)

supply, but that is not the case. Apart from decoy pigeons and occasional pets such as parrots, etc., the Rennellese kept no domestic animals originally. There are now a few dogs, *amanagi*, but in STANLEY's day they were still unknown[1]. The present breed (Fig. 38) resembles somewhat a rather big, smooth-haired terrier, either brown, black or white-and-brown speckled. The ears are large and pointed, the nose tapering, and the tail long and thin. It feeds to a considerable degree on scraps of coconut flesh. The first missionaries tried in vain to introduce pigs, but they were very soon killed off and eaten, and nobody seems to have repeated the attempt. On the other hand there are now great numbers of chickens and muscovy ducks, but their importance is highly questionable. The idea of rational poultry breeding has never entered the minds of the population; nothing is done to take care of the stock, which is left entirely to itself, and although we had no difficulty in now and then buying a fowl in order to supplement our scanty provisions I never saw any killed for native use. Consequently there is a great surplus of male birds, a fact rather unfavourable to egg production, and moreover the eggs are rarely found, because the hens build their nests in the dense pandanus vegetation on the cliffs where they are not only difficult to discover but are also liable to be attacked by the rats. At Lake Te Nggano Mr. and Mrs. BRADLEY saw goats and cats, but at least during our visit they were not kept in the western districts.

Pigeon hunting is not so much an economic enterprise as a sport and a jealously guarded privilege of the chiefs and their families. A large fowling net, *seu*, is the principal implement. The net is triangular and attached to two long and slender rods placed in a forked wooden handle. The handle is tapering behind, and on the outside of each branch there is a slot for the rods. The specimen in the Copenhagen Museum (I 5193, fig. 39) is 3.66 m. long and has a maximum width of 96 cm. At the ends of the branches and immediately behind the bifurcation are wrappings of split cane, and between the branches is a transversal string to which the lower end of the net is tied.

[1] STANLEY 1929, p. 17. It is, perhaps, doubtful whether his statement is correct. The Rennellese maintained that they had dogs before contact with the Europeans.

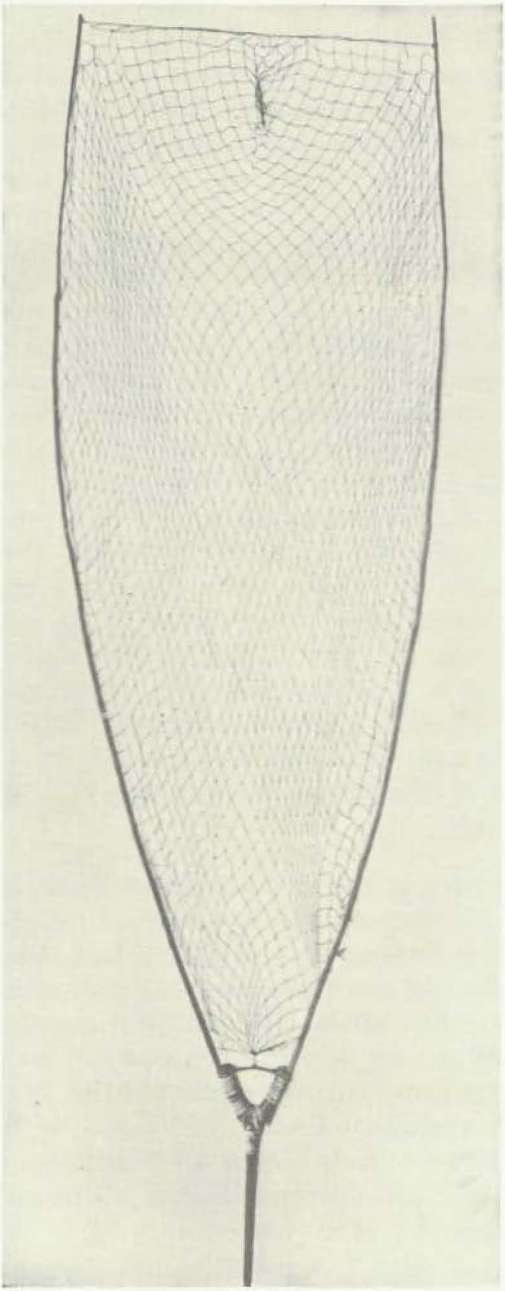


Fig. 39. Pigeon net. (National Museum, Copenhagen).

Fig. 40. Man with pigeon net and perch for decoy pigeon. Te Avamanggu.

A platform is built high up in one of the giant trees of the forest, and here the hunter squats, more or less concealed under a cover of large-leafed twigs placed on his head. Besides his net he carries with him a decoy pigeon which by means of a short line is tied to a pole with a transversal perch at the end. The bird is made to flap its wings and flutter up and down, and at the same time the hunter tries to attract the wild pigeons by imitating their cooing, thus enticing them to come within reach of the net (Fig. 40).

Frigate birds perching on the trees are caught in snares. The pole snare, *seŋge*, is a long and thin rod to the upper end of which is attached a running noose made of a thin strip of split cane. Our specimen in the Copenhagen Museum (I 5194) has a length of 2.94 m. Another implement for catching small birds consists of three loops—not snares—made of a certain sticky creeper. The birds are lured to perch on the loops by the fowler by imitating their cries. This implement is called *sabaki*, but unfortunately I know it by description only.

Flying foxes are taken while they are asleep in the day time by means of a pole, 3—4 m. long, to the end of which is fastened a great number of diverging flagellae of the rattan palm. The term for this implement is *kama*.

Considering the poor access to meat supply it is not astonishing that food gathering not only of numerous wild fruits, such as a species of Cycad, *pei-pei*, etc., but also of invertebrates plays a considerable rôle in the household. The following list which does not claim to be exhaustive, however, includes some of the most common forms[1]:

Insects. Wood borer, *huŋaŋgei*,
Longicorn (larva), *ahato*,
— (imago), *gagumu*,
Social wasp (larva and pupa), *kano-kano*,
Chafer (larva), *takaputo*.

Crustaceans. Marsh crab, *taŋi*,
Rock crab, *kama-kama*,
Great land crab, *aŋgo*,
Common land crab, *maŋabai*,
Hermit crab, *uŋa'a*,
Coconut crab, *akui*,
Spiny lobster, *tapa-tapa*,
Freshwater prawn, *pae*.

Molluscs. Chiton, *takuku*,
Limpet, *gagigasa*,

[1] Cf. Wolff 1955 a, p. 60 ff.

Top shell, *puŋoŋoto,*
Turban shell, *aŋgiŋi,*
Nerite, *sisi,*
Cowrie, *puŋe,*
Cone shell, *kaŋgea,*
Tridacna, *takamou,*
Octopus, *heke,*
Cuttlefish, *ŋu-heke.*

Echinoderms. Sea slug, *manu.*

Octopus are taken by hand or by means of a short, pointed stick, whereas the wide-spread Oceanic "rat" device is quite unknown. Shrimps are caught in the lake in ordinary baskets which are placed in the shallow water near the shore and carefully raised afterwards. When fishing for tridacna, a stick is thrust between the valves, after which it is easily detached from the rocks.

4.
Food and Beverages. — Fire Making. — Cooking. — Meals. — Betel.

Taro, yams, sweet potatoes and coconuts make up the staple food together with pandanus and papaya fruits. The amount of proteins is really surprisingly small. There does not seem to be any food prerogatives for chiefs, thus neither shark nor turtle meat is reserved for them. One of the things which astonished the Tikopian visitors to Rennell was the ignorance of making puddings of coconut cream: the flesh of the coconuts was simply scraped out and mixed with cooked vegetables[1]. The stool-like and tripod coconut scrapers seem to be entirely unknown. The only specimen of an implement approaching a regular grater I have seen had an iron blade with serrated edge fastened to a simple wooden shaft, and I very much doubt that this is an aboriginal type. Otherwise a scraper or spoon, *tuai,* of pearl shell or coconut shell is used. It is somewhat tapering towards the rear and has a slightly curved, non-serrated edge. The lengths of those

[1] Firth 1931, p. 186.

in the Copenhagen Museum (1 5238—40) vary between 9 and 10.3 cm., the widths between 4.2 and 5.9 cm. (Fig. 41 a—c). The

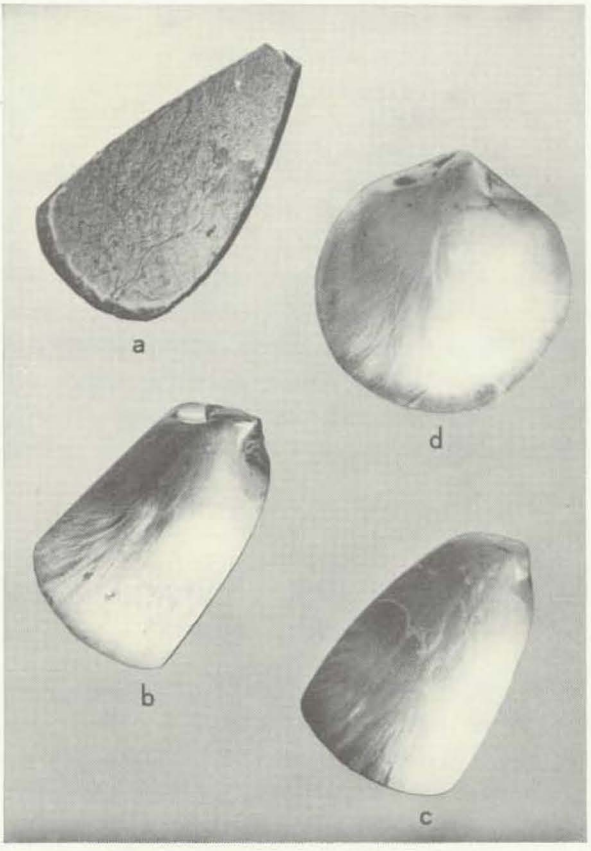


Fig. 41. Spoons and scraper of coconut shell (a) and pearl shell (b—d). (National Museum, Copenhagen).

spoons are likewise used for papaya, which, as rightly observed by KNIBBS[1], are generally eaten in an unripe state.

Water and coconut milk are the only beverages and, as formerly mentioned, water is scarce and brackish. Kava is not known at all. Water is kept in bottles, *bai*, made of a whole coconut shell, the pointed end of which has been removed and closed with a wooden stopper. The bottle illustrated in fig. 42 a (I 5242) is placed in a wide-meshed net of three parallel strands of sennit

[1] KNIBBS 1929, p. 203. Cf. LAMBERT 1944, p. 267.

with six thicker cords tied together at the top so it can be hung from the house rafters. Diameter 16 cm., length including sus-

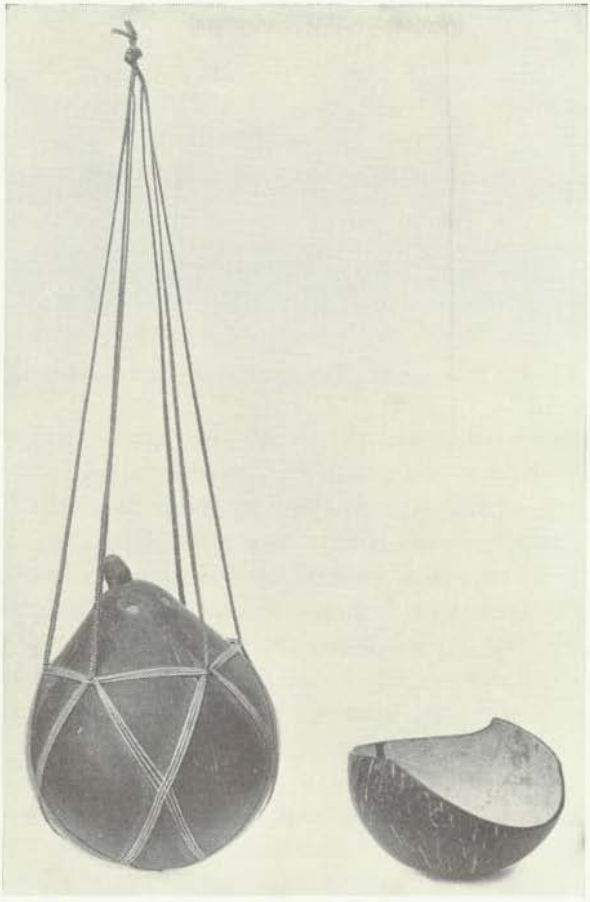


Fig. 42. Water bottle and dipper. (National Museum, Copenhagen).

pension 51 cm. Drinking cups and dippers are made of half coconut shells. A dipper, *paŋoŋo*, in our collection (I 5241, fig. 42b) has a rim which in front raises in a low, obtuse angle and at the rear forms a broad and low handle. Diameter 13.3 cm., height 8.5 cm.

Fire was formerly made by means of the fire plough, and even though matches are now common, the old-fashioned apparatus has not fallen into oblivion and is probably still used occasion-

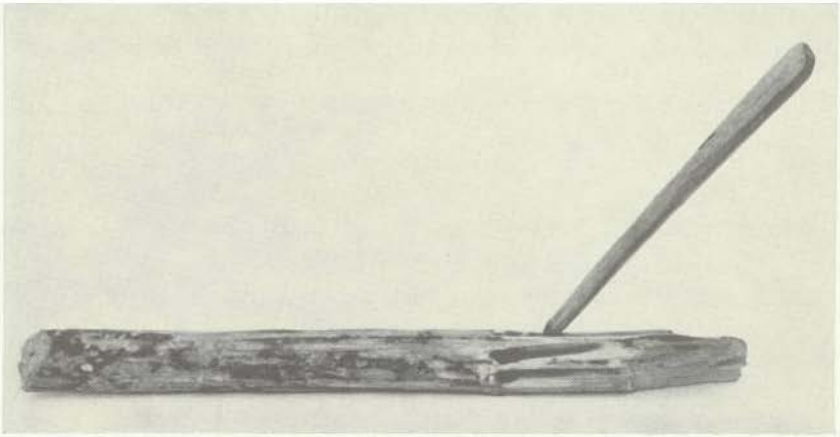


Fig. 43. Fire plough. (National Museum, Copenhagen).

ally. It consists of a hearth, *vaŋgo-vaŋgo*, and a stick, *ti'iŋga*, somewhat flattened and pointed at the distal end. The hearth of the specimen in the Copenhagen Museum (I 5247; fig. 43) has four deep, longitudinal grooves and a length of 39.5 cm.; length of the stick 21 cm. It is worked by two persons kneeling on the ground with the hearth between them, one of them pressing the hearth down, the other holding the stick obliquely in both hands with the palms downwards and rubbing the stick backwards and forwards in one of the grooves (Fig. 44). Within a surprisingly short time a spark has been produced.

Nowadays much cooking is done in enameled European pots, but yams and the like are still baked on hot coral rocks as in the olden days. The typical Polynesian earth oven has been mentioned by several early observers[1]. When the stones are heated, the ashes are removed and yams and taro are placed directly on them in the pit. Originally fire was taboo within the house just as cooking was prohibited to the men[2].

The principal meals are in the morning and at night, each sex eating separately, the men first and the women afterwards.

[1] Hogbin 1931 b, p. 554. Lambert 1931, p. 143. Lambert 1934, p. 102. Lambert 1944, p. 271. Macgregor 1943, p. 35.
[2] Stanley 1929, p. 18. Hogbin 1931 a, p. 175.

Fig. 44. Men making fire with fire plough. Lavanggu.

The food of the chiefs was considered taboo and was not to be touched by any other person. If he wanted to give something of it to others, he was obliged to neutralize the effects by invoking *Te Haiŋgi-atua*.

Wooden food bowls, *kumete*, have now been entirely abandoned and are replaced by modern trade articles. There is, however, a specimen in Bishop Museum, Honolulu, shaped like an oblong and rather deep bowl with short exterior lugs on the short sides; length 63.5 cm. (Fig. 45). LAMBERT's statement that such bowls were also used as drums[1] is scarcely reliable, except perhaps as makeshifts.

[1] LAMBERT 1931, p. 143. LAMBERT 1944, p. 271.

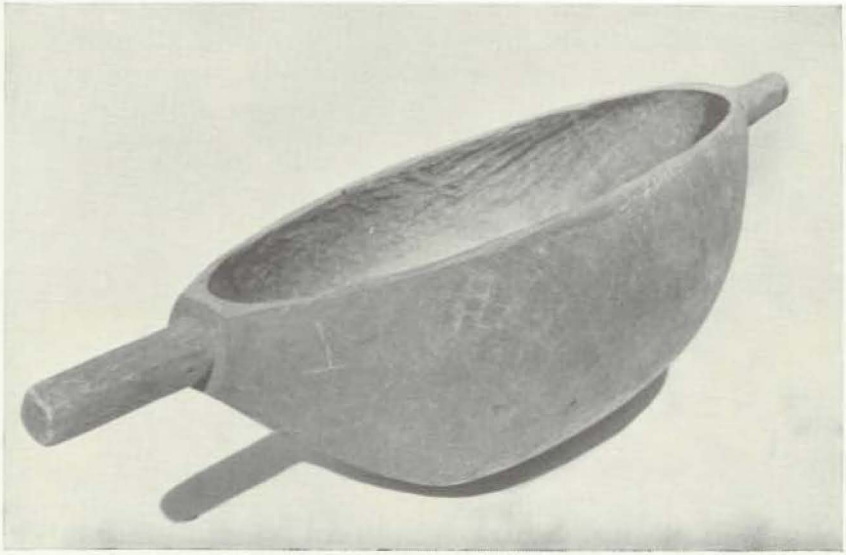


Fig. 45. Wooden food bowl. (Courtesy, Bishop Museum, Honolulu).

Woodford tells us that areca nuts were chewed with lime but without addition of betel pepper[1]. R. van den Broek d'Obrenan, however, expressly mentions the latter[2], and it is a fact that I have never seen anybody chewing betel without it. Whether it has been introduced in the interval between Woodford's visit in the first decade of the century and 1935 when the *Korrigane* called at the island I dare not say. Pieces of areca nut, *pua*, are now wrapped in a pepper leaf, *pita*, and chewed with lime, *natiŋga*, which is added afterwards by slipping the lime stick into the container and licking it off.

Lime containers, *kapia*, are made of coconut shells like the water bottles but smaller and without suspension cords. The hole at the top is closed with a wooden stopper which, in one of the specimens of our collection (I 5243) is quite simple, whereas the shape of another specimen (I 5244) is more elaborate: it has a circular, sharp-edged rim in the middle and on top a great, eye-

[1] Woodford 1907, p. 36. Woodford 1916, p. 48. I do not understand why Lambert (1934, p. 134) states that while betel is chewed on Bellona it does not occur on Rennell.

[2] R. van den Broek d'Obrenan 1947, p. 31.

Fig. 46. Lime container and lime sticks. (National Museum, Copenhagen).

shaped projection (Fig. 46a). The ordinary lime stick, *amosi*, resembles exactly the chief's staff (cf. p. 41) but is, of course, very much smaller. Our collection includes two specimens (I 5245—46; fig. 46b—c), 18.3 and 19.7 cm. in length respectively. On the latter there is an almost effaced design consisting of alternating longitudinal and zigzag lines. Sometimes, however, the lime sticks have more fanciful shapes like miniature clubs, ceremonial spears, etc. A few sticks of this kind, now in the Cambridge museum, are seen in fig. 47.

A few bamboo containers of Melanesian type were seen, but they were evidently of recent introduction.

The betel outfit is carried in rectangular bags of pandanus-leaf plaiting, *kete-maŋgu* (cf. p. 32). They are often decorated with pleasing, geometrical designs such as vertical, horizontal and oblique stripes, sometimes forming lozenge patterns, as will appear from fig. 59, showing some specimens in the Copenhagen

Fig. 47. Lime sticks. (Courtesy, University Museum of Archaeology and Ethnology, Cambridge).

Museum (I 5252—58). The size varies between 21.5 by 14.5 cm. and 35.5 by 34 cm. On one of them the back continues in a triangular flap at the upper edge, and all except one has a plaited suspension cord attached to the upper corners.

III.
Manufactures.

1.
Stone Working. — Adzes. — Work in Wood and Shell. — Decorative Art.

Working in stone, wood, and shell is—or was—done by the men. Their tools are few and simple. Formerly cutting tools were made of shell, bone and, to some extent, of stone, but now iron is generally employed. At present a knife with a long iron blade is one of a man's most indispensable possessions and is used for making one's way through the forest, chopping down coconuts, and many other things. As early as the beginning of this century Woodford noticed a few iron tools on the island, while, on the other hand, iron was still scanty several years later, and stone adzes were in use as late as 1945[1].

Suitable stone is very rare. It was said that stones might sometimes be found imbedded in the coral rock[2] or among the roots of trees drifted ashore, but even if communication with other islands was evidently slight, it is not improbable that adze heads of stone were sometimes imported. The stone heads produced by the Rennellese themselves were first pecked by means of a hammer stone and afterwards ground and polished with a piece of coral rock, *puŋa*. A grinding stone in our collection (I 5210) is 8.2 by 4.7 cm., sub-triangular in cross section, and has a longitudinal groove on each surface. The grooves suggest that it was not used for making adzes but rather for polishing bone awls, spear shafts, or similar objects.

[1] Woodford 1907, p. 36. Deck 1921, p. 475. Forster (MS).
[2] Cf. Stanley 1929, p.24.

The Rennellese stone adze head, *tauki-ŋŋi*, can scarcely be distinguished from that of the Melanesian Solomons but differs

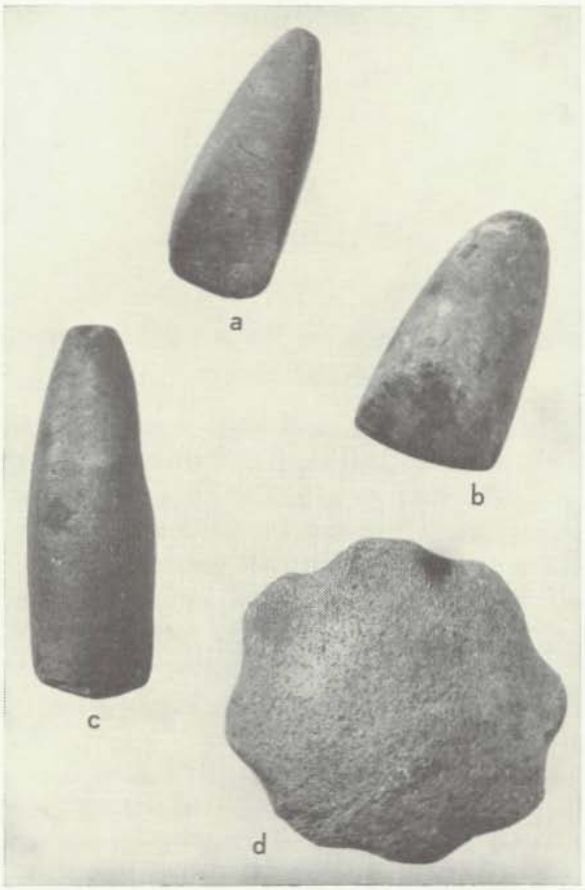


Fig. 48. Stone adze heads (a—c) and club head (d). (National Museum, Copenhagen).

essentially from the ordinary triangular and quadrangular Polynesian type. It is bevelled on one side to form a curved cutting edge, whence it tapers gradually towards a narrow and rounded poll. The cross section is approximately round, although somewhat flattened on the under side where the head rests against the shaft. Our collection includes three specimens (I 5203—05; fig. 48a—c), two of them made of dark basalt while the third, according to Mr. JOHN GROVER of the Colonial Geological Sur-

vey, Honiara, is probably of rhyolite from Guadalcanal or Russell Islands. The lengths vary between 11.4 and 8.4 cm., maxi-

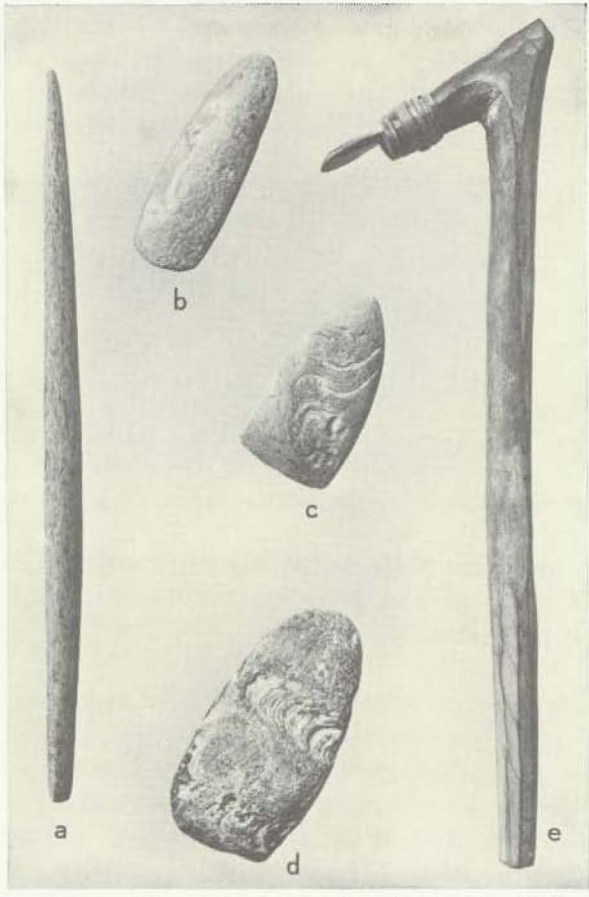


Fig. 49. Bone awl (a), shell adze heads (b—d), and adze (e). (National Museum, Copenhagen).

mum widths between 4.4 and 3.9 cm., and thickness between 3.3 and 2.7 cm.

Owing to the lack of proper material, adze heads were, however, as a rule made of tridacna shell. Such shell heads, *taukitata*, are similar to the stone heads in type, but on account of the natural shape of the shell they are often smaller and thinner and generally less regular. The under side is mostly flat. The three specimens in the Copenhagen Museum (I 5206—08; fig. 49b—d)

have the following size: length between 9.7 and 7 cm., width between 5 and 2.9 cm., and thickness between 1.3 and 1.1 cm.

The adze haft is elbow-shaped, made of a naturally forked branch cut off so as to form a handle and a short "toe" to which the head is attached. On the only complete adze we were able to obtain (I 5209; fig. 49e) the shell head is lashed to a step on the upper side of the toe by means of split cane. The small size

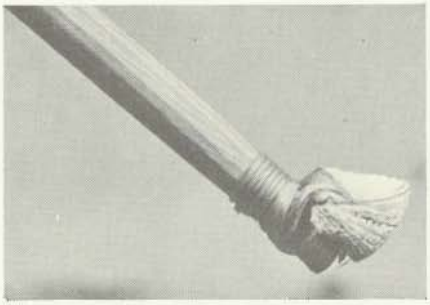


Fig. 50. Implement for scooping out coconuts. (Bradley collection).

of this specimen indicates that it has been used for light work: length 29.7 cm., width of edge 2.2 cm. Adzes with iron blades are now in general use.

The adze is the principal tool for wood working, but it should be added that fire was used for instance for hollowing out canoes[1]. Knives were originally made of sharp-edged shells, shark teeth, etc. Coconuts for water bottles were scooped out by means of a sharp piece of snail shell attached to a stick, 10—20 cm. long (Fig. 50). This implement is called *ali*.

In spite of the primitive tools, weapons and implements are always carefully and neatly made. Wood is often blackened by burying it in a swamp for several days. From a technical point of view wood working is, however, of the simplest kind. Separate parts of an object are only lashed together, and more intricate methods such as riveting, grooving, and mortising are unknown. Scarfing occurs on spears and arrows for joining the points to the foreshafts.

Shell ornaments were made by first breaking the shell into

[1] R. VAN DEN BROEK D'OBRENAN 1947, p. 32.

suitable pieces and afterwards grinding them with a piece of coral. They were perforated by means of a hand drill, the bit of which was said to be originally of stone, whereas in the present day it is made of iron; for small holes a needle is used. In the British Museum there is a peculiar tool (1908. 6. 29. 53) said to have been employed in making shell rings, viz. a bow-saw consisting of a bow, about 80 cm. in length, with a rattan string. A stone weight is attached close to one of the tips of the bow, and an unfinished ring is slid on the string. When a shell ring is to be made, a hole is first pecked and drilled through the shell, and the string of the saw is then passed through the hole and the entire core is removed by sawing. If the bow string is of cane or other vegetable matter, sand or some other abrasive must evidently be added. The question is, however, whether this implement really comes from Rennell. As far as I know no similar tool occurs in the Rennell collections of any other museum. What is perhaps still more significant is the fact that it seems to be particularly suited for making the broad shell rings worn as armlets by many Melanesian tribes, and ornaments of this kind are equally unknown in the collections from the island. On the other hand there is in the British Museum a bow-saw from New Georgia exactly like the specimen described, only with a string of wire instead of cane. I suspect, therefore, that it must actually have come from one of the Melanesian Solomons as an imported piece, or it has simply been erroneously labeled by the collector.

Art is but feebly developed. Staffs, lime sticks, clubs and ceremonial spears have sometimes elaborate or even odd forms such as being asymmetrical and provided with great double barbs which, when sharp-angled, may probably be interpreted as representations of frigate birds. Decoration in the true sense of the word is, on the other hand, extremely simple. Objects made of wood or shell are sometimes decorated with incised designs, but nothing like the elaborate carvings of the Maori, Marquesas Islanders and some other Polynesians is known on Rennell. On shell discs there are often concentric circles consisting of short dashes, whereas on clubs, arrow foreshafts, lime sticks, etc., the prevailing motifs are straight, zigzag, and toothed lines which may be arranged singly, in pairs, or forming belts of varying

widths. In one case only, viz. on a club (I 5173) I have seen a lozenge with strongly concave sides consisting of zigzag lines. Such designs are generally emphasized by means of a calcareous substance so that they stand out white against the dark wood. Painted ornaments do not occur at all.

Decoration with inlaid pearl shell, although undoubtedly of Melanesian origin, may be an old trait on Rennell, but it was probably very little used in early days (cf. p. 21).

2.

Making of Bark Cloth. — Tapa Beaters. — Dyeing.

Bark cloth was up to recent years the only material used for clothing. Nowadays, after the regular importation of calico, it is not worn anymore and but little of it is left, but the method of making is still generally known even within the younger generation, and there was no difficulty in obtaining both a description and a demonstration of the procedure.

The raw material is the inner bark of two species of *Ficus* called *mabuli* and *aloba*[1]. As far as I was able to ascertain, the paper-mulberry tree does not grow on the island, and LAMBERT must be wrong when stating that it was used for this purpose[2]. First a straight-stemmed tree of not too great a size is felled, and the outer bark is removed by means of an adze. A section of the trunk is then held between two men squatting on the ground, and one of them splits the inner bark lengthwise with a sharp wooden stick and strips it off carefully (Fig. 51). Then they put four small forked sticks pairwise in the ground and place two longer sticks horizontally in the forks, thus forming a pair of low trestles, after which a small fire of dry coconut leaves is started between them. The inner bark is laid across the tresles, and for a short time it is gradually moved so as to expose the whole length to the heat in order to dry it (Fig. 52).

This preparatory work is performed by the men, whereas the rest of the process belongs to the women. First the woman takes the bark to one of the small fresh-water holes, where it is washed.

[1] Cf. the names stated by the visitors from Tikopia: "mafuri" and "arova" (FIRTH 1931, p. 186).

[2] LAMBERT 1934, p. 102.

Fig. 51. Men removing bark for making bark cloth. Te Avamanggu.

When it is nearly dry, it is placed on a simple log and scraped by means of a shell. A scraper of this kind, *hasi*, in our collection (I 5212; fig. 41 d) is but an unfashioned pearl shell, 8.4 by 8.1 cm. The concluding process consists of beating the bark with a heavy wooden club, *teŋgeke*, which is much cruder than the ordinary Polynesian tapa beaters. Our collection includes two specimens of this kind (I 5213—14; fig. 53). Both are made of dark wood, almost cylindrical and with a narrower handle. The grooves are rather irregular and are found on one side only. On one of them the working part terminates in a small knob. Lengths 36 and 40 cm. respectively. The bark is now placed across the same log which served for scraping and is beaten again and again till

Fig. 52. Men drying bark for making bark cloth. Te Avamanggu.

it has attained a proper thinness. The finished product is always used in pieces of the size in which they are made, since neither glueing nor beating together of separate sheets are known[1].

The decoration of bark cloth is extremely simple. Painted and stencilled designs do not occur, only dyeing of whole pieces with turmeric, *aŋu*. The dye is prepared in a very primitive way differing from that of the more advanced Polynesian islands. A fibre cord is wound tighly around a stick 1 m. in length so that about three fourths of the stick is covered. After first being peeled

[1] It is not correct, therefore, when CH. VAN DEN BROEK D'OBRENAN (1939, p. 150) writes: *"On l'étend ensuite, puis, en y incorporant les fibres d'autres minces bandes d'écorce, on assemble les lambeaux..."*.

the root ot the turmeric plant is rubbed against the stick, which is held vertically with one end resting in a coconut-shell bowl[1]. The juice and loosened particles of the root caught in the bowl

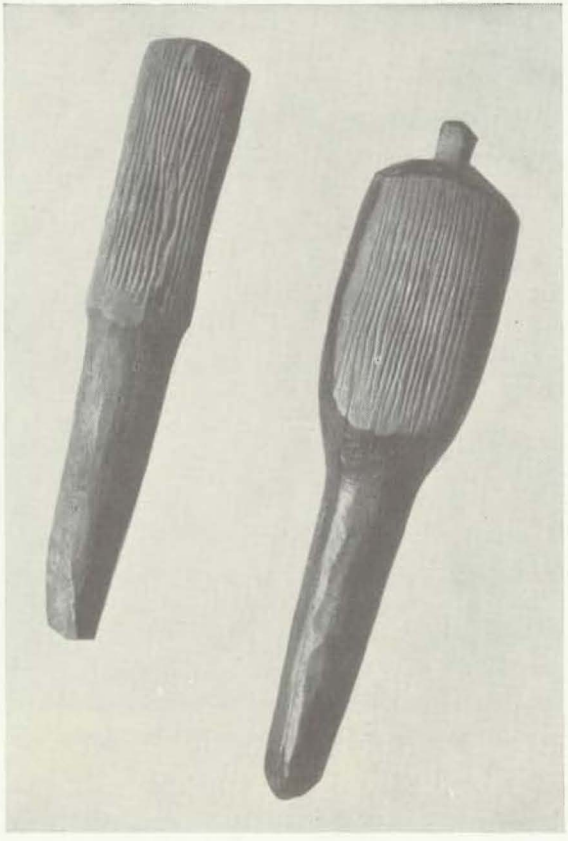


Fig. 53. Bark-cloth beaters. (National Museum, Copenhagen).

make up the dye in which the bark cloth is immersed. It is then put aside to dry. Afterwards the stick is heated and the cord, which has, of course, been entirely impregnated with turmeric during the grating process, is removed and made into a ball with which the cloth is thoroughly rubbed. Thus it acquires a bright yellow or orange colour which has, however, the drawback that it rubs off easily on all objects, including the human body, with which it comes in contact. The cord used for dyeing is termed *ukatama*.

[1] Cf. FIRTH 1931, p. 186.

Fig. 54. Man drying twigs for making rope. Lake Te Nggano. (T. Wolff phot.).

3.
Cordage. — Netting. — Basketry. — Mats. — Plaited Designs.

Cords are made of coconut and hibiscus fibres as well as of a certain creeper known as *vaŋaitu*, with segments about 30 cm. in length. The latter is used for fishing nets and is prepared in the following manner. The creeper is broken segment by segment and the knees are cut off, after which the green external bark is removed with a piece of turtle or coconut shell. In our collection there is a scraper of this kind, *nenebi* (I 5211) consisting of a piece of turtle shell with two parallel long sides and one oblique and

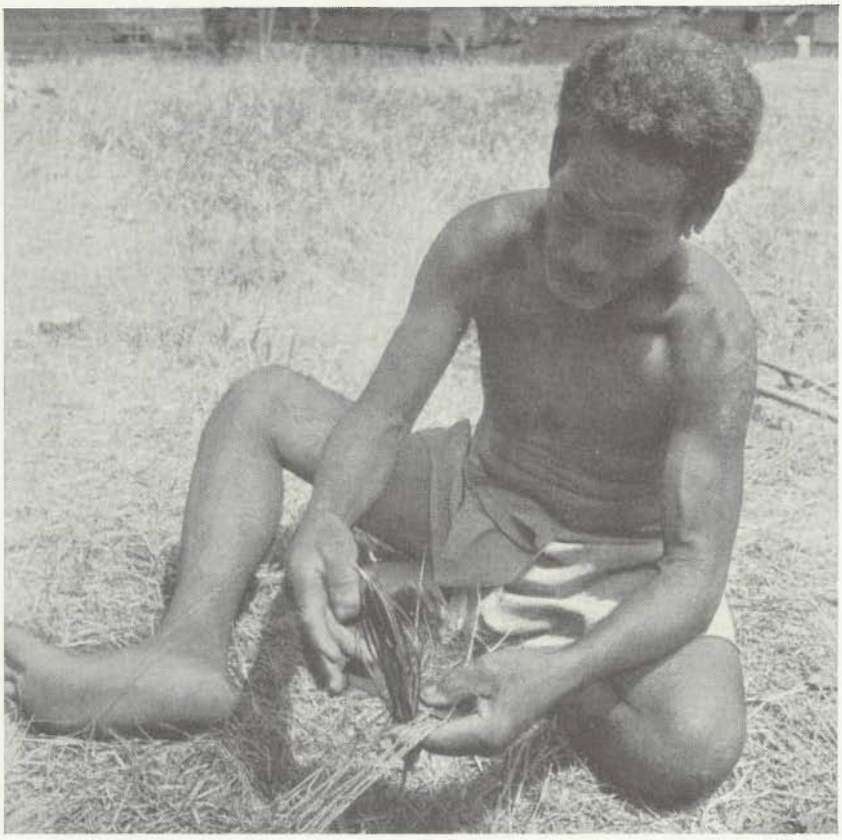


Fig. 55. Man making fishing net. Lake Te Nggano. (T. Wolff phot.).

one irregular short side, 8.5 by 4.4 cm. A small bundle of segments is then placed across the fork of a branch held in the hand and is dried over a slow fire (Fig. 54). When this is finished, the inner bark is stripped off, and if the strips are too thick they are split into finer threads. Finally, the threads are twined to strands on the thigh and lengthened by placing them so that the ends overlap and can be twined together. For making ropes several strands are twisted, the number of plies varying according to the size required. In many cases cords are braided.

For heavy lashings split rattan cane is used instead of cord.

Netting is, like rope-making, done by men (Fig. 55). A true netting needle is not known. Either two twigs are tied together in

Fig. 56. Woman making pandanus mat. Lavanggu.

two places some distance from the ends, or a stick is split at both ends so that the string can be wound around it. The mesh gauge, *aha*, is a rectangular or sub-rectangular slab of wood. The three specimens in the Copenhagen Museum (I 5199, 5200, and 5200 a) have the following size: 10.5 by 4 cm., 14.5 by 4.5 cm., and 15 by 4.5 cm. (Fig. 37 a). The knot used in fishing nets is the ordinary sheet bend.

Basket making and mat plaiting are women's work (Fig. 56). Baskets are among the most common household articles, and the simple type used for carrying home tubers and fruits from the gardens is both easily made and just as readily thrown away since it becomes brittle when dry, and discarded specimens are

always seen lying scattered on the ground around the dwellings. A basket of this kind, *poŋga-poŋga*, is made from a piece cut of a coconut frond. The mid-rib is split in two and forms the upper

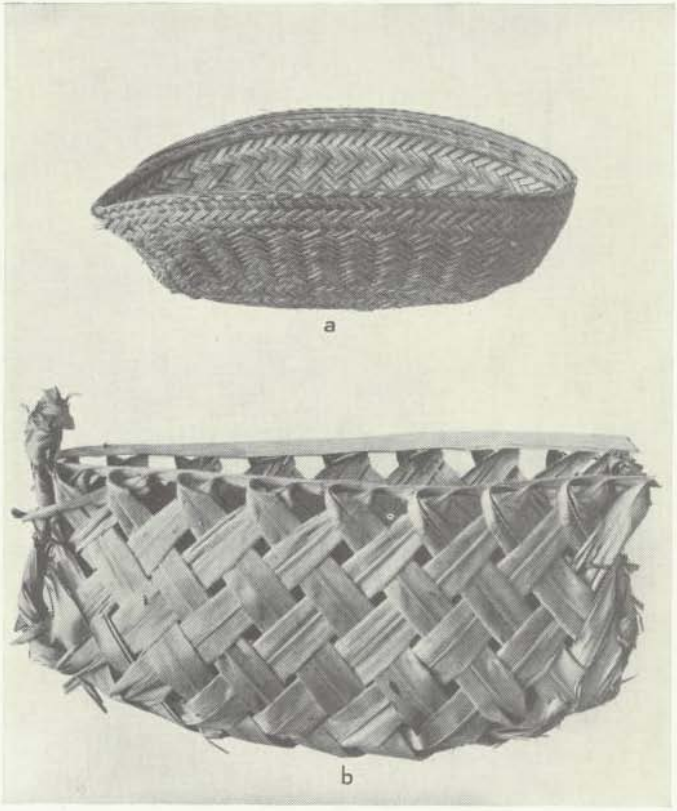


Fig. 57. Baskets. (National Museum, Copenhagen).

rim, and the leaflets are plaited in simple checker-work, the free ends being braided to close the bottom. The half-finished basket is open at both ends; for completion, it is turned inside out so that the bottom braid forms an interior ridge, and the ends are closed by tying them together with a piece of fibre string. The specimen in the Copenhagen Museum (I 5251; fig. 57 b) is 59 cm. long by 30 cm. high, but larger baskets are common.

Baskets for permanent use, *kete*, are more carefully made. The shape is flat with a sharp bottom and curved upper rim. The

latter consists of two split ribs. The sides are woven in twilled work, which in the specimen in our collection (I 5250; fig. 57a)

Fig. 58. Detail of plaited pandanus mat. (National Museum, Copenhagen).

form series of horizontal triangles at the top and bottom with vertical angles in between. As in the simple type there is an interior keel formed by braiding the free ends of the leaflets together, whereas the ends of the basket are closed by continuing the plaiting around them. The Copenhagen specimen has a length of 45.5 cm. and a height of 18 cm.

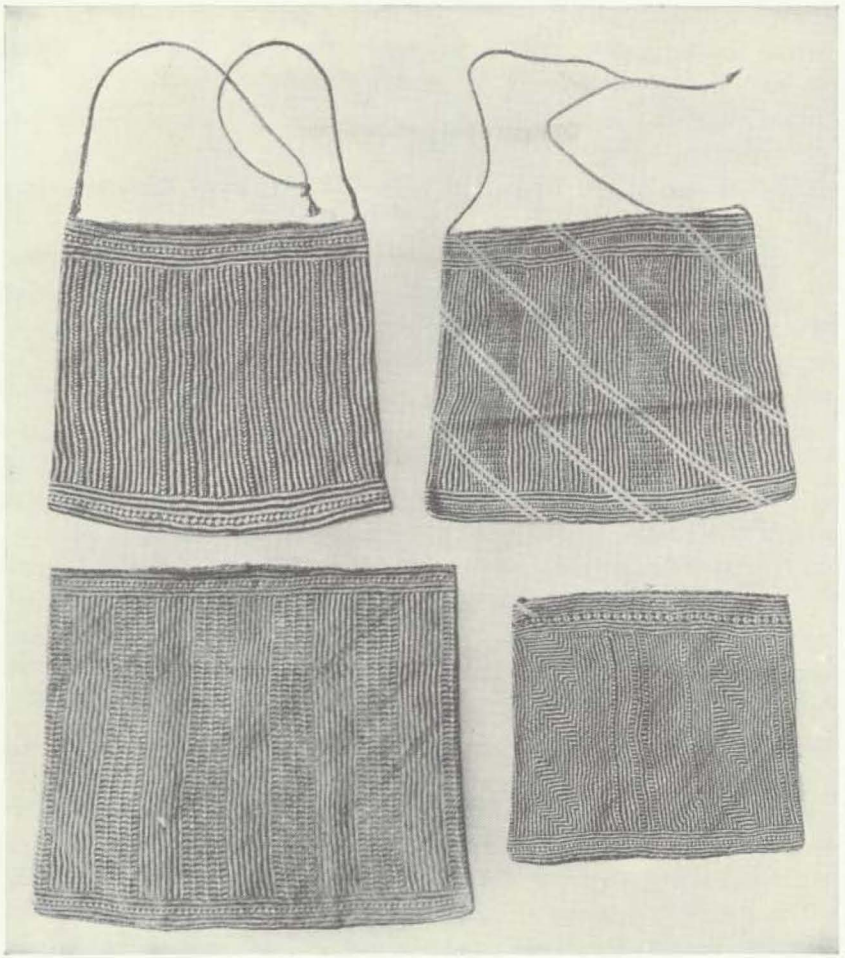


Fig. 59. Plaited bags. (National Museum, Copenhagen).

Bags for betel outfit, etc., and mats are made of strips of pandanus and wild banana (?) leaves. Pandanus leaves are now also used for thatching and house walls. The leaves are first dried[1], then they are opened out and made supple by rubbing them backwards and forwards around a stake placed vertically in the ground. A simple type of sleeping mat is made of broad leaf strips which are doubled lengthwise, placed edge to edge so that

[1] This is probably what KNIBBS (1929, p. 212) means by stating that they are "cured" by fire.

they overlap slightly and then pinned together with short thorns. Along the long sides they are stitched together with fibre thread, as seen in the specimen in our collection (I 5260, cf. p. 54). Thatch and house-wall sheets are made in the same way. Holes are punched with a bodkin, *tui*, of human bone or wood. We collected one of each kind (I 5236—37; fig. 49a) 26.3 and 14.8 cm. long, respectively.

Bags, *kete-maŋgu*, and fine mats, *malikopi*, are plaited in diagonal twilled work and decorated with geometrical designs which stand out as dark lines against the light ground. It is for the dark stripes that leaves of the wild banana are said to be used. The bags are rectangular and have as a rule a braided suspension cord for carrying them across the shoulder, and in one case I have seen a bag with a triangular flap at the upper edge, but all others are open at the top. The Copenhagen Museum possesses seven specimens (I 5252—58), varying in size between 35.5 by 34 cm. and 21.5 by 14.5 cm. A large mat in our collection measures 203 by 82 cm. As formerly mentioned, smaller sitting mats, *gapa-gapa*, were worn as a kind of garment (cf. p. 32). When weaving one of the large mats the woman holds a stick between her toes, resting it on her outstretched leg; the ends of the chain strands are bent around the stick.

The designs are always quite simple. On the mats they generally consist of diagonal lines, often double or more, forming lozenge-shaped patterns (Fig. 58). The decoration of the bags is often somewhat more complicated, as will appear from fig. 59, but the motifs are the same: vertical, diagonal and horizontal lines, lozenges and stepped figures, which may be arranged in vertical or horizontal stripes. The light stripes in the mats are known as *kie*, the dark ones as *gapagagi*.

IV.

Social Life.

1.

Pregnancy and Birth. — Childhood. — Tattooing and Incision. — Marriage. — Kinship. — Death and Burial. — Islands of the Dead.

HOGBIN asserts that the Rennellese are ignorant of the connection between sexual intercourse and conception, but LAMBERT has rightly refuted this view[1], which, moreover, tallies badly with the patrilineal descent of the population. For all that, HOGBIN may be right in maintaining that the soul of the child is placed in the mother's womb by the deceased relatives. A pregnant woman must avoid certain kinds of food. Thus, she did not eat cowries for fear that the child should be born with narrow eyes, nor a species of fish with protruding eyes in order to prevent it from acquiring such. The eating of another kind of fish known as *sausaugeŋge* is supposed to cause the child to be longheaded. This is considered particularly ugly, and a mother will therefore massage the skull of her longheaded infant.

Births are regarded as something "unclean" and must not take place in the dwelling but at some distance in the open near the common place for defecation. The woman in confinement is there generally surrounded by all the women of the village. She gives birth kneeling, supporting herself by means of two stakes, while one of the attending women presses her abdomen below the breasts. After the birth she cuts the navel string with a shell, and the afterbirth is buried under a stone. She immediately puts her finger into the mouth of the newborn child in order to be

[1] HOGBIN 1931 a, p. 177. LAMBERT 1934, p. 104 cf. 123.

sure that it acquires a strong voice, and feeds it with a little coconut or papaya which she chews first herself and squirts into the mouth of the baby.

In the meantime a fire of dry coconut fronds has been started close to the mother, and both she and the child are rubbed with heated leaves and the heated hands of the surrounding women to give them strength. One day on the beach at Lavanggu I came across a crowd of women who eagerly showed me a young woman lying half unconscious on a bed of coconut fronds. She had just given birth to a child, which had been placed beside her in a coarse palm-leaf basket, and one of her calves as well as her foot sole were badly burnt. Incidentally, the burning is also used as a remedy for strengthening the sick.

Male children are most appreciated. Twin births may occur. The killing of one of the twins as well as infanticide on the whole was flatly denied, but it was admitted that one of them might often die from lack of nourishment. LAMBERT mentions feticide by kneading the abdomen[1]. Births of children with a caul or with teeth were said to be unknown, and accordingly nobody knew what would happen if they took place.

Mother and child are confined for one day and night in a small shelter of coconut leaves. When this seclusion is over, she will wash the child and herself and return to her house, where she has to remain for one or two weeks for fear that she will otherwise be unable to suckle her child properly. She can, however, both cook for her family and eat what she likes.

Soon after the birth the child was named, as a rule for some dead or living relative. If it was a son, the name was given by the father; if a daughter, by the mother, who might, however, also give it to a son if for some reason the father was absent. There was no feast of any kind connected with naming.

I have little information about children's games, and saw practically no toys. At Lavanggu both boys and grown-up men often played with an ordinary football, but apparently without any rules. A native toy is the buzz, *huapaipai*, consisting of an oval, hollow fruit shell with a hole at one end. A string is passed through the centre of the shell, which produces a humming sound

[1] LAMBERT 1934, p. 123.

when the string is slackened and tightened alternately. A specimen in our collection (I 5263; fig. 60) has a string 81 cm. long. Other games which are sometimes seen played are cat's cradle and one where pebbles or the small green opercula of the *Trochus* snail are tossed into the air, but I failed to obtain the rules.

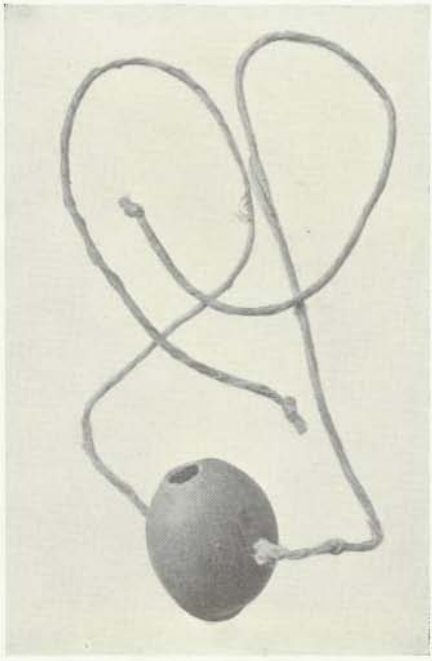


Fig. 60. Buzz. (National Museum, Copenhagen).

CHARLES VAN DEN BROEK D'OBRENAN gives the following information: "*Comme dans beaucoup d'îles d'Océanie, les indigènes de Rennell doivent subir une sorte d'initiation. On ne pourra exhiber de nouveaux tatouages qu'après avoir gravi une échelon social*"[1]. The first part of this statement is certainly incorrect and, as will appear from the following, the latter part is but half true. Tattooing, *tatau*, is still common. All old and middle-aged and even some young persons are more or less elaborately tattooed, even though the custom is disappearing within the youngest generation or, in cases where it is upheld, the old patterns are giving way for in-

[1] CH. VAN DEN BROEK D'OBRENAN 1939, p. 155.

Fig. 61. Woman painting design before tattooing. Lake Te Nggano. (T. Wolff phot.).

stance to the bearer's name, etc. The process, which Mr. WOLFF had an opportunity of observing at Lake Te Nggano, is performed in the well-known Polynesian manner and described by him as follows. Both the operator and her assistant were women. First a small hole, about 10 cm. deep, was dug in the ground, a piece of resin, *puŋu*, was lighted and put into the hole, and one half of a coconut shell was placed over it with the concave side downward. The resin burned with a sooty flame that blackened the inside of the shell. Then the soot was mixed with a few drops of water and by means of the thumb and forefinger smeared on a straw, with which the design was drawn on the skin of the young man who was to be tattooed (Fig. 61). The tattooing comb, *a'u*, which is now in the Copenhagen Museum (I 5235 a; fig. 12 d) was a

Fig. 62. Tattooing process. Lake Te Nggano. (T. Wolff phot.).

piece of split ibis bone, 13.1 cm. long, notched at the end so as to form four fine teeth, and tied with thin fibre thread at an acute angle to a short wooden handle[1]. The instrument was wetted, placed on the design, and tapped with a short stick. The dye is said to penetrate into the skin in two days (Fig. 62).

The most conspicuous pattern of the men consists of a broad vertical stripe and two similar oblique stripes or parallelograms forming a kind of inverted arrow head and known as *aha* or *hakapuloŋa* and *tibi*. On either side there is a row of six or ten small fish figures, *lipo*, which, however, are not an original Rennell design but were introduced by cast-aways from Tikopia two

[1] Forster (MS) refers to the tattooing comb as "pungu", but this is really the term for the resin employed.

or three generations ago. It is not known what kind of fish is depicted. On the thighs are three to six broad stripes called *tauakatu*, and on the arms other stripes, *huŋgumea*. A line, *kasotua*, runs down the spine from the neck to the loins, and finally the calves are covered with a net-like pattern, *bae'uŋgi*. This finishes the tattooing of common people, but chiefs and their kin are entitled to a semilunar design, *hakasapa*, on the buttocks, and formerly also to an additional chest design called *taukuka*, but this is at present to be found only on Bellona. The special designs of the chiefs could only be made in connection with a great feast.

Tattooing is, of course, a rather painful process and therefore takes place at several intervals beginning at puberty. FORSTER[1] was told that the chest tattooing was performed at the age between 16 and 20, and the operator was paid with a basket and a piece of bark cloth. Next, between 20 and 25, came the tattooing of the thighs, which cost not only a basket and a piece of bark cloth but also a mat. At a later stage followed the decoration of the arms and still later that of the back and calves, in which cases the prices ran as high as two mats.

The tattooing of the women differs somewhat from that of the men and is common to all, no special designs being reserved for the families of the chiefs. The process begins at puberty when the chest design consisting of one vertical and two oblique lines, *tu'u*, much narrower than those of the men, are made. Next comes the tattooing of the shin bones, *ivihakaŋga'a*, and afterwards that of the thighs, *'atumanu*, and of the calves, *aŋgova'e*. The process is finished when also the arms, shoulders, and loins are decorated; these designs are known respectively as *kaso*, *uŋgalipo*, and *hoŋge*. The fish figures of the women were, like those of the men, introduced from Tikopia. For further details and illustrations the reader is referred to the reports of the *Korrigane* Expedition[2].

TRENCH adds the following information about tattooing: "These badges, I gathered, formerly were a passport after death into the land of the dead, and were the outward and visible sign that the bearer followed a particular *atu* [*aitu*? *atua*?] who re-

[1] FORSTER (MS).

[2] CH. VAN DEN BROEK D'OBRENAN 1939, p. 154 f. R. VAN DEN BROEK D'OBRENAN 1947, p. 25 ff.

ceived him into the land of the dead of which this particular *atu* was the controlling spirit. An improperly marked individual would not be received after death by any *atu* and would be condemned to haunt Rennell Island for ever"[1]. I am unable to confirm this statement.

LAMBERT says that boys are circumcised at puberty[2]. It need not be emphasized that the operation commonly performed in Polynesia is not true circumcision but incision; however, even so his remarks are difficult to understand. Incision was certainly known and was termed *seŋge*. It was undertaken by the chief, who made a slit in the upper side of the foreskin by means of a shell knife, but otherwise the statements were rather vague and confused. It was said that only men of importance were incised, and the operation might be performed at any age. Afterwards the chief was obliged to give a feast. There was general agreement, however, that the custom was abolished by a chief called *Tinopau*, who lived ten generations ago, thus long before LAMBERT's time.

There were no special taboos or ceremonies connected with a girl's first menstruation. She had, on the other hand, like all menstruating women, to stay within her house and could neither enter other houses nor, indeed, come near other people than her own husband and children, but she was not forbidden to cook for her family and touch her husband's belongings. At the end of the period she washed and her seclusion was finished without further precautions.

Both young men and girls enjoy considerable sexual freedom. This was, in fact, one of the things which was specially noticed by the Tikopians who visited the island[3]. Illegitimate children are common and are not looked upon as a disgrace.

Marriage is contracted after direct negotiations between the father of the bridegroom and the bride's father. The former brings a present of food, mats, etc., to the bride's family and another present to the chief, whose consent was said to be necessary. One or two days later the bride's father gave a similar present to the bridegroom's family, and thus the wedding was

[1] TRENCH 1940, p. 204.
[2] LAMBERT 1931, p. 142.
[3] FIRTH 1931, p. 189.

accomplished without any further ceremony. Monogamy was evidently predominant even in pre-Christian times, but polygyny was allowed. LAMBERT mentions one man with three wives and two men with two wives[1]. Polyandry did not occur. Cross-cousin marriage is common but not compulsory, whereas marriage between parallel cousins and with uncles, aunts, nephews and nieces is prohibited. Both levirate and sororate occur; a man might marry two sisters at the same time, or the sister of his deceased wife. The chiefs' families practise endogamy as a natural consequence of their divine descent, but neither endogamous nor exogamous clans are known.

Descent is patrilineal, and the kinship terms are more or less classificatory as will appear from the list overleaf[2].

As terms of adress the words for father, mother, and child are changed respectively to *tamau*, *tinau*, and *tama-ŋgiki*, literally "little child". If a person wants to indicate that he is speaking of his real mother and not of his father's sister he will say *tinana-na'uŋgi*, i. e. "true mother". The close relations between a man and his female parallel cousin, and between a woman and her male parallel cousin are reflected in the fact that they use the terms for sister and brother respectively. Brothers and sisters are subject to avoidance: they are not allowed to speak together and can only converse through their parents. It is likewise worthy of note that a woman will use the same term for her own and her brother's child, whereas a man has a special term for his sister's child.

When a man feels that his death is approaching he will dispose of his property and for instance give his fishing net to a son who is a clever fisherman, etc. Land is always inherited in the male line (cf. p. 63). The members of the *Korrigane* Expedition noticed how a dying man, clad in his best attire, crawled close to the house of the chief, while his brother, likewise in "*tenue de gala*" sat down beside him, and the women of the place were lamenting in a semi-circle around them[3]. No explanation is given of this ceremony.

[1] LAMBERT 1931, p. 143.
[2] Cf. also HOGBIN 1931 a, p. 177.
[3] CH. VAN DEN BROEK D'OBRENAN 1939, p. 156.

Term	In relation to		
	both sexes	men	women
tupuna	grandfather / grandmother		
tamana	father / father-in-law		
tinana	mother / mother-in-law / father's sister		
taukete-o-tamau	father's older brother		
taina-o-tamau	father's younger brother		
tuatina	mother's brother		
tau-tinana	mother's sister		
matua			husband
ŋguŋgu		wife	
taukete		older brother	older sister
taina		younger brother	younger sister
tuahini		sister	
tau-tuahini		parallel cousin (f)	
tuŋga'ani			brother / parallel cousin (m)
ha'aŋa		cross cousin (f)	cross cousin (m)
haihanau		cousin (m)	cousin (f)
tama	child		brother's child
hosa	son / son-in-law		
tama'ahini	daughter / daughter-in-law		
iŋgamutu		sister's child	
makupuna	grandchild		

When death arrived, the whole family started wailing. The body was dressed in breech-cloth and ornaments. If the deceased was a chief, his beard was shaven and his turban was wrapped around his head. Hogbin reports that the body was covered with turmeric[1]. It was then wrapped in a simple pandanus mat, and a chief was exhibited on the *ŋgoto-maŋgae*. A grave was dug, ac-

[1] Hogbin 1931 a, p. 175. Hogbin 1931 b, 554.

cording to HOGBIN with the sacred paddles[1]. There were no particular burial places, but as formerly mentioned the graves were generally close to the houses (cf. p. 46). The body was carried to the grave lashed to a pole. A mat was placed in the bottom of the grave, and the body was laid down on its back with the head on a head rest in the direction of the sea or a near-by path. The staff of a chief was placed in his arm[2], but otherwise no grave-goods such as weapons, food, etc., were buried. Finally, a small shelter was erected on top of the grave[3]. Food was brought here, and the mourners ate on the spot, and later food offerings were made to the spirit. On the beach near Lavanggu was the grave of the grandfather of *Puia*, the present teacher of the place (Fig. 63). The shelter had entirely disappeared with the exception of a fragment of one of the posts, and now it appeared only as a slight elevation in the coral sand with a row of stone slabs protruding on the side nearest the sea[4].

After the funeral the mourners gave themselves up to violent expressions of grief. They cut off the hair on the crown of the head, *tauhua'ea*, slashed the skin of the forehead in three or four places with knives, *hoa*, and burnt their chins and breasts with small pieces of fish line or bark cloth, *tutugeuŋgeu*. They even chopped down some coconut trees, smashed the coconuts, and tore down the top of the house roof to let it appear "tonsured" too. The tonsure and burns of the mourners have been reported by some earlier authors[5]. For a whole month the mourners and the persons who had assisted at the burial were forbidden to work and to eat the favourite dishes of the deceased. On the other hand the family would give a feast—unfortunately I am unable to state the exact time when—and if the deceased was a chief, people from other parts of the island would bring them presents and their chief would play the sounding board at a dance in which, however, the mourning family did not take part. The

[1] HOGBIN 1931 a, p. 175.

[2] Not, as stated by LAMBERT (1934, p. 121) placed on top of the grave.

[3] Cf. KNIBBS 1929, p. 207, 217. HOGBIN 1931 a, p. 175. HOGBIN 1931 b, p. 554.

[4] DECK (1945, p. 39) mentions a small conical grave hut at Kanggava where "buried in the sand, his knees tied to his neck, the last great chief sits". This statement is, as will be seen, quite inconsistent with that given by my informants.

[5] HOGBIN 1931 a, p. 175 f. HOGBIN 1931 b, p. 554. CH. VAN DEN BROEK D'OBRENAN 1939, p. 145. R. VAN DEN BROEK D'OBRENAN 1947, p. 33.

Fig. 63. Grave. Lavanggu.

burial customs and the mourning period were the same for men and women.

The souls of the dead might go to one of two places according to their own choice: *Manukatu'u*, which was the home of *Te Haiŋgi-atua*, or *Nukuahea*, which belonged to *Te Hua-i-ŋgaveŋa*. Both are islands situated to the east in the ocean, with plenty of food and drinking water. The departing souls gather at Lavanggu, which for that reason was considered taboo in former times, and are taken on board the canoe of the god. After their arrival to the island they are at liberty to travel to and from between Rennell

and their spirit residence as often as they want, so that they can assist their surviving relatives. LAMBERT tells us that the ancestors are consulted by means of a bamboo pole stuck into the ground at the grave, but gives no details of how it is done[1]. There is no difference between the future life of good and evil persons. According to LAMBERT the souls continue to grow in the Land of the Dead, which he places in the sky, and he adds that only men are entitled to enter there[2]. This piece of information should, I presume, be taken with some reservation.

2.

Salutation. — Intertribal Relations. — Weapons. — Warfare. — Conclusion of Peace.

When the visitors from Tikopia arrived at Rennell they were taken by the hand and led to the chief. Here they were received with the common Polynesian custom of nose-rubbing and were given presents of coconuts[3]. The rubbing of noses is both a greeting and a sign of affection[4]. Formerly, when people from a foreign district approached a village, the women among the visitors would start a particular dance in order to show the friendly intentions of the party.

Bellona was the only island with which Rennell had regular intercourse, though not always of a peaceful character. The same is true of the districts on Rennell itself. LAMBERT emphasizes the jealousy between Te Nggano, the original population centre, and Te Mungginuku—or, as he calls it, Kolugu—around Kanggava Bay, which acquired added importance in modern times on account of the anchorage there, and says that it resulted in a war when the ancestors of the chief settled in the latter place three generations ago[5]. It was quite evident, also when we visited the island, that relations were rather strained between the old high

[1] LAMBERT 1944, p. 309.
[2] LAMBERT 1934, p. 120 f.
[3] FIRTH 1931, p. 184.
[4] WOODFORD 1916, p. 46. LAMBERT 1931, p. 150.
[5] LAMBERT 1934, p. 119 f. Strictly speaking LAMBERT says two generations, but the present chief is a son of the chief living in Lambert's days.

chief, *Taupoŋi*, and *Tahua*, the chief of Te Mungginuku. As a rule, however, the three eastern districts, Te Nggano, Te Mungginuku, and Banggikanggo were allied against the westernmost ones, Taungganggotu and Senggema. Thus, for instance, was the state of affairs during the last war on the island. The central chieftainship, Te Tuakoi, was connected by family ties to both sides and joined sometimes one and sometimes the other of the fighting parties and enjoyed the doubtful privilege of being the habitual battle field.

The weapons of the Rennellese are bows and arrows, darts, and clubs. Stones are thrown with the hand as slings are unknown, and neither shields nor any kind of armour occur.

We were unable to find a bow, *kahutu*, which had been actually used and therefore had one made to order (I 5181), but judging from the old specimens in other museums it is correct in every detail except for the fact that the string is made of ordinary twine instead of fibre. The stave is of light-coloured wood and round in cross section. The tips are characteristic: the upper one is shaped like a long, blunt and quadrangular knob, somewhat tapering downwards and terminating below in a quadrangular projection which keeps the string from sliding down, whereas the lower one is round and pointed so that the bow when not used can be stuck into the ground, and the projection for the string is circular. Total length 124.5 cm. A similar bow is in the Cambridge Museum (34. 328; fig. 64d) and two others from Bellona are in the British Museum (1936—12. 17. 5 and 1909—66). A third specimen from Bellona, also in the British Museum (1936—12. 17. 4) differs in having shorter tips and flat projections for the string, which is made of split cane (Fig. 65).

The arrows, *'u*, have a thin, pin-shaped point of human bone sometimes made of two pieces scarfed together and tied by means of a whipping of fibre thread. The point is beveled at the base and scarfed to a long, spindle-shaped or slightly profiled foreshaft of dark wood, which is inserted into a bamboo shaft and secured with fibre whipping. The shaft has neither feathering nor nock for the string. The foreshafts are often decorated with incised designs emphasized with a white, calcareous substance, and in the foreshaft of one arrow, now in the British Museum

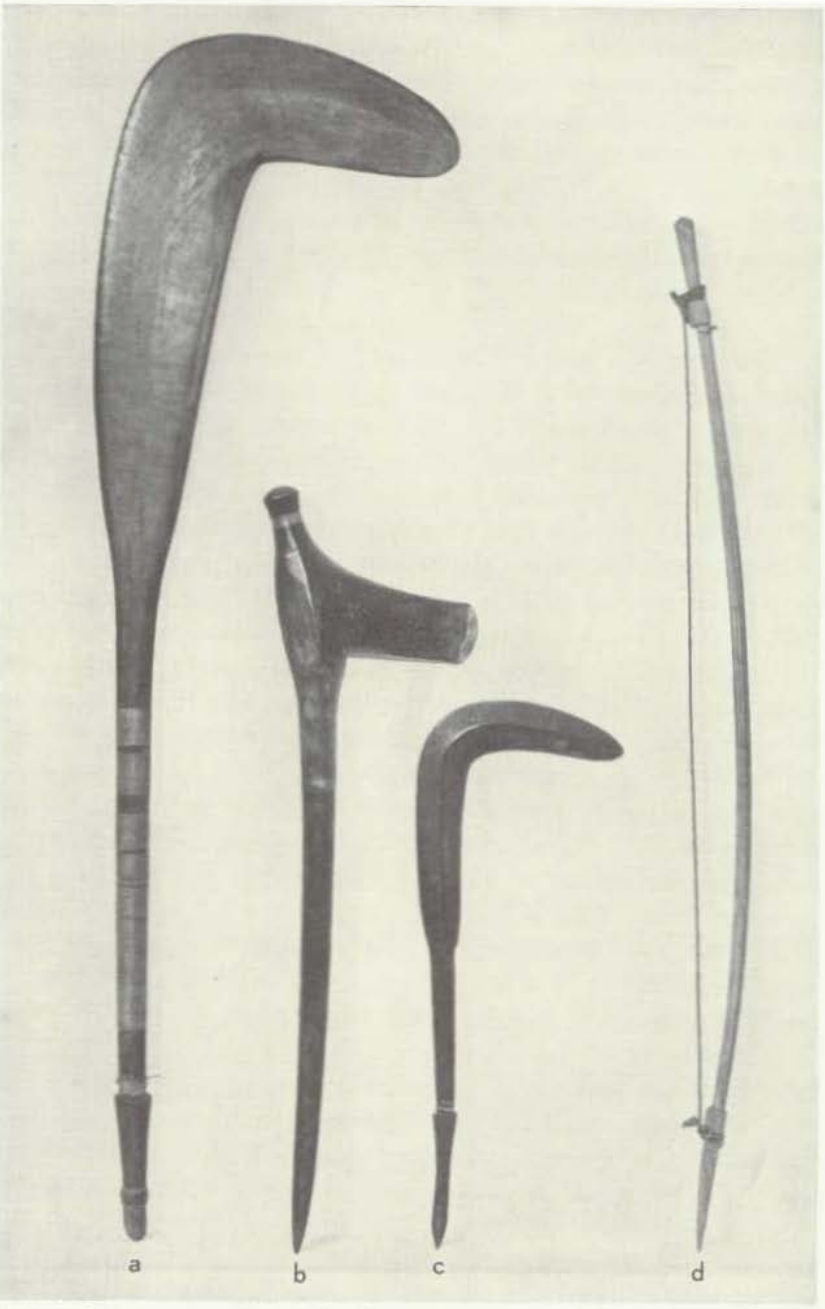


Fig. 64. Clubs (a—c) and bow (d). (Courtesy, University Museum of Archaeology and Ethnology, Cambridge).

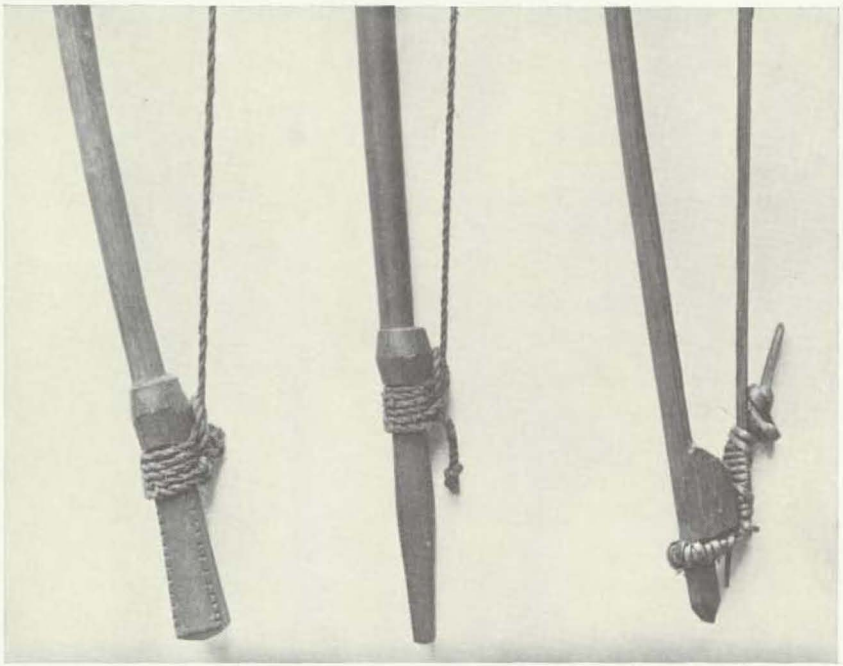


Fig. 65. Details of bows. Bellona Island. (Courtesy, British Museum, London).

(1927—111; fig. 66a), there is a slight swelling with a longitudinal perforation. Our collection includes eight arrows (I 5182a—h; fig. 67), varying in length between 87 and 83.5 cm., and a decorated foreshaft (I 5183), 35.2 cm. long.

When shooting, the archer holds the bow vertically with the arrow shaft resting between the forefinger and long finger of his left hand. The arrow release is primary, the nock being held between the thumb and the first joint of the forefinger (Fig. 68).

Darts, *tao*, are of a type similar to that of the arrows. Like the latter they have pin-shaped points of human bone made of two pieces scarfed together. There are, however, no foreshafts, the points being attached directly to the slender, slightly tapering shafts of dark wood. The joints are secured with whippings of fibre thread. The specimens in the Copenhagen Museum (I 5184—85; fig. 16h—i) are 2.26 and 2.29 m. long respectively. Darts are considered symbols of *Tahaki-ŋaŋi*, one of the sons of *Te Haiŋgi-atua*.

Fig. 66.

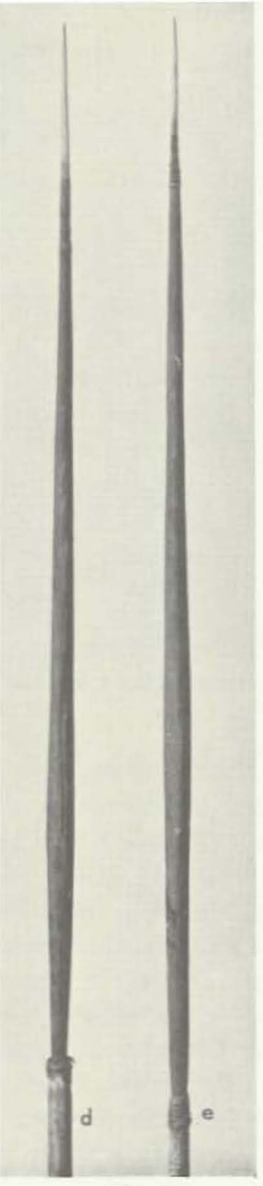


Fig. 67.

Fig. 66. Arrows. (Courtesy, British Museum, London).
Fig. 67. Arrows. (National Museum, Copenhagen).

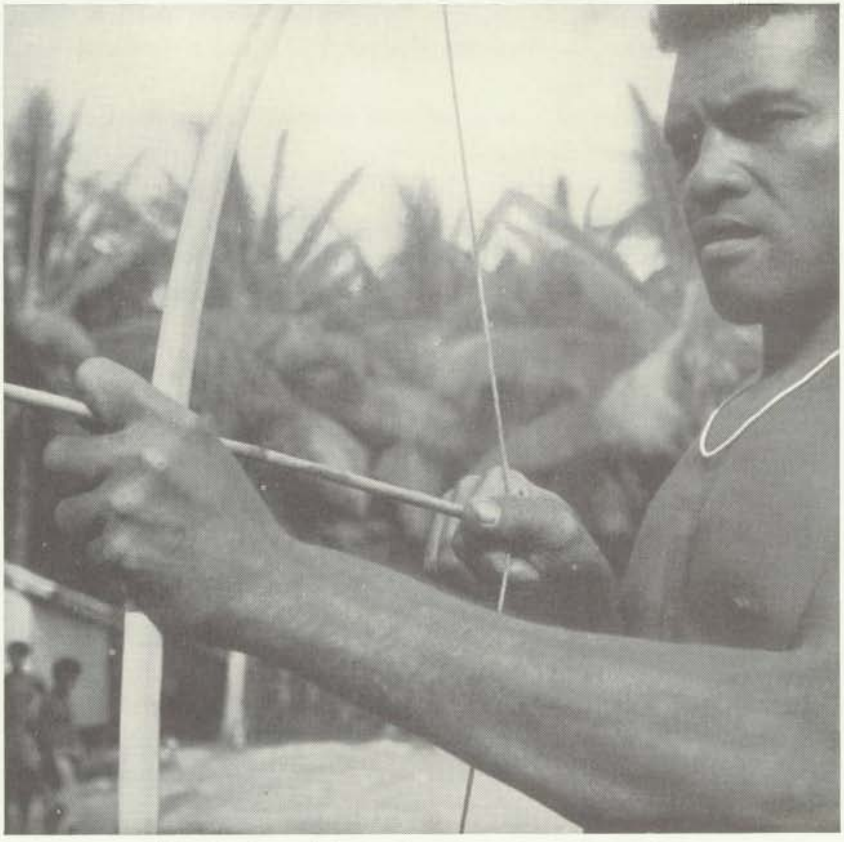


Fig. 68. Arrow release. Lavanggu. (M. Høyer phot.).

There are many shapes of clubs, each of them with a separate name. The term *ua* refers to a type of which our collection has three specimens (I 5172—74; fig. 69c—d). They are made of dark, brown or black wood, with a flat blade, either elliptical with small, proximal projections or with more or less sharp corners. On each side of the blade there are a low longitudinal and a transversal ridge. The shaft is short and terminates in a conical knob. I 5173 is decorated along the longitudinal ridge with an incised, toothed double line continuing near the shaft in a single line. A zigzag line follows the transversal ridge, and on the distal part of the shaft a zigzag line forms a lozenge-shaped figure with strongly concave sides. On I 5174 the outlines of the blade are emphasized by a toothed line, and along the transversal ridge

there are two zigzag lines. The designs are filled with a white calcareous substance. The lengths of the clubs described vary between 73 and 49 cm.

Another type of club is known as *koabalo* or *gogabalo* and is, like the darts, a symbol of *Tahaki-ŋaŋi*. I 5175 in our collection may serve as an example (Fig. 69b). The material is brown wood. The head is ovate and somewhat flattened, terminating in a knob with concave sides. The shaft tapers downwards and has for about two thirds of its length an open-meshed wrapping of split cane. Total length 95 cm.

The characteristic asymmetrical clubs are called *ŋututaba*. Of these we have two specimens (I 5176—77). The head terminates in a knob like an inverted cone and has one strongly curved, sharp edge, whereas the opposite side is but slightly convex and blunt. The head continues gradually in a tapering shaft, which in I 5176 has a wrapping of split cane like that of I 5175. On the other specimen (Fig. 69a) the head is decorated with an incised design filled with a white substance: two toothed lines along the blunt edge and at both ends. Besides there are on one side two triangular pieces of pearl shell. Lengths 107 and 93.5 cm.

I 5178 is a short club, *tiaŋgetaha*, probably intended primarily for throwing (Fig. 69e). It is made of black wood. The head is long compared to the shaft and has eight sharp, radial flanges. On the tapering shaft rows of small incised triangles form horizontal and vertical bands with small star-like figures in between. Length 24 cm. According to Mr. BRADLEY, clubs of this type were carried by chiefs.

The term *baukiaŋa* designates a club with a heavy, roughly star-shaped head of wood or stone. Our specimen (I 5179; fig. 69f) is made entirely of wood. The head is rounded on top, with nine blunt, radial projections, and continues gradually in a tapering shaft terminating in an inverted conial knob. Length 46 cm. We did not succeed in obtaining a complete specimen with a stone head but did acquire a single detached head made, according to Mr. JOHN GROVER of the Colonial Geological Survey, of andesite from Guadalcanal or Russell Islands (Fig. 48d). The upper side is rounded, the lower one flat, with eight blunt, slighty protruding knobs at the edge. Diameter 10.5 cm. The stone-headed

Fig. 69. Clubs. (National Museum, Copenhagen).

club was the first type to be described from Rennell Island[1]. Besides this specimen, now in the British Museum, very few are known. LAMBERT collected one and mentions another one in the Brisbane Museum and one in Cambridge[2]. The latter (2. 5522) is seen in fig. 70b. As will appear from the illustration, the head is lashed on top of the shaft by means of split cane, and there is a braided wrist strap attached to it. A similar club (25. 941) in the Cambridge Museum is seen in the same figure. Although made entirely of wood it is provided with a lashing like that of the stone-headed specimen. In addition to those mentioned by LAMBERT, Mr. WOLFF saw a stone-headed club in the Otago Museum, Dunedin, N.Z.

This description does not exhaust the number of club types. What is evidently a rather common form is a club with a fairly broad, sickle-shaped head and a narrow shaft. Two specimens, now in the Cambridge Museum, (2. 5518 and 34. 337) are seen in fig. 64; others are for instance in the museums of Auckland and Dunedin, N.Z., and a similar one from Bellona in Bernice P. Bishop Museum, Honolulu. An axe-like club (2. 5520) in the Cambridge Museum is likewise illustrated in fig. 64. In the museum of Auckland, N.Z., are two related but more grotesque forms: one of them (20056) with two large and sharp flanges like a double axe, and the other one (20052) even with four radial flanges. A specimen of the former type, called according to Mr. BRADLEY *ŋutugua*, is illustrated in fig. 71. A rather narrow, lozenge-shaped club, terminating in two conical knobs in continuation of each other, is found in the Otago Museum, Dunedin.

It was the chief who gave orders to war, *saŋga-taua*, in which case he would sometimes ask the chief of some friendly district for assistance. Whether the chief led the war party himself or appointed one of his men to do so, a war leader is called *tuŋgi-taua*. The warriors assembled in a hidden spot in the forest, bringing their weapons, sleeping mats, and food along with them. Standing between the mats the leader invoked *Te Haiŋgi-atua* and prayed for a successful issue of their undertaking. All this

[1] WOODFORD 1910, p. 122. There called "ngakulu".
[2] LAMBERT 1934, p. 103. The Brisbane specimen is pictured in EDGE-PARTINGTON 1890—98, III pl. 34 fig. 7.

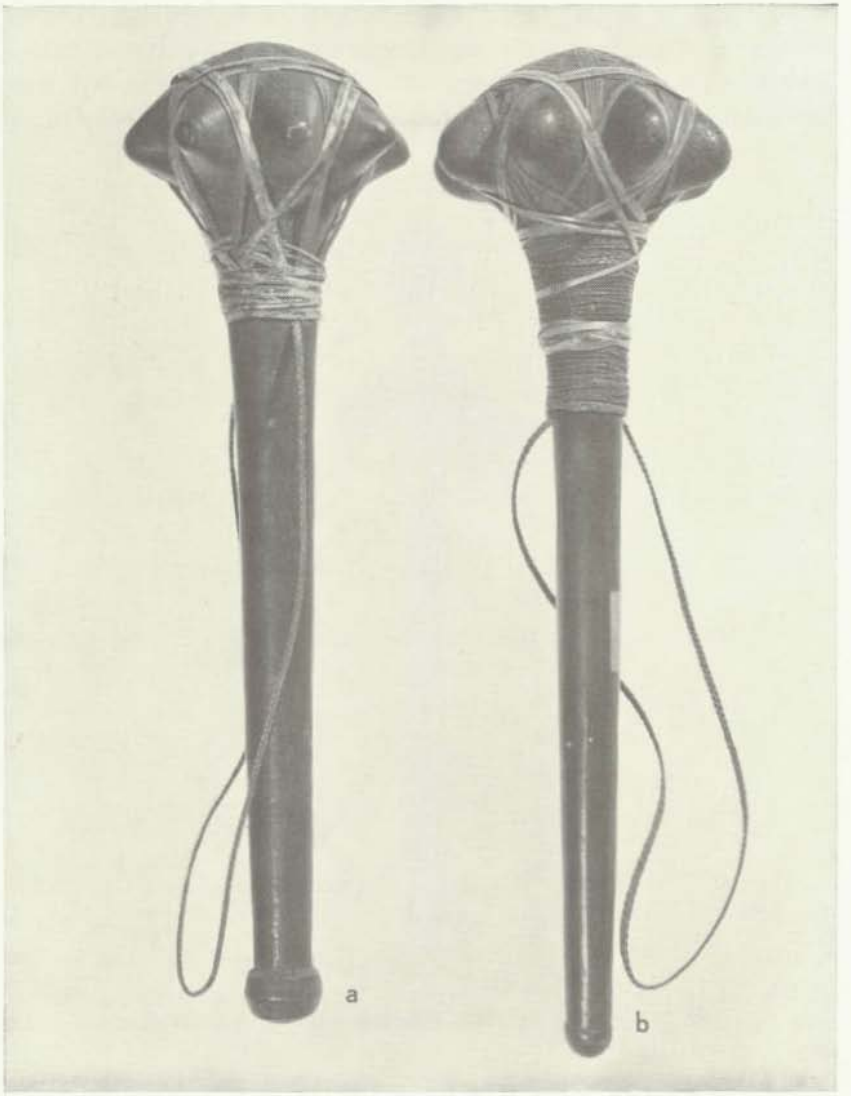


Fig. 70. Clubs. (Courtesy, University Museum of Archaeology and Ethnology, Cambridge).

was done secretly so that the enemy did not suspect their intentions. There was no formal declaration of war, and the wars were actually raids with rather few participants and consisting for the most part in ambushes and sudden attacks. Only in cases where the enemy was not taken by surprise did the two parties

draw up in an open place. The victorious part showed no mercy. Houses and gardens were destroyed, men and boys were killed, and women and girls carried off. The flesh was removed from the thighs and upper arms of the fallen enemies and the bones

Fig. 71. Club. (Bradley collection).

taken home to be used for spear and arrow points. Sometimes also the heads were carried to the *ŋgoto-maŋgae*, where a feast was celebrated in honour of the warriors and the chief thanked *Te Haiŋgi-atua* and *Te Hua-i-ŋgaveŋa* for the victory. The enemy heads were placed on poles around the place, and during the following dance they might be hit with the clubs of the dancers. Afterwards they were thrown away, and head hunting in the proper sense of the word did not occur. Cannibalism was likewise

unknown, although there is a tradition of two cannibalistic outlaws, *Teŋgu* and *Ɣabagu*, once living in the Banggikanggo district.

Just as a war depended on the initiative of the chief, so he also decided when peace should be concluded. First he dispatched five women to the hostile chief in order to announce his intention. After that he appointed two male delegates, who blackened a piece of bark cloth with soot, made it carefully into a bundle, and presented it as a sort of credentials. The delegates made an appointment when and where the two chiefs should meet, and the chief in whose district the negotiations took place gave a feast in honour of his visitor. Then compensations for the killed were exchanged: teeth of flying foxes, mats, etc., and were distributed among the relatives of those concerned. In some cases the defeated party seems to have ceded part of its territory. This ended the war. There were no special taboos for the warriors who had taken part in the fighting.

3.
Musical Instruments. — Dances and Songs. — Calendar.

When the fact is taken into consideration that the Rennellese are fond of dancing and singing it is astonishing that they have, strictly speaking, only one musical instrument, the sounding board. The shell trumpet is, as mentioned previously, used for signaling (cf. p. 68), and the shell rattle is probably first and foremost an ornament (cf. p. 38). It is true that a few men now have a ukulele, and great slit drums have been introduced for calling the congregation to church service (p. 21). The Rennellese know that the Melanesians of Malaita have Pandean pipes, but they never play them themselves. Another, originally foreign instrument may now sometimes be seen, viz. a long flute made of the stalk of a papaya leaf. It has been mentioned by previous authors[1], but it is generally agreed that it is not aboriginal.

The sounding board, *paupau*, is a heavy, crescent-shaped

[1] Ch. van den Broek d'Obrenan 1939, p. 146. R. van den Broek d'Obrenan 1947, p. 32.

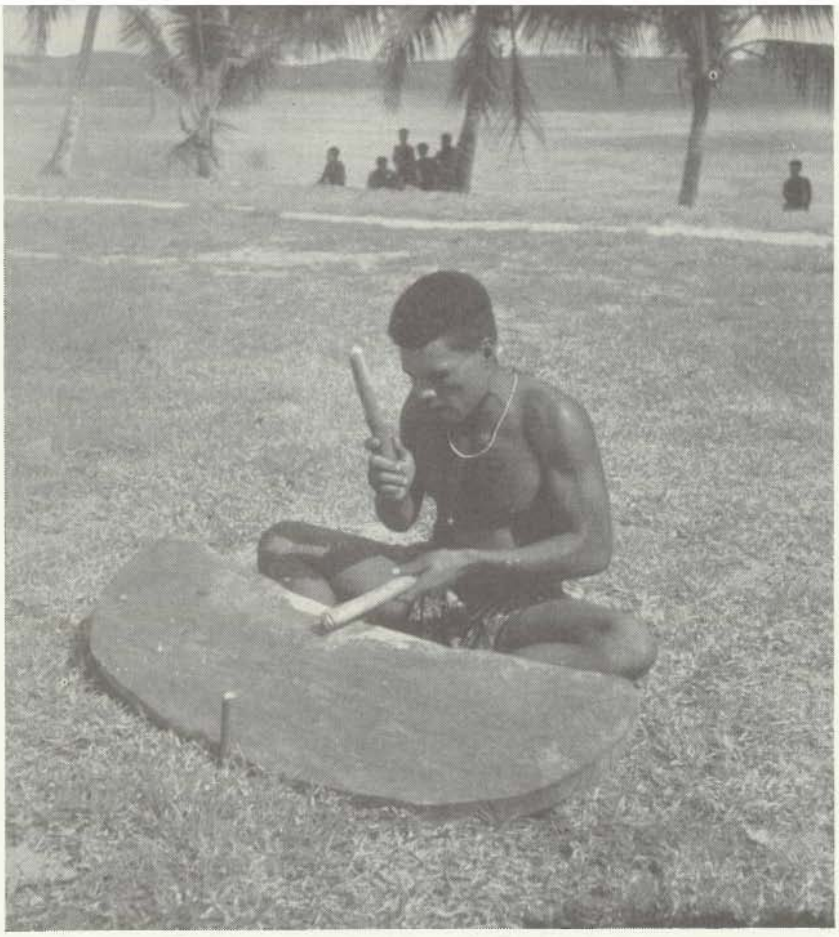


Fig. 72. Man beating the sounding board. Lavanggu.

piece of wood with rounded corners (Fig. 72). Our specimen (I 5264) is 119 cm. long by 38 cm. broad and is played with two sticks, 27 and 28.5 cm. long respectively. The board is placed on the ground with the convex side propped against a stick and the concave side resting on the feet of the player, who sits cross-legged behind it, beating time with the sticks on the concave side.

This instrument is used for accompanying the dances, of which there are many kinds. So far dancing is a favourite amusement, but in some years it will probably disappear. The Seventh

Day Adventists certainly disapprove of it, and the followers of the South Sea Evangelical Mission at best oppose the dancing of the women. Actually the old dances fulfilled an important social and psychological function. They were a response to the need of entertainment and communal feeling during the long, tropical nights when darkness prevented other kinds of occupation. Now, at most those who are lucky enough to possess a kerosene lantern can while away the time at card playing or, perhaps, laboriously reading a prayer book, the language and meaning of which they hardly understand.

Fortunately the Missions have not succeeded in suppressing the dances yet. One night at Te Avamanggu Mr. WOLFF and Mr. HØYER were sitting in the open with some Rennellese and tried —although not with the best result— to teach them some Danish songs which they seemed to appreciate very much. Gradually the general feeling got more animated, some of the men came dragging along with the slit drum which rightly belonged to the chapel and, as there was no sounding board at the place, they began drumming and soon the men started to dance. It was obvious that a few of the younger people lacked practice, but an elderly man named *Moa*, the chief's brother, corrected them without mercy, and all seemed to enjoy the diversion. Shortly after the women joined in a more solemn dance and the men ceased their performance. I had later the opportunity of observing men dancing in broad daylight at Lavanggu in honour of the Resident Commissioner when he visited the island, but the high spirits and general animation which characterized the spontaneous dancing in the moonlight at Te Avamanggu were to some degree lacking.

One dance called *te ŋgoŋole* refers to the flying foxes (Fig. 73). The men form a single file holding two long sticks in their hands. They bend down to the right, at the same time raising the stick in their left hands over their heads and taking a hopscotch step forwards on the right leg; then they bend to the left raising the right stick and hopping forwards on the left leg, and so continue. Meanwhile they sing a song composed by a man named *Te Mauŋaika*. The meaning is something like this: "Many flying foxes came to the island and made a great noise. I took my flying-fox spear and caught many of them."

Fig. 73. Dance. Lavanggu.

Another song for the same kind of dance is about catching pigeons: "I build a platform in a tree to catch pigeons. They enter my net and are caught in it and cry. I know how to decoy pigeons. When one comes I lift my net, which is as swift as the wind. The pigeon tries to escape but I catch it in my net. When it comes I know how to catch it."

A third song, said to have come from Bellona, deals with a man who has stolen yams and broken the yam vines, thus destroying the garden like a parrot. "You eat flying foxes like an

ant, cooking them straigt away (i. e. without skinning them first). You are a thief. Yoy pull down the bananas with a pole and put them in a shoulder bag. Then you return to your house at Tabulukangga and built an earth oven."

In another dance the men stand in two rows facing each other and holding a long stick between them with both hands, Then they bend almost to the ground hopping sideways, lift the stick to shoulder-height, bend again, etc., hopping all the time.

A third dance called *te hauhau koŋgoa* imitates the wrapping up of a breech cloth. The men stand in a long row grasping each other's hands, after which one end of the row begins to move, hopping alternately on one leg and the other and passing under the outstretched arms of the nearest participants until the whole party is moving in a spiral. The accompanying song runs as follows: "Roll up the breech cloth! Unroll the breech cloth! Put it underneath!"

Te makosau is a circle dance in which the dancers jump round with their hands folded, the tips of the outstretched forefingers resting against each other and moving the arms up and downwards. The text of one song is something like this: "There was a very greasy fish (oil fish?). When its grease floated to Bellona the fish came to the place of Pangi." Another text to the same kind of dance was composed by *Puia*, the teacher at Lavanggu, and refers to the flying fish: "Where do you stop? You come along right. When you come I will catch you on both sides of my canoe. Beating on my net attracts the flying fish."

Dances in which the sounding board is used are called *te huamoko*. First the men move with long jumps round the board in the direction against the clock, then they turn round jumping in the opposite direction and finally turn their backs to the board, resting the fingertips of one hand against those of the other (Fig. 74). There is also another *huamoko* dance in which the men rest their hands on the hips, moving in a circle with hopscotch steps and singing: "The hands on the hips! Bend down!" In a third dance or rather play, one man stands inside the circle and another one outside, clapping his hands. One of them sings: "I will catch you," to which his partner answers: "You cannot catch me!"

The preceding song texts are all rendered in free translations for the accuracy of which I dare not vouch. They were given in

Fig. 74. Dance. Lavanggu.

the local pidgin and are probably nothing but rather vague versions of the general meaning. In a few cases, however, I obtained some original texts which I submitted to Dr. J. PRYTZ JOHANSEN, who has a thorough knowledge of both Maori and Tahitian. He very kindly studied my notes, but of course the extremely scanty information available of the Rennellese dialect prevented him from arriving at definite translations, the more so because grammatical rules are not always observed in Polynesian poetry. In fact, his translations differ sometimes rather considerably from the comments given by my informants. Nevertheless I quote them here with Dr. PRYTZ JOHANSEN's approval in the hope that they may eventually prove to be of some little use to linguistic studies

Fig. 75. Dance. Lavanggu.

in the future. One text accompanying a circle dance at the end of which everybody jumps on to the sounding board (Fig. 75) runs as follows:

Sa	*uo*	*sa*	*bo*	*sa*	*vai*	*pakia*
	Friend		go		water	is hit
ka	*mu*	*ki*	*ŋgaŋgi*		*kati*	*mahana*
	mutter	to	the sky		stop	heat
kati	*mataŋimataŋi*				*kaŋguo*	
stop	eastwind				?	

Translation: "Friend! Let us go, let us jump into the water. We mutter to the sky: Stop heating, stop, eastwind! . . ."

The next song deals with jealousy:

Te hakataŋi te hakataŋi kite mai ohai ke tataŋi
Make (me) cry make (me) cry see who crying

muna atu hoki te makakau
talk return crane (your) neck (to see)

tena ahai aŋa ki a te au hakamahanahana makau
who turns to me encourage adultery

hakasa hemiakuahai
forbid ?

huŋge oku niugape
fell my coconut trees (?)

Translation: "You make me cry, make me cry. Who sees the crying? You talk, return and crane your neck in order to see, but who turns to me and encourages to adultery? I forbid .... to fell my coconut trees." I add the native, probably very free translation: "I am jealous. I cannot look at you. Why are you jealous? What do you know about me that makes you jealous? Don't speak evil of me! Why have you chopped down my coconut trees?"

A dance called *makotu'u* was stated to come from Tikopia. It was accompanied by beating on the sounding board, and the men had green leaves in their hands. In contradistinction to the dance itself the song, which tells of the visit of a white doctor (S. M. LAMBERT?), is doubtless of local origin:

Toketa na hoki i Muŋgava
Doctor return from Rennell Island

kanukanu ki ana pukapuka
write in his books

tosi kinai taku tu'uŋgaŋgo
draw in (on) my ?

ta ŋgani kinai te tiŋgo
? in (on) peep through a hole

tuku iho konei ke nonoho tutu iho
let down there sit fast down

te ŋgupe ta mai telo mai te ŋgupe taia mai.
gather it hither yonder hither gather direct hither.

Translation: "The doctor has returned from Rennell Island. He wrote in his books .... He peeped through a hole (of a camera). He let us come inside, there we are now sitting fast. We gather. We come hither from close-by and from a distance. We gather and are directed hither (?)." The following translation was given by one of my informants: "The doctor has left Rennell Island. He wrote our names in a book. He wrote the names of his followers. He peered through a camera. Everybody is inside it now. He ordered some people to stay away and others to come."

This is an old song accompanied by clapping the hands:

Saua	*toku*	*haŋge*	*kia*	*una*	*(?ŋguŋa)*
Come to (?)	my	house	to	help	(? high)

unusia	*te*	*soa*	*te*	*pou*	*mua*
gossip		friend		pole	in front

tauha	*ietuŋaki*	*te*	*henua*
?	?		?

ŋutu	*sumaŋgie*
mouth (eat?)	palatable

kitea	*kae*	*kitea*
is seen		is seen

e kitea	*mai*	*moa*	*e kitea*	*mai*	*moana*
is seen	from	middle	is seen	from	sea

te ŋutu	*sui*	*o*	*tena*	*ia.*
eat	corresponding	of	that with	you that.

Translation: "Come to my house to help me (making it high?). The friends gossip at the front pole ... ? ... the land ... eat well.. It is seen, it is seen. It is seen from the interior, it is seen from the sea. Do you eat as well with you?" The comments differ considerably from the translation: "I built a large house, a very high house where all people come and gossip. If they ask me for coconuts, yam and pana I can give them. You do the same thing at your places!"

Another song dealing with house building is the following, composed by a man called *Te Pani*:

Toku	*haŋe*	*na*	*tu'u*	*i*	*Saea*
My	house		stands	at	Saea

oka	*na iki*	*te toŋa*	*ki*	*mua*
rafter	whistle	southwind		in front

taiŋgi	*kinai*	*teŋga*	*kie*	*ha*	*na*	*popala*
blow	into	yonder		four		helper

tona	*amoŋa*	*hakaeke*	*ihoguakuhana*
its	carry	put up	?

ona	*huahua*	*na*	*tau*	*hua*
its	by the hundred		count	tenfold

tona	*ŋgau*	*ato*	*te*	*ŋgaho*	*i*	*ba*
its	leaf	thatch	roof	mat(?)	between(?)	

kake	*ake*	*mau*	*te*	*ŋgaho*	*ŋgima*
climb	up	grasp	roof	mat(?)	hand

hahe'e	*taea*	*toku*	*sitoa.*
?	obtain	my	store.

Translation: "My house stands at Saea. The rafter whistled in the southwind which blew into it from ahead. Let four helpers (come) who can carry and put up ... (?). By the hundred we counted tenfold (?) its thatching leaves, the roof mats (?). They climbed up, the hands grasped the roof mats ... (?) ... I have got a store." In this case there is somewhat greater agreement with the comments: "A house stands at Saea. The house is strong, the wind cannot knock it down. How many men are coming to help me carrying a beam? Let four men come! Place it on the posts! I look at all the timbers and see how strong they are. All our timbers look as ship's masts. We put a hundred mats on the roof. Come and put them on! Now my house looks like a store."

This song, composed by a certain *Te Ikanoa*, refers to fishing:

Toku	*ma'aŋga*	*te*	*tai*	*kona*
My	garden		sea	there

he'e	*atu*	*aku*	*haŋgotaŋa*
sail	out	my	fishery

ti'i	*e*	*te*	*saŋa*	*ka*	*kai*	*(i)*	*uta*
fetch	and(?)		continue		eat		land

akuaba	*ahonana'a*	*kinai*
	?	into

na'a	*ma'u*	*aku (maku?)*	*aŋgomonoŋa*
?	?	?	?

na nugu te ika i oku ŋgima.
escaped fish from my hand.

Translation: "The sea there is my garden. I sail out fishing. I catch and keep on, then we eat on land .... ? .... The fish escaped from my hand." The following comments were offered by my informant: "The sea is my garden. I go to the sea, I can catch fish. When the time comes we go back and work in the gardens. I know where the fish live. I caught a fish but it escaped."

The *makoki te ŋga'akau* dance, in which the dancers hold a short stick in their hands, is accompanied by the following song:

Poaka e poakaka e poaka
Pig pigs pig

poaka e poakaka e poaka
pig pigs pig

e poaka mai moana
pig from sea

te ŋutu sui o tena ia.
eat corresponding of that with you it.

Translation: "A pig, pigs, a pig (or possibly vocative: Pig! etc.). A pig from the sea. Do you eat as well with you?" It is strange that this song seems to refer to pigs, which, as formerly stated, are not found on Rennell since the missionaries' abortive attempt to introduce them many years ago. In the native comments pigs are not mentioned at all, and on the whole they differ so much from Dr. Prytz Johansen's translation that I strongly suspect that some sort of mistake must have occurred: "Sometimes I plant things and they grow well, sometimes they do not. Who will feed me? I tried hard to plant things but they did not thrive. I will make another garden somewhere."

Concerning the Rennellese calendar I shall confine myself to citing the "moons" of the year as stated by Hogbin[1], beginning with the end of the rainy season, which approximately corresponds to our months December, January and February. The names are as follows: *lakiki-ma-takitaki*; *lakiki-i-ŋgoto*; *lakiki-hakaoti*; *ha*; *ŋgima*; *ono*; *hitu*; *vaŋu*; *iva*; *aŋgahuŋgu*; *peŋga-i-na*; *takitaki*; *peŋga-i-ŋgoto*; *peŋga-hakaoti*.

[1] Hogbin 1931 a, p. 176.

V.

The Cultural Position of Rennell Island.

1.

The Polynesian Outliers. — Linguistic and Racial Affinities of the Rennellese. — Polynesian Migrations. — Differentiation within Polynesian Culture.

For many years it has been known that outside Polynesia proper there are a number of other Pacific islands where the population shows close affinities to the Polynesians in language, culture and, at least in part, also in race. Besides Rennell and Bellona some of the most important are Tikopia, Cherry (Anuda) and Reef Islands near the Santa Cruz group, and Sikaiana, Lord Howe (Luangiua, Ontong Java), Tasman (Nukumanu), Mortlock (Taku, Marqueen) and Nugeria (Abgarris, Fead) northeast and north of the Solomons[1]. Farther to the west Kapingamarangi and Nukuoro about midway between the Carolines and the Bismarck Archipelago are inhabited by Polynesians[2]. Evidence of Polynesian settlement is also found on Rotuma and the Lau Islands near Fiji[3], on some of the New Hebrides, and on Uvea in the Loyalty group[4]. Nissan, between the Solomons and New Ireland, was originally colonized by Polynesians from Nugeria but was later invaded by Melanesians from Buka[5].

[1] Hogbin 1940, p. 199. Te Rangi Hiroa 1945, p. 120. Parkinson 1897. p. 111.

[2] Te Rangi Hiroa 1950, p. 3 f.

[3] Allen 1895, p. 571 f. Hocart 1929, p. 230 f. Thompson 1940, p. 213 f. Russel 1942, p. 230. Eason 1951, p. 1 f.

[4] Glaumont 1889, p. 140. Smith 1892 b, p. 109 f. Ray 1917, p. 298. Viala 1919, p. 223. Humphreys 1926, p. 101, 120. Nevermann 1953, p. 196 f. Polynesian influence is conspicuous in the culture of the Melanesian Loyalty Islands (Brügger 1944, p. 130 f.)

[5] Krause 1907, p. 48.

In CHURCHILL's opinion the Polynesian "outliers" indicate the route of one of the original eastward migrations of the Polynesians, the ancestors of the Rennellese having passed from Lord Howe and Tasman Islands through the passage between Guadalcanal and Malaita to their present habitat[1]. CHURCHILL's theory is, however, hardly tenable. As early as 1902 THILENIUS pointed out that the dialects of the outliers are so closely related to the language farther east that they could not possibly be regarded as survivals from an earlier period[2]. This view has since then been corroborated by the linguistic studies of RAY, who criticizes CHURCHILL's neglect of grammar and states that there is "very little difference between the languages of the Polynesians in Melanesia and that of the general Polynesian to the East of them ... There is also hardly any evidence of an archaic character for the language of the Polynesian settlements"[3]. The only exceptions to this rule are Kapingamarangi and Nukuoro where, according to recent investigations, the dialects "differ from all previously recorded dialects among the Polynesian outliers in not revealing a particularly close relationship to the Western Polynesian speech of Samoa and Tonga. They may even prove to be as distinct from Western as from Eastern Polynesian, in which case their speakers might well represent a remnant of the original Polynesian migrants rather than a later backwash as in Tikopia and Ontong Java"[4].

That, however, does not solve the whole problem. In the following discussion I shall try to go into some detail as far as Rennell Island is concerned.

The Polynesian character of the Rennellese language is a well established fact, although the occurence of Melanesian loanwords may not be out of question. It is, indeed, suggestive that in no case where Polynesians from other islands are known to have visited Rennell does there seem to have been much difficulty in mutual understanding. A very conspicuous difference

[1] CHURCHILL 1916, p. 155 f., 169. Cf. CHURCHILL 1911, p. 138 ff.

[2] THILENIUS 1902, p. 24, 28, 71 ff. An immigration from the east of the inhabitants of Lord Howe, Mortlock and Nugeria had been suggested even earlier (WOODFORD 1890, p. 232 f.)

[3] RAY 1919—20, p. 52 f.

[4] MURDOCK 1948—49, p. 11.

between the dialect of Rennell and other Polynesian dialects is the substitution of $\eta(g)$ for r and l, and a certain vacillation between f and h.[1] W. von Bülow found close linguistic affinities to Samoa and concluded that the Rennellese had still been in contact with that island group in a period when the specific Samoan characteristics had already been established[2]. In a recent paper Elbert has attempted a genealogical table of the Polynesian languages. According to his views Proto-Tongan was first separated from the common stock and developed into modern Tongan and the dialects of Futuna, Uvea, and Niue, whereas the remaining group split in two branches, one Proto-Samoan, of which modern Samoan and the dialects of Tikopia and Ellice Islands are offshoots, and another one including all eastern dialects as well as those of the so-called outliers[3]. Elbert's classification agrees with that of Dempwolff in considering the languages of Tonga and Futuna particularly archaic, whereas Dempwolff refers those of not only Samoa but also of Uvea, Niue, New Zealand and the Tuamotus to an intermediary stage[4]. Probably Elbert's views should be taken with some reservation since they are based exclusively on the difference of vocabularies and take into account neither the grammatical structure nor the more or less continuous intercourse between the islands during long periods and the resulting mixed origin of their populations[5]. As far as the Rennell dialect—and the nearly identical dialect of Bellona—are concerned, our knowledge is still so insufficient that it would be exceedingly rash to offer any opinion on their affinities, the more so because immigrations from islands of different linguistic standing may have occurred.

Equally obscure is the physical descent of the Rennellese. Their skin is much lighter and their features far more Europid than those of their Melanesian neighbours on Guadalcanal and Malaita, while their hair is most frequently frizzly or curly, straight and wavy hair being decidedly rare. Howells ventures the opinion that the population of Rennell and Bellona is "almost

[1] Ray 1896, p. 60.
[2] von Bülow 1898, p. 146 f.
[3] Elbert 1953, p. 169.
[4] Dempwolff 1929, p. 75.
[5] Thus also Kähler (1951, p. 649): "*Ich glaube, dass man sich die gegenseitige Beeinflussung von Sprachen in diesem riesigen Inselgebiet mit seiner meist seefahrenden Bevölkerung gar nicht kompliziert genug vorstellen kann*".

certainly of much the same physical type" as the Lord Howe islanders, which is "Micronesian with a mild admixture of Melanesian[1]." Unfortunately we have no anthropometrical data from Rennell except the cephalic index, which is given as 74.5 or 74.84 (cf. p. 27). According to this the Rennellese are slightly less dolichocephalic than the people of Lord Howe Islands, where SHAPIRO found an index of 74.1[2]. More important is, perhaps, the different character of the hair, which on Lord Howe is never frizzly but wavy or even, among the women, more or less straight[3]. A type similar to that of the Lord Howe islanders occurs on Nukumanu and the western Carolines apart from Palau and Yap, whereas the natives of Kapingamarangi "reveal Polynesian affinities[4]." The question whether the Rennellese are physically related to the Micronesians in general and to the Lord Howe islanders in particular must therefore be left open for the present.

The whole problem of race is furthermore complicated by other facts. The Micronesians themselves are generally supposed to be a hybrid race, including Melanesid, Polynesid and Mongolid components, and obviously a mixture of such elements may occur in many places and does not necessarily imply direct consanguinity. Considerable intermixture with light-skinned elements has taken place in many parts of Melanesia. Thus, HOWELLS stresses the occurrence of non-Melanesid elements in Fiji, the southern New Hebrides, the Loyalty Islands, and southern New Caledonia, while the same component in a more "dilute" form is "strikingly evident in the coastal regions of the larger islands of the Solomons group, so that in many portions it has probably contributed at least half of the mixture[5]." The Fijians are, indeed, closely related physically to the Polynesians, particularly to the Samoans and Tongans[6]. In the Massim and Port Moresby districts of New Guinea I have seen many Melanesians, especially women, almost as light-skinned and Europid-looking as the Rennellese.

Unfortunately, however, even the origin of the light-skinned

[1] HOWELLS 1948, p. 44. SPOEHR (1952, p. 459) is also of opinion that the northern outliers were populated from Micronesia. Cf. THILENIUS 1902, p. 21.
[2] SHAPIRO 1933, 245.
[3] SHAPIRO 1933, p. 242.
[4] SHAPIRO 1933, p. 273 f. Cf. the illustrations in TE RANGI HIROA 1950.
[5] HOWELLS 1948, p. 44 f. Cf. HOWELLS 1933, p. 309 f.
[6] HOWELLS 1933, p. 309, 332.

component in Melanesia is an exceedingly moot question. It is by no means certain that it came from what is now termed Polynesia except in place like Fiji, Santa Cruz and the Loyalty group, where direct contact is known to have taken place[1]. The problem is, to some extent, connected with the origin of the Melanesian languages. The latter are, of course, related to those of Micronesia and, more distantly, also to those of Polynesia, and even though they have now a far wider distribution than the light-skinned elements it is fairly probable that they were originally introduced by such[2]. If, as CHURCHILL and many other authors believe[3], at least one stream of Polynesian migrations passed through Melanesia, either along the northern fringe or through Torres Strait, or both ways, these elements might with some reason be ascribed to Polynesian admixture, However, it is not at all certain that the Polynesians ever followed these routes. CHURCHILL's views have, for instance, been severely criticized by RAY, who even rejects the idea of an originally common Melanesian tongue related to Polynesian and regards present-day Melanesian as a so to speak polyphyletic group of more or less Indonesian-influenced Papuan languages[4]. SPEISER has adopted a similar view. He advanced the theory that the megaliths of Melanesia are due to a light-skinned, non-Polynesian and non-Mongolid people coming from Indonesia, at the same time emphasizing the heterogeneous character of Melanesian culture[5]. If they are right, the occurrence of a comparatively light-skinned racial component in Melanesia has no direct connection with the Polynesians. More recently ALPHONSE RIESENFELD has examined the megalithic complex in Melanesia in detail and arrived at a conclusion slightly different from the ideas of SPEISER, viz. that it was introduced by Mongolid immigrants, some of whom came to western New Guinea from the Moluccas, whereas the main wave proceeded from Formosa, the Philippines and northern Celebes to Micronesia and thence to the greater part of Melanesia and Poly-

[1] Cf. WHITMERE 1879, p. 265. SPEISER 1921, p. 115. HUMPHREYS 1926, p. 101, 120. LEVERD 1922, p. 95 ff. HOWELLS 1933, p. 310. NEVERMANN 1953, p. 196 ff.

[2] HOCART 1923, p. 472. SPEISER 1939, p. 469 f., 472.

[3] CHURCHILL 1911, 48. CHURCHILL 1916, p. 173. DE QUATREFAGES, s. a., map. FORNANDER 1890, p. 33, GRAEBNER 1905, 1905, p. 48 f. GRAEBNER 1909 a, p. 775. DIXON 1916, p. 98. SMITH 1921, p. 101 f., cf. map. VON KÖNIGSWALD 1951, p. 44 ff.

[4] RAY 1926, p. 595 ff. Cf. HEINE-GELDERN 1932, p. 609. KÄHLER 1951, p. 646.

[5] SPEISER 1939, p. 469 ff, 480 ff. SPEISER 1946, p. 7, 9, 12, cf. 49.

nesia[1]. The important point is, however, that he agrees with SPEISER and RAY in considering the light-skinned component among the Melanesians as non-Polynesian.

If opinions differ in regard to the origin of the latter we are in no better position when we turn to the racial history of the Polynesians, who are far less uniform in physical type than is often supposed. SULLIVAN distinguished between four different types: one primitive, long-headed and narrow-nosed, of medium height, and one broad-headed of tall stature, both of them of Europid origin, together with a dolichocephalic and broad-nosed Melanesid type, and a fourth showing both Negrid and Mongolid affinities[2]. SHAPIRO, to be sure, emphasizes the difficulty in establishing different types in terms of geographical distribution—which is, of course, something quite different from establishing the types themselves—but he is nevertheless aware of a well-defined pattern in the distribution of the cephalic index[3]. Brachycephaly occurs mainly in the central area, i. e. in the Society Islands, Hawaii, the nortwestern Tuamotus, the Austral and some of the Cook Islands, while in Samoa, Tonga, the Marquesas Islands, Mangaia, the northern Cook Islands and the central Tuamotus the cephalic index is bordering on mesocephaly, and slight dolichocephaly predominates in the marginal regions including New Zealand, the southeastern Tuamotus, Mangareva, and Easter Island[4]. The cephalic index on Rennell does not therefore diverge from the general pattern and does not in itself indicate the presence of non-Polynesian elements. On the other hand the character of the hair strongly suggests a certain admixture of a component which for the present may be termed Melanesid.

It would be tempting to ascribe this Melanesid component to the afore-mentioned *Hiti* who, according to native tradition, were the aboriginal inhabitants of Rennell, the more so because their name by the phonetic laws of the Rennell dialect is identical with Fiti, i. e. Fiji; but unfortunately the answer is not as simple as that. It is true that the Rennellese describe the *Hiti* as being similar in appearance to themselves, and this might perhaps apply to a Fijian substratum, for though speaking a Melanesian

[1] RIESENFELD 1950 a, p. 668 ff. Cf. RIESENFELD 1950 b, 25 ff.
[2] SULLIVAN 1924, p. 24 f.
[3] SHAPIRO 1943, p. 4 ff.
[4] SHAPIRO 1943, p. 6.

language and certainly more dark-skinned and frizzly-haired than the average Polynesians, the Fijians do not differ nearly as much from Polynesians in physical type as for instance the Melanesians of the Solomons do. It is, however, dangerous to attach too much importance to a mere name if there are no other facts to support the identification, in particular since *Fiti* is a common Polynesian term which is also employed for the legendary pre-Moriori immigrants to the Chatham Islands; the same stem occurs in the name Tafiti given to the southern tribe on Niue and in the geographical designation Tahiti, while Tawhiti in New Zealand and Kahiki in Hawaii mean any distant localities, and in Mangaia we have "iti" = east, the same meaning which we meet again in Fiti (i. e. Fiji), corresponding to Tonga = south and Tokelau = north[1].

The whole problem is closely bound up with the question of the racial homogeneity of the Polynesians. Here we meet widely divergent views[2]. Sullivan found his Melanesid type particularly well represented on Easter Island, in skeletal material from New Zealand and, less frequently, in Central Polynesia[3]. The occurrence of this type has sometimes, supported by ethnological evidence, been interpreted as proof of a dark-skinned pre-Polynesian population[4]. This assumption seems, however, to rest on rather weak foundations. Shapiro for instance emphatically denies the existence of Melanesid admixture among the Easter Islanders where the foreign element is otherwise supposed to be particularly conspicuous[5], nor can the traditions of an early pygmy race in some island groups refer to an original dark-skinned population[6]. If nevertheless the occurrence of a Melanesid strain in Polynesia

[1] von Bülow 1908, p. 103. Smith 1902—03, p. 167 Tregear 1891, p. 75, 499 f.

[2] There is probably no reason for discussing the fantastic idea of a medieval Scandinavian immigration set forth by Poirier (1950, p. 253 f. 1952, p. 81 ff.) since it has already been aptly refuted by Shapiro (1951, p. 282 ff.).

[3] Sullivan 1924, p. 24.

[4] Among others by Whitmere (1879, p. 267) and Friederici (1914 a, p. 11 ff), whereas the latter author previously had explained the dark-skinned component in the Tuamotus as brought along from Fiji (1911, p. 145 f). Linton (1923, p. 462 ff) and Speiser (1946, p. 9) both assumed a Melanesid substratum, and Dixon (1920, p. 264 f.) even postulated a still earlier Negrito layer. The former idea was repudiated in a review, probably by S. Percy Smith (Anonymous 1921).

[5] Shapiro in Métraux 1940, p. 27.

[6] Te Rangi Hiroa 1938 b, p. 59 f. Te Rangi Hiroa 1945, p. 90, 107, 113. Luomala 1951, p. 83 f.

should be proved, there remains not only the possibility that it was carried there together with the Polynesians from Micronesia, but also, as mentioned by SKINNER[1], that it dates as far back as to pre-migration times.

To summarize what has here been said about the racial conditions of the Rennellese: if an admixture of a non-Polynesid, i. e. probably Melanesid admixture can be substantiated, which does not seem improbable, it may be ascribed either to an original, dark-skinned population on the island (the *Hiti*?), or to later contact for instance with San Cristoval and Guadalcanal (cf. p. 24), or to the assumption that the original immigrants were already mixed. In the latter case there are again three possibilities: that Polynesia or at least part of it was originally peopled by Melanesids; that they were absorbed during the Polynesian migrations through Micronesia; or that the Polynesians were of mixed descent already before they left southeastern Asia. All possibilities are not equally probable, one or two are, indeed, extremely improbable, but even if they are left out of account so many others still remain that nothing definite can be said about the racial history of Rennell.

Needless to say, the cultural development of the Polynesians is as closely associated with their migrations as is the question of race. It is beyond the point to discuss the migration problems in detail, but a few particulars should be mentioned. J. MACMILLAN BROWN's ideas of sunken archipelagos which were populated in palaeolithic times and later supported an archaic civilization[2] can safely be left out of consideration, and so can also HEYERDAHL's more recent and—at least to some extent—better founded hypothesis of the American origin of the Polynesians[3]. There is, to be sure, good reason for believing that the sweet potato reached Polynesia from South America in pre-Columbian times[4], but other-

[1] SKINNER 1924, p. 230.

[2] BROWN 1907, p. 256 ff. BROWN 1927, I p. 297 ff, II p. 150 ff et passim.

[3] HEYERDAHL 1952 a. Cf. HEINE-GELDERN 1952, 313 ff. HEINE-GELDERN's comments have not been materially invalidated by HEYERDAHL's subsequent rejoinder (HEYERDAHL 1952 b). DIXON (1933, p. 315 ff) has previously pointed out that some of the alleged parallels between Oceania and America are not above criticism.

[4] DIXON 1932, p. 49 ff versus FRIEDERICI 1929, p. 469 ff. Cf. also HORNELL 1945, p. 175 ff.

wise there is no specific American culture element anywhere in Polynesia, whereas everything else, including language and race, points to Southeast Asia. According to Baron von Heine-Geldern the basic Polynesian culture is the result of a blending of two complexes, characterized by two different adze types, the quadrangular and the tanged or shoulder-adze, which are both found on the Philippines[1]. H. Otley Beyer maintains a similar view[2].

On the whole the Philippine Islands are accepted as the cradle of the Polynesians by most authorities[3], and there is also general agreement that their main route was through Micronesia, but whether this was the only one is still questionable. As formerly suggested, some authors are of opinion that other streams flowed through Melanesia. The crucial point is how to explain the spread of dogs, pigs and food plants such as breadfruit, banana, taro and yam, which do not thrive on the low and poor Micronesian atolls. Te Rangi Hiroa, who assumes that all Polynesians moved "through Micronesia and directly from the Gilbert Islands to central Polynesia with minor streams diverging south to Samoa and Tonga", believes that both food plants and domestic animals reached the latter islands from Fiji and were thence carried farther to the more distant island groups[4]. That Micronesia acted as a sort of filter, preventing the eastward spread of many cultural elements, cannot very well be doubted, but on the other hand the empoverishing effects of the atolls may easily be overrated, and it should be borne in mind that volcanic island groups like Palau, Yap, Truk, Ponape and Kusae afford as good natural resources as are found anywhere in the Pacific. This seems also to be the view of Skinner, who believes that the early Polynesians arrived in the central Carolines with a fairly high culture and settled on Samoa and Tonga before they continued to the Society Islands[5]. After having mentioned the views of Te Rangi Hiroa, Weckler aptly summarizes the other possibilities thus: (1) that the migra-

[1] Heine-Geldern 1932, p. 582, 584.

[2] Beyer 1948, p. 36.

[3] There may be some slight linguistic evidence of connections with the Moluccas (cf. Friederici 1915, p. 21) Father Schmidt found close affiniteis between the mythology of Polynesia and that of the Moluccas (1910, p. 98), but since his investigation did not include the Philippines, too much weight cannot be attached to this circumstance.

[4] Te Rangi Hiroa 1945, p. 13. Cf. Te Rangi Hiroa 1938 b, p. 41.

[5] Skinner 1951, p. 44 f.

tion after all passed Melanesia; (2) that the Polynesians may have arrived at Samoa and there acquired the food plants and domestic animals from Fiji before they went on to the eastern archipelagos; and (3) that their stay in Micronesia was so short that they were able to retain both animals and plants[1]. Unfortunately we have very little knowledge of the archaeology of either Micronesia and Polynesia. Recent investigations on Saipan in the Marianas go to show that this island was inhabited about 2000 B. C[2]. This is a much earlier date than is generally supposed for the settlement in Polynesia and even earlier than the date of the proto-Austronesian exodus from the Asiatic continent as pictured by HEINE-GELDERN[3], but actually we know next to nothing of when the Polynesians reached Samoa and Tonga and what their culture was like at that period. The chronology inferred by the Polynesian genealogies refers more or less exclusively to their journeys in the eastern parts of the Pacific.

However we imagine the Polynesian immigration there can be no doubt but that their culture underwent considerable change during the subsequent period. As stated above, some authorities contend not only that they met and mixed with an older population but also that they absorbed some elements of their culture. Thus LINTON found evidence of cultural contact with a Melanesian substratum in southeastern Polynesia, especially in the Marquesas, New Zealand and, in a modified form, in the Society Islands[4]. HEINE-GELDERN ascribes the early Neolithic round adze and the spiral designs of New Zealand and the Chatham Islands to a pre-Polynesian population, the legendary Tangata-whenua.[5] SPEISER thinks that a hybrid austro-melanid people originated as a result of Indonesian influence in Melanesia and thence spread to Polynesia before the Polynesian invasion and explains such elements as pig breeding, the fire plough, incision, etc., as survivals from the austro-melanid substratum[6]. This view, which is, of course, but another aspect of the afore-mentioned hypothesis of an early, dark-skinned population in Polynesia, is highly

[1] WECKLER 1943, p. 22 f.
[2] SPOEHR 1952, p. 460 ff.
[3] HEINE-GELDERN 1932, p. 599 ff.
[4] LINTON 1923, p. 460 f.
[5] HEINE-GELDERN 1932, p. 585. HEINE-GELDERN 1937, p. 205.
[6] SPEISER 1946, p. 39 ff, 77.

problematic. While Te Rangi Hiroa admits more than one immigration wave, he nevertheless rejects the idea of pre-Polynesian inhabitants[5]. It should be remembered for instance that neither the round adze nor the fire plough are unknown in Micronesia, and incision may have disappeared there as it has on both Rennell and Niue. I shall return to these questions later. Be this how it may, so much seems at least probable that new impulses arrived from the west after the first settlement, thus resulting in a chronological differentiation of the culture, but just how this is to be understood is, unfortunately, still uncertain.

For linguistic reasons Churchill concluded that the earliest Polynesian or what he called proto-Samoan migration passed through Melanesia, partly along the north coast of New Guinea and partly through Torres Strait (cf. p. 142) and resulted in the settlement of Samoa, Tonga, Fiji and Niue; at a later period another stream of Polynesians, the Tongafiti, went to the north of Melanesia and arrived at Samoa but was driven from there to the eastern islands as late as about 1200 A. D[2]. S. Percy Smith took a similar view but added a third wave, the Takitimu, that went through the Carolines and Marshall Islands to Hawaii and also reached the east coast of New Zealand[3]. A study of Melanesian sociology led Rivers to the conclusion that it was possible to distinguish between two cultural waves in Polynesia, one characterized by incision and burials in a sitting position which swept over both Melanesia and Polynesia, in the former area giving rise to what he called the Dual People, and a later stream which i. a. introduced domestic animals, megalithic structures and the use of kava as well as mummification and burials in extended position. Both the Sitting Burial and the Kava peoples he supposed to speak Austronesian languages, but at the same time he emphasized the difficulty of identifying them with Churchill's proto-Samoans and Tongafiti[4], and Williamson inclined to the opinion that both proto-Samoans and Tongafiti belonged to the Kava people[5].

Also according to E. S. Craighill Handy Polynesian culture

[1] Cf. Te Rangi Hiroa 1938 b, p. 45, 60. Te Rangi Hiroa 1945, p. 13 ff.
[2] Churchill 1911, p. 179 f. Churchill 1916, p. 143, 173.
[3] Smith 1921, p. 88, 127 ff.
[4] Rivers 1914, II p. 427 ff, 431 ff, 475, 584.
[5] Williamson 1924, I p. 9 f.

consists of two distinct complexes[1]. The earlier or Indo-Polynesian stratum he refers to CHURCHILL's proto-Samoans and includes such elements as the veneration for stone slabs in connection with ancestor cult, the sanctity of the firstborn, grave offerings consisting of food and weapons, death feasts, traces of head hunting (skull trophies), primitive forms of dance, planting and harvest rites, terrace building, cultivation of taro and sweet potatoes, tattooing, cannibalism, mana and taboo concepts, worship of high gods such as Rongo and Tane, etc. This complex occurs most clearly among the commoners on Tahiti and Hawaii as well as in southern Polynesia, in contradistinction to the later complex which has left its mark on the culture of the higher classes of Tahiti and Hawaii and occurs more or less in Central Polynesia as a whole. Here we find megalithic structures, mummification, organized priesthood and artisan's guilds, ceremonial dances, first-fruit ceremonies of a social rather than a religous character, pig breeding and domestic dogs, kava drinking, divine kingship, aristocratic organization, and conceptions of Tangaroa as creator of the universe. The whole megalithic complex HANDY ascribes to CHURCHILL's Tongafiti immigration.

HANDY's basic idea of stratification is doubtless more correct than that of RIVERS, and so are probably several details of his hypothesis; but his method is unsystematic, and in some cases an unbridled imagination leads him astray, for instance when a fortuitous resemblance of words lures him to identify the Tahitian ari'i, supposed to be the offspring of Ta'aroa, with descendants of the Tan-ka-lo or riverboat dwellers of the Chinese province of Kwangtung[2]. His views have been criticized at length in a posthumous essay by WILLIAMSON, who points out that many of HANDY's elements are described in such vague and general terms that their significance is materially impaired, and besides his dichotomy "involves the splitting up and separation of elements which, in the actual ethnographic material, are closely related to each other and integrated into a functional whole"[3].

In addition it should be mentioned that some authors, without attempt at establishing a stratification of Polynesian culture as a

[1] HANDY 1920, p. 233 ff. HANDY 1930, p. 7.
[2] HANDY 1930, p. 18 f.
[3] WILLIAMSON 1939, p. 258 ff, 267.

whole, with more or less justification refer certain elements to foreign influences[1]. In his extensive study of the megalithic complex in Melanesia, RIESENFELD assumes—though, as it seems to me, for not very convincing reasons—that it reached Fiji and the Lau Islands as late as about 1600 A. D., perhaps even later, and thence spread to Polynesia[2]. He realizes, however, that there must have been other routes, too, e. g. from the New Hebrides, and if, as he believes, the cultivation of taro and coconut trees, irrigation, pig breeding, quadrangular adzes, ancestor cult, etc., belong to the same complex, it must of course have entered Polynesia at a much earlier date.

The theories so far cited have in common that the differentiation of Polynesian culture is associated with successive actions from the outside. Other authors have approached the problem from another angle and have stressed the geographical differentiation of the culture. GRAEBNER suggested a distinction between a northern and a southern sub-area, but without elaborating the subject[3], and LINTON drew attention to parallels between Samoa, Tonga and Micronesia on the one hand and between the Marquesas and New Zealand on the other, while the Society Islands occupy an intermediate position, and Hawaii shares a number of material traits with the Marquesas, whereas in non-material culture it is closer to western Polynesia and the Society Islands[4]. For the most detailed and systematic inquiry we are, however, indebted to BURROWS, who like TE RANGI HIROA recognizes a western and an eastern sub-area, the latter centering in the Society Islands[5]. On the basis of a painstaking analysis of a great number of cultural elements he infers that while no hard and fast lines can be drawn between east and west, there is a number of characteristic differences. Thus, in the western sub-area thirteen elements were apparently borrowed from Fiji, eleven elements are due to local development, and six elements have been either rejected or abandoned. In contradistinction the eastern sub-area shows only five borrowed elments (of which none are of Fijian

[1] For instance SPEISER 1936, p. 312. SPEISER 1941, p. 30 ff. HEINE-GELDERN 1952, p. 337.
[2] RIESENFELD 1950 a, p. 667 ff.
[3] GRAEBNER 1905, p. 47 f.
[4] LINTON 1923, p. 458.
[5] BURROWS 1938, p. 151 ff. BURROWS 1940, p. 350 ff.

origin), but no less than sixteen developed locally and only one abandoned or rejected[1]. On the other hand he is sceptic towards the attempts at establishing a chronological stratification. His study, he admits, "sheds very little light on original immigration into the Pacific. One hint, indeed, emerges. Certain traits shared by central Polynesia, Micronesia, and some intermediate islands are absent or rare in western Polynesia. ... This situation suggests one immigration into central Polynesia by way of Micronesia, another into western Polynesia by a different route (on other grounds, through Fiji). But there are difficulties in the way of this interpretation. Any of the traits mentioned may be old Polynesian, retained in central-marginal Polynesia but abandoned in the west. Again, any of them may have developed in central Polynesia and spread from there to Micronesia, instead of the other way"[2]. In some cases BURROWS's otherwise sound conservatism may appear to be exaggerated; among the elements which are rare in the western sub-area he includes, for instance, the shoulder adze, and in view of its extremely wide distribution in Asia it is next to impossible to assume that it developed locally in central Polynesia. But on the whole his view marks a sober reaction to the far-fetched hypotheses of several earlier writers and corresponds closely to that of TE RANGI HIROA[3].

In short, we still know too little to be able to reconstruct the history of Polynesian culture, although there are certain indications of a stratification, but how much is due to culture stimulus from the outside, and in this case how much has been carried along by later waves of immigration and how much has been taken over from Fiji—and on the other hand how much is the result of local development in the Society Islands and subsequent diffusion to other island groups, are questions we cannot answer at present. What we need are more extensive archaeological excavations, and first of all in places like Tonga, Samoa and the Society Islands, which must have played a prominent rôle in the history of Polynesia. Our next task will now be to investigate how the culture of Rennell Island fits into the picture sketched on the preceding pages.

[1] BURROWS 1940, p. 360 ff.
[2] BURROWS 1938, p. 155 f.
[3] TE RANGI HIROA 1938 b, p. 301.

2.

Research Plan. — Economic Methods and Implements. — Canoes. — Houses and Furniture. — Clothing and Personal Adornment. — Tools and Techniques. — Weapons. — Recreation. — Social Organization. — Religion.

Even a casual glance at the culture of Rennell Island leaves no doubt about its general Polynesian pattern, but if we want to delve deeper into the problem of its relations to Polynesia as a whole, a more thorough-going analysis of its individual elements will prove imperative. Since the archaeological data from the Pacific are more than meagre, this means first of all a plotting of their geographical distribution, for although the spread of any particular element is not simply correlated to its age it is nevertheless able to offer valuable hints.

It will be necessary, however, to take not only Polynesia into account but to a great extent also Micronesia, which, as SPOEHR rightly observes, is so closely related to Polynesia that they must, to a certain degree, be considered a single culture area[1]. On the other hand New Guinea and the other Melanesian islands stand much farther apart, and only exceptionally will our investigation require an excursion to those parts of Oceania, save of course such semi-Polynesian islands as Fiji, Rotuma and the Lau group.

Like all Polynesians the Rennellese are primarily horticulturists, yam, taro, coconuts and pandanus being their staple crops. The original lack of bananas and breadfruit is probably due to the poor conditions of the soil. The same explanation may apply to the gourd plant, which does not thrive on atolls and is grown to a limited extent in western Polynesia as a whole[2]. Turmeric is widespread as a dye plant in both Polynesia and Micronesia.

The distribution of betel and betel chewing in Oceania has been pointed out by GRAEBNER and, in greater detail, by RIESENFELD[3]. It does not occur among the Polynesians at all outside Tikopia and Rennell (and Bellona), nor is it found in eastern

[1] SPOEHR 1952, p. 458.
[2] DODGE 1943, p. 81, 85.
[3] GRAEBNER 1909 a, p. 762. RIESENFELD 1947, p. 157 ff.

Micronesia including the Polynesian outliers such as Sikaiana, Lord Howe and Tasman Islands, etc. On the other hand it is known on Palau, Yap and the Marianas and is very common in New Guinea, especially in the eastern districts, and in the Melanesian island chain from Wuvulu and Aua in the west as far as the southern Solomons and Santa Cruz in the east. Here it was noticed as early as 1568 and 1605 by MENDAÑA and FERNÁNDEZ DE QUIRÓS respectively, and perhaps even earlier. There can scarcely be any doubt that the areca nut was introduced to Rennell from the southern Solomons, for its name, *pua*, is exactly the same as is common not only there but throughout Melanesia ("pua", "bua", "mbung"), in western Micronesia ("mbun", "bu'ok", "pugua") and as far to the west as Indonesia ("buwa", "puah") and even Ceylon ("puwak"), whereas it differs radically from the words both on Santa Cruz and Tikopia[1]. The case of betel pepper is more questionable. It was mentioned previously (p. 86) that according to WOODFORD, pepper was not used on Rennell at the time of his visits, whereas at present the nut is always wrapped in a pepper leaf. Now, the Rennellese word for betel pepper, *pita*, is identical with the Tikopian term, whereas in the southern Solomons it is called "amesi", "amadi", or "oha"[2]. This circumstance seems to indicate that betel pepper did not come together with areca chewing but rather suggests a later introduction from Tikopia, perhaps as late as after WOODFORD's time. It is a remarkable fact that the Rennellese vocable for betel lime, *natiŋa*, corresponds to neither the Tikopian nor the southern Solomons words[3].

Although some Rennellese lime containers are made of bamboo according to the pattern generally used on the Melanesian Solomons, most of them are made of young coconuts, a type occurring for instance in the region around the Buka Passage[4] but, as it seems, on the whole less common in Melanesia than bamboo boxes. Gourd containers, which are also a widely distributed Melanesian type, are not of course found on Rennell since gourds do not grow on the island.

As for agricultural methods we can be brief. HANS DAMM, who

[1] RIESENFELD 1947, p. 183, 185, 187.
[2] RIESENFELD 1947, p. 185.
[3] Cf. RIESENFELD 1947, p. 185.
[4] BLACKWOOD 1935, p. 294.

has studied the distribution of artificial watering in Oceania, has shown that it is found in some form or other in all the principal Polynesian island groups except Tonga. It is his opinion that it was part of the early Polynesian culture originating in Southeast Asia but was more or less lost during the migration through the Micronesian archipelago and re-introduced by a later culture wave[1]. In Rennell, artificial watering is impossible even in its simplest form on account of the nature of the soil, and therefore we cannot decide whether it was known when the ancestors of the present polulation settled on the island and they had to give it up afterwards owing to the unfavourable environment. The slash-and-burn method employed in laying out the gardens is at any rate a common procedure in Oceania, and the simple digging stick is found everywhere. I shall confine myself to giving some quotations concerning the distribution of the latter in Polynesia and Micronesia, but it is, of course, just as general in Melanesia[2]. It is hardly necessary to add that an implement of this simple kind very likely occurs in some places where it has not been recorded.

The common domestic animals in Polynesia, i. e. dogs (?), pigs and fowl, were originally absent on Rennell, and their place in the history of Polynesian culture is still obscure. In many islands one or two or all of them were lacking. An old tradition tells us that pigs came to Samoa from Fiji[3], but the possibility cannot be excluded that it refers to re-introduction. We are told,

[1] Damm 1951, p. 223 f.

[2] Tikopia (Firth 1936 a, p. 37. Firth 1939, p. 33, 66). Kapingamarangi (Te Rangi Hiroa 1950, p. 43). Nukuoro (Eilers 1934, p. 230). Uvea (Burrows 1937, p. 100 f.) Futuna (Burrows 1936, p. 141). Ellice I., spade (Hedley 1897, p. 261 f). Tokelau?, "agriculture is almost impossible" (Macgregor 1937, p. 11). Tonga, sometimes with cross piece (Cook & King 1785, I p. 392). Lau (Hocart 1929, p. 103). Fiji (Williams & Calvert 1858, I p. 63 f). Samoa (Krämer 1902—03, II p. 129. Te Rangi Hiroa 1930, p. 545). Cook I. (Te Rangi Hiroa 1944, p. 248). Tubuai (Aitken 1930, p. 16). Society I. (Ellis 1831, I p. 137). Hawaii (Handy etc. 1933, p. 109). Marquesas (Handy 1923, p. 181). Mangareva (Te Rangi Hiroa 1938 a, p. 225). Easter I. (Métraux 1940, p. 152). New Zealand, with foot rest (Hawkesworth 1773, III p. 465. Banks 1896, p. 244. Best 1924, II p. 359 ff. Best 1925, p. 32 ff. Makereti 1938, p. 187 ff). Chatham I. (Skinner & Baucke 1928, p. 346). Marshall I. (Krämer & Nevermann 1938, p. 110). Eastern Carolines (Christian 1899 a, p. 294. Christian 1899 b p. 131). Central Carolines (Kubary 1895, p. 56. Bollig 1927, p. 145. Krämer 1932, p. 122. Krämer 1935, fig. 33. Damm 1935, p. 46. Krämer 1937, p. 332). Western Carolines (Eilers 1935—36, I p. 92, II p. 135). Yap (Müller 1917, p. 56 f). Palau (Kubary 1895, p. 158) Marianas (Thompson 1945, p. 30).

[3] Te Rangi Hiroa 1938 b, p. 381.

for instance, that on Rotuma the original stock of pigs was destroyed by a typhoon and a new breed introduced later, and on Tikopia they were deliberately killed off on account of the damage they caused to the gardens[1]. There is also evidence that pigs had reached Mangareva, but they had been exterminated before the discovery by Captain WILSON[2].

In many cases the occurrence of domestic animals in the Pacific seems to depend on more or less casual circumstances. Thus, dogs were unknown on Niue[3] and on Tongareva, Pukapuka, Manihiki and Rakahanga[4], and they were likewise absent in Mangaia[5], the Marquesas[6], Mangareva[7], Easter Island[8] and the Chatham Islands[9]. In Micronesia, Ponape is the only island where dogs were known[10]. On the other hand they occurred not solely in the main Polynesian groups such as Tonga, Samoa, the Society Islands, Hawaii and New Zealand, but also in many less important archipelagos and isolated islands[11]. Pigs and chicken have similar sporadic distributions. Both were lacking on Tikopia, but as mentioned above, pigs seem to have been known there in former times. They were likewise absent on Kapingamarangi and Tasman Islands,[12] whereas QUIRÓS saw both on Sikaiana[13]. Neither in the Ellice nor the Tokelau groups and Niue did they occur originally[14]. The same thing applies to New Zealand and the Chatham Islands[15] and, at any rate as far as the pig is concerned, to the northern Cook group[16]. The Easter Islanders had fowl but

[1] DILLON 1829, II p. 94, 134.
[2] TE RANGI HIROA 1938 a, p. 194.
[3] SMITH 1902—03, XI p. 99. LOEB 1926, p. 7.
[4] TE RANGI HIROA 1932 a, p. 197. TE RANGI HIROA 1932 b, p. 83. BEAGLEHOLE 1938, p. 27.
[5] TE RANGI HIROA 1944, p. 15 f.
[6] ROLLIN 1929, p. 50.
[7] TE RANGI HIROA 1938 a, p. 194.
[8] MÉTRAUX 1940, p. 19.
[9] SKINNER 1923, p. 50.
[10] FINSCH 1893, p. 273, 505. KRÄMER 1938, p. 112.
[11] Sikaiana (WOODFORD 1916, p. 39). Uvea (BURROWS 1937, p. 6). Futuna (BURROWS 1936, p. 133). Tokelau (MACGREGOR 1937, p. 13). Lau (THOMPSON 1940, p. 141). Tubuai (AITKEN 1930, p. 9). Tuamotu (QUIROS 1904, I p. 201. CORNEY 1913—19, II p. 40).
[12] EILERS 1934, p. 70, 230.
[13] QUIROS 1904, II p. 492.
[14] KENNEDY 1931, p. 104. MACGREGOR 1937, p. 150. SMITH 1902—03, XI p. 99 f. LOEB 1926, p. 7.
[15] BEST 1924, I p. 434. SKINNER 1923, p. 15.
[16] TE RANGI HIROA 1932 a, p. 197. TE RANGI HIROA 1932 b, p. 83. BEAGLEHOLE 1938, p. 27.

no pigs[1]. It seems that the early Spanish expeditions found pigs on some of the atolls in the Tuamotus[2], and although pigs are mentioned in the traditions of Mangareva, there is no evidence of poultry[3]. In Micronesia pigs are lacking everywhere, but chicken were probably known in the Marianas, while on Palau they lived only in a wild state and were considered taboo[4]. This brief and somewhat incomplete survey will, I hope, suffice to show that the distribution of domestic animals in Polynesia is inconsistent with any definite geographical pattern and therefore does not allow of further interpretation, and it remains an open question whether they were known to the ancestors of the Rennellese before their arrival to their present habitat. The term for dog, *amenagi*, is certainly not Polynesian and suggests a borrowing from some Melanesian source.

Pigeon hunting is a noble sport rather than an economic enterprise in many parts of Polynesia, but the use of pigeon nets is limited to the western islands[5]; still, a pole net for bird catching occurs in the Marquesas[6]. The Samoan method of using the net from a platform agrees closely with that on Rennell[7]. A large, two-poled net like the Rennellese type was employed on Tonga by commoners, whereas that of the chiefs is described as being "small, with a narrow opening, affixed to the end of a rod of about twelve feet in length"; here the hunter was usually squatting on the ground concealed in a small bower[8]. Pole nets for catching birds were probably known in former times on Uvea[9], and must occur also on Sikaiana since we are told that they were introduced from there to Lord Howe and Tasman Islands[10]. They are likewise mentioned from some other western islands but evidently of varying types; thus, they had a round frame on Funafuti, and on Pukapuka the distal end of the net was bent backwards in an

[1] Métraux 1940, p. 19.
[2] Corney 1931—19, I, p. 296, II p. 40.
[3] Te Rangi Hiroa 1938 a, p. 513.
[4] Finsch 1893, p. 273. Krämer 1926, p. 63. Thompson 1945, p. 30.
[5] Te Rangi Hiroa 1930, p. 677.
[6] Handy 1923, p. 180.
[7] Te Rangi Hiroa 1930, p. 536 f., 539.
[8] Martin 1818, II p. 329 f. Dumont d'Urville 1830—33, IV p. 250. McKern 1929, p. 19.
[9] Burrows 1937, p. 110.
[10] Sarfert & Damm 1929, p. 131.

obtuse angle[1]. The bird net is further recorded from Nauru and some of the Carolines[2], and on Yap and Palau flying foxes were taken in triangular nets[3]. The pole net does seem to occur in the Melanesian Solomons, where birds were caught in large nets stretched between the trees[4].

Decoy pigeons are mentioned from Tonga, Samoa and Niue in connection with net hunting[5]. On New Zealand decoy birds are used for snaring the kea[6], on Nauru and the Gilberts for catching frigate birds and other sea birds by means of a sling shot[7], and on Palau and Rotuma for bird shooting[8]. Like the bird nets, the use of decoy birds seems to be a western element in Oceania.

Our information about the pole snare is probably defective. It is recorded for bird catching in several places, including New Zealand in a highly specialized form, but in the Marquesas its use for birds is said to be recent, whereas it is old as a fishing device[9]. For fishing it occurs on several islands in Polynesia[10], and in Micronesia it is used both for bird catching in the Carolines[11] and for fishing in the Gilbert Islands, Nauru, Yap, and Palau[12]. Most likely it is an old Oceanic element.

I am not aware of any parallels to the remarkable nooses for bird catching described by the Rennellese, although the use of bird-lime is widespread in Oceania. An implement resembling the multipronged spear for catching flying foxes is described from

[1] Funafuti (Hedley 1897, p. 278). Niue (Smith 1902—03, XI p. 217. Loeb 1926, p. 107). Pukapuka (Beaglehole 1938, p. 209).

[2] Stephen 1936—37, p. 56. Eilers 1935—36, I p. 99, 269, 392.

[3] Kubary 1895, p. 120. Krämer 1926, p. 65. Müller 1917, p. 59.

[4] Blackwood 1935, p. 325. Ivens 1927, p. 389.

[5] Martin 1818, II p. 329 f. Dumont d'Urville 1830—33, IV p. 250. Wilkes 1844, II p. 128. Turner 1884, p. 127 f. Stair 1897, p. 190 f. Krämer 1906, p. 482. Krämer 1902—03, II p. 332. Te Rangi Hiroa 1930, p. 533 f. Smith 1902—03, XI p. 217. Loeb 1926, p. 107 cf. pl. xc.

[6] Best 1924, II p. 469 f.

[7] Brandeis 1907, p. 61. Krämer 1906, p. 360 f. Stephen 1936—37, p. 56.

[8] Kubary 1895, p. 117. Krämer 1926, p. 65. Gardiner 1898, p. 487.

[9] Lord Howe and Tasman I. (Sarfert & Damm 1929, p. 131). Niue (Anell 1955, p. 61). Samoa (Te Rangi Hiroa 1930, p. 527). Pukapuka (Beaglehole 1938, p. 75). Tubuai (Aitken 1930, p. 78). New Zealand (Best 1924, II p. 479. Tamati Ranapiri 1895, p. 144. Firth 1929, p. 139 ff. Makereti 1938, p. 260, 268). Marquesas (Handy 1923, p. 169, 181. Rollin 1929, p. 138 f).

[10] Anell 1955, p. 56 f.

[11] Eilers 1934, p. 231. Eilers 1935—36, I p. 99, 269, 392. Krämer 1935, p. 143. Damm 1935, p. 60. Sarfert 1919—20, p. 117.

[12] Finsch 1893, p. 324. Brandeis 1907, p. 60. Hambruch 1914—15, p. 135 f. Müller 1917, p. 86. Kubary 1895, p. 152 f.

Samoa[1], but on Tonga the flying fox is considered taboo[2]. On Uvea and Futuna it is now always hunted with shot guns and the original method has sunk into oblivion[3].

The simple, single-pronged fishing spear is common in many parts of Polynesia, but it is not always possible to tell if it is an original type or if it was introduced together with the coming of iron. On Niue it was, for instance, unknown in former times[4], and we are ignorant of the original form of the fishing spears in the Tokelaus[5], while iron-pointed and accordingly modern spears occur on Tubuai and Easter Island[6]. In some cases, however, we are on safer ground as far as the type is concerned, although it is not always certain that fishing implements are in question. Thus we are told that spears on Funafuti were "merely poles of coco-nut wood sharpened at one end"[7]. In the Society Islands "*les lances à une pointe n'étaient que le bois même bien affilé*"[8], and in the Chatham Islands "a pointed rod" was used[9]. In addition, single-pointed spears are mentioned from a great number of other islands[10], including the Marshalls and Carolines[11]. All taken together there can be no doubt that we are here dealing with an ancient and widespread type.

Simple fish hooks made of one piece of shell, bone, etc., are according to BURROWS, characteristic of central-marginal Polynesia but absent in the western area. He gives their distribution as follows: Ellice Islands, Tokelau, Pukapuka, Manihiki-Rakahanga, the southern Cook Islands, Austral Islands and Rapa, Society Islands, Hawaii, Marquesas, Tuamotu, Mangareva, Easter

[1] TE RANGI HIROA 1930, p. 526.
[2] GIFFORD 1929, p. 325.
[3] BURROWS 1937, p. 110. BURROWS 1936, p. 145.
[4] LOEB 1926, p. 96.
[5] MACGREGOR 1937, p. 94.
[6] AITKEN 1930, p. 57. MÉTRAUX 1940, p. 189.
[7] HALE 1846, p. 162.
[8] MOERENHOUT 1837, II p. 106. Cf. HANDY 1932, p. 90
[9] SKINNER & BAUCKE 1928, p. 361.
[10] Lord Howe and Tasman I. (PARKINSON 1907, p. 536. SARFERT & DAMM 1929, p. 123, 233). Kapingamarangi and Nukuoro (EILERS 1934, p. 81. TE RANGI HIROA 1950, p. 269). Uvea (BURROWS 1937, p. 106). Samoa (DEMANDT 1913, p. 20. TE RANGI HIROA 1930, p. 438). Lau (THOMPSON 1940, p. 130, 134). Pukapuka (BEAGLEHOLE 1938, p. 190). Cook I. (TE RANGI HIROA 1944, p. 216). Hawaii (BISHOP 1940, p. 43). Mangareva (LAVAL 1938, p. 251 f. TE RANGI HIROA 1938 a, p. 300).
[11] FINSCH 1893, p. 403. GIRSCHNER 1912, p. 153. EILERS 1934, p. 388, 431. EILERS 1935—36, I p. 97. KRÄMER & NEVERMANN 1938, p. 120.

Island, and New Zealand[1]. However, McKern believes that they occurred formerly on Tonga[2], which agrees with Burrows's view that originally they were known in western Polynesia but abandoned there in favour of bonito hooks and other kind of tackle[3]. Simple fish hooks are also found on the Polynesian outliers Lord Howe, Tasman and Sikaiana as well as on Kapingamarangi and Nukuoro[4]. They are common not only throughout Micronesia and Melanesia with the possible exception of Fiji but also in many places in Australia. This extremely wide distribution leaves no doubt of their great age in Oceania[5].

If in stead of studying the highly varying forms of this element as a whole, we confine ourselves to those made of turtle shell, which is the type found on Rennell, we get the following distribution: Lord Howe and Tasman, Kapingamarangi and Nukuoro, Funafuti, Tokelau, Rotuma, Samoa, Society Islands, and Hawaii[6]. Besides they are common in the Gilberts and Carolines and were likewise used in the Marianas[7]. In Melanesia they are widespread in the Solomons and farther west as well as in the Loyalty group[8]. It is possible, however, to go one or two steps further. The Rennellese turtle-shell hooks belong to the very simplest Oceanic type, i. e. they are U-shaped, without any kind of catching device in the form of incurved point or barb and, as far as could be ascertained, without projection for attaching the line to the shank. The U-shape is by far the most common form in Oceania outside certain parts of Micronesia and probably the original Polynesian type[9]. Most af them are, however, provided with an incurved point or a barb. Hooks lacking such devices are common only in New Zealand and the Chatham Islands, but do occur also in the Society, Marquesas and Tuamotu groups and exceptionally on Mangareva and Easter Island, while on the other hand nearly

[1] Burrows 1938, p. 10, 173.
[2] MS cited by Anell 1955, p. 96 footnote.
[3] Burrows 1938, p. 131.
[4] Anell 1955, p. 94, 96 f.
[5] Anell 1955, p. 86 ff.
[6] Beasley 1928, p. xi. Sarfert & Damm 1929, p. 113. Eilers 1934, p. 73, 238 ff. Hedley 1897, p. 265 f. Macgregor 1937, p. 101. Gardiner 1898, p. 425. Beaglehole 1938, p. 197. Arning 1931, p. 50.
[7] Beasley 1928, p. xi. Girschner 1912, p. 153. Damm 1935, p. 49. Sarfert 1919—20, p. 103. Müller 1917, p. 72. Thompson 1945, p. 31.
[8] Beasley 1928, p. xi. Cf. Woodford 1918, p. 131.
[9] Anell 1955, p. 115, 120.

all Melanesian and Australian hooks are of this type[1]. Projections on the shank or some other kind of arrangement for attaching is characteristic of most Polynesian fish hooks, whereas throughout Melanesia simple grooves are used[2]. Another Melanesian trait of the Rennellese turtle-shell hook is the method of bending it by means of heat[3]. Thus it will appear that the Rennellese hook differs essentially from the ordinary Polynesian types, while on the other hand it shows the closest possible affinities to Melanesia.

The great wooden shark hook is a specialized form of the simple hook. It is undoubtedly related to the ruvettus hook but differs from the latter in being rounded in stead of angular, and besides the ruvettus hook has a separate point piece or a point curved inwards. According to GUDGER the point-less type is found in Rarotonga, Mangaia, the Society Islands and, in slightly different form, in Fiji, and outside Polynesia very similar hooks occur in the Gilberts and in Melanesia on the Woodlarks and Trobriands as well as at Milne Bay in eastern New Guinea[4]. In the Solomons it seems to be absent[5]. On the other hand it is probable that it was found in former days in Tokelau where now iron hooks of identical shape are used[6], and of shark fishing on Kusae in the eastern Carolines SARFERT tells us that "*dazu benutzte man einen Wurzelast einer Stelzenwurzelmangrove, so wie ihn die Natur bot*"[7], i. e. a similar though more primitive type. A slightly deviating form, with a small exterior barb, has been recorded from Lord Howe and Tasman Islands[8]. Thus, simple shark hooks without separate point piece seem to have a rather sporadic distribution in the Pacific, but the occurrence as far east as the Society Islands suggests that it was previously more widespread than now and was replaced by the hook with a point piece, which ANELL believes to be a rather late type probably originating

[1] ANELL 1955, p. 117.
[2] ANELL 1955, p. 118 f.
[3] ANELL 1955, p. 120.
[4] GUDGER 1927, p. 223 ff. TE RANGI HIROA 1944, p. 239 f. ELLIS 1831, I p. 145 f. MOERENHOUT 1837, II p. 102. EDGE-PARTINGTON 1890—98, I pl. 9, 117, II pl. 18.
[5] BEASLEY 1928, p. 71.
[6] MACGREGOR 1937, p. 102 f.
[7] SARFERT 1919—20, p. 103.
[8] SARFERT & DAMM 1929, p. 115 cf. fig. 74.

in the Gilbert or Ellice Islands[1]. Te Rangi Hiroa is also of opinion that the simple shark hook is an old element in Polynesia[2].

A contributary reason why the simple shark hooks are comparatively rare in western Polynesia is the fact that there, as in Micronesia, the prevailing method for catching sharks is by means of a snare. On Rennell Island the snare is employed only as an accessory for securing the fish when it has already been caught on the hook, as is also the case on Tikopia[3]. Most likely Anell is right in considering this method older than the more widespread use of the snare alone[4].

The ordinary fishing net is universal in both Polynesia[5] and Micronesia[6]. On Rennell it is not used for seining, but this is easily explained by the fact that the rough coral bottom inside the reef is not suitable for this method. The fish drive and surrounding of the fish are described from various other islands. Without attempting to give a complete survey I shall mention the following places: Kapingamarangi and Nukuoro, Lau, Tokelau,

[1] Anell 1955, p. 236 f, 246.
[2] Te Rangi Hiroa 1944, p. 453.
[3] Rivers 1914, I p. 331.
[4] Anell 1955, p. 53.
[5] Tikopia (Firth 1930, p. 107). Tasman I. (Parkinson 1907, p. 536). Kapingamarangi and Nukuoro (Eilers 1934, p. 82, 242. Te Rangi Hiroa 1950, p. 222 ff). Uvea (Burrows 1937, p. 105). Futuna (Burrows 1936, p. 147 f. Viala 1919, p. 266). Tokelau (Macgregor 1937, p. 97). Niue (Skogman 1851—53, II p. 21. Smith 1902—03, XI p. 215). Tonga (Cook 1777, I p. 215. Cook & King 1785, I p. 396. West 1865, p. 119 ff). Lau (Hocart 1929, p. 111 f). Rotuma (Gardiner 1898, p. 426 ff. Eason 1951, p. 27). Fiji (Williams & Calvert 1858, I p. 69). Samoa (Turner 1884, p. 167 f. Krämer 1902—03, II p. 177. Demandt 1913, p. 34. Te Rangi Hiroa 1930, p. 483 ff). Tongareva (Te Rangi Hiroa 1932 a, p. 198). Pukapuka (Beaglehole 1938, p. 208). Cook I. (Te Rangi Hiroa 1944, p. 226 ff). Tubuai (Aitken 1930, p. 59 ff). Society I. (Hawkesworth 1773, I p. 483. Banks 1896, p. 154. Ellis 1851, I p. 140. Moerenhout 1837, II p. 104. Corney 1913—19, II p. 282. Handy 1932, p. 84 ff). Hawaii (Cook & King 1785, III p. 150. Dixon 1789, p. 273. Malo 1903, p. 277. Bishop 1940, p. 41). Marquesas (Fleurieu, an vi, p. 191. Krusenstern 1811—12, I p. 233. Linton 1923, p. 399. Handy 1923, p. 170. Rollin 1929, p. 146). Mangareva (Beechey 1831, I p. 195. Laval 1938, p. 252 f. Te Rangi Hiroa 1938 a, p. 294 ff). Easter I. (Geiseler 1883, p. 37. Thomson 1891, p. 459. Métraux 1940, p. 186 f.) New Zealand (Hawkesworth 1773, III p. 465. Cook & King 1785, I p. 157. Banks 1896, p. 206, 213, 243. Dumont d'Urville 1830—33, II p. 491. Best 1924, II p. 404 ff. Best 1929, p. 18 ff. Makereti 1938, p. 222). Chatham I. (Skinner & Baucke 1928, p. 361).
[6] Gilbert I. (Parkinson 1889, p. 95. Finsch 1893, p. 321 f. Hambruch 1914—15, p. 138 f. Wedgwood 1935—37, p. 10). Marshall I. (Erdland 1914, p. 49. Krämer & Nevermann 1938, p. 121). Carolines (Finsch 1893, p. 463, 508. Christian 1899 b, p. 126. Sarfert 1919—20, p. 107. Hambruch & Eilers 1936, p. 323 f.

Samoa, Pukapuka, Rongareva, and the Cook Islands[1]. In Micronesia it is recorded for instance from Yap[2].

Scoop nets for catching flying-fish—or sometimes also for other species—are said to have been introduced to Tikopia from Ellice Islands[3] and are, perhaps, also recent acquisitions in Tongareva[4] and the Marquesas[5]. Apart from this their distribution is nearly universal throughout Polynesia[6] and Micronesia[7], although the type varies in details. Thus, a cross bar is lashed as a spreader to the handle and the sides of the frame on the nets from Kapingamarangi, Uvea, Funafuti, Pukapuka, Manihiki-Rakahanga, Cook and Society Islands and Mangareva in Polynesia, and the same arrangement is found on Nauru, in the Marshalls and many of the Carolines as well as on Yap, whereas it is lacking for instance on Lord Howe and Tasman, Niue, some of the Carolines (Merir, Lamotrek, Feis) and Palau. It will be remembered that the cross bar is also found on Rennell. On the other hand the Rennellese net differs from the type of Funafuti and some other islands in the shape of the frame, of which in the latter places the distal part is bent backwards in an obtuse angle.

KUBARY 1895, p. 65. KRÄMER 1937, p. 235. GIRSCHNER 1912, p. 154. EILERS 1935—36, I p. 389). Yap (MÜLLER 1917, p. 80). Palau (KUBARY 1895, p. 135 f. KRÄMER 1926, p. 93). Marianas (THOMPSON 1945, p. 32).

[1] EILERS 1934, p. 242 f. TE RANGI HIROA 1950, p. 226 ff. THOMPSON 1940, p. 130. MACGREGOR 1937, p. 97. STAIR 1897, p. 204. DEMANDT 1913, p. 35 f. BEAGLEHOLE 1938, p. 58. TE RANGI HIROA 1932 a, p. 198. TE RAMGI HIROA 1944, p. 234 f.

[2] KUBARY 1895, p. 135 f.

[3] FIRTH 1939, p. 84.

[4] TE RANGI HIROA 1932 a, p. 201.

[5] LINTON 1923, p. 400.

[6] Lord Howe and Tasman I. (SARFERT & DAMM 1924, p. 120 f). Kapingamarangi and Nukuoro (EILERS 1934, p. 82, 244. TE RANGI HIROA 1950, p. 215 ff). Uvea (BURROWS 1937, p. 104). Ellice I. (KENNEDY 1931, p. 65 ff. HEDLEY 1897, p. 277. TURBOT 1950, p. 353). Niue (SMITH 1902—03, XI p. 215. LOEB 1926, p. 96). Rotuma (GARDINER 1898, p. 425). Samoa (KRÄMER 1902—03, II p. 177. DEMANDT 1913, p. 45 f. TE RANGI HIROA 1930, p. 475). Pukapuka (BEAGLEHOLE 1938, p. 208). Manihiki and Rakahanga (TE RANGI HIROA 1932 b, p. 160). Cook I. (TE RANGI HIROA 1944, p. 231 ff.) Society I. (HANDY 1932, p. 88 f). Mangareva (LAVAL 1938, p. 253. TE RANGI HIROA 1938 a, p. 296, 298). Easter I. (MÉTRAUX 1940, p. 184 f). New Zealand (BEST 1929, p. 27. MAKERETI 1938, p. 241). Chatham I. (SKINNER & BAUCKE 1928, p. 378).

[7] Gilbert I. (PARKINSON 1889, p. 96. WILKES 1844, V p. 101. FINSCH 1893, p. 324. HAMBRUCH 1914—15, p. 137 f, cf. 156. STEPHEN 1936—37, p. 53. WEDGWOOD 1935—37, p. 10). Marshall I. (KRÄMER 1906, p. 430. ERDLAND 1914, p. 51. KRÄMER & NEVERMANN 1938, p. 120 f). Carolines (KUBARY 1895, p. 96. EILERS 1935—36, I p. 93, 268, 389, II p. 184 f. EILERS 1934, p. 342 f, 387, 430 f. KRÄMER 1932, p. 145. KRÄMER 1937, pl. 5, 336. GIRSCHNER 1912, p. 154). Yap (MÜLLER 1917, pl. 25). Palau (KUBARY 1895, pl. xviii. KRÄMER 1926, p. 91).

Flying-fish are generally caught from the canoe by torch light, a method which seems to be as widespread as the flying-fish net itself and probably like the latter an old element in Polynesian and Micronesian culture[1]. On many islands fish are also speared by torch light, for instance in Tonga, Samoa, Tubuai, the Society Islands and New Zealand[2] as well as in the Carolines[3] and probably many other places, but I am not sure that this method was employed on Rennell.

Fish weirs are common in both Polynesia and Micronesia, but as a rule they are built of stones and not of coconut fronds as they are on Rennell. However, we are informed that on Tonga weirs "are built by placing sticks in a circle, fence-fashion, leaving a gate or door into the circle. To a long creeper (*valai*) used as a rope, are attached split coconut leaves to act as wings or guides"[4]. In the Cook Islands there is a similar device[5]. Frond weirs are mentioned from some other places[6]. I have found no reference from eastern Polynesia, but the type is so simple that it has, perhaps, been ignored. It is used on Pukapuka together with a leaf sweep and a basket, thus suggesting a method similar to that of Rennell. Sweeps, sometimes of enormous size, are found throughout Polynesia[7].

Fish poisoning in Oceania has recently been studied by Hei-

[1] Tikopia (Rivers 1914, I p. 330. Firth 1940, I p. 55). Lord Howe and Tasman I. (Sarfert & Damm 1929, p. 121). Kapingamarangi and Nukuoro (Eilers 1934, p. 82, 245. Te Rangi Hiroa 1950, p. 219). Uvea (Burrows 1937, p. 104). Ellice I. (Kennedy 1931, p. 65 ff. Turbot 1950, p. 353). Tokelau (Macgregor 1937, p. 96 f). Niue (Smith 1902—03, XI p. 215. Loeb 1926, p. 96). Rotuma (Gardiner 1898, p. 425). Samoa (Krämer 1902—03, II p. 177. Demandt 1913, p. 64 f. Te Rangi Hiroa 1930, p. 475). Pukapuka (Beaglehole 1938, p. 56). Manihiki and Rakahanga (Te Rangi Hiroa 1932 b, p. 158). Cook I. (Te Rangi Hiroa 1944, p. 213). Society I. (Wilson etc. 1799, p. 367. Handy 1932, p. 88, 109). Marquesas (Handy 1923, p. 177. Linton 1923, p. 400). Mangareva (Laval 1938, p. 254. Te Rangi Hiroa 1938, p. 296, 298). Gilbert I. (Parkinson 1889, p. 96. Hambruch 1914—15, p. 137 f. Stephen 1936—37, p. 53. Wedgwood 1935—37, p. 10. Turbot 1950, p. 353). Marshall I. (Krämer 1906, p. 430. Krämer & Nevermann 1938, p. 122. Erdland 1914, p. 51). Carolines (Sarfrt 1919—20, p. 105. Hambruch & Eilers 1936, p. 330 f. Kubary 1895, p. 96. Girschner 1912, p. 154. Eilers 1935—36, I p. 93, 268, 389). Yap (Müller 1917, p. 88).

[2] Whitcombe 1930, p. 5. Krämer 1902—03, II p. 173. Aitken 1930, p. 57. Ellis 1831, I p. 149 f. Best 1929, p. 105.

[3] Hambruch & Eilers 1936, p. 330 f. Krämer 1937, p. 334.

[4] Whitcombe 1930, p. 4.

[5] Te Rangi Hiroa 1944, p. 220.

[6] Lord Howe and Tasman I. (Sarfert & Damm 1929, p. 123 f). Uvea (Burrows 1937, p. 103). Samoa (Te Rangi Hiroa 1930, p. 432). Pukapuka (Beaglehole 1938, p. 57). Marshall I. (Krämer & Nevermann 1938, p. 122).

[7] Te Rangi Hiroa 1944, p. 220.

ZER, who summarizes the distribution thus: Fiji, Samoa, Rarotonga, Society Islands, Hawaii, Marquesas, the Carolines and the Marianas, besides many places in Melanesia[1]. To this list may be added Tikopia, Lord Howe and Tasman Islands, Uvea, Futuna, Niue, Tonga, Lau, Cook Islands, Mangareva, and Palau[2]. This almost universal distribution, to which HEIZER adds evidence from Australia, Indonesia and eastern Asia, leaves no doubt that we are dealing with a very old culture element.

In Polynesia, octopus are generally caught by means of the so-called "rat", consisting of a pointed rod to which a cowrie shell is attached. In some islands we find, however, the simpler and probably earlier method occurring on Rennell, viz. of using a stick only[3]. This method may, indeed, be more widespread than our quotations indicate.

In their important work, HADDON and HORNELL have discussed the Oceanic canoes at considerable length, and besides the characteristics of the canoes of western Polynesia were pointed out by BURROWS, so here we can be brief. The shape of the hull is on Rennell always of a similar simple type as is found generally in Polynesia; only in more elaborate canoes, such as are not found on Rennell, do regional differences appear[4]. The number of booms to which the outrigger float is attached, ranges in Polynesia from two to at least nine, but the use of five or more is characteristic of the western sub-area and Melanesia[5]. This does not mean, however, that two or three booms, such as occur on Rennell, are not found in the west, for this arrangement is sometimes used on Tonga and Samoa[6], and the number of booms must, of course, to some degree depend upon the size of the canoe, which on Rennell is never very great. The attachment of the float is here always indirect, i. e. by means of short stanchions inserted

[1] HEIZER 1953, p. 262.

[2] RIVERS 1914, I p. 332. SARFERT & DAMM 1929, p. 124. BURROWS 1937, p. 106 f. BURROWS 1936, p. 149. SMITH 1902—03, XI p. 216. LOEB 1926, p. 97. STOKES 1921, p. 231. THOMPSON 1940, p. 134 f. TE RANGI HIROA 1934, p. 145. TE RANGI HIROA 1944, p. 215 f. TE RANGI HIROA 1938 a, p. 301. KUBARY 1895, p. 151.

[3] Futuna (BURROWS 1936, p. 152). Tokelau (MACGREGOR 1937, p. 93 f). Samoa (TE RANGI HIROA 1930, p. 420). Cook I. (TE RANGI HIROA 1944, p. 213). Marquesas (HANDY 1923, p. 175. ROLLIN 1929, p. 149 f). Truk (KRÄMER 1932, p. 140).

[4] BURROWS 1938, p. 34.

[5] BURROWS 1938, p. 38 f.

[6] BURROWS 1938, p. 182.

into the float and lashed to the booms. Indirect attachment is found on Tikopia, Sikaiana, Lord Howe and Tasman, Uvea, Futuna, Tokelau, Niue, Tonga, Samoa, Pukapuka, Manihiki-Rakahanga, Tongareva, exceptionally in the Cook Islands, Society Islands (mixed), Marquesas, western Tuamotus (mixed) and on the only archaeologically known outrigger canoe from New Zealand[1]. Apart from the Ellice Islands it is thus predominant throughout western Polynesia, which agrees with the fact that it is also common in the central and western Carolines, in the Marianas, and in many parts of Melanesia[2]. There are, however, different types of indirect attachment. The one which occurs on Rennell, characterized by more or less overcrossed stanchions, occurs on Tikopia, Uvea, Futuna (main boom), Tokelau, Niue, Tonga, Rotuma, Fiji, Samoa, Manihiki, Tuamotus, Society Islands and on the afore-mentioned archaeological specimen from New Zealand; we find it also sporadically in Melanesia. Thus the distribution is mainly marginal in Oceania and probably older than the undercrossed attachment and crutch connectives[3]. Even though it is scarcely justifiable for the present to refer the various types of attachments to definite migrations, as Haddon and Hornell have tried to do, it seems nevertheless clear that the Rennellese canoe is a rather oldfashioned type.

The sail is obviously of so-called lateen form, but unfortunately little is known of its details. There is, however, reason for assuming that it belongs to what Haddon and Hornell call the "primitive Oceanic" form. Lateen sails have in general, except for Mangareva, a western distribution in Polynesia, in contradistinction to the sprit sail[4]. This may indicate that the lateen sail was introduced from Micronesia, whence, in fact, a more advanced lateen type spread to Samoa and Tonga as late as the latter half of the 18th century[5].

The ordinary "profane" and the sacred paddles differ somewhat in shape, the former having a rather narrow, elliptical blade, whereas the blade of the latter is short and broad; none

[1] Haddon & Hornell 1936—38, II p. 80. Burrows 1938, p. 182.
[2] Haddon & Hornell 1936—38, III p. 80 f, 84. Burrows 1938, p. 38.
[3] Haddon & Hornell 1936—38, III p. 30, 76 ff.
[4] Burrows 1938, p. 183. Add: Kapingamarangi (Te Rangi Hitoa 1950, p. 199 f.
[5] Haddon & Hornell 1936—38, III p. 49.

of them are shouldered at the transition between blade and shaft. Elliptical or lanceolate, non-shouldered blades are found on Uvea, Futuna, Rotuma, Manihiki, Marshall Islands, Nauru, some of the Carolines, and Palau[1]. They occur, though rarely, in the Cook Islands[2], and on Rapa they are considered a survival of an original type older than the prevalent Tahitian pattern[3]. The New Zealand paddle had similar outlines, but the section of the blade was plano-convex[4]. Narrow and shouldered blades we meet on Tikopia, Sikaiana, Ellice Islands and Niue[5], whereas short and broad blades are used in Samoa, Fiji and the central and eastern groups such as the Cook and Society Islands, Hawaii, Marquesas, Tuamotus, Mangareva and Easter Island[6]. Thus, the long and narrow blade seems to be primarily a western element, but the occurrence of related forms on Rapa and New Zealand suggests that it is actually older than the broad type, which may have originated in the Society group and thence spread radially.

Our information about the original Rennellese house is so meagre that very little can be said of its details. Rectangular dwellings with a straight ridge are found on most Polynesian and Polynesian-influenced islands[7]. Besides, they are common in the Gilbert and Marshall groups, on many of the Carolines, in the Marianas and to some extent in Melanesia[8]. The use of a king post for supporting the roof and resting on a tie beam between the wall posts is, when modern European influence is left out of consideration, distinctive of western Polynesia[9], but as far as is known it did not occur on Rennell, no more than rounded gable ends supported by parallel or arched purlins, which are likewise western traits[10]. Obviously we have in both cases elaborations of a more primitive type without a king post and with a simple

[1] Burrows 1937, p. 114. Burrows 1936, fig. 11. Haddon & Hornell 1936—38, I fig. 126, 254, 280, 299, 311.
[2] Te Rangi Hiroa 1944, p. 190 ff.
[3] Haddon & Hornell 1936—38, I p. 150.
[4] Haddon & Hornell 1936—38, I fig. 145.
[5] Haddon & Hornell 1936—38, I fig. 196, 206, II fig. 34, 48.
[6] Haddon & Hornell 1936—38, I fig. 11, 30, 37, 56, 65. Métraux 1940, fig. 18.
[7] Tikopia, Ellice I., Tokelau, Tonga (sometimes), Fiji, Tongareva, Manihiki-Rakahanga, Cook I. Society I. Hawaii, New Zealand (Tischner 1934, p. 125 ff.)
[8] Tischner 1934, p. 117 f.
[9] Burrows 1938, p. 29 ff.
[10] Burrows 1938, p. 33.

ground plan[1], in other words more or less like the Rennellese house. The use of separate sheds for cooking is common in both Polynesia and Micronesia[2].

Plaited mats are universal not only in Polynesia[3] but also in Micronesia[4] and must certainly belong to the oldest elements in Oceania. The techniques will be discussed later (p. 182 f).

Quite different from the plaited mats are those made of parallel pandanus strips stitched or sewn together. GRAEBNER includes them in his Melanesian Bow Culture, and their principal distribution is, in fact, to be found in the Melanesian area, where they occur from Bougainville Strait as far west as Geelvink Bay in New Guinea and even on Ceram, whereas they are absent in the New Hebrides and New Caledonia[5]. They are not rare in Micronesia, especially in the Carolines[6]. In Polynesia their distribution

[1] BURROWS 1944, p. 100 ff. TE RANGI HIROA 1944, p. 420, 423 f.

[2] TISCHNER 1934, p. 230.

[3] Tikopia (FIRTH 1939, p. 250). Lord Howe and Tasman I. (SARFERT & DAMM 1929, p. 170). Kapingamarangi (EILERS 1934, p. 100 ff. TE RANGI HIROA 1950, p. 105 ff). Uvea (VIALA 1919, p. 262. BURROWS 1937, p. 121, 125). Tokelau (QUIRÓS 1904, I p. 215. WILKES 1844, V p. 17. HALE 1846, p. 159. MACGREGOR 1937, p. 124). Niue (SMITH 1902—03, XI p. 216). Tonga (COOK 1777, I p. 214. G. FORSTER 1777, I p. 454. J. R. FORSTER 1778, p. 449, COOK & KING 1785, I p. 391. LABILLARDIÈRE, an viii, II p. 100. MARTIN 1818, I p. 153 footnote. WEST 1865, p. 46). Lau (THOMPSON 1940, p. 201). Rotuma (DILLON 1829, II p. 96. GARDINER 1898, p. 412, 418 f. ALLEN 1895, p. 574. EASON 1951, p. 25). Fiji (WILLIAMS & CALVERT 1858, I p. 67 f). Samoa (WILKES 1844, II p. 150. TURNER 1884, p. 119 f. ERSKINE 1853, p. 109. STAIR 1897, p. 109, 143 ff. KRÄMER 1092—03, II p. 293. TE RANGI HIROA 1930, p. 214 ff.) Tongareva (TE RANGI HIROA 1932 a, p. 129). Pukapuka (BEAGLEHOLE 1938, p. 128 ff). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 126). Cook I. (TE RANGI HIROA 1944, p. 53 ff). Tubuai (AITKEN 1930, p. 73 f). Society I. (HAWKESWORTH 1773, II p. 217. BANKS 1896, p. 132, 153. CORNEY 1913—19, II p. 83, 279. ELLIS 1831, I p. 186. MOERENHOUT 1837, II p. 88. HANDY 1927, p. 66 ff). Hawaii (COOK & KING 1785, II p. 238, III p. 149. LISIANSKY 1814, p. 126. MALO 1903, p. 75. ARNING 1931, p. 20. HANDY ets. 1933, p. 127. BISHOP 1940, p. 19 f). Marquesas (LINTON 1923, p. 381 f. HANDY 1923, p. 163. ROLLIN 1929, p. 115). Tuamotu (CORNEY 1913—19, I p. 295). Mangareva (BEECHEY 1831, I p. 193. LAVAL 1938, p. 277. TE RANGI HIROA 1938 a, p. 243, 246 ff). Easter I.? (cf. THOMPSON 1891, p. 468). New Zealand (DUMONT D'URVILLE 1830—33, II p. 499 f. BEST 1924, II p. 525).

[4] Gilbert I. (WILKES 1844, V p. 99 f. FINSCH 1893, p. 331 f). Nauru (BRANDEIS 1907, p. 58). Marshall I. (FINSCH 1893, p. 409. ERDLAND 1914, p. 33. KRÄMER & NEVERMANN 1938, p. 154 f). Carolines (CHRISTIAN 1899 a, p. 292. CHRISTIAN 1899 b, p. 127. FINSCH 1893, p. 469, 577. KUBARY 1895, p. 64. EILERS 1934, p. 392, 442 f. KRÄMER 1935, 178. KRÄMER 1937, p. 244, 339. GIRSCHNER 1912, p. 157. DAMM 1935, 78. MERTENS 1836, p. 221. EILERS 1935—36, I p. 136 f. II p. 174). Yap (MÜLLER 1927, p. 104 f). Palau (KUBARY 1895, p. 209 ff). Marianas (THOMPSON 1945, p. 40).

[5] GRAEBNER 1905, p. 41 ff. GRAEBNER 1909 a, p. 765.

[6] Marshall I. (KRÄMER & NEVERMANN 1938, p. 149). Carolines (FINSCH 1893, p. 469, 515. SARFERT 1919—20, p. 154. CHRISTIAN 1899 a, p. 292. HAMBRUCH & EILERS 1936, p. 377 f. EILERS 1934, 392 f, 443.

seems to be restricted to the "outliers"—Lord Howe, Tasman and Mortlock Islands—and the semi-Polynesian Fiji[1], but it should be noted that a somewhat similar technique occurs on Easter Island[2]. There is thus every reason for supposing that on Rennell this type is due to Melanesian influence.

Flat baskets made of coconut fronds in simple diagonal checker weave are probably used in Polynesia wherever proper material is available[3]. In most cases where I have no information, as for instance from Tonga and Hawaii, I suspect that the reason is my rather limited access to museum collections and literary sources. We find the same kind of basket throughout Micronesia[4], and it is beyond doubt an old element in Oceania.

I am not quite certain as regards the procedure in weaving the finer baskets, although it is apparent that diagonal twill is employed. It is therefore with some hesitation that I identify them with those from Lord Howe and Tasman, Uvea, Futuna, Ellice Islands and Tokelau[5] and possibly also with certain baskets from Niue, Samoa, Tongareva, Cook, Austral and Society Islands as well as from Hawaii and Easter Island[6]. If this view is correct, their wide distribution must indicate a rather considerable age in Polynesia, but for the present I prefer to leave the question of their affinities unanswered.

[1] Sarfert & Damm 1929, p. 168. Wilkes 1844, III p. 358.

[2] Métraux 1940, p. 210.

[3] Tikopia? (cf. Firth 1939, p. 81). Lord Howe and Tasman I. (Sarfert & Damm 1929, p. 171). Kapingamarangi (Te Rangi Hiroa 1950, p. 84 ff). Uvea (Burrows 1937, p. 123 f). Futuna (Burrows 1936, p. 178 f). Ellice I. (Hedley 1897, p. 290 f). Tokelau (Macgregor 1937, p. 136). Niue (Smith 1902—03, XI p. 216). Lau (Thompson 1940, p. 193). Rotuma (Gardiner 1898, p. 417 f). Samoa (Krämer 1902—03, II p. 294. Te Rangi Hiroa 1930, p. 189). Tongareva (Te Rangi Hiroa 1932 a, p. 130 f). Pukapuka (Beaglehole 1938, p. 135 ff). Rakahanga, imported ? (Te Rangi Hiroa 1932 b, p. 123). Cook I. (Te Rangi Hiroa 1944, p. 51). Tubuai (Aitken 1930, p. 75). Society I. (Hawkesworth 1773, II p. 217. Banks 1896, p. 153. Bille 1851, pl. p. 266. Handy 1927, pl. iii—iv). Marquesas (Linton 1923, p. 383. Rollin 1929, p. 115). Mangareva, recently introduced (Te Rangi Hiroa 1938 a, p. 247).

[4] Gilbert I. (Finsch 1893 p. 332 f). Marshall I. (Finsch 1893 p. 409. Krämer & Nevermann 1938 p. 133). Carolines (Christian 1899 a p. 293. Christian 1899 b, p. 128. Finsch 1893, p. 515 f. Hambruch & Eilers 1936, p. 373. Eilers 1934, p. 350, 443 f. Eilers 1935—36, I p. 137 ff, II p. 174). Yap (Müller 1917, p. 106). Palau (Krämer 1926, pl. 21).

[5] Sarfert & Damm 1929, p. 171. Burrows 1937, p. 124. Burrows 1936, p. 179 f. Hedley 1897, p. 291. Macgregor 1937, p. 137.

[6] Smith 1902—03, XI p. 216. Te Rangi Hiroa 1930, p. 198 ff. Te Rangi Hiroa 1932 a, p. 135 f. Te Rangi Hiroa 1944, p. 52. Aitken 1930, p. 75. Handy 1937, pl. vi. Bishop 1940, p. 21. Métraux 1940, p. 211 f.

Wooden bowls of some kind or other are practically universal in Polynesia, but the Rennellese type, which is oval with short, horizontal lugs projecting from the pointed ends, seems to be a western form, which occurs also on Lord Howe and Tasman Islands, Uvea, Futuna, Ellice Islands and Tokelau[1]. In the Copenhagen Museum there are some round specimens with similar lugs from Samoa and a very large, oval bowl with phallus-shaped projections from Santa Cruz.

The coconut-shell cup is so simple and easily made that TE RANGI HIROA is undoubtedly right in ascribing it to the original Polynesian culture[2]. It is, in fact, recorded from nearly everywhere in Oceania where the material is at hand. I confine myself to some quotations illustrating its wide distribution in Polynesia[3] and Micronesia[4], but by means of adequate museum material it might probably be somewhat extended.

Water bottles made of a whole coconut shell have a similar universal distribution in Polynesia[5] and, at least in its eastern

[1] SARFERT & DAMM 1929, p. 141. BURROWS 1937, p. 96 f. BURROWS 1936, p. 136. HEDLEY 1897, p. 298. MACGREGOR 1937, p. 147.

[2] TE RANGI HIROA 1944, p. 414.

[3] Mortlock I. (FINSCH 1893, p. 568). Kapingamarangi and Nukuoro (EILERS 1934, p. 123, 264. TE RANGI HIROA 1950, p. 17). Uvea (BURROWS 1937, p. 100). Futuna (BURROWS 1936, p. 201). Tokelau (MACGREGOR 1937, p. 146). Niue (SMITH 1902—03, XI p. 96). Tonga (COOK 1777, I p. 214. COOK & KING 1785, I p. 394). Lau (THOMPSON 1940, p. 192). Fiji (WILLIAMS & CALVERT 1858, I p. 143). Samoa (STAIR 1897, p. 113. KRÄMER 1902—03, II p. 209. TE RANGI HIROA 1930, p. 104 f). Tongareva (TE RANGI HIROA 1932 a, p. 102). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 86). Cook I. (TE RANGI HIROA 1944, p. 29). Tubuai (AITKEN 1930, p. 38). Society I. (HAWKESWORTH 1773, III p. 96 f. ELLIS 1831, I p. 192). Marquesas (KRUSENSTERN 1811—12, I p. 232. LANGSDORFF 1812, I p. 149. LINTON 1923, p. 355. HANDY 1923, p. 66. VON DEN STEINEN 1925—28, II p. 47. ROLLIN 1929, p. 151). Tuamotu (HAWKESWORTH 1773, I p. 101, 106). Mangareva (BEECHEY 1831, I p. 194).

[4] Gilbert I. (FINSCH 1893, p. 327). Nauru (BRANDEIS 1907, p. 58. HAMBRUCH 1914—15, p. 62 f). Marshall I. (KRÄMER & NEVERMANN 1938, p. 132). Carolines (CHRISTIAN 1899 a, p. 293. CHRISTIAN 1899 b, p. 129. FINSCH 1893, p. 568. GIRSCHNER 1912, p. 144. KRÄMER 1937, p. 64, 231. DAMM 1935, p. 64. EILERS 1935—36, I p. 402). Palau (KUBARY 1895, p. 205). Maty I. (HAMBRUCH 1908, p. 104).

[5] Tikopia (RIVERS 1914, I p. 333. FIRTH 1936, p. 80). Lord Howe and Tasman I. (SARFERT & DAMM 1929, p. 141). Kapingamarangi (EILERS 1934, p. 125. TE RANGI HIROA 1950, p. 16). Uvea (BURROWS 1937, p. 123). Ellice I. (HEDLEY 1897, p. 295). Tokelau (MACGREGOR 1937, p. 124, 147). Niue (SMITH 1902—03, XI p. 96). Tonga (MARTIN 1818, II p. 181 footnote), Lau (THOMPSON 1940, p. 207). Samoa (WILKES 1844, II p. 154. KRÄMER 1902—03, II p. 129. TE RANGI HIROA 1930, p. 105). Tongareva (TE RANGI HIROA 1932 a, p. 102). Pukapuka (BEAGLEHOLE 1938, p. 124). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 86). Cook I. (TE RANGI HIROA 1944, p. 29). Tubuai (AITKEN 1930, p. 38). Society I. (ELLIS 1831, I p. 191). Hawaii (BISHOP 1940, p. 14). Marquesas (LINTON 1923, p. 356.

parts, in Micronesia[1]. It is likewise found in several places in Melanesia: to mention but a few examples, there are in the Copenhagen Museum specimens from the Solomons, New Ireland and New Guinea. Thus we may, like TE RANGI HIROA[2], consider the water bottle an old Polynesian element.

It was mentioned in one of the earlier chapters (p. 55) that a cylindrical wooden box with a loose lid may possibly belong to the original Rennellese culture. It seems to be a common western type, although in two cases (Uvea and Manihiki-Rakahanga) it is stated to be rceently introduced from the Tokelau group[3]. In the Copenhagen Museum there is a specimen of the same kind from the Solomons. The western distribution agrees with GRAEBNER's view that it is a late Polynesian type[4].

Curved, triangular spoons made of pearl or coconut shell can scarcely be distinguished from simple coconut scrapers except for the fact that the latter often have a serrated edge. Most probably both types must be considered identical implements. In Polynesia they are of sporadic occurrence and mainly confined to the marginal areas, being otherwise replaced by the more elaborate and later tripod or stool-shaped scrapers. TE RANGI HIROA mentions them from Hawaii, Tongareva, Manihiki-Rakahanga and Mangareva[5]. Besides they are known from the Ellice Islands and, for scraping taro, from Tubuai[6]. On Futuna there is "a kind of scoop or chisel ... made by cutting off a piece of the protruding angle of a green husk", which BURROWS considers post-European[7] and which possibly has replaced an earlier implement. From Tonga LABILLARDIÈRE pictures a coconut scraper of shell attached

VON DEN STEINEN 1925—28, II p. 47. ROLLIN 1929, p. 151). Mangareva (TE RANGI HIROA 1938 a, p. 217).

[1] Gilbert I. (FINSCH 1893, p. 328). Nauru (BRANDEIS 1907, p. 74. HAMBRUCH 1914—15, p. 62). Marshall I. (FINSCH 1893, p. 407. KRÄMER & NEVERMANN 1938, p. 131). Carolines (HAMBRUCH & EILERS 1936, p. 363. LUTKÉ 1835—36, atlas pl. 29. KUBARY 1895, p. 56. KRÄMER 1932, p. 124. KRÄMER 1935, p. 48. KRÄMER 1937, p. 231. DAMM 1935, p. 64 f).

[2] TE RANGI HIROA 1944, p. 414.

[3] Lord Howe and Tasman I. (SARFERT & DAMM 1929, fig. 84—88). Uvea (BURROWS 1937, p. 109, 171. VIALA 1919, p. 265). Ellice I. (HEDLEY 1897, p. 296 f). Tokelau (MACGREGOR 1937, p. 124, 157). Samoa (Edge-PARTINGTON 1890—98, II pl. 44). Manihiki-Rakahanga (TE RANGI HIROA 1930 b, p. 83).

[4] GRAEBNER 1909 a, p. 749.

[5] TE RANGI HIROA 1944, p. 415.

[6] HEDLEY 1897, p. 264. EDGE-PARTINGTON 1890—98, III pl. 49. AITKEN 1930, p. 39.

[7] BURROWS 1936, p. 140.

to a simple wooden shaft[1], thus resembling the afore-mentioned hafted iron specimen observed on Rennell (cf. p. 81). Spoon-shaped scrapers are also recorded from a few places in Micronesia, viz. Nauru, Nukuoro, Oleai and Palau[2], and a similar implement made of turtle shell is known from Yap and the Maty Islands[3]. In Melanesia we find coconut and pearl-shell spoons widespread as far east as the New Hebrides, whereas they are lacking on Fiji and New Caledonia, for which reason GRAEBNER includes them in his Melanesian Bow Culture[4]. I believe, therefore, that we are dealing here with an Oceanic type of considerable age, but more or less supplanted by later forms.

One of the latter, viz. the tripod coconut scraper, we meet again in our discussion of the remarkable three-legged head rest. This seems to be a local Rennellese type, since all other Polynesian head rests to my knowledge have either two or four legs in so far as they are not, as sometimes for instance on Uvea, a simple block of wood. Only on Futuna do we find a somewhat similar form with one vertical and one slanting leg[5]. I do not consider it a quite groundless supposition, however, that the Rennellese type has some sort af connection with the tripod coconut scraper, just as the stool scrapers may be related to both other types of head rests and to seats. Tripod scrapers occur on Tonga, Samoa, Mangaia and Tuamotu[6] as well as on several Micronesian islands and even in Indonesia[7]. For the present the problem must be left unsolved.

Men's breech cloths were nearly universal in Polynesia, whether they were made of tapa, which was by far the most common, of fine matting or, as on some of the "outliers", of woven material[8]. In Micronesia they occur in the Carolines and

[1] LABILLARDIÈRE, an viii, II p. 129.

[2] HAMBRUCH 1914—15, p. 63. EILERS 1934, p. 265. KRÄMER 1937, p. 231. KUBARY 1895, p. 196.

[3] MÜLLER 1927, p. 69. Specimen in the National Museum, Copenhagen.

[4] GRAEBNER 1905, p. 41 ff.

[5] BURROWS 1936, p. 176, cf. fig. 9 f.

[6] TE RANGI HIROA 1944, p. 415.

[7] Nauru, Gilbert I., Marshall I., southern Borneo, Java, Nias (FOY 1904, p. 140).

[8] Tikopia (RIVERS 1914, I p. 348. FIRTH 1947, p. 71). Lord Howe and Tasman I. (PARKINSON 1907, p. 544. SARFERT & DAMM 1929, p. 91 f). Kapingamarangi (EILERS 1934, p. 117 f. TE RANGI HIROA 1950, p. 147 f). Futuna (BURROWS 1936, p. 193). Ellice I. (HALE 1846, p. 162. HEDLEY 1897, p. 240). Tokelau (HALE 1846,

on Yap, but as far as Palau is concerned, KRÄMER questions their place in the original culture[1]. The wide distribution indicates a very considerable age in Oceania. TE RANGI HIROA has arrived at the same conclusion[2].

What has been said of the breech cloth applies to a great extent also to the women's skirt, which is nearly as widespread[3]. In Micronesia, where it is often made of matting, we find the skirt in some places[4] but not as common as a garment made of loose-hanging fibres or narrow strips of leaves. On p. 33 it was mentioned that Sir HARRY LUKE records the latter from Rennell, but at the same time some doubt was expressed as to the accuracy

p. 150. LISTER 1891, p. 56. MACGREGOR 1937, p. 141). Niue (TURNER 1884, p. 305. SMITH 1902—03, XI p. 213. THOMSON 1901, p. 145. LOEB 1926, p. 93). Tonga (COOK & KING 1785, I p. 388. SKOGMAN 1851—53, II p. 29). Rotuma (GARDINER 1898, p. 411). Fiji (DUMONT D'URVILLE 1841—46, IV p. 248. WILLIAMS & CALVERT 1858, I p. 156). Samoa (STAIR 1897, p. 114). Tongareva (WILKES 1844, IV, p. 296. TE RANGI HIROA 1932 a, p. 139). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 136). Pukapuka (BEAGLEHOLE 1938, p. 147). Cook I. (COOK & KING 1785, I p. 194, 210. TE RANGI HIROA 1934, p. 143. TE RANGI HIROA 1944, p. 64). Austral I. (COOK & KING 1785, II p. 6. AITKEN 1930, p. 46). Society I. (HAWKESWORTH 1773, II p. 192. BANKS 1896, p. 131. CORNEY 1913—19, I p. 331. WILSON etc. 1799, p. 328. TURNBULL 1805, I p. 132. ELLIS 1831, I p. 178. HENRY 1928, p. 285. HANDY 1930, p. 10). Hawaii (COOK & KING 1785, III p. 136. DIXON 1789, p. 270. BILLE 1851, p. 17. BISHOP 1940, p. 35). Marquesas (COOK 1777, I p. 309. FLEURIEU, an vi, p. 154. WILSON etc. 1799, p. 145. KRUSENSTERN 1811—12, I p. 223. LINTON 1923, p. 416. HANDY 1923, p. 280. VON DEN STEINEN 1925—28, II p. 5). Tuamotu (CORNEY 1913—19, I p. 289, II p. 37. BEECHEY 1831, I p. 200. FRIEDERICI 1911, p. 152). Mangareva (LAVAL 1938, p. 208. TE RANGI HIROA 1938 a, p. 253). Easter I. ? (cf. GEISELER 1883, p. 34. MÉTRAUX 1940, p. 217).

[1] Carolines (CHRISTIAN 1899 a, p. 289. CHRISTIAN 1899 b, p. 112. SKOGMAN 1851—53, II p. 54. HAMBRUCH & EILERS 1936, p. 280. SARFERT 1919—20, p. 87. LUTKÉ 1835—36, II p. 67. GIRSCHNER 1912, p. 131. EILERS 1934, p. 432. KRÄMER 1935, p. 31, 142. KRÄMER 1932, p. 91. KRÄMER 1937, p. 34, 221. KUBARY 1895, p. 91. EILERS 1935—36, I p. 117, 274, II o. 140, 221). Yap (MÜLLER 1917, p. 15). Palau (KRÄMER 1926, p. 2).

[2] TE RANGI HIROA 1944, p. 431.

[3] Tikopia (RIVERS 1914, I p. 348. FIRTH 1947, p. 71). Lord Howe and Tasman I. (SARFERT & DAMM 1929, p. 92. PARKINSON 1907, p. 544). Uvea (VIALA 1919, p. 243). Futuna (BURROWS 1936, p. 192). Tonga (FORSTER 1777, I p. 434). Samoa (STAIR 1897, p. 115. TE RANGI HIROA 1930, p. 312). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 134 f). Cook I. (TE RANGI HIROA 1944, p. 64. TE RANGI HIROA 1934, p. 143). Tubuai (AITKEN 1930, p. 46). Society I. (HAWKESWORTH 1773, II p. 192. BANKS 1896, p. 131. CORNEY 1913—19, I p. 331. WILSON etc. 1799, p. 328 f. TURNBULL 1805, I p. 131. ELLIS 1831, I p. 178). Hawaii (COOK & KING 1785, II p. 196, III p. 138. BISHOP 1940, p. 35). Marquesas (COOK 1777, I p. 309. FORSTER 1777, II p. 25. FLEURIEU, an vi, p. 169. LISIANSKY 1814, p. 86. LINTON 1923, p. 416. HANDY 1923, p. 281). Tuamotu (CORNEY 1913—19, II p. 37. WILKES 1844, I p. 327. FRIEDERICI 1911, p. 152). Mangareva (BEECHEY1831, I p. 174. TE RANGI HIROA 1938 a, p. 253). Easter I. ? (cf. GEISELER 1883, p. 34).

[4] Marshall I. (ERDLAND 1914, p. 25). Carolines (KRÄMER 1935, p. 32. GIRSCHNER 1912, p. 131).

of this statement. Nevertheless it must be admitted that this type actually does occur in several parts of western Polynesia[1] and still more generally in Micronesia[2], although often as a man's garment. This would go to show that contrary to the opinion set forth by TE RANGI HIROA[3] it does not belong to the original Polynesian culture but was borrowed from some Micronesian or Melanesian source. It is doubtless old in Melanesia where, according to SPEISER, it belongs to the pre-Austronesian culture[4].

The turban or head cloth is common on numerous Polynesian islands. Often it is worn on special occasions, for instance at ceremonies, in war or, as in Tonga, during work in the gardens and on fishing expeditions to protect the head against the sun, while on Fiji it belonged to the chief's costume[5]. It is not unlikely that it was still more widespread in early times.

Polynesian ear ornaments are too varied to be discussed here in detail, the more so since in many cases we are ignorant of their original appearance. Rings of turtle or coconut shell were worn for instance on the Tasman and Tokelau Islands and on Pukapuka, on many of the Carolines, and on Yap[6]. It should be noticed that our quotations refer to western Polynesia and Micronesia only, but as it is quite likely that similar ornaments occurred in other places as well, too much weight should not be attached

[1] Uvea (BURROWS 1937, p. 134, 136). Ellice I. (HALE 1846, p. 165. HEDLEY 1897, p. 242). Tokelau (HALE 1846, p. 159. LISTER 1891, p. 56. MACGREGOR 1937, p. 142). Niue (THOMPSON 1901, p. 145). Tonga (cf. TASMAN & VISSCHER 1919, p. 67, 71 figg.). Fiji (WILKES 1844, III p. 375). Samoa (WILKES 1844, II p. 70 cf. 147. ERSKINE 1953, p. 41. TURNER 1884, p. 118. STAIR 1897, p. 114 f. TE RANGI HIROA 1930, p. 249 ff, 259 ff). Pukapuka (BEAGLEHOLE 1938, p. 147).

[2] Gilbert I. (PARKINSON 1889, p. 97). Marshall I. (ERDLAND 1914, p. 23). Carolines (LUTKÉ 1835—36, II p. 25. SKOGMAN 1851—53, II p. 54. KRÄMER 1937, p. 221, 320. EILERS 1935—36, I p. 274, II p. 221). Palau (KRÄMER 1926, p. 2 ff).

[3] TE RANGI HIROA 1944, p. 431.

[4] SPEISER 1933 b, p. 191. SPEISER 1935, p. 140 ff. SPEISER 1946, p. 22.

[5] Uvea (VIALA 1919, p. 251. BURROWS 1937, p. 136). Futuna (BURROWS 1936, p. 193). Tonga (MARTIN 1818, I p. 157 f). Fiji (WILKES 1844, III p. 49, 80. WILLIAMS & CALVERT 1858, I p. 67, 156 f). Samoa (TE RANGI HIROA 1930, p. 615). Cook I. (COOK & KING 1785, I p. 171. TE RANGI HIROA 1944, p. 79). Tubuai (AITKEN 1930, p. 72). Society I. (HAWKESWORTH 1773, II p. 193. COOK 1777, I p. 321. CORNEY 1913—19, II p. 83. WILSON etc. 1799, p. 329. MOERENHOUT 1837, II p. 35. HENRY 1928, p. 286). Hawaii (HANDY etc. 1933, p. 232). Marquesas (HANDY 1923, p. 286. ROLLIN 1929, p. 130). Tuamotu (FRIEDERICI 1911, p. 152). Mangareva (WILSON etc. 1799, p. 115. BEECHEY 1831, I p. 174. TE RANGI HIROA 1938 a, p. 171).

[6] PARKINSON 1907, p. 543. MACGREGOR 1937, p. 143. BEAGLEHOLE 1938, p. 155. CHRISTIAN 1899 b, p. 123. GIRSCHNER 1912, p. 130. BOLLIG 1927, p. 172 f. MÜLLER 1927, p. 24.

to this circumstance. As to the wooden ear slabs of the Rennellese I know but a single parallel, viz. the shell plates from Tasman Islands[1]. So much seems certain, at least, that they are not a common Polynesian type. Equally rare are Polynesian nose ornaments, whereas they are extremely common in Melanesia. An elaborately carved nose ornanent of turtle shell occurred on Lord Howe and Tasman Islands, in the latter place worn by the priests[2], and it may be surmised that nose ornaments were found on other of the "outliers", too, but apparently they are here a Melanesian rather than a Polynesian element. The same is probably true of the plaited arm rings, which occur also on Lord Howe and Tasman Islands[3], and in many parts of Melanesia including the Solomons.

Necklaces made of teeth of the flying fox and, as on Rennell, highly valued as "money", are to my knowledge found only on Santa Ana, one of the small islands off the southeastern tip of San Cristoval, as well as on Bougainville, Buka, Carteret Islands and Nissan in the northern Solomons[4]. Nissan was formerly a Polynesian outlier (cf. p. 138), but the use of tooth money is, as is money on the whole, entirely un-Polynesian, as it may be expected in a society where prestige depends on descent more than on wealth. On the other hand teeth of dogs, marsupials, and boars are highly estimated as standards of value in many parts of Melanesia[5]. The Melanesian origin of this element is therefore obvious.

Small sitting mats as an accessory to the costume are worn on Lord Howe, Tasman and Kapingamarangi by the priests and by pregnant women[6], and by the women on Kusae[7]. It is consequently difficult to decide whether they originally belong to the Polynesian outliers and spread thence to Micronesia, or vice-versa.

Fans are very common in many parts of Oceania and extremely varying both in shape and in workmanship. On Rennell only the simple, triangular type with a handle made of the midrib

[1] Parkinson 1907, p. 543.
[2] Parkinson 1907, p. 527. Woodford 1916, p. 34.
[3] Parkinson 1897, p. 138. Sarfert & Damm 1929, p. 90.
[4] Parkinson 1899, p. 22. Parkinson 1907, p. 494. Krause 1907, p. 154. Bernatzik 1936, p. 49.
[5] Petri 1936, p. 542 ff.
[6] Sarfert & Damm 1929, p. 94. Te Rangi Hiroa 1950, p. 95.
[7] Sarfert 1919—20. p. 88.

of the frond seems to occur and was especially carried by the chiefs. On Tasman Island fans were specific to the priests[1]. Simple triangular fans are moreover known from Fiji, Rotuma, Samoa, Pukapuka, Cook Islands, Hawaii and Marquesas[2]. Fire fans of similar type are common on the Carolines and on Yap[3]. They are also found in some parts of Melanesia; there are, for instance, specimens in the Copenhagen Museum from New Britain, Banks Islands, and the New Hebrides. With good reason TE RANGI HIROA classed the simple fan among the oldest Polynesian elements[4].

GRAEBNER included the composite comb within his specific Polynesian Culture[5], but his view is probably open to doubt not only because composite combs are found in Melanesia too, but also because they are absent in several parts of Polynesia, being replaced in New Zealand and some other islands by combs carved of one piece of wood or bone. Besides it is definitely stated that combs were originally lacking in the Society Islands and Mangareva[6], nor have I found evidence of combs for instance in the Marquesas and Easter Island. The Rennellese type with only a few prongs seems to belong to Micronesia, the northern Solomons and Fiji[7] and is thus most likely a western form. Combs made of one piece of wood are on Rennell introduced from the Solomons.

Shark teeth were used for shaving and hair cutting on many Polynesian islands[8], even if depilation by means of shell pincers

[1] PARKINSON 1897, p. 139.

[2] WILLIAMSON & CALVERT 1858, I p. 68 fig. EDGE-PARTINGTON 1890—98, I pl. 124. GARDINER 1898, p. 420. TE RANGI HIROA 1930, p. 633. BEAGLEHOLE 1938, p. 142 f. TE RANGI HIROA 1944, p. 56 ff. BRIGHAM 1903, p. 94, fig. 86. LINTON 1923, p. 384.

[3] HAMBRUCH & EILERS 1936, p. 377. EILERS 1934, p. 350. KRÄMER 1937, p. 43, EILERS 1935—36, II pl. 4. MÜLLER 1927, p. 108.

[4] TE RANGI HIROA 1944, p. 425 f.

[5] GRAEBNER 1905, p. 44 ff. In his later work (1909 a, p. 746) he realizes that it is found in the western sub-area only.

[6] HAWKESWORTH 1773, II 0. 189. TE RANGI HIROA 1938 a, p. 169. A comb in the National Museum, Copenhagen, said to be from the Society Islands, may be wrongly labelled.

[7] SARFERT 1919—20, p. 81 f. KRÄMER 1932, p. 98. KRÄMER 1935, p. 32 f, 256. KRÄMER 1937, p. 37. DAMM 1935, p. 31. KRÄMER 1926, p. 30 f. PARKINSON 1899, p. 21. DUMONT D'URVILLE 1841—46, IV p. 247.

[8] Tonga (MARTIN 1818, II p. 269). Rotuma (GARDINER 1898, p. 412). Samoa (TURNER 1884, p. 122). Society I. (WILSON etc. 1799, p. 343. ELLIS 1831, I p. 132). Marquesas (KRUSENSTERN 1811—12, I p. 232. LANGSDORFF 1812, I p. 151. LINTON 1923, p. 347. ROLLIN 1929, p. 105).

was equally common. On the Ellice and Tokelau Islands bleeding and incision, respectively, were performed with shark's teeth[1], and similar knives are mentioned from Hawaii, although their use is not stated[2]. It seems a reasonable supposition that they are an old Polynesian element.

Tattooing is as good as universal in Polynesia. Certainly it is absent on Kapingamarangi, Niue and Tongareva[3], it is somewhat doubtful on Tubuai[4], and on Tikopia and Easter Island it is said to have been copied from Rotuma and the Marquesas, respectively[5], but in these cases the original art was probably abandoned and, as far as the two latter places are concerned, re-introduced. That tattooing "accompanied the Polynesians into the Pacific from Indonesia" is also the opinion of Te Rangi Hiroa[6]. Even if the same thing may not hold good of the characteristic tattooing comb, its wide distribution nevertheless goes to show its great age in Oceania. Outside New Zealand, where the comb teeth were replaced by a chisel edge, we find it practically everywhere in Polynesia. It has been described so often that a few quotations will suffice[7]. In Micronesia a similar implement occurs[8], and we find it again on the Banks Islands, where it is probably due to Polynesian influence[9]. According to Rennellese tradition, the fish design was originally adopted from Tikopia, and actually it is well-known there[10]. Similar, though not identical fish designs have been illustrated from Lord Howe, Tasman, and Sikaiana[11].

[1] Hedley 1897, p. 299 f. Macgregor 1937, p. 39.

[2] Cook & King 1785, II p. 239. Cf. Te Rangi Hiroa 1943.

[3] Te Rangi Hiroa 1950, p. 278. Smith 1902—03, XI p. 208. Te Rangi Hiroa 1932 a, p. 144.

[4] Aitken 1930, p. 44.

[5] Firth 1939, p. 84. Geiseler 1883, p. 36.

[6] Te Rangi Hiroa 1944, p. 443.

[7] Tikopia (Firth 1936 b, p. 174). Lord Howe and Tasman I. (Sarfert & Damm 1929, p. 67 f). Uvea (Burrows 1937, p. 55). Futuna (Burrows 1936, p. 62). Ellice I. (Kennedy 1931, p. 299 f). Tokelau (Macgregor 1937, p. 143). Tonga (Cook & King 1785, I p. 387). Rotuma (Allen 1895, p. 575). Fiji (Wilkes 1844, III p. 376). Samoa (Te Rangi Hiroa 1930, p. 636 ff). Cook I. (Te Rangi Hiroa 1944, p. 128). Society I. (Hawkesworth 1773, I p. 482, II p. 189). Marquesas (Linton 1923, p. 417). Mangareva (Laval 1938, p. 236). Easter I. (Métraux 1940, p. 237 f).

[8] Gilbert I. (Krämer 1906, p. 348). Marshall I. (Krämer & Nevermann 1938, p. 91 f). Carolines (Hambruch & Eilers 1936, p. 270. Girschner 1912, p. 131. Finsch 1893, p. 602. Damm 1935, p. 30. Eilers 1935—36, I p. 105 f, 273. II p. 144, 223). Yap (Müller 1917, p. 32). Palau (Krämer 1926, p. 34).

[9] Speiser 1923, p. 192.

[10] Cf. Firth 1936 b, p. 177.

[11] Woodford 1916, p. 33, 45.

The custom of incision has been discussed at considerable length by SPEISER. Outside New Zealand it is said to be performed everywhere in Polynesia[1], a statement which is hardly correct, however, since it seems to be absent on Easter Island as well as on Lord Howe and Tasman Islands[2]. From Hawaii and the Marquesas our information is contradictory: some sources deny the occurrence[3], while it is testified by others[4]. Possibly it was not a general custom there, as is also the case on the Tuamotus[5]. On Vaititupu it was introduced rather recently from Samoa but is absent elsewhere in the Ellice group[6]. On Niue it was abandoned and replaced by a symbolic gesture[7]. On Fiji and the Lau Islands true circumcision and, more rarely, incision occurred[8]. Under the circumstances it is difficult to settle the question how widespread and general it was originally; anyhow there is no basis for considering it a specific Polynesian element as GRAEBNER does[9]. In Micronesia, incision was introduced to the Gilberts from Samoa and Tahiti[10] but is otherwise unknown, whereas circumcision occurs, though rarely, in some of the Carolines[11]. On the other hand incision is found in two well defined areas within Melanesia, one extending along the north coast of New Guinea to New Britain and New Ireland, New Hanover, St. Matthias and the Admiralty Islands, and another one including the southern New Hebrides and New Caledonia, whereas it is absent in the Solomons, the northern New Hebrides and the Banks, Santa Cruz, Torres and Loyalty Islands; though in many places suppressed by Islam and Christianity we also find incision among several Indonesian tribes[12]. One thing at least, appears clearly from this distribution, viz. that incision cannot have reached Rennell from the neighbouring Melanesian groups, nor is it likely that it arrived in Poly-

[1] SPEISER 1944, p. 14.
[2] SARFERT & DAMM 1929, p. 63. THOMSON 1891, p. 465.
[3] COOK & KING 1785, II p. 233. LISIANSKY 1814, p. 85 f.
[4] WILSON etc. 1799, p. 144. KRUSENSTERN 1811—12, I p. 222. LANGSDORFF 1812, I p. 136. MALO 1903, p. 127 f.
[5] MONTITON 1874, p. 491. FRIEDERICI 1911, p. 149.
[6] NEWELL 1895, p. 610. KENNEDY 1931, 242 footnote.
[7] THOMSON 1901, p. 140. SMITH 1902—03, XI p. 203. LOEB 1926, p. 71 f.
[8] WILLIAMS & CALVERT 1858, I p. 166. ALLEN 1895, p. 576. BREWSTER 1922, p. 181. EASON 1951, p. 6.
[9] GRAEBNER 1905, p. 47.
[10] KRÄMER 1906, p. 336.
[11] KRÄMER 1932, p. 251. KRÄMER 1937, p. 269, 360.
[12] FRIEDERICI 1913, p. 155. SPEISER 1944, p. 11 f, 18.

nesia from Micronesia. It seems more probable that SPEISER is right in assuming that it spread from Indonesia along the north coast of New Guinea to New Britain and thence both westwards to the Admiralty Islands and direct to the southern New Hebrides and further on to New Caledonia and Polynesia[1]. Whether here it belonged to a pre-Polynesian "Austro-Melanid" culture, as SPEISER thinks, depends on our standpoint to his view of Oceanic migrations on the whole (cf. p. 147).

Shell adzes are the most important tools on Rennell and occur over most of Polynesia, not only on the atolls but even on many volcanic islands where stone is easily available and actually used besides shell, e. g. Tonga, Rotuma, Samoa, Hawaii, etc.[2] Incidentally, this indicates a strong traditional preference for a rather unsuitable material, thus suggesting the priority of shell implements in Polynesia. Unfortunately I have not sufficient material at hand for a comparison between the Rennellese shell adzes and those from other Oceanic groups. On Christmas Island EMORY found archaeological specimens of a type described as "common in Micronesia and the Ellice Islands which appears as far east as Pukapuka and Tongareva. It is quite different from the Tongan shell adzes made from the thick hinge of the *Tridacna* and from the Tuamotuan shell adzes ground out in definite shapes"[3]. Judging from these remarks I am inclined, with every reserve, to class the crude Rennellese shell adze with the Micronesian-West Polynesian type. The attachment of the head to a toe-shaft with simple windings is typical of marginal Polynesia including Fiji (i. e. everywhere except the Tonga, Samoa, Society, Cook and Austral groups) and is also widespread in Micronesia and Melanesia, so that we are entitled to refer it to the earliest Polynesian period[4].

The round, polished stone adze presents one of the great problems in Polynesian ethnology. It occurs on Tonga and, though rarely, in the Society Islands, in New Zealand, where it

[1] SPEISER 1944, p. 14, 18. Cf. SPEISER 1933 b, p. 130. SPEISER 1935, p. 130.
[2] Cf. EMORY 1934, p. 23 f. GARDINER 1898, p. 460. TE RANGI HIROA 1930, p. 353 f. MALO 1903, p. 77. BISHOP 1940, p. 22. FLEURIEU, an vi, p. 190.
[3] EMORY 1934, p. 23 f.
[4] TE RANGI HIROA 1944, p. 443. Add to the list: Horne Islands or, possibly, Niuatobutabu and Tafahi (LARSEN 1941, p. 225 ff).

is especially common in the Otago district, on the Chatham Island and on Easter Island where, however, MÉTRAUX believes it is a local development of the quadrangular type[1]. In Micronesia, nearly 75 pct. of the stone adzes excavated on the Marianas by L. M. THOMPSON were round and only about 25 pct. were quadrangular[2]. That the round type is nearly universal in Melanesia outside certain parts of New Guinea needs hardly to be emphasized. Without attempting an explanation of its occurrence elsewhere in Polynesia I feel rather convinced that on Rennell it was borrowed, if not actually imported, from the Melanesian Solomons, where we find, indeed, exact parallels.

The typical drill in both Polynesia and Micronesia is the pump drill, but hand drills are recorded from several places[3] and must probably be an old form.

Bodkins or awls for making thatch sheets or mats are common in Polynesia[4] as well as in Micronesia[5]. There are minor differences in the shape, thus on Samoa they have a small barb, while on Palau they are provided with an eye, but principally they belong to the same and probably old type.

The history of the fire plough in Oceania has recently been analyzed by SPEISER and LAGERCRANTZ. It is universal in Polynesia including the "outliers" and in Micronesia, where, however, also the fire drill occurs, and besides it is predominant in most parts of the Melanesian islands, whereas it is somewhat doutful in Australia, being possibly introduced there in recent times by

[1] LINTON 1923, p. 325. HEINE-GELDERN 1932, p. 585. SKINNER 1923, p. 97. MÉTRAUX 1940, p. 277.

[2] THOMPSON 1932, p. 33.

[3] Tikopia ? (cf. FIRTH 1939, 79). Tokelau (MACGREGOR 1937, p. 156). Pukapuka (BEAGLEHOLE 1938, p. 167). Society I. (HAWKESWORTH 1773, II p. 219. BANKS 1896, p. 156). Marquesas (LINTON 1923, p. 347). New Zealand (COOK & KING 1785, I p. 160). Nauru (HAMBRUCH 1914—15, p. 78). Marshall I. (KRÄMER & NEVERMANN 1938, p. 144). Carolines (EILERS 1934, p. 245. KRÄMER 1935, p. 223. DAMM 1935, p. 73. EILERS 1935—36, I p. 148, 289, II p. 235). Pâlau (KRÄMER 1926, p. 109).

[4] Tasman I. (PARKINSON 1907, p. 541). Kapingamarangi (TE RANGI HIROA 1950, p. 65). Nukuoro (EILERS 1934, p. 249). Ellice I. (HEDLEY 1897, p. 292. KENNEDY 1931, p. 279). Tokelau (MACGREGOR 1937, p. 156). Samoa (TE RANGI HIROA 1930, p. 62). Tongareva (TE RANGI HIROA 1932 a, p. 95). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 76). Marquesas (LINTON 1923, p. 348). Mangareva (TE RANGI HIROA 1938 a, p. 237).

[5] Gilbert I. (FINSCH 1893, p. 334). Marshall I. (FINSCH 1893, p. 412. KRÄMER & NEVERMANN 1938l p. 148). Carolines (CHRISTIAN 1899 a, p. 295. CHRISTIAN 1899 b, p. 132. MATSUMURA 1918, p. 52 f. GIRSCHNER 1912, p. 159. EILERS 1934, p. 350 f, 392 f. DAMM 1935, p. 77. EILERS 1935—36, I p. 289, 405, II p. 187 f). Palau (KRÄMER 1926, p. 201).

Melanesian labourers[1]. Thus there is every reason to suppose that we are dealing with an old element in Oceania, but the particulars of its history are still obscure. GRAEBNER included it in his Polynesian Culture[2], but SPEISER and, subsequently, LAGERCRANTZ object to this view[3]. SPEISER believes that it came comparatively late to Micronesia from the east and thus cannot date from the period of proto-Polynesian settlement there. In New Guinea the fire plough was obviously introduced from the Melanesian islands, since it occurs mainly in the coastal regions, and in Melanesia, as rightly pointed out by LAGERCRANTZ, the westward "backwash" of the Polynesians cannot be responsible for the spread, because this movement never reached so far west as this would imply. He therefore joins the view of SPEISER, who considers the fire plough an element which was carried to Polynesia from the Melanesian islands by the "Austro-Melanid" migration and later adopted by the Polynesians. The difficulty is, however, that the existance of a pre-Polynesian, Austro-Melanid population is still highly hypothetical. If, on the other hand, we accept the view that one of the Polynesian migrations passed through Melanesia, the possibility exists that the fire plough followed this route from the west. Here, however, we face another difficulty, for in Indonesia it is recorded only from Mindanao, whereas otherwise simple fire drills and fire syringes are employed[4]. Still, it may be doubtful just how much weight we should attach to this fact. It stands to reason that the fire syringe is a very late invention that must have replaced older fire making implements, and again the drill may, though certainly a very old element, have been able to stand its ground because it is less tiring to work than the fire plough. To summarize: the whole problem is not yet ready for final solution, except for the obvious fact that the fire plough is old in Polynesia.

The earth oven has a still wider distribution than the fire plough. It is found not only throughout Polynesia, but also in Micronesia and in many parts of Melanesia and Australia, as

[1] SPEISER 1940—41, p. 254 f, 261. LAGERCRANTZ 1954, p. 29 ff, 66. Add to the list: Niue (SMITH 1902—03, XI p. 209). Pukapuka (BEAGLEHOLE 1938, p. 95).
[2] GRAEBNER 1905, p. 44 ff. GRAEBNER 1909 a, p. 746.
[3] SPEISER 1946, p. 40. Cf. SPEISER 1935, p. 153. LAGERCRANTZ 1954, p. 67.
[4] LAGERCRANTZ 1954, p. 15, 42 f.

well as on Tenimber and Timorlaut in eastern Indonesia[1]. GRAEBNER suggests that it belongs to his Moiety Culture (*Zweiklassenkultur*) in Oceania and was taken over by the proto-Polynesians when they gave up pottery making[2]. Be this how it may, there can be no doubt that the earth oven is one of the earliest elements in Polynesian culture[3].

Bark cloth is employed in so many parts of the world, and on so primitive stages, that it must be a very early acquisition in the history of human culture. In Polynesia it is prepared everywhere except in the colder regions of New Zealand and on some atolls where proper raw material is lacking, and is evidently, as in Melanesia[4], an old element. The reason why the Rennellese use *Ficus* bark like most Melanesians do[5], in stead of paper mulberry and breadfruit, is of course the fact that the latter trees do not—or until recently did not—grow on the island. In the main the methods of manufacture are the same throughout the area. In many places a shell is used for separating the inner and outer bark layer or for scraping[6], and the bark beater is as old and widespread as the fabric itself[7]. Minor regional differences in the shape of the beater were pointed out by BURROWS and TE RANGI HIROA, who showed, for instance, that the western beaters are comparatively short with flaring sides and coarse grooves[8]. Whereas the

[1] GRAEBNER 1913, p. 802 ff. FRIEDERICI 1913, p. 166. FRIEDERICI 1914 b, p. 6.
[2] GRAEBNER 1913, p. 805, 808 f.
[3] Cf. TE RANGI HIROA 1944, p. 414.
[4] SPEISER 1935, p. 153. BÜHLER 1936, p. 27. SPEISER 1946, p. 28.
[5] HAMBRUCH 1926, p. 16 f.
[6] Futuna ? (cf. BURROWS 1936, p. 187). Tokelau MACGREGOR 1937, p. 131). Tonga (FORSTER 1778, p. 145 ff). Fiji (ROTH 1934, p. 292). Samoa (TE RANGI HIROA 1930, p. 109 f). Cook I. (TE RANGI HIROA 1944, p. 68). Society I. (HAWKESWORTH 1773, II p. 211. BANKS 1896, p. 146). Hawaii (HANDY etc. 1933, p. 126). Marquesas (LINTON 1923, p. 411). Easter I., obsidian scraper (THOMSON 1891, p. 467).
[7] Tikopia (RIVERS 1914, I p. 329. FIRTH 1947, p. 71). Kapingamarangi (EILERS 1934, p. 138 ff. TE RANGI HIROA 1950, p. 145). Uvea (VIALA 1919, p. 263 f. BURROWS 1937, p. 131). Futuna (BURROWS 1936, p. 187). Tonga (MARTIN 1818, II p. 276). Fiji (WILLIAMS & CALVERT 1858, I p. 65. ROTH 1934, p. 292 f). Samoa (KRÄMER 1902—03, II p. 301. TE RANGI HIROA 1930, p. 288 ff). Cook I. (TE RANGI HIROA 1934, p. 143). Tubuai (AITKEN 1930, p. 64 f). Society I. (HAWKESWORTH 1773, II p. 212. FORSTER 1777, I p. 276. WILSON etc. 1799, p. 372). Hawaii (BRIGHAM 1940, p. 25). Marquesas (HANDY 1923, p. 162. LINTON 1923, p. 412. VON DEN STEINEN 1925—28, II p. 5. ROLLIN 1929, p. 119). Mangareva (TE RANGI HIROA 1938 a, p. 249 f). Easter I. (MÉTRAUX 1940, p. 213. THOMSON 1891, p. 467). New Zealand (TE RANGI HIROA 1944, p. 431).
[8] BURROWS 1938, p. 17. TE RANGI HIROA 1944, p. 429 ff.

most common form of the head is everywhere quadrangular our Rennellese specimens are almost round. On Fiji, Hawaii, and the Marquesas round heads occur besides the ordinary type, while on Kapingamarangi ovate heads are general. It is expressly stated that round beaters are used on Hawaii in the preliminary stages of preparation[1], so it is not improbable that it should be considered an especially early form. Retting by means of long soaking of the bast is characteristic of eastern Polynesia and is by Burrows considered a survival of the original method of manufacture on the ground that it also occurs in Indonesia[2]. It is not known in the western sub-area including Rennell, but whether this really means the abandonment of an original trait is, I believe, open to doubt. A primitive trait is, at any rate, the ignorance of joining several strips of bast into larger sheets. This is likewise true of Tikopia[3]. Otherwise the usual method of joining strips in the western sub-area is pasting, while on the central and marginal islands felting is employed[4]. The Rennellese method of turmeric dyeing is also remarkably old-fashioned, neither stamping nor tablet rubbing being known, but only dipping in an infusion of the dye-stuff and simple rubbing as on Tikopia[5]. Also on Futuna "turmeric is often smeared over the entire surface of a bark-cloth turban"[6]. The primitive turmeric grater consisting of a stick wound with a string is recorded from Samoa and Rotuma[7] and may occur elsewhere, too.

Both diagonal checker and diagonal twilled work are fundamental methods in Polynesian basketry. The list given below includes both techniques unless otherwise stated[8]. It can probably

[1] Handy etc. 1933, p. 127.
[2] Burrows 1938, p. 18 f, 106.
[3] Firth 1947, p. 70.
[4] Burrows 1938, p. 19 f.
[5] Firth 1947, p. 71.
[6] Burrows 1936, p. 189.
[7] Krämer 1902—03, II p. 277. Te Rangi Hiroa 1930, p. 299 f. Gardiner 1898, p. 413.
[8] Tikopia, check (spec. in the British Museum). Lord Howe and Tasman I. check (Sarfert & Damm 1929, p. 171). Kapingamarangi (Te Rangi Hiroa, p. 84 ff, 96 ff. Eilers 1934, fig. 68). Nukuoro (Eilers 1934, p. 236, 255). Uvea (Burrows 1937, p. 127). Futuna (Burrows 1936, p. 177 f). Ellice I., check (Hedley 1897, 291 fig. 52). Tokelau (Macgregor 1937, p. 131 ff, 137). Tonga, twill (spec. in the National Museum, Copenhagen). Lau (Thompson 1940, p. 201). Samoa (Krämer 1902—03, II fig. 25. Te Rangi Hiroa 1930, p. 198 ff). Tongareva (Te Rangi Hiroa 1932 a, p. 129 ff). Manihiki-Rakahanga (Te Rangi Hiroa 1932 b,

be taken for granted that the apparent gaps in the distribution are due to lack of information and that accordingly the techniques in question should be classed with the oldest elements in Polynesia. This is corroborated by their correspondingly wide distribution in Micronesia[1].

STOLPE says of the decorative art in the Tonga-Samoa region that "the constituent elements in this ornamentation are the straight line and the zig-zag line, including its variety—the toothed line"[2]. Exactly the same is true of Rennellese art, which, in fact, is still more primitive than that of Tonga and Samoa, where variety of the general pattern is often produced by combination of the designs and by dividing the surface into squares. GREINER has pointed out, however, that zigzag lines occur practically everywhere not only in Polynesia but also in Melanesia except in New Britain, although often more or less obscured by more complicated designs, concluding as follows: "The fact that most of the angular designs of Polynesia are also present in Melanesian art, leads to the supposition that Polynesian art is not a thing apart from all other art but that it is a part of an underlying Oceanic art or culture which is characterised by this same angular geometric feature and that this art was carried by the Polynesian people to the farthest outposts of Oceania"[3]. Far less common are the dotted spiral lines which are found on the Rennellese shell pendants. A similar decoration is known for instance from the Gilberts and the New Hebrides[4] and may be known elsewhere, too. Whether it has anything to do with the elaborate spiral ornamention on New Zealand is, on the other hand, exceedingly doubtful. Inlaying with pearl shell is, in Polynesia, characteristic

p. 103 f). Pukapuka (BEAGLEHOLE 1938, p. 136 ff). Cook I. (TE RANGI HIROA 1944, p. 50 ff). Tubuai (AITKEN 1930, p. 75). Society I. (HANDY 1927, p. 18 ff, 39 ff). Hawaii (BRIGHAM 1903, p. 91 fig. 84. HANDY etc. 1933, p. 127). Marquesas (LINTON 1923, p. 383). Mangareva (TE RANGI HIROA 1938 a, p. 244 ff). Easter I. (MÉTRAUX 1940, p. 211 f). New Zealand (spec. in the National Museum, Copenhagen).

[1] Nauru, check (HAMBRUCH 1914—15, p. 68 ff). Marshall I. (KRÄMER & NEVERMANN 1938, pl. 7). Carolines (SARFERT 1919—20, p. 161 f. HAMBRUCH & EILERS 1936, p. 373 f. EILERS 1934, figg. 216, 247 f, 394. KRÄMER 1932, p. 168 ff, 172 f. KRÄMER 1935, p. 61, 265. KRÄMER 1937, p. 69 ff, 245 fig. 167. DAMM 1935, p. 78 f. EILERS 1935—36, I fig. 60, pl. 3). Yap (MÜLLER 1917, pl. 28). Palau (KUBARY 1895, pl. XXVIII. KRÄMER 1926, fig. 147).

[2] STOLPE 1927, p. 4.

[3] GREINER 1923, p. 99. On triangular, toothed and zigzag designs in Melanesia cf. REICHARD 1933, I p. 126 f.

[4] EDGE-PARTINGTON 1893—98, II pl. 82, 92.

only of Manihiki[1]. On Tonga, inlaying with pieces of the bone of whales was sometimes used[2]. On Rennell, however, the custom seems so closely connected with the Melanesian Solomons, where inlaying with pearl or nautilus shell is a typical feature, and besides of so comparatively recent origin that it most likely was derived from these islands.

It is a popular fallacy that bows and arrows were unknown in Polynesia. Actually they did occur in most places. It is true that they were but rarely employed for war; nevertheless this is recorded from the Mortlocks, Fakaofa in the Tokelau group, Mangareva, and possibly the Cook Islands[3]. Moreover ROGGEVEEN found them apparently as war weapons in what he called the "Boumann Eilanden", which have been identified with Manua in eastern Samoa[4]. Describing a fight with the Spaniards on the Marquesas, QUIRÓS makes the following statement: "What I have to say is, that some of the natives, being strong and courageous, used arrows ..."[5], which would also imply their use for war. In Tonga, on the other hand, the use of war bows and arrows was learnt from Fiji[6]. For fishing or sport they were far more common[7]. Besides, in a few cases bows have been recorded, although we know nothing of their use. Thus QUIRÓS found bows and arrows on Sikaiana[8], and in the narrative of LE MAIRE and SCHOUTEN's voyage there is a picture of natives from the Horne

[1] STOLPE 1927, p. 5. TE RANGI HIROA 1932 b, p. 157.

[2] MARTIN 1818, II p. 265.

[3] GIRSCHNER 1912, p. 169. LISTER 1891, p. 57. TE RANGI HIROA 1938 a, p. 193. TE RANGI HIROA 1944, p. 307.

[4] ROGGEVEEN 1838, p. 190. BEHRENS 1737, p. 142.

[5] QUIRÓS 1904, I p. 23. The original text (cited by SÖDERSTRÖM 1939, p. 27) reads as follows: *"Lo que yo sé decir es que si como esto indios son fuertes y animosos usan flechas, que no fatturan más cuidados que vieron"*.

[6] MARTIN 1818, I p. 67, 270 f. LAURY 1850, p. 116.

[7] Tikopia (RIVERS 1914, I p. 349. FIRTH 1939, p. 33). Kapingamarangi (TE RANGI HIROA 1950, p. 269). Tokelau (MACGREGOR 1937, p. 94). Niue (FORSTER 1777, II p. 164. SMITH 1902—03, XI p. 212). Tonga (FORSTER 1777, I p. 438. COOK & KING 1785, I p. 397. DUMONT D'URVILLE 1830—33, II p. 247 f. WEST 1865, p. 265). Rotuma (ALLEN 1895, p. 575. GARDINER 1898, p. 487). Samoa (KRÄMER 1902—03, II p. 171. DEMANDT 1913 p. 67 f). Society I. (HAWKESWORTH 1773, II p. 147. BANKS 1896 p. 142. WILSON etc. 1799 p. 353. ELLIS 1831 I p. 217. MOERENHOUT 1837, II p. 148 ff. CORNEY 1913—19, II p. 268. HENRY 1928, p. 276. HANDY 1930, p. 58 f). Hawaii (COOK & KING 1785, II p. 247. DIXON 1789, p. 278. BISHOP 1940, p. 40). Marquesas (LINTON 1923, p. 388 f. ROLLIN 1929, p. 186). Tuamotu (FRIEDERICI 1915, p. 45).

[8] A Sikaiana native whom QUIRÓS met on Taumako told him *"que el era ... soldado flechero"* (PURCHAS 1625, p. 1428).

Islands (Futuna and Alofi) carrying a bow[1]. A bow has been found at Mangapai in New Zealand, originating perhaps from the pre-Maori (Moriori?) population of the island[2]. If we turn our attention to Micronesia the bow has been described as a sporting implement on the Marshalls[3], and on Ponape in the Carolines there is a tradition that it was used by a pygmy tribe, the Chokalai, who inhabited the island in former times[4]. I think it is a lawful conclusion that the bow was actually universal as a war weapon in Polynesia at an early period but was either entirely abandoned or degenerated into an implement used only for fishing, sport and—in the Society Islands—for ceremonial shooting contests. This is further borne out by linguistic evidence. The Polynesian term for bow is in most islands "pana", "fana", "ana" or some other derivation of the same root[5].

Now, is the Rennellese bow to be included in the general Polynesian series? The question is legitimate since the Rennellese word, *kahutu*, is derived from a different, perhaps non Polynesian stem[6]. Unfortunately we have very few detailed descriptions of Polynesian bows. The Tuamotuan type differs from all others in Oceania in having a backing of plaited cord; the stave is round in cross section, tapering towards the ends, and with a low, transversal ridge on the back for fastening the string[7]. In the Society Islands the bow had a simple stave, oval in cross section, and with tapering nocks[8]. The Hawaiian bow had a very characteristic shape: the tips of the stave widened conically and continued in a likewise conical tenon which formed the actual nock[9].

[1] Le Maire & Schouten 1945, I p. 64 fig.
[2] Tregear 1893. Phillips 1954, 139 ff.p.
[3] Krämer & Nevermann 1938, p. 214.
[4] Christian 1899 a, p. 297 f. Christian 1899 b, p. 36 f. Cf. Girschner 1912, p. 169.
[5] Friederici 1915, p. 53 ff.
[6] It is not clear whether *kahutu* or, in the Bellona dialect, *kauhutu* (cf. Ray 1919—20, p. 73) are genuine Polynesian or Melanesian terms. Undoubtedly they are related to the corresponding words from Sikaiana, "kawusu", and from Lord Howe and Tasman Islands, "āvuhū" and "kāvūhu" (Ray 1919—20, p. 73. Sarfert & Damm 1929, p. 242). In Tonga, Fiji and Sesake in the New Hebrides "kau", and in Efate "kasu" mean i. a. tree or wood (Codrington 1885, p. 51. Tregear 1891, p. 388). The same stem occurs in the words for bow in both Tonga and Samoa: "kaufana" and "āufana" (Ray 1919—20, p. 73). The latter part of the Rennellese term is more difficult to explain, compare however Tonga "tutuu", cut off, and Sikaiana "tutu" cut (Tregear 1891, p. 539 f).
[7] Friederici 1915, p. 45.
[8] Giglioli 1893, p. 230 f. Söderström 1939, p. 25 ff.
[9] Edge-Partington 1890—98, II pl. 32. Friederici 1915, p. 45, fig. 6.

Te Rangi Hiroa describes the Tongan bow as following the Fijian pattern[1], but probably he is thinking of the war bow which, as mentioned above, was adopted from Fiji, where we have bows terminating in simple nocks. Similar simple shapes occur in Samoa and Niue[2]. On the other hand there are some old Tongan specimens which differ rather considerably from the ordinary Fijian type. Söderström describes one in the Sparrman collection of the Stockholm Museum as follows: "At one end the bow-stave is thickened, and here provided with two notches for the fastening of the string. The other end terminates in a rather short, narrow tenon, 'growing out' from an incision squarely carved in the wood. This sheer incision occurs on the same side of the stave as the groove that runs the whole length of one side of the bow"[3]. Unfortunately his illustration is on a very small scale and rather blurred. The Rennellese bow stave is identical with neither the Hawaiian nor the ancient Tongan style, but there is a certain vague resemblance between the three types, which may indicate that they are local developments of a common ancestral form. If this is so, we may consider the Rennellese bow an original Polynesian weapon in spite of the difference in term. At least it is quite distinct from Melanesian bows.

The Rennellese word for arrow, *'u*, is on the other hand of definitely Melanesian origin. We find the same root in both Indonesia and Melanesia as far as Fiji and the New Hebrides: Torres Straits "u"; Fiji "vuzu" or "vudhu"; Banks Islands "vus", etc.[4] Actually, exactly the same arrow type as on Rennell, i. e. an unfeathered bamboo shaft with an awl-shaped bone point, occurs on Santa Cruz, Banks and Torres Islands as well as on the New Hebrides where, according to Speiser, it belongs to the earliest culture[5]. On Hawaii, we are told, "the arrows were pointed with a long, carefully polished, sharp bone"[6], and similar arrows, although with wooden points, are known from Samoa, the Society Islands and the Solomons[7]. After all the Rennellese arrow type

[1] Te Rangi Hiroa 1938 b, p. 48.
[2] Edge-Partington 1890—98, I pl. 65, 69.
[3] Söderström 1939, p. 37. Cf. Giglioli 1893, p. 215 ff. Edge-Partington 1890—98, 1 pl. 69.
[4] Freiderici 1915, p. 52.
[5] Graebner 1909, p. 134. Speiser 1923, p. 216 ff, 220. Speiser 1935, p. 153.
[6] Handy etc. 1933, p. 149. Söderström 1939, p. 25 ff.
[7] Söderström 1939, p. 27. Specimens in the National Museum, Copenhagen.

may be an old Polynesian form in spite of its undoubtedly Melanesian affinities.

Unfortunately nothing is known of the method of arrow release in Polynesia, and next to nothing of the methods in other parts of Oceania. Primary release, as on Rennell, is recorded from the northern Solomons, but judging from a rather blurred illustration the Mediterranean method is employed in the small islands southeast of San Cristoval, and besides Mediterranean release is found in Santa Cruz, where, however, tertiary release also occurs[1].

In the Rennellese term for spear, *tao*, we meet with another Austronesian word, common not only in Melanesia but also elsewhere in Oceania, although it is lacking in some places such as the Marquesas, Tuamotus, Easter Island, and the Gilberts[2]. There is, except in size, very little difference between spears and arrows on Rennell. On the other hand it is difficult to find exact parallels elsewhere, the common Polynesian spear point of bone being a tail thorn of the sting ray.

There is probably no single island in Polynesia where so may kinds of clubs occur as on Rennell. One of the most common forms corresponds to what CHURCHILL calls the carinated type, "the distinctive character of which is the keel adown the blade and generally a rib at the point of maximum breadth"[3]. The carinated club is widespread and probably old in Polynesia. It occurs also in Melanesia on Santa Cruz and the Solomons but is here, according to SPEISER, due to Polynesian influence[4]. In one particular trait, viz. the short handle, the Rennellese club shows even particularly close relationship to the Malaitan form. A somewhat similar type occurs in the Gilberts[5].

Among the asymmetrical Rennellese clubs one has a large and flat, sickle-shaped blade and is so like some clubs from San Cristoval[6] that there can be no doubt about a connection between them, whereas its relations to the curved clubs from Niue are questionable. The standing of the asymmetrical axe-shaped club is

[1] PARKINSON 1899, p. 31. MORSE 1922, p. 10. BERNATZIK 1936, fig. 154. SPEISER 1913, figg. 14 f, 70.
[2] FRIEDERICI 1915, p. 21.
[3] CHURCHILL 1917, p. 70.
[4] SPEISER 1933 a, p. 86 f.
[5] FINSCH 1893, p. 311.
[6] GUPPY 1887, pl. p. 74. PARAVICINI 1931, figg. 41, 72.

more problematic. More or less axe-like wooden clubs occur in a few Polynesian islands, for instance Lord Howe, Tasman, Rarotonga and New Zealand[1], but their shape differs in every case considerably from the Rennellese type. For the present we must therefore consider the latter a local development.

The short club with radial flanges, CHURCHILL's "wheel-type", is on the other hand a well-known West Polynesian culture element, characteristic of Uvea, Futuna, Tonga, Fiji, and Samoa[2]. The origin of the club with an elongated, ovate head terminating in a short knob is again doubtful. It looks very much as if it were derived from a stone-headed prototype. While stone-headed clubs are at best very rare in Polynesia, they are common enough in certain parts of Melanesia. SPEISER has pointed out that whereas in New Guinea the stone head is always put on from the distal end of the shaft, the Baining of New Britain will push it forward along the shaft from its proximal end[3]. Among the Sulka and some neighbouring tribes, as well as on the coast of New Ireland and in the central New Hebrides there are some clubs with wooden heads which SPEISER derives from the Baining type[4]. A specimen from Ambryn in the Copenhagen Museum (I 3098) is, in fact, rather similar to the Rennellese type. Although parallels are unknown in the Solomons, there may be some reason for classing the Rennellese club together with this wooden-headed form. If it could reach the New Hebrides direct from New Britain, as SPEISER believes, it might get to Rennell as well.

We have true stone-headed clubs on Rennell too, but of an entirely different type, the head being roughly stellate and lashed on to the top end of the shaft. There is to my knowledge no exact counterpart to it anywhere in Oceania. Star-shaped stone heads are in Melanesia always pierced so that the shaft can be thrust through the hole. An ovate stone head attached to a shaft in a way similar to that of the Rennellese club occurs, however, on a certain kind of short club or back ornament worn on southern Malaita by "those men who claimed the payment of blood-money for a life

[1] SARFERT & DAMM 1929, p. 242. TE RANGI HIROA 1944, p. 288 f. BEST 1924, II p. 251.
[2] CHURCHILL 1917, p. 33. BURROWS 1938, p. 46.
[3] SPEISER 1933 a, p. 77.
[4] SPEISER 1933 a, p. 78, 80 f.

which they had taken"[1]. It may be that the Rennellese weapon has some affinity to the Malaitan form, even though this cannot be taken for granted. It will be remembered that the Rennellese designate a club with a coarse stellate wooden head with the same word as the stone-headed specimens, thus suggesting that it is derived from the latter.

The Rennellese are not the only Polynesians guilty of taking parts of the human body as war trophies, a custom quite different, of course, from the regular head hunting in the central Solomons and New Guinea. On Uvea, the hands af slain enemies were taken, on Tonga, Samoa, the Marquesas and New Zealand the heads[2]. BOUGAINVILLE tells us of the inhabitants of the Society Islands that "... *ils leur lèvent la peau du menton avec la barbe, qu'ils portent comme un trophée de victoire*"[3], and on Rarotonga the heads of enemies killed in battle were sacrificed to Tangaroa[4]. In Micronesia head trophies are known from Yap, and enemy heads were offered up to the war and breadfruit gods on Truk[5]. Trophy taking seems to be an old Oceanic custom, which was possibly even more widespread than the sources cited would indicate.

While some sort of instrument for beating time is common throughout Oceania, exact parallels to the Rennellese sounding board are apparently unknown outside Tikopia and New Zealand, if the "cymbals" mentioned by an early author from Uvea are not, as suggested by BURROWS, "a far-fetched description of a sounding board"[6]. On Fakaofu in the Tokelaus a man would beat with two sticks on a log placed on the ground, or on the board used for scraping bark cloth[7]. The Samoans used "an instrument formed of a loose slat, fitted into a board, on which they beat time with two sticks"[8], which may be the same instru-

[1] IVENS 1938, p. 13. Described as a "*Tanzkeule*" by PARAVICINI (1931, fig. 23).
[2] BURROWS 1937, p. 83. MARTIN 1818, I p. 200. STAIR 1897, p. 249. ELLIS 1831, III p. 317. BEST 1924, II p. 333.
[3] BOUGAINVILLE 1771, p. 217. Cf. HENRY 1928, p. 312 f.
[4] WILLIAMSON 1933, II p. 240.
[5] KRÄMER 1932, p. 269. MÜLLER 1927, p. 194.
[6] FIRTH 1939, p. 299. FIRTH 1940, II p. 210. BEST 1924, II p. 166 f. BURROWS 1937, p. 145.
[7] HALE 1846, p. 153. MACGREGOR 1937, p. 75.
[8] WILKES 1844, II p. 141. Cf. STAIR 1897, p. 135 f.

ment mentioned from Tonga as "a loose flat piece of hard wood, about three feet long, and an inch and a half square, fastened only at one end upon another similar piece; this is struck by two small sticks, one in each hand, and produces a rattling sound"[1]. The Society Islanders used "two chunks of a sonorous wood, one thicker than the other and of unequal length, which on being struck with two small truncheons, give out a sound with some show of harmony about it"[2]. On Mangareva a flat stone was beaten[3]. On Easter Island "the percussion plate was made by digging a hole about 3 feet deep and 1 or 2 wide. A large gourd, half filled with tapa or grass, was placed in the hole, which was covered with a thin stone slab. A man stepped on the slab, and with his feet beat time for dancers and singers"[4]. This description recalls the foot boards mentioned from Hawaii and Treasury Islands in the Solomons, consisting of a slab of wood placed over a hole in the ground[5]. A similar instrument, struck with two heavy bamboo sticks, is recorded from Banks Islands and the New Hebrides(?)[6], while on the Gazelle Peninsula in New Britain two logs are placed across the legs of the musician, who plays by means of a pair of sticks[7]. Thus we have in various parts of Oceania a number of percussion instruments which may, perhaps, represent local variants of some ancient element. GRAEBNER, in fact, included the sounding board in his East Papuan Culture, one of is earliest cultures in Oceania[8].

Though scarcely a musical instrument in the proper sense of the word, the shell trumpet may conveniently by dealt with here. Its nearly world-wide distribution—from the Mediterranean and Madagascar to India, Central and East Asia, Indonesia, Oceania, and America—need not concern us here where only the distribution in the Pacific is under discussion. Whereas European and Asiatic trumpets outside Indonesia are always end-blown, we have in Oceania both end and side-blown forms. According to information gathered by TE RANGI HIROA on Samoa, the type

[1] MARTIN 1818, II p. 315.
[2] CORNEY 1913—19, II p. 289.
[3] TE RANGI HIROA 1938 a, p. 399.
[4] MÉTRAUX 1940, p. 355.
[5] ROBERTS 1926, p. 364. GUPPY 1887, p. 144.
[6] SPEISER 1923, p 421. CODRINGTON 1891, p. 337.
[7] PARKINSON 1907, p. 135.
[8] GRAEBNER 1905, p. 31 ff.

depends on the material, trumpets made of *Tritonium* shell having a lateral and those made of *Cassis* an apical hole[1]. SPEISER makes a similar statement about trumpets from the Banks Islands, but here there are nevertheless some end-blown *Tritonium* specimens beside those with a lateral hole[2]. The Rennellese *Tritonium* trumpet described here (p. 68) is also end-blown, so as a general rule the material hypothesis does not hold good and we are permitted to consider the forms in question two distinct types. Leaving out a few instances where the occurrence of shell trumpets is recorded but no further details are given[3], we find both types on Futuna, Ellice Islands, Tonga, Fiji, Samoa, Cook Islands, Society Islands and the Marquesas, as well as in Melanesia on New Ireland, New Britain, New Guinea, Solomon and Banks Islands, some of the New Hebrides, and New Caledonia[4]. End-blown trumpets alone are mentioned from Pukapuka, Hawaii, New Zealand and the Gilberts[5], and the side-blown type is the only one described from Uvea, Manihiki, Mangareva—where it was introduced from the Tuamotus—from Micronesia outside the Gilberts, and from the southern New Hebrides, New Britain, St. Matthias, New Hanover, Admiralty and Maty Islands[6]. It is not improbable that a more extended museum material would show a still wider distribution of both types. GRAEBNER considered the side-blown shell trumpet an original Polynesian element, and there can be no doubt of its great age[7]. SPEISER included trumpets without specifying the type, in the proto-Austronesian culture of the New Hebrides[8]. Present evidence goes to show that the centre of distribution of the side-blown type is situated in the western Pacific, which agress with the fact that it also occurs in Indonesia. It may possibly turn out to be a later development than the end-

[1] TE RANGI HIROA 1930, p. 579.
[2] SPEISER 1923, p. 422.
[3] Lord Howe (SARFERT & DAMM 1929—31, p. 461). Rotuma (GARDINER 1898, p. 487). Tubuai (COOK & KING 1785, II p. 7). Easter I. (MÉTRAUX 1940, p. 354).
[4] BURROWS 1936, p. 212. FOY 1909, p. 244 f. SACHS 1929, p. 37, 86. ROBERTS 1926, p. 354 f. SPEISER 1923, p. 422.
[5] BEAGLEHOLE 1938, p. 216. FOY 1909, p. 244 f. SACHS 1929, p. 37, 86. ROBERTS 1926, p. 354 f.
[6] FOY 1909, p. 244 f. SACHS 1929, p. 37, 86. ROBERTS 1926, p. 354 f. SPEISER 1933 b, p. 191.
[7] GRAEBNER 1905, p. 44 ff. GRAEBNER 1909 a, p. 748. Cf. TE RANGI HIROA 1944, p. 456.
[8] SPEISER 1935, p. 153. SPEISER 1946, p. 37.

blown form, but whether this means that it spread to Oceania after the main Polynesian migration remains an unsolved problem.

A kind of buzz, comparable with the Rennellese toy, is known from Hawaii and New Zealand[1], and games in which pebbles are tossed are recorded from Samoa, Hawaii, Fiji and the Gilberts[2]. It can hardly be doubted that similar games have a much wider distribution. String figures, the well-known cat's cradle game, are, on the other hand, described from numerous places, covering nearly all Polynesia[3]. If to this is added that they are known at least in some parts of Micronesia and Melanesia[4], it seems a fair conclusion that they are old in the Pacific.

The usual greeting and love token throughout Polynesia and Micronesia is the well-known custom of nose rubbing. Many years ago it was recorded by ANDREE from the Ellice Islands, Samoa, Fiji, Tongareva, Hawaii, Marquesas, New Zealand and the Chatham Islands as well as from the Gilberts and the Marianas[5]. Here we may add Uvea, Futuna, Niue, Tonga, Mangaia, the Society Islands, Mangareva and Easter Island[6] and, for Micronesia, the Marshall and Caroline groups[7]. Thus we have here again to do with an obviously old trait in this area.

Turning now to the social conditions in a more limited sense, we need scarcely emphasize that patrilineal descent with additional recognition of the distaff line is general in Polynesia. Patri-

[1] CULIN 1899, p. 220. BEST 1924, II p. 164 ff.

[2] WILKES 1844, II p. 136. CULIN 1899, p. 228 f, 239 f. WILLIAMS & CALVERT 1859, p. 127. STEPHEN 1936—37, p. 60.

[3] Kapingamarangi (TE RANGI HIROA 1950, p. 272). Ellice I. (HORNELL 1927, p. 77). Tokelau (HORNELL 1927, p. 77). Tonga (HORNELL 1927, p. 61 ff). Lau (THOMPSON 1940, p. 130, 134). Rotuma (RUSSELL 1942, p. 254). Fiji (HORNELL 1927, p. 11 ff). Samoa (HORNELL 1927, p. 71 ff, TE RANGI HIROA 1930, p. 557 ff). Cook I. (GILL 1876, p. 65). Tubuai (AITKEN 1930, p. 94). Society I. (BLIGH 1792, p. 107. HORNELL 1927, p. 80 ff). Hawaii (BISHOP 1940, p. 51). Marquesas (E. S. C. HANDY 1923, p. 303 f. W. C. HANDY 1925, p. 11 ff. ROLLIN 1929, p. 186). Mangareva (LAVAL 1938, p. 230. TE RANGI HIROA 1938 a p. 184). Easter I. (MÉTRAUX 1940, p. 354). New Zealand (BEST 1924 II p. 99 ff. MAKERETI 1938 p. 153). Chatham I. (SKINNER 1923, p. 54. SKINNER & BAUCKE 1928, p. 373).

[4] Gilbert I. (HORNELL 1927, p. 77). Nauru (WEDGWOOD 1935—37, p. 31). Yap (MÜLLER 1927, p. 206 ff).

[5] ANDREE 1889, p. 226 f.

[6] BURROWS 1937, p. 136. BURROWS 1936, p. 70. SMITH 1902—03, XI p. 208. COOK 1777, I p. 220. MARTIN 1818, I p. 227 footnote. COOK & KING 1785, I p. 179. WILSON etc. 1799, p. 348. BEECHEY 1831, I p. 151. TE RANGI HIROA 1938 a, p. 166. MÉTRAUX 1940, p. 140.

[7] FINSCH 1893, p. 325. CHAMISSO 1821, p. 135.

lineal descent is also found on the Gilberts, Yap and in the Marianas, while Micronesia is elsewhere typically matrilineal[1]. It is generally acknowledged that the bilateral system with main emphasis on the male line belongs to the original Polynesian culture, and recent investigations even suggest that it is basic in Micronesia too[2].

In kinship terminology, the western sub-area of Polynesia is i. a. distinguished by specific terms for (1) father and mother, (2) son and daughter, (3) mother's brother and father, and father's sister and mother, (4) woman's own child and her brother's child, and man's own child and his sister's child[3]. Here there is general agreement with Rennell in points (1) and (2), and in point (3) as far as the difference in terms between mother's brother and father is concerned, whereas father's sister and mother are called with the same word. As to point (4), a man will use different terms for his own and his sister's child, whereas a woman will use the same word for her child and that of her brother. In points (3) and (4) the Rennellese custom agrees with conditions on the Tokelau Islands[4].

It will be remembered that on Rennell, marriage between parallel cousins is forbidden, but not between cross cousins. This custom seems to be rather unusual in Polynesia where, as a rule, marriage is not allowed between any blood relatives unless they belong to the third generation or more from a common ancestor[5]. Cousin marriage is also taboo in the Gilberts and on Pur in the western Carolines[6]. There are, however, some exceptions to this rule. According to RAYMOND FIRTH "marriage with cross-cousins is not common in Tikopia and is not favoured, being placed on exactly the same footing as the union of parallel cousins"[7], which seems to imply that both kinds of marriage may occur, and TAU-

[1] STILLFRIED 1953, p. 87.
[2] MURDOCK 1948—49, p. 12 ff.
[3] BURROWS 1938, p. 58 f.
[4] BURROWS 1938, table 2.
[5] Lord Howe (HOGBIN 1930—31, p. 414. HOGBIN 1934, p. 114). Uvea (BURROWS 1937, p. 62). Futuna ? (BURROWS 1936, p. 63). Tokelau (MACGREGOR 1937, p. 41). Rotuma (WILLIAMSON 1924, II p. 143). Pukapuka (BEAGLEHOLE 1938, p. 294). Mangaia (TE RANGI HIROA 1934, p. 92). Tubuai (cf. AITKEN 1930, p. 29). Mangareva (TE RANGI HIROA 1938 a, p. 132 f). Easter I. (MÉTRAUX 1940, p. 108 f). New Zealand (BEST 1924, I p. 446. MAKERETI 1938, p. 60).
[6] GRIMBLE 1921, p. 26. EILERS 1935—36, I. p. 195.
[7] FIRTH 1936, p. 221.

TAIN writes that "le Marquisien admettait le mariage entre cousins germains dans un seul cas, celui où les cousins étaient les enfants d'un frère et d'une sœur"[1], so here only unions between parallel cousins are forbidden. On Tonga, cross-cousin marriage is strictly speaking taboo, but the rule is not always observed, and probably this is also the case on Samoa, whence our information gives the impression of being rather confused, as well as in the Society Islands, where at least a single example of cross-cousin marriage is recorded[2]. For Niue the information is contradictory: while LOEB maintains that neither cross nor parallel cousins may marry, THOMSON asserts that it is lawful for children of two brothers, but not for those of two sisters[3]. Prohibition against parallel-cousin marriage, often combined with a distinct preference to unions between cross cousins, occurs on the Lau Islands, Fiji, Nauru, Marshall Islands, many of the Carolines, and Yap[4]. In the Solomons the situation is rather complicated: on northern Bougainville and Malaita both forms of cousin marriage are forbidden, whereas on Little Mala and western San Cristoval—but not central San Cristoval—the prohibition concerns only cross cousins[5]. This is true of Tanna in the New Hebrides, too, whereas cross-cousin marriages are common in other parts of this group and are here supposed to belong to the earliest culture[6]. It seems that while prohibition against unions between parallel cousins is more or less general in Polynesia and Micronesia, cross cousins are forbidden to marry mainly in the eastern sub-area, cross-cousin marriage thus being principally a western trait. This difference in attitude is probably bound up with the difference in kinship terminology, but to what extent they are parts of a functional whole and how this system originated are problems which shall not be discussed here[7].

[1] TAUTAIN 1895, p. 649.

[2] GIFFORD 1929, p. 22. WILLIAMSON 1924, II p. 124 ff, 137.

[3] LOEB 1926, p. 62. THOMSON 1901, p. 141 f.

[4] HOCART 1929, p. 34. THOMPSON 1940, p. 59. THOMSON 1908, p. 184. BREWSTER 1922, p. 188. WEDGWOOD 1935—37, p. 382. KRÄMER & NEVERMANN 1938, p. 183 f. SPOEHR 1949, p. 196. SARFERT 1919—20. p. 307. HAMBRUCH & EILERS 1936, p. 71. KRÄMER 1935, p. 82. KRÄMER 1937, p. 110. DAMM 1935, p. 146. MÜLLER 1917, p. 223.

[5] BLACKWOOD 1935, p. 67, 81. IVENS 1930, p. 82 f. IVENS 1927, p. 66. FOX 1924, p. 29, 62.

[6] HUMPHREYS 1926, p. 47. SPEISER 1933 b, p. 191. SPEISER 1935, p. 153.

[7] Cf. BURROWS 1938, p. 137 ff.

Another western trait which may have some relation to the kinship usage is the brother-and-sister avoidance, which is listed by BURROWS from Uvea, Futuna, Ellice Islands, Tokelau, Tonga, Samoa, and Tongareva[1]. To this may be added Tikopia (for sexual and obscene conversation only), Lord Howe ("to a certain extent"), Lau, Fiji, Nauru, Marshall Islands, and, in some measure, the central Carolines[2].

While both the levirate and sororate are said to be forbidden on Lord Howe[3], they are common in other places, though rarely compulsory[4]. Furthermore, sororate is mentioned from Tonga and the Society Islands, and levirate from New Zealand[5]. It is difficult to form any precise opinion on the basis of these obviously insufficient data, but it does not seem unlikely that they are both old customs in Polynesia.

BURROWS has pointed out a characteristic difference between the western and eastern systems of land tenure in Polynesia. In the western sub-area it was fundamentally hereditary since here there was a general coincidence of "breed and border", whereas in the eastern islands the hereditary claims were usually subsidiary to the arbitrary authority of the chief[6]. While after a victorious war a Rennellese chief might take possession of some gardens belonging to a neighbouring community for the benefit of his own tribe, and a man in laying out a new garden in the border lands between two tribes would decide which chief he would acknowledge, these are exceptional cases, and as rule inheritance of land was in agreement with the western pattern, which is also considered the older[7].

Chieftainship is developed to a different degree in Polynesia, and it is possible that in some parts it has been subject to foreign influences, but the basic idea is the divine descent of the chiefs.

[1] BURROWS 1938, p. 60 f. WILLIAMSON 1924, II p. 110, 159 f, 181, 207 ff.

[2] FIRTH 1936, p. 192. HOGBIN 1930—31, p. 416. HOGBIN 1934, p. 105. HOCART 1929, p. 35. BREWSTER 1922, p. 188. WEDGWOOD 1935—37, p. 380. SPOEHR 1949, p. 195. BOLLIG 1927, p. 102.

[3] HOGBIN 1930—31, p. 414. HOGBIN 1934, p. 106.

[4] Uvea (BURROWS 1937, p. 63). Lau (THOMPSON 1940, p. 53). Samoa (GIFFORD 1929, p. 189. WILLIAMSON 1924, II p. 125). Pukapuka (BEAGLEHOLE 1938, p. 295). Mangaia (TE RANGI HIROA 1943, p. 93 ff). Marquesas (HANDY 1923, p. 100). Nauru (GRIMBLE 1921, p. 28, WEDGWOOD 1935—37, p. 382).

[5] GIFFORD 1929, p. 189. WILLIAMSON 1924, II p. 137. BEST 1924, I p. 448, 476.

[6] BURROWS 1939, p. 18.

[7] BURROWS 1939, p. 20.

We find this concept on Tikopia, Uvea, Futuna, Tokelau, Tonga, Samoa, Tongareva, Mangaia, the Society Islands, Hawaii, Mangareva, Easter Island, New Zealand, and the Chatham Islands[1]. Both WILLIAMSON and LEHMANN speak of sacred chiefs on the Marquesas, but this is probably due to misunderstanding; HANDY definitely denies it and explains their absence by the supposition that among the original immigrants no-one could lay claim to divine ancestors. In Fiji, divine chiefs are recognized in eastern Viti Levu, but not in the western part[2]. In close connection with the idea of the sacred character of the chief is the fact that his office is sometimes identical with that of the priest. So it is in Samoa and New Zealand and to some extent also in Hawaii and the Society Islands, whereas a special development has taken place in Tonga[3]. In Samoa, conditions are especially primitive, since here the chief is not only a priest but also acts as a prophet inspired by the divinity, just as is the case on Rennell[4]. Divine possession is general in Polynesia but is as a rule limited to certain priests or a specific prophet class[5]. Staves as chiefs' badges and symbols of authority are likewise frequent throughout Polynesia[6].

In many Polynesian islands it is the usual practice to cut off the hair or inflict burns as tokens or mourning after a death. Often both customs occur jointly. Their distribution is so wide[7] that it seems a fair conclusion to consider them original Polynesian culture elements.

In many parts of Polynesia as well as in Micronesia and Melanesia the dead body is wrapped in mats or the like before the

[1] RIVERS 1914, I p. 305. FIRTH 1936, p. 376. VIALA 1919, p. 242. BURROWS 1936, p. 110. MACGREGOR 1937, p. 51. MÉTRAUX 1940, p. 130. SKINNER 1923, p. 51. HOCART 1915 a, p. 635 ff. WILLIAMSON 1924, III p. 63 ff. HANDY 1927, p. 138 ff. LEHMANN 1930, p. 102 ff. NEVERMANN 1947, p. 51, 87, 98, 116.

[2] HOCART 1915 b, p. 74.

[3] HANDY 1927, p. 136 f. LEHMANN 1922, p. 27 ff.

[4] HANDY 1927, p. 135 f.

[5] HANDY 1927, p. 159. LEHMANN 1935, p. 263 ff. TE RANGI HIROA 1935, p. 48. WILLIAMSON 1937, p. 111 ff. NEVERMANN 1947, p. 120.

[6] WILLIAMSON 1937, p. 184 ff. Lau (HOCART 1929, p. 45). Fiji (WILLIAMS & CALVERT 1858, I p. 25).

[7] Tikopia, Uvea, Futuna, Tokelau, Tonga, Rotuma, Manihiki, Tongareva, Cook I., Society I., Marquesas (WILLIAMSON 1933, I p. 247, 251, 265, 271, 279 ff). Kapingamarangi (EILERS 1934, p. 139). Niue (TURNER 1884, p. 306). Samoa (STAIR 1897, p. 117). Pukapuka (BEAGLEHOLE 1938, p. 300). Mangaia (TE RANGI HIROA 1934, p. 189). Tubuai (AITKEN 1930, p. 117). Hawaii (LISIANSKY 1814, p. 123). New Zealand (BEST 1924, II p. 58). Cf. HANDY 1927, p. 251 ff. NEVERMANN 1947, p. 251 ff. NEVERMANN 1947, p. 51, 87, 98, 116.

burial[1]. Unfortunately there is but little information about the position of the body in the grave. In most cases it seems to be flexed or squatting. Definite evidence of extended burial is limited to Tikopia, Tonga and Samoa[2]. In Hawaii priests and petty chiefs only were interred in this manner[3], and in the Marshalls both sitting and extended burial occurs[4]. Whether extended inhumation should be considered a specific western trait in Oceania must await further investigation. RIVERS associated it with megalithic structures and a particular immigration wave of his Kava People[5].

The grave itself is in the western sub-area often strewn with white sand, or a low sand mound is heaped on top of it, and the circumference is marked with stone slabs set on edge[6]. In Niue the grave is covered with a stone[7], as is also sometimes the case in other places. Similar customs are known from the Gilberts and Marshalls, where they were characteristic of chiefs' burials, and from Kusae and Yap[8]. Sometimes it is only the dead belonging to the lower classes, or young children, who are interred in this way; this, for example, is common in eastern Polynesia in the Society Islands, in New Zealand and the Chathams, and in Micronesia in the Marshalls and Carolines, Tasman Islands, Nugeria, and Yap[9]. In Hawaii and the Marquesas the bodies of old and infirm people were disposed of thus, and in the Marquesas also those of priests[10]. I hesitate to consider this type of burial the ear-

[1] Ellice I., Tonga, Fiji, Samoa, Manihiki, Rarotonga, Hawaii, Chatham I., Marshall I., Yap (DOERR 1935, p. 392). Lord Howe (SARFERT & DAMM 1929, p. 275). Kapingamarangi and Nukuoro (EILERS 1934, p. 139, 287). Carolines (KRÄMER 1935, p. 232. DAMM 1935, p. 154. KRÄMER 1937, p. 119. DAMM 1938, p. 268. HAMBRUCH & EILERS 1936, p. 93). Rotuma (EASON 1951 p. 14).

[2] RIVERS 1914, II p. 274.

[3] LINTON 1923, p. 456.

[4] KRÄMER & NEVERMANN 1938, p. 206.

[5] RIVERS 1914, II p. 431 f, 580.

[6] Lord Howe (WOODFORD 1916, p. 37. SARFERT & DAMM 1929, p. 277). Uvea (BURROWS 1937, p. 61. VIALA 1919, p. 253). Futuna (BURROWS 1936, p. 70. SMITH 1892 a, p. 39). Ellice I. (KENNEDY 1931, p. 317). Tokelau (LISTER 1891, p. 54 f). Tonga (WEST 1865, p. 268). Rotuma (ALLEN 1895, p. 577). Fiji (WILLIAMS & CALVERT 1858, I p. 192). Samoa (KRÄMER 1902—03, II p. 105). Tongareva (TE RANGI HIROA 1932 a, p. 182). Manihiki-Rakahanga (TE RANGI HIROA 1932 b, p. 217). Pukapuka (MACGREGOR 1935, p. 27). Malden I. (EMORY 1934, p. 31, 36). Tubuai (AITKEN 1930, p. 117). Hawaii (ELLIS 1851, I p. 359).

[7] HANDY 1927, p. 159. LEHMANN 1935, p. 263 ff. TE RANGI HIROA 1935, p. 48. WILLIAMSON 1937, p. 111 ff. NEVERMANN 1947, p. 120.

[8] DOERR 1935, p. 404. GRIMBLE 1921, p. 46. KRÄMER & NEVERMANN 1938, p. 207 f.

[9] DOERR 1935, p. 385. EILERS 1935—36, I p. 62, 199, 345 f, II p. 102 f.

[10] DOERR 1935, p. 384, 387.

liest one in Polynesia, but at least it is an old trait, which in some places has been more or less replaced by other and often more elaborate customs.

The erection of a small house on the grave is known from chiefs' burials in Tonga and Tikopia; sometimes a shelter was built over a canoe grave in New Zealand, and according to DOERR grave houses are also recorded from the Mortlocks, Hawaii, and the Society Islands, where they are said to be recent, however[1]. We may add Fiji[2] and several islands in Micronesia, where in the Marshalls and sometimes in the Carolines they were characteristic of chiefs' graves[3], but elsewhere of children's burials[4], since other burial forms than interment are used for grown-up persons there. Grave houses are likewise described from Yap[5], and moreover they are common in many parts of Melanesia and Australia including Tasmania[6]. Possibly they have some sort of relation to the widespread custom of burying the dead within the dwelling, such as it occurs i. a. in Nauru, the Gilbert and Marshall Islands, Fiji and Melanesia[7]. In Polynesia, grave houses seem to belong to the western sub-area.

The idea of a particular place where the souls gather in order to leave for the Land of the Dead was found by ROSALIND MOSS in Fiji, Mangaia, and New Zealand, and special "leaping stones" for the souls in Samoa and Futuna[8]. She points out that the idea of a meeting place for the souls is characteristic of southern Melanesia from Torres Islands to Pentecost in the New Hebrides and is there associated with the belief in an underground spirit land, generally reached through a volcano. Besides she shares the view of RIVERS that this concept is due to the so-called Dual People[9]. Actually, the idea of a departing place or of "leaping stones" for the spirits is more widespread than indicated by Moss. Thus, WILLIAMSON mentions it from Tonga, Rotuma, Rarotonga, the Society Islands, and the Marquesas[10]. In my opinion our informa-

[1] DOERR 1935, p. 394.
[2] WILLIAMS & CALVERT 1858, I p. 192.
[3] MERTENS 1836, p. 204. KRÄMER & NEVERMANN 1938, p. 208.
[4] KRÄMER 1935, p. 151. KRÄMER 1937, p. 119 pl. 25. DAMM 1935, p. 154. EILERS 1935—36, II p. 102 f.
[5] MÜLLER 1927, p. 272.
[6] DOERR 1935, p. 392 ff.
[7] BRANDEIS 1907, p. 77. GRIMBLE 1921, p. 46. DOERR 1935, p. 391.
[8] Moss 1925, p. 48 f, 82, 106, 227.
[9] Moss 1925, p. 42, 218.
[10] WILLIAMSON 1933, I p. 361, 343, II p. 25, 41, 93.

tion on this point is too defective for allowing a decision in regard to the question of the mutual affinities between the Melanesian and Polynesian beliefs. The problem is further connected with the ideas of the Land of the Dead. The concept of an island afterworld is generally supposed to be a result of migration, embodying the belief in a return of the soul to the ancestral home[1], and it is significant that whereas most Polynesians place the afterworld in the west, the Rennellese souls are thought to travel towards the east. It is worth noticing, however, that the common West Polynesian name of the afterworld, Pulotu or, in Fiji, Burotu[2], does not seem to occur on Rennell, where there are two distinct Islands of the Dead; a similar concept is found in San Cristoval, Ulawa and Florida in the Melanesian Solomons[3].

Very little can be said about the Rennellese pantheon. *Semoana*, one of the names attributed to *Te Haiŋgi-atua*, is known in Tikopia, whereas *Te Hua-i-ŋgaveŋa* is unknown there[4]. In the Tokelaus, *Semoana* also occurs but apparently as a rather subordinate spirit[5]. In the name of *Tafaki-ŋaŋi* we can easily recognize Rangi, the Sky God of New Zealand and Mangaia, and the first part of the name we find in Tafa'i, who according to Samoan belief is the husband of the Moon, Sina (in Rennell: *Mahina*)[6]. *Sau* appears in a Samoan myth[7], and *TaŋaŋgoA* is, of course, identical with the well-known Tangaroa. It has often been pointed out that while Tangaroa is a deity of prime importance and indeed, in Samoa, the Society Islands and some other places is considered the supreme god and creator of the world, he holds a much more humble position in the marginal groups[8]. On Rennell he is a rather inferior and mischievous being associated with the thunderstorm. The latter belief recalls Tonga where, we are told, "he sends forth the thunder and lightening; and when a thunderstorm occurs it is supposed that he is killing a Chief"[9], but at

[1] Moss 1925, p. 30.
[2] Uvea, Futuna, Tonga, Samoa (Burrows 1938, p. 189). Fiji (Moss 1925, p. 11).
[3] Ivens 1934, p. 48.
[4] Firth 1931—32, p. 188.
[5] Lister 1892, p. 51. Macgregor 1937, p. 62.
[6] Williamson 1933, I p. 100 f.
[7] Williamson 1933, II p. 147.
[8] Handy 1927, p. 115 f. Williamson 1937, passim. Burrows 1938, p. 65 f.
[9] Lawry 1850, p. 114.

the same time he is there equal to the other gods of first rank[1]. Father SCHMIDT has stressed his original malignant character in Hawaii and the Marquesas, associating it with his view that he was originally a Moon God and adversary of Kane, the "Sun Prince"[2]. On the other hand HANDY rightly maintains that although in Hawaii, after an abortive attempt at creating Man, he led a revolt against the other gods, this "does not reveal the general attitude toward Kanaloa, for neither myths in general nor the worship reveal the theory of this deity's being a 'fallen angel', as FORNANDER puts it"[3]. As to the Marquesas, Taka'oa was there a relatively unimportant sea and wind god[4]. His malignant disposition is more apparent in Uvea and Futuna, where he seems to be a spirit who catches human beings in a net in order to eat them[5].

Both *Mau-tiki-tiki* and *Ataŋgaŋga* are well-known in Polynesian mythology. Says KATHARINE LUOMALA: "In the marginal islands like Uvea, Niue, Futuna, Santa Cruz, Ulawa, Tikopia, Ontong Java, Fiji, and the Tokelaus, only one or two myths, or only occasional statements, have been recorded about the Maui family. No evidence survives to indicate that, even before Europeans altered the native culture, these islands, which are peripheral socially and geographically to Polynesian culture centers, had enough myths about Maui to create a cycle"[6]. The name Mau(i)-tiki-tiki is, she continues, "quite general throughout Oceania. Its wide distribution gives the impression that it is an extremely old part of the cycle"[7]. *Ataŋgaŋga* (= Ataranga, Talanga, etc.) is the common name for either Maui's father or his mother for instance in Tonga, Samoa, and the Tuamotus[8].

Sennit-covered stakes such as *Te Haiŋgi-atua*'s "resting place", are nearly universal as representatives of the greater Polynesian gods, and "in Central Polynesia there was a considerable use of emblems such as elaborately carved clubs, paddles, or adzes"[9]. Thus there is nothing unusual in the Rennellese

[1] WILLIAMSON 1937, p. 44 ff.
[2] SCHMIDT 1910, p. 99.
[3] HANDY 1927, p. 117 f.
[4] HANDY 1927, p. 116 f. ROLLIN 1929, p. 163. WILLIAMSON 1937, p. 46.
[5] BURROWS 1936, p. 105 f.
[6] LUOMALA 1949, p. 22.
[7] LUOMALA 1949, p. 24.
[8] LUOMALA 1949, p. 27. WILLIAMSON 1933, I p. 34, 36, 325.
[9] HANDY 1927, p. 121, 125. WILLIAMSON 1937, p. 165 ff.

sacred paddles and spears. As far as the latter are concerned there are parallels both on Uvea and Tikopia[1], and fantastically carved spears were symbols of the ancestors in Lord Howe, Tasman, Mortlock, and Nugeria[2]. First-fruit offerings are general in Polynesia[3].

Sacred stones are likewise common, for as HANDY has it: "By reason of its materially lasting character no doubt, stone was regarded throughout Polynesia as the most permanent agency that could be utilized as a medium and container of mana"[4], and apparently for this reason he includes the veneration for stone slabs in the earliest Polynesian culture[5]. I believe, however, that a distinction must be made between stones which are representatives of gods and therefore, so to speak, sacred by nature, and on the other hand those which have acquired divine power by contact, be it by association with chiefs, as parts of a sanctuary, etc. The former kind we have in Tikopia, Kapingamarangi, Futuna, Ellice Islands, Fakaofu in the Tokelaus, Samoa and Pukapuka, as well as in the Gilberts in Micronesia[6]. EMORY believes that they were originally regarded as back rests for the gods and compares them with the raised stone slabs of the sanctuaries in eastern Polynesia where, however, carved idols of stone or wood often took their place; "god seats" also occur in Micronesia, and it is likely that the idea of sacred stones is an old Polynesian trait[7]. Nevertheless the whole problem should be taken up for treatment on a wider basis, not only in regard to the character and function of the stones, but also geographically, including the possibility of a connection with monoliths and other megalithic monuments in Oceania as a whole.

As shown by TE RANGI HIROA and BURROWS there is a regional differentiation in the sacred structures of Polynesia[8]. The typical structure in the west is a temple or "god house", and besides there is an open plaza, corresponding to the Rennellese *ŋgoto-*

[1] BURROWS 1937, p. 86. FIRTH 1940, I p. 144.
[2] PARKINSON 1897, p. 143. NEVERMANN 1947, p. 67.
[3] HANDY 1927, p. 188 f. WILLIAMSON 1937, p. 121.
[4] HANDY 1927, p. 179.
[5] HANDY 1920, p. 233 f. HANDY 1930, p. 7.
[6] EMORY 1943, p. 13, 18. FIRTH 1940, II p. 207. EILERS 1934, p. 132 f. LISTER 1892, p. 50. WILLIAMSON 1933, I p. 17 f.
[7] EMORY, p. 11 ff, 19 f. MÜLLER 1917, pl. 68. KRÄMER 1926, figg. 35, 69, 222.
[8] TE RANGI HIROA 1935, p. 49 f. BURROWS 1938, p. 76 ff.

maygae, which is mainly a kind of village green, even if certain religious ceremonies may be performed there. In the eastern island groups, sacred houses are less important and instead the plaza has developed into an actual sanctuary consisting of raised terraces, paved courts enclosed by stone walls, etc. Temples, i. e. god houses as principal structures, are found according to BURROWS on Uvea, Futuna, Ellice Islands, Tokelau, Tonga, Samoa, Niue(?), and Pukapuka[1], to which should be added Lord Howe, Kapingamarangi, Tikopia, Lau Islands, and Fiji[2]. Village greens of a mainly social character are mentioned by BURROWS from Uvea, Futuna, Tokelau, Tonga, Samoa, Niue, Pukapuka, and New Zealand[3]. Here we may add Lord Howe and Tasman, Tikopia, and the Chatham Islands[4]. Obviously, Rennell Island must in this case be included among the western island groups.

3.

Proto-Polynesian Elements. — Western Elements. — Elements of Local and Uncertain Origin. — The Relations of Rennell to the West Polynesian Culture and the Megalitihic Complex of Melanesia. — Conclusions.

The preceding analysis has shown that by far the majority of the Rennellese culture elements are so widespread in Polynesia —and, indeed, in many cases in Oceania—that they must in all probability belong to the original culture of the Polynesians. They are, in other words, proto-Polynesian even if in some cases they may have undergone a local development on Rennell.

Within this category should be included the principal economic methods and implements, i. e. slash-and-burn horticulture with growing of yam, taro, coconuts, pandanus and turmeric; digging stick; pole snare; single-pronged fishing spear; wooden shark hook and additional use of shark snare; ordinary fishing net and scoop net as well as fishing by torch light and by poison;

[1] BURROWS 1938, p. 190.

[2] EILERS 1934, p. 132 f. SARFERT & DAMM 1929, p. 208 f. DILLON 1829, II p. 136 f. THOMPSON 1940, p. 112 f. WILLIAMS & CALVERT 1858, I p. 221 ff.

[3] BURROWS 1938, p. 81.

[4] SARFERT & DAMM 1929, p. 222. HOGBIN 1930—31, p. 405. FIRTH 1940, II p. 207. SKINNER 1923, p. 51.

octopus fishing by means of a pointed stick; simple rectangular house without king post and rounded gable ends; separarate cooking sheds; mats and simple baskets plaited in diagonal checker and twilled technique; bowls and bottles of coconut shell; spoons or simple coconut scrapers of shell; breech cloth, skirt and head cloth; simple fan; shark-tooth knife; tattooing comb; incision; shell adze with simple toe haft; hand drill; awl; fire plough; earth oven; bark cloth and simple bark beaters; simple dyeing technique; decorative designs consisting of straight, zigzag and toothed lines; bow and carinated club; head trophies; sounding board(?), end-blown and side-blown(?) shell trumpets; string figures; nose rubbing; patrilineal descent; levirate and sororate(?); divine descent of chiefs who also function as priests and inspired prophets; stave as chiefs' badge; hair cutting and burns as tokens of mourning; wrapping of the dead in mats; subordinate character of *Taŋaŋgoa*; simple myths of *Mau-tiki-tiki* and *Ataŋgaŋga*; sennit-covered stakes as emblems of gods; and first-fruit offerings.

Less numerous though still considerable in number are such elements which are characterized by their more or less pronounced western distribution, but apart from this common feature they form a rather heterogeneous group. A few belong here in the sense only that their occurrence is at present limited to the western region since farther east they have been abandoned in favour of other types. In this case they must actually be included among the proto-Polynesian elements. The following traits are supposed to belong to this class: paddles with narrow blades; inheritance of land independent of the chief's authority; sand-covered graves marked with stone slabs; and perhaps stones as emblems of the gods.

More numerous are the western elements which seem to be due to diffusion, either from Micronesia or from various places in Melanesia, as for instance the fibre skirt (if, indeed, it belongs to Rennell at all) and the dotted spiral decoration. Pigeon nets and the use of decoy birds may have spread from Micronesia, and so may the indirect outrigger attachment of the canoes and the lateen sail, though it is probable that both were introduced by way of Fiji[1]. On the whole Fiji must have played a vital part in

[1] Burrows 1938, p. 98 f.

the building of the specific West-Polynesian culture. From Fiji came the wheel-shaped club[1], and BURROWS supports the view at one time set forth by RIVERS "that the coastal Fijian and western Polynesian kinship complex arose through blending of a Polynesian society, with patrilineal reckoning and divine chiefs, and a Melanesian society, with matrilineal reckoning, dual organization, and emphasis on relationship clustering about that of cross-cousin"[2]. It still remains to investigate how far this complex is a genuine functional whole based upon historical connections and including such traits as brother-and-sister avoidance and cross-cousin marriage. It may be pertinent to note that a conspicuous feature of the complex, the privileged position of the sisters' sons, seems to be absent on Rennell or at least so faintly pronounced as to be practically non-existent. I shall, however, leave this problem for the future to solve.

Some western elements on Rennell are doubtless local borrowings from the Melanesian Solomons in spite of the fact that more or less parallel types may occur elsewhere in Polynesia. To this category belong the following traits: dogs(?); simple fish hooks made of turtle shell; plaited armrings; necklaces of flying-fox teeth used as money; combs made of one piece of wood; round stone adzes; decoration by means of inlaid pearl shell; the sickle-shaped club, and, perhaps, the idea of two island afterworlds. Other elements are definitely of Melanesian origin, but whence they came to Rennell is at present impossible to say. Betel chewing and lime boxes may yet have been introduced from the Solomons, but in other cases we shall probably have to look for more distant sources. I refer here to the sewn pandanus mats and the ovate-headed clubs. Nose ornaments may also be due to Melanesian influence.

Finally, there are other western elements the history of which is still obscure. They are not Melanesian, but may have developed either in western Polynesia, or spread from Micronesia. They include the small sitting mat as an accessory to the costume; the composite comb with only a few prongs; fish as a tattooing design (on Rennell borrowed from Tikopia); oval wooden bowls with horizontal lugs; and possibly also the specific type of shell adze

[1] BURROWS 1938, p. 94.
[2] BURROWS 1938, p. 143.

head. The emphasis placed upon the god house, in contradistinction to the open-air sanctuary, is likewise a western trait, but whether it developed in Fiji or in western Polynesia we do not know. The custom of erecting a small house on top of the grave may have been introduced either from Micronesia or from Melanesia.

There still remain a number of elements which are even more problematic. It is not out of the question that a more thorough study than I have been able to undertake may show that for instance the fish drive, fish weirs of coconut fronds, flat baskets for permanent use, the buzz and the tossing game with stones or the like, and the idea of special departing places or "leaping stones" for the souls of the deceased are old proto-Polynesian elements. This may even be true of the arrows with awl-shaped points in spite of their obvious affinities to certain Melanesian types, and of the primary arrow release. Our information of the remarkable nooses for catching birds, the multipronged flying-fox spear and the ear ornaments is so scanty that I dare not venture any suggestions, and the origin of the extended burial is likewise obscure. The three-legged head rest, the arrow-like javelins, the asymmetrical, axe-like club and the stone-headed club are apparently local developments or rather variants of more general forms.

After this survey of the various elements which go to form the culture of Rennell Island it may be of interest to compare the results with those obtained from other parts of Oceania. It will be seen immediately that several elements otherwise found in western Polynesia are lacking here: fish hooks for catching bonito and oil fish; food pounders; joining bark-cloth sheets by means of pasting and felting, and decoration of bark cloth by rubbing over tablets (as well as the eastern methods of stamping and water-marking); right-angle plaiting in mats and baskets; coiled basketry; houses with rounded gable ends and ridge poles supported by king posts; canoes with flange-lashed planks (as well as with right-through lashing as in eastern Polynesia); wooden slit gong (introduced recently for church service); panpipes; kava bowls and kava ceremonies; terms distinguishing father's sister from mother, and distinguishing child, woman speaking, from broth-

er's child; privileged position of sisters' sons; Tangaloa as supreme god; and Pulotu as afterworld. There are other characteristics of western Polynesia[1], but whether they occur on Rennell I cannot say. It might be surmised that the absence of some elements such as bonito and oil fish hooks and the plank canoe were simply due to local geographical conditions, but it is by no means certain, and for most of the other elements this interpretation is out of the question, the only feasible explanation being that they never reached Rennell.

In his work on the megalithic complex in Melanesia, RIESENFELD suggests that it may have spread to Rennell too, adding that "the apparent non-existence of stone-work may simply be due to lack of knowledge"[2]. This I consider extremely improbable. Apart from the "god stones", which are most likely proto-Polynesian, there are no indications of such elements as RIESENFELD classes within his megalithic culture: no phallus stones, no dolmens, no village or irrigation terraces, no paved roads, artificial harbours or other stone structures, no coiled pottery, no ceremonial bonito fishing, no real shark cult, no pig breeding, etc.

One outcome of our analysis is the demonstration of the relative poverty of Rennellese culture. Now it is a well-known fact that throughout the Pacific the culture of the coral islands is always markedly poorer than that of the volcanic groups, simply because the natural resources are more limited. That, however, will hardly account for everything as far as Rennell is concerned. As we have seen not only the specific eastern traits but also many of the elements which are found elsewhere in western Polynesia are lacking here. Another characteristic of its culture is its old-fashioned stamp. By far most of its elements are so widespread that they must be considered proto-Polynesian, and some of them are even remarkably primitive as for instance the bark-cloth techniques, the functioning of the chief-priests as inspired prophets, etc. The conclusion must be that the population of Rennell separated from the rest of the stock at an early period and since then has had but little intercourse with the other islands. The development of local types points in the same direction. The

[1] BURROWS 1938, p. 88 ff.
[2] RIESENFELD 1950, p. 194 f.

contact with Tikopia, which resulted in, for instance, the introduction of certain tattooing designs and, perhaps, of betel pepper, seems to be quite recent.

Moreover it appears from our inquiry that it is scarcely possible to demonstrate cultural affinities to any other particular island group. Thus the tradition of an immigration from Ubea —provided that by this name we are to understand the present Uvea of Wallis Island—can neither be proved nor disproved, and the agreements in kinship terminology with the Tokelau group are hardly sufficient evidence of especially close relations to these islands. Nor is there evidence of immigration from any of the Polynesian outliers or direct from Micronesia. Some elements undoubtedly show contact with the Melanesian Solomons and even with more distant parts of Melanesia, but again they are too few and incidental to prove actual immigrations from there. If there is any basis at all for the afore-mentioned tale of settlers from southern Guadalcanal, they must have been too few in number to leave their stamp on the population. We might ask, of course, if this tradition should not be correlated with the Rennellese tradition of the *Hiti*, but an interpretation of this kind seems to be impossible, for in that case we should expect a much stronger Melanesian component in race, language and culture than is actually found. How, then, the *Hiti* tradition should be explained is still a puzzle, and so far there is no evidence of a stratification in the culture of Rennell.

In one of the previous chapters (p. 145 ff) a brief account was given of the highly divergent hypotheses regarding the peopling of Polynesia, based some of them on traditional history, others on a study of regional similarities and differences. The present inquiry, it must be admitted, sheds very little light on the problem. We have found no support for dividing Polynesian culture into two or three strata due to different immigration waves. In stating this I do not want to deny that a stratification of this kind may not eventually be discovered. The history of most cultures is more complex than it appears at first sight. What we need is, as as I have already emphasized, painstaking archaeological research throughout Oceania. Till that has been done—and so far the soil has scarcely been scratched—there is too much room left for more or less groundless speculations.

Bibliography.

Abbreviations.

A: Anthropos. Mödling b. Wien.
AA: American Anthropologist. New York. Lancaster. Menasha.
AGW-M: Mitteilungen der Anthropologischen Gesellschaft. Wien.
AMNH-AP: American Museum of Natural History. Anthropological Papers. New York.
AT: Acta Tropica. Basel.
BA: Baessler-Archiv. Leipzig. Berlin.
BM-: Bernice P. Bishop Museum. Honolulu.
-B: Bulletin.
-M: Memoir.
-OP: Occasional Paper.
-SP: Special Publication.
CIW-P: Carnegie Institute of Washington. Publication. Washington.
DM-: Dominium Museum. Wellington.
-B: Bulletin.
-M: Monograph.
E: Ethnologica. Leipzig.
ES: Ethnological Studies. Göteborg.
ESE: Ergebnisse der Südsee-Expedition 1908—1910. Hamburg.
G: Globus. Braunschweig.
GJ: Geographical Journal. London.
IAE: Internationales Archiv für Ethnographie. Leiden.
M: Man. London.
MVH-M: Mitteilungen aus dem Museum für Völkerkunde. Hamburg.
O: Oceania. Melbourne. Sydney.
PMAAE-P: Peabody Museum of American Archaeology and Ethnology. Papers. Cambridge, Mass.
PS-: Polynesian Society. Wellington. New Plymouth.
-J: Journal.
-M: Memoir.
RAI-J: Journal of the Royal Anthropological Institute. London.
SEU: Studia Ethnographica Upsalensia. Uppsala.
SI-: Smithsonian Institution. Washington.
-AR: Annual Report.
-WBS: War Background Studies.

SO-J: Journal de la Société des Océanistes. Paris.
SWJA: Southwestern Journal of Anthropology. Albuquerque.
USNM-R: United States National Museum. Report. Washington.
ZAOS: Zeitschrift für afrikanische und oceanische Sprachen. Berlin.
ZE: Zeitschrift für Ethnologie. Berlin.

List of Works.

Anonymous (= Smith, S. Percy ?): "A new theory of Polynesian origins". By Roland B. Dixon, Ph. D. A review. PS-J. XXX. 1921.
Aitken, Robert T.: Ethnology of Tubuai. BM-B. 70. 1930.
Allen, W.: Rotuma. Report of the 6th meeting of the Australasian Association for the Advancement of Science. Sydney (1895).
Amich, Fray José, see Corney, Bolton G.
Andía y Varela, see Corney, Bolton G.
Andree, Richard: Ethnographische Parallelen und Vergleiche. Neue Folge. Leipzig 1889.
Anell, Bengt: Contribution to the history of fishing in the Southern Seas. SEU. IX. 1955.
Arning, Eduard: Ethnographische Notizen aus Hawaii 1883–86. MVH-M. XVI. 1931.
Banks, Joseph: Journal of the Right Honourable Sir... during Captain Cook's first voyage... 1768—71. Ed. Sir Joseph D. Hooker. London 1896.
Baucke, William, see Skinner, H. D.
Beaglehole, Ernest & Pearl: Ethnology of Pukapuka. BM-B. 150. 1938.
Beasley, Harry G.: Pacific Island records. Fish hooks. London 1928.
Beckwith, Martha Warren (ed.): Kepelino's traditions of Hawaii. BM-B. 95. 1932.
Beechey, F. W.: Narrative of a voyage to the Pacific and Bering's Strait 1825–28. New ed. I. London 1831.
Behrens, Carl Friederich: Reise durch die Süd-Länder und um die Welt. Franckfurt & Leipzig 1737.
Bernatzik, Hugo Adolph: Owa Raha. Wien, Leipzig, Olten 1936.
Best, Elsdon: Polynesian voyagers. DM-M. 5. 1923.
— The Maori. I—II. PS-M. V. 1924.
— Maori agriculture. DM-B. 9. 1925.
— Fishing methods and devices of the Maori. DM-B. 12. 1929.
Beyer, H. Otley: Philippine and East Asian archaeology, and its relation to the origin of the Pacific Islands population. National Research Council of the Philippines. Bulletin XXIX. Quezon City 1948.
Bille, Steen: Beretning om Corvetten Galathea's Reise omkring Jorden 1845, 46 og 47. III. Kjøbenhavn 1851.
Bishop, Marcia Brown: Hawaiian life of the pre-European period. Salem 1940.

Blackwood, Beatrice: Both sides of Buka Passage. Oxford 1935.
Bligh, William: A voyage to the South Sea. London 1792.
Boenechea, Domingo, see Corney, Bolton G.
Bollig, P. Laurentius: Die Bewohner der Truk-Inseln. Ethnologische Anthropos-Bibliothek. III. 1. Münster 1927.
Bonacorsi, Raimundo, see Corney, Bolton G.
(Bougainville, L. A. de:) Voyage autour du monde par le frégate du roi La Boudeuse et la flûte L'Étoile. Paris 1771.
Brandeis, Antonie: Ethnographische Beobachtungen über die Nauru-Insulaner. G. XCI. 1907.
Brewster, A. B.: The hill tribes of Fiji. London 1922.
Brigham, William T.: An index to the islands of the Pacific Ocean. BM-M. I, 2. 1900.
— A handbook for visitors to the Bernice Pauahi Bishop Museum. Honolulu 1903.
Broek d'Obrenan, van den, see d'Obrenan, van den Broek.
Brown, J. Macmillan: Maori and Polynesian. London 1907.
— Peoples and problems of the Pacific. I—II. London 1927.
Bryan, see Handy.
Brügger, Mafaldo: Der polynesische Kultureinfluss auf Neu-Kaledonien und die Loyalty-Inseln. AT. I. 1944.
Buck, Sir Peter = Te Rangi Hiroa
— see Handy.
Bühler, A.: Versuch einer Bevölkerungs- und Kulturanalyse auf den Admiralitätsinseln. ZE. LXVII. 1936.
Bülow, W. von: Einige Bemerkungen zu den Artikel "Die Sprache von Moi-ki, Bellona Insel" in dem Aufsatze von Sidney H. Ray: Mitteilungen über die Dialekte der Salomon-Inseln. ZAOS. IV. 1898.
— Beiträge zur malayopolynesischen Ethnographie und Sprachforschung. IAE. XVIII. 1908.
Burrows, Edwin G.: Ethnology of Futuna. BM-B. 138. 1936.
— Ethnology of Uvea (Wallis Island). BM-B. 145. 1937.
— Western Polynesia. ES. VII. 1938.
— Breed and border in Polynesia. AA. N.s. XLI. 1939.
— Culture-areas in Polynesia. PS-J. XLIX. 1940.
Byron, John, see Hawkesworth, John.
Calvert, James, see Williams, Thomas.
Carteret, Philip, see Hawkesworth, John.
Chamisso, Adelbert von: Bemerkungen und Ansichten auf einer Entdeckungs-Reise... 1815—18. (= Kotzebue, Otto von: Entdeckungs-Reise in die Süd-See und nach der Berings-Strasse. III. Weimar 1821).
Christian, F. W.: On Micronesian weapons, dress, implements, etc. RAI-J. XXVIII. 1899 a.
— The Caroline Islands. London 1899 b.
Churchill, William: The Polynesian wanderings. CIW-P. 134. 1911.
— Sissano. Movements of migration within and through Melanesia. CIW-P. 244. 1916.

Churchill, William: Club types of nuclear Polynesia. CIW-P. 255. 1917.
Codrington, R. H.: The Melanesian languages. Oxford 1885.
— The Melanesians. Oxford 1891.
Cook, James: An account of a voyage round the world. (= Hawkesworth, John: An account of the voyages... in the southern hemisphere. II—III. London 1773).
— A voyage towards the South Pole and round the world 1772—75. 2. ed. I—II. London 1777.
Cook, James, & King, James: A voyage to the Pacific Ocean...1776—80. 2. ed. I—III. London 1785.
Corney, Bolton G. (ed.): The quest and occupation of Tahiti by the emmisaries of Spain in 1772—1776. Hakluyt Soc. 2. ser. 32, 36, 43. London 1913, 1914, 1918. (Voyages of Domingo Boenechea, Raimundo Bonacorsi, Fray José Amich, José de Andía y Varela and Máximo Rodríguez).
Culin, Stewart: Hawaiian games. AA. N. s. I. 1899.
Damm, Hans: Inseln um Truk. ESE. II B, 6. 1935.
— Methoden der Feldbewässerung in Ozeanien. Südseestudien. Gedenkschrift zur Erinnerung an Felix Speiser. Basel 1951.
— see Sarfert, Ernst.
(Deck, Northcote:) Rennell Island. GJ. LVII. 1921.
— South from Guadalcanal. Toronto 1945.
Demandt, E.: Die Fischerei der Samoaner. MVH-M. III, 1. 1913.
Dempwolff, Otto: Das austronesische Sprachgut in den polynesischen Sprachen. Festbundel uitgegeven door het Koninklijk Bataviaasch Genotschap van Kunsten en Wetenschappen. I. Weltevreden 1929.
Dillon, Peter: Narrative and successful result of a voyage in the South Seas to ascertain the actual fate of La Pérouse's expedition. I—II. London 1829.
Dixon, George: A voyage round the world. London 1789.
Dixon, Roland B.: Oceanic. The mythology of all races. ed. Louis Herbert Gray. IX. Boston. 1916.
— A new theory of Polynesian origins. Proceedings of the American Philosophical Society. LIX. Philadelphia 1920.
— The problem of the sweet potato in Polynesia. AA. N. s. XXXIV. 1932.
— Contacts with America across the southern Pacific. The American Aborigines, ed. Diamond Jenness. Toronto 1933.
Dodge, Ernest S.: Gourd growers of the South Seas. Gourd Society of America. Ethnographical Series. 2. Boston 1943.
Doerr, Erich: Bestattungsformen in Ozeanien. A. XXX. 1935.
Dumont d'Urville, J.: Voyage de la corvette L'Astrolabe...1826—29. I—V. Paris 1830—33.
— Voyage au Pole Sud et dans l'Océanie...1837—40. I—X. Paris 1841—46.
Eason, W. J. E.: A short history of Rotuma. Suva (1951).
Edge-Partington, James: An album of the weapons, tools, ornaments,

articles of dress etc. of the natives of the Pacific Islands. I—III. Manchester 1890—98.
Eilers, Annelise: Inseln um Ponape. ESE. II B, 8. 1934.
— Westkarolinen. ESE. II B, 9. 1935—36.
— see Hambruch, Paul.
Elbert, Samuel H.: Internal relationship of Polynesian languages and dialects. SWJA. IX. 1953.
Ellis, William: Polynesian researches. 2. ed. I—IV. London 1831.
Emory, Kenneth P.: Archaeology of the Pacific Equatorial Islands. BM-B. 123. 1934.
— Polynesian stone remains. PMAAE-P. XX. 1943.
— see Handy.
Erdland, P. A.: Die Marshall-Insulaner. Ethnologische Anthropos-Bibliothek. II, 1. Münster 1914.
Erskine, John Elphinstone: Journal of a cruise among the islands of the western Pacific. London 1853.
Finsch, O.: Ethnologische Erfahrungen und Belegstücke aus der Südsee. Wien 1893.
Firth, Raymond: Primitive economics of the New Zealand Maori. London 1929.
— Report on research in Tikopia. O. I. 1930—31.
— A native voyage to Rennell. O. II, 2. 1931.
— We, the Tikopia. London 1936 a.
— Tattooing in Tikopia. M. XXXVI. 1936 b.
— Primitive Polynesian economy. London 1939.
— The work of the gods in Tikopia. I—II. London 1940.
— Bark-cloth in Tikopia, Solomon Islands. M. XLVII. 1947.
Fleurieu, C. P. Claret: Voyage autour du monde...1790—92, par Étienne Marchand. I. Paris, an vi.
Fornander, Abraham: The Polynesian race. 2. ed. I. London 1890.
Forster, George: A voyage round the world...1772—75. I—II. London 1777.
Forster, John Reinold: Observations made during a voyage round the world. London 1778.
Forster, Michael: Extract of report on Rennell Island to the secretary of government, Honiara. October 4th, 1949. (MS. in the Government files, Honiara).
Fox, C. E.: The threshold of the Pacific. London 1924.
Foy, W.: Schemelartige Kokosnussschaber. AGW-M. XXXIV. 1904.
— Zur Verbreitung der Nasenflöte. E. I. 1909.
Friederici, Georg: Ein Beitrag zur Kenntniss der Tuamotu-Inseln. Mitteilungen des Vereins für Erdkunde 1910. Leipzig 1911.
— Untersuchungen über eine melanesische Wanderstrasse. Mitteilungen aus den deutschen Schutzgebieten. Ergänzungsheft 7. Berlin 1913.
— Malaio-Polynesische Wanderungen. Vortrag gehalten auf dem XIX deutschen Geographentage. Leipzig 1914 a.

Friederici, Georg: Der Erdofen. Petermanns Mitteilungen. LX, 1. Gotha 1914 b.
— Ein Beitrag zur Kenntniss der Trutzwaffen der Indonesier, Südseevölker und Indianer. BA. Beiheft VII. 1915.
— Zu den vorkolumbischen Verbindungen der Südsee-Völker mit Amerika. A. XXIV. 1929.
Gardiner, J. Stanley: The natives of Rotuma. RAI-J. XXVII. 1898.
Geiseler: Die Oster-Insel. Berlin 1883.
Gifford, Edward Winslow: Tongan Society. BM-B. 61. 1929.
Giglioli, Enrico Hillyer: Appunti intorno ad una collezione etnografica fatta durante il terzo viaggio di Cook. Archivio per l'Antropologia e l'Etnologia. XXIII. Firenze 1893.
Gill, William Wyatt: Life in the southern isles. London s. a. (1876?).
Girschner, Max: Die Karolineninsel Námōluk und ihre Bewohner. BA. II. 1912.
Glaumont, M.: Usages, mœurs et coutumes des Néo-Calédoniens. Revue d'Ethnographie. VII. Paris 1889.
Graebner, Fritz: Kulturkreise und Kulturschichten in Ozeanien. ZE. XXXVII. 1905.
— Die melanesische Bogenkultur und ihre Verwandten. A. IV. 1909 a.
— Völkerkunde der Santa-Cruz-Inseln. E. I. 1909 b.
— Der Erdofen in der Südsee. A. VIII. 1913.
Greiner, Ruth: Polynesian decorative designs. BM-B. 7. 1923.
Grimble, Arthur: From birth to death in the Gilbert Islands. RAI-J. LI. 1921.
Grover, John C.: Geology, mineral deposits and prospects of mining development in the British Solomon Islands Protectorate. Interim Geological Survey of the British Solomon Islands. Memoir I. London & Honiara 1955.
Gudger, E. W.: Wooden hooks for catching sharks and *Ruvettus* in the South Seas. AMNH-AP. XXVIII, 3. 1927.
Guppy, H. B.: The Solomon Islands and their natives. London 1887.
Haddon, A.C. & Hornell, James: Canoes of Oceania. I—III. BM-SP. 27—29. 1936—38.
Hale, Horatio: Ethnography and Philology. (= Wilkes, Charles: Narrative of the United States exploring expedition. VI. Philadelphia 1846).
Hambruch, Paul: Wuvulu und Aua. MVH-M. II, 1. 1908.
— Nauru. ESE. II B, 1. 1914—15.
— Oceanische Rindenstoffe. Oldenburg 1926.
Hambruch, Paul & Eilers, Annelise: Ponape. ESE. II B, 7. 1936.
Handy, Edward S. Craighill: Some conclusions and suggestions regarding the Polynesian problem. AA. N. s. XXII. 1920.
— Native culture in the Marquesas. BM-B. 9. 1923.
— Polynesian religion. BM-B. 34. 1927.
— History and culture in the Society Islands. BM-B. 79. 1930 a.
— The problem of Polynesian origins. BM-OP. IX, 8. 1930 b.

HANDY, EDWARD S. CRAIGHILL: Houses, boats, and fishing in the Society Islands. BM-B. 90. 1932.
HANDY, WILLOWDEAN CHATTERSON: String figures from the Marquesas and Society Islands. BM-B. 18. 1925.
— Handicrafts of the Society Islands. BM-B. 42. 1927.
HANDY, EMORY, BRYAN, BUCK, WISE, etc.: Ancient Hawaiian civilization. Honolulu 1933.
HAWKESWORTH, JOHN: An account of the voyages... for making discoveries in the southern hemisphere...by Commodore Byron, Captain Wallis, Captain Carteret, and Captain Cook. I—III. London 1773.
HEDLEY, CHARLES: The ethnology of Funafuti. Australian Museum. Memoirs. III. Sydney 1897.
HEINE-GELDERN, ROBERT: Urheimat und früheste Wanderungen der Austronesier. A. XXVII. 1932.
— L'art préboudhique de la Chine et de l'Asie du sud-est et son influence en Océanie. Revue des Arts Asiatiques. XI. Paris 1937.
— Some problems of migration in the Pacific. Kultur und Sprache. Wiener Beiträge zur Kulturgeschichte und Linguistik. IX. Wien 1952.
HEIZER, ROBERT F.: Aboriginal fish poisons. Bureau of American Ethnology. Bulletin 151. Washington 1953.
HENRY, TEUIRA: Ancient Tahiti. BM-B. 48. 1928.
HEYERDAHL, THOR: American Indians in the Pacific. Oslo 1952 a.
— Some problems of aboriginal migration in the Pacific. Archiv für Völkerkunde. VI—VII. Beiheft 1. Wien 1952 b.
HOCART, A. M.: Chieftainship and the sister's son in the Pacific. AA. N. s. XVII. 1915 a.
— Ethnographical sketch of Fiji. M. XV, 1915 b.
— Who are the Melanesians? RAI-J. LIII. 1923.
— Lau Islands, Fiji. BM-B. 62. 1929.
HOGBIN, H. Jan: The social organization of Ontong Java. O. I. 1930—31.
— A note on Rennell Island. O. II, 2. 1931 a.
— Primeval life as it is lived to-day. Illustrated London News. April No. London 1931 b.
— Law and order in Polynesia. London 1934.
— "Polynesian" colonies in Melanesia. PS-J. XLIX. 1940.
HORNELL, JAMES: String figures from Fiji and western Polynesia. BM-B. 39. 1927.
— Was there pre-Columbian contact between the peoples of Oceania and South America? PS-J. LIV. 1945.
— see HADDON, A. C.
HOWELLS, WILLIAM W.: Anthropometry and blood types in Fiji and the Solomon Islands. AMNH-AP. XXXIII, 4. 1933.
— The racial elements of Melanesia. PMAAE-P. XX. 1948.
HUMPHREYS, C. B.: The southern New Hebrides. Cambridge 1926.
IVENS, WALTER G.: Melanesians of the south-east Solomon Islands. London 1927.

Ivens, Walter G.: The island builders of the Pacific. London 1930.
— The diversity of culture in Melanesia. RAI-J. LXIV. 1934.
— Solomon Islands clubs called "Wari-i-hau." Ethnologia Cranmorensis. No. 2. (Chislehurst) 1938.
Kähler, Hans: Die Stellung der polynesischen Dialekte innerhalb der austronesischen Sprachen. Zeitschrift der Deutschen Morgenländischen Gesellschaft. 100, 2. Wiesbaden 1951.
Kayser, Al.: Die Eingeborenen von Nauru (Südsee). A. XII—XIII. 1917—18.
Keate, George (ed.): An account of the Pelew Islands...composed from the journals and communications of Captain Henry Wilson. 3. ed. London 1789.
Kennedy, Donald Gilbert: Field notes on the culture of Vaitupu, Ellice Islands. PS-M. IX. 1931.
Kepelino, see Beckwith, Martha Warren.
King, James, see Cook, James.
Knibbs, S. G. C.: The savage Solomons as they were and are. London 1929.
Königswald, G. H. R. von: Über sumatranische Schiffstücher und ihre Beziehungen zur Kunst Ozeaniens. Südseestudien. Gedenkschrift zur Erinnerung an Felix Speiser. Basel 1951.
Kotzebue, Otto von: Neue Reise um die Welt...1823—26. I—II. Weimar & St. Petersburg 1830.
— see Chamisso, Adelbert von.
Krämer, Augustin: Die Samoa-Inseln. I—II. Stuttgart 1902—03.
— Hawaii, Ostmikronesien und Samoa. Stuttgart 1906.
— Palau. ESE. II B, 3. 1926.
— Truk. ESE. II B, 5. 1932.
— Inseln um Truk. ESE. II B, 6. 1935.
— Zentralkarolinen, I. ESE. II B, 10. 1937.
— & Nevermann, Hans: Ralik-Ratak (Marshall-Inseln). ESE. II B, 11. 1938.
Krause, Fritz: Zur Ethnographie der Insel Nissan. Jahrbuch des städtischen Museums für Völkerkunde zu Leipzig 1907.
Krieger, H. W.: Island peoples of the western Pacific, Micronesia and Melanesia. SI-WBS. XVI. 1943.
Krusenstern, A. J. von: Reise um die Welt...1803—06. 2. Ausg. I—II, 1—2. Berlin 1811—12.
Kubary, J. S.: Ethnographische Beiträge zur Kenntniss des Karolinen Archipels. Leiden 1895.
Labillardière, (J. J. de): Relation du voyage à recherche de La Pérouse. II. Paris, an viii.
Lagercrantz, Sture: African methods of fire-making. SEU. X. 1954.
Lambert, S. M.: Health survey of Rennell and Bellona Islands. O. II, 2. 1931.
— British Solomon Islands health surveys, 1933. Journal of Tropical Medicine and Hygiene. XXXVII. London 1934.
— Amerikansk Læge i Paradiset. København 1944.

LANGSDORFF, G. H. VON: Bemerkungen auf einer Reise um die Welt... 1803—07. I. Frankfurt a. M. 1812.
LARSEN, HELGE: Some ancient specimens from western and central Polynesia. Nationalmuseets Skrifter, Etnografisk Række. I. København 1941.
LAVAL, HONORÉ: Mangareva. Ed. A. MÉTRAUX & M. DESMEDT. Braine-le-Comte & Paris 1938.
LAWRY, W.: Friendly and Feejee Islands. London 1850.
LEHMANN, FRIEDR. RUDOLF: Mana. Institut für Völkerkunde. 1. Reihe, II. Leipzig 1922.
— Die polynesischen Tabusitten. Veröffentlichungen des Staatlich-sächsischen Forschungsinstitutes für Völkerkunde. 1. Reihe, X. Leipzig 1930.
— Prophetentum in der Südsee. ZE. LXVI. 1935.
(LE MAIRE, JACOB, & SCHOUTEN, WILLEM CORNELISZ.:) De ontdekkingsreis van...1615—17. I. s'Gravenhage 1945.
LEVERD, A.: Polynesian linguistics, I. Polynesian language of Uvea. Loyalty Islands. PS-J. XXXI. 1922.
LINTON, RALPH: Material culture of the Marquesas Islands. BM-M. VIII, 5. 1923.
LISIANSKY, UREY: A voyage round the world...1803—06. London 1814.
LISTER, J. J.: Notes on the natives of Fakaofu (Bowditch Island), Union group. RAI-J. XXI. 1892.
LOEB, EDWIN M.: History and traditions of Niue. BM-B. 32. 1926.
LUKE, Sir HARRY: From a South Seas diary 1938—1942. London 1945.
LUOMALA, KATHARINE: Maui-of-a-thousand-tricks. BM-B. 198. 1949.
— The Menehune of Polynesia and other mythical little people of Oceania. BM-B. 203. 1951.
LUTKÉ, FRÉDÉRIC (= LYTKE, FEDOR): Voyage autour du monde... 1826—29. I—III. Paris 1835—36.
MACGREGOR, GORDON: Anthropological work of the Templeton Crocker Expedition. BM-B. 124. 1934.
— Notes on the ethnology of Pukapuka. BM-OP. XI, 6. 1935.
— Ethnology of the Tokelau Islands. BM-B. 146. 1937.
— The gods of Rennell Island. PMAAE-P. XX. 1943.
MCKENZIE-POLLOCK, J. S.: Medical report on Rennell Island. March 11. 1950. (MS. in the Government files, Honiara).
MCKERN, W. C.: Archaeology of Tonga. BM-B. 60. 1929.
MAKERETI: The old-time Maori. London 1938.
MALO, DAVID: Hawaiian antiquities. Honolulu 1903.
MARCHAND, ÉTIENNE, see FLEURIEU, C.P. CLARET.
MARTIN, JOHN: An account of the natives of the Tonga Islands...compiled and arranged from the extensive communications of Mr. William Mariner. 2. ed. I—II. London 1818.
MATSUMURA, AKIRA: Contributions to the ethnography of Micronesia. Journal of the College of Science, Tokyo Imperial University. XL, 7. Tokyo 1918.

MEAD, MARGARET: An inquiry into the question of cultural stability in Polynesia. Columbia University Contributions to Anthropology. IX. New York 1928.
— Social organization of Manua. BM-B. 76. 1930.
(MENDAÑA, ALVARO DE): The discovery of the Solomon Islands. Ed. Lord AMHERST OF HACKNEY & BASIL THOMSON. I—II. Hakluyt Soc. London 1901.
— see QUIRÓS, PEDRO FERNÁNDEZ DE.
MERTENS (KARL HEINRICH): Les mœurs et usages des habitants des îles Carolines basses. (In LUTKÉ, FR.: Voyage autour du monde... 1826—29. III. Paris 1836).
MÉTRAUX, ALFRED: Ethnology of Easter Island. BM-B. 160. 1940.
MILES, G. P. L.: Notes on the material culture of Niue. Ethnologia Cranmorensis. No. 3. (Chislehurst) 1938.
MOERENHOUT, J.A.: Voyages aux îles du Grand Océan. I—II. Paris 1837. (Reprint 1952).
MONTITON, ALBERT: Les Paumotous. Les Missions Catholiques. VI. Lyon 1874.
MORSE, EDWARD S.: Additional notes on arrow release. Salem, Mass. 1922.
Moss, ROSALIND: The life after death in Oceania and the Malay Archipelago. Oxford 1925.
MÜLLER, FRIEDRICH: Reise der österreichischen Fregatte Novara um die Erde. Anthropologischer Teil. III. Ethnographie. Wien 1868.
MÜLLER, WILHELM: Yap. ESE. II B, 2. 1917.
MURDOCK, GEORGE PETER: Anthropology in Micronesia. Transactions of the New York Academy of Sciences. Ser. II, 11. New York 1948—49.
NEVERMANN, HANS: Götter der Südsee. Stuttgart 1947.
— Polynesier auf den Neuen Hebriden. ZE. LXXVIII. 1953.
— see KRÄMER, AUGUSTIN.
NEWELL, J. E.: Notes, chiefly ethnological, on the Tokelau, Ellice, and Gilbert Islanders. Report of the 6th Meeting of the Australasian Association for the Advancement of Science. Sydney 1895.
NIEUWENHUIS, A. W.: Die Entstehung der Polynesier und ihrer Kultur. IAE. XXX. 1930.
D'OBRENAN, CHARLES VAN DEN BROEK: Le voyage de "La Korrigane". Paris 1939.
D'OBRENAN, RÉGINE VAN DEN BROEK: Note sur l'île Rennel et ses tatouages. SO-J. III. 1947.
PARAVICINI, EUGEN: Reisen in den britischen Salomonen. Frauenfeld & Leipzig 1931.
PARKINSON, R.: Beiträge zur Ethnologie der Gilbertinsulaner. IAE. II. 1889.
— Zur Ethnographie der Ongtong Java- und Tasman-Inseln. IAE. X. 1897.
— Zur Ethnographie der nordwestlichen Salomo Inseln. Abhandlungen

und Berichte des Königl. Zoologischen und Anthropogisch-Ethnographischen Museums zu Dresden. VII, 6. Berlin 1899.
PARKINSON, R.: Dreissig Jahre in der Südsee. Stuttgart 1907.
PETRI, HELMUT: Die Geldformen der Südsee. A. XXXI. 1936.
PHILLIPS, W. J.: The use of the bow and arrow in New Zealand. Ethnos. XIX. Stockholm 1954.
POIRIER, JEAN: Une hypothèse de travail: Les migrateurs nordiques ont-ils atteint, entre le XI[e] et le XIV[e] siècle, la Polynésie orientale? SO-J. VI. 1950.
— L'élément blond dans l'ethnie polynésienne. SO-J. VIII. 1952.
PURCHAS, SAMUEL: Hakluytus Posthumus or Purchas his Pilgrimes. IV. London 1625.
QUATREFAGES, A. DE: Les Polynésiens et leurs migrations. Paris (1866).
(QUIRÓS, PEDRO FERNÁNDEZ DE): The voyages of...1595 to 1606. Hakluyt Soc. London 1904.
RAY, SIDNEY H.: Mitteilungen über drei Dialekte der Salomon-Inseln. ZAOS. II. 1896.
— Polynesian linguistics, III. Polynesian languages of the Solomon Islands. PS-J. 1917 a.
— The people and language of Lifu, Loyalty Islands. RAI-J. XLVII. 1917 b.
— The Polynesian languages in Melanesia. A. XIV—XV. 1919—20.
— A comparative study of the Melanesian island languages. Cambridge 1926.
REICHARD, GLADYS: Melanesian design. I—II. New York 1933.
RIESENFELD, ALPHONSE: Who are the Betel-People? IAE. XLV. 1947.
— The megalithic culture of Melanesia. Leiden 1950 a.
— The racial characteristics of the early "Polynesians" in Melanesia. M. L. 1950 b.
RIVERS, W. H. R.: The history of Melanesian society. I—II. Cambridge 1914.
ROBERTS, H. H.: Ancient Hawaiian music. BM-B. 29. 1926.
RODRÍGUEZ, MÁXIMO, see CORNEY, BOLTON G.
(ROGGEVEEN, JACOB): Dagverhaal der ontdekkings-reis van...1721—22. Middelburg 1838.
ROLLIN, LOUIS: Les îles Marquises. Paris 1929.
ROTH, KINGSLEY: The manufacture of bark-cloth in Fiji (Navatusila, Viti Levu Island). RAI-J. LXIV. 1934.
RUSSELL, W. E.: Rotuma. PS-J. LI. 1942.
SACHS, CURT: Geist und Werden der Musikinstrumente. Berlin 1929.
SARASIN, F.: Ethnologie der Neu-Caledonier und Loyalty-Insulaner. München 1929.
SARFERT, E.: Kusae. ESE. II B, 4. 1919—20.
SARFERT, ERNST, & DAMM, HANS: Luangiua und Nukumanu. ESE. II B, XII. 1929.
SCHMIDT, W.: Grundlinien einer Vergleichung der Religionen und Mythologien der austronesischen Völker. Denkschriften der Kaiser-

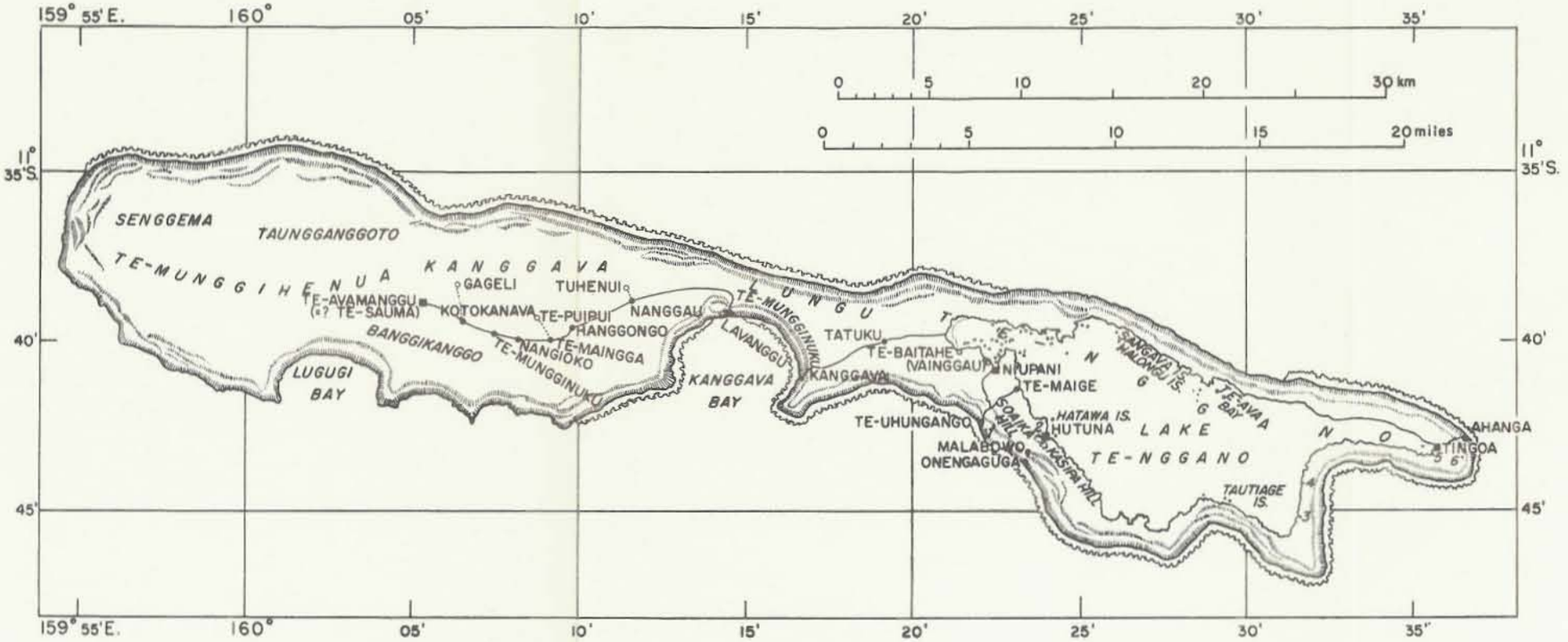
lichen Akademie der Wissenschaften in Wien. Philos.-Hist. Klasse. LIII, 3. Wien 1910.
SCHOUTEN, WILLEM CORNELISZ., see LE MAIRE, JACOB.
SHAPIRO, HARRY L.: The physical characteristics of the Ontong Javanese. AMNH-AP. XXXIII, 3. 1933.
— Physical differentiation in Polynesia. PMAAE-P. XX. 1943.
— Remarque sur l'origine des Polynésiens. SO-J. VII. 1951.
SKINNER, H. D.: The Morioris of Chatham Islands. BM-B. IX, 1. 1923.
— The origins and relationship of Maori material culture and decorative arts. PS-J. XXXIII. 1924.
— Some aspects of the history of Polynesian material culture. PS-J. LX. 1951.
— & BAUCKE, WILLIAM: The Morioris. BM-M. IX, 5. 1928.
SKOGMAN, C.: Fregatten Eugenies resa omkring jorden...1851—53. I—II. Stockholm s. a.
SMITH, S. PERCY: Futuna; or Horne Island and its people. PS-J. I. 1892 a.
— Uea; or Wallis Island and its people. PS-J. I. 1892 b.
— Niuē Island and its people. PS-J. XI—XII. 1902—03.
— Notes on the Ellice and Tokelau groups. PS-J. XXIX. 1920.
— Hawaiki. 4. ed. Auckland, Christchurch, etc. 1921.
SÖDERSTRÖM, J.: A. Sparrman's ethnographical collection from James Cook's 2nd expedition. Ethnographical Museum of Sweden, New Series. Publ. 6. Stockholm 1929.
SPEISER, FELIX: Südsee, Urwald. Kannibalen. Leipzig 1913.
— Völkerkundliches von den Santa-Cruz-Inseln. E. II. 1916.
— Anthropologische Messungen aus den St. Cruz-Inseln. Archiv für Anthropologie. N. F. XVIII. Braunschweig 1921.
— Ethnographische Materialien aus den Neuen Hebriden und den Banks-Inseln. Berlin 1923.
— Über Keulenformen in Melanesien. ZE. LXIV. 1933 a.
— Versuch einer Kulturanalyse von Neu-Kaledonien. ZE. LXV. 1933 b.
— Versuch einer Kulturanalyse der Zentralen Neuen Hebriden. ZE. LXVI. 1934.
— Ueber Kunststile in Melanesien. ZE. LXVIII. 1936.
— Melanesien und Indonesien. ZE. LXX. 1939.
— Über Feuerzeuge in der Südsee. A. XXXV—XXXVI. 1940—41.
— Kunststile in der Südsee. Führer durch das Museum für Völkerkunde Basel. Basel 1941.
— Über Totenbestattungen in Inselmelanesien. IAE. XL. 1942.
— Ueber die Beschneidung in der Südsee. AT. I. 1944.
— Versuch einer Siedlungsgeschichte der Südsee. Denkschriften der Schweizerischen Naturforschenden Gesellschaft. LXXVII. Zürich 1946.
SPOEHR, ALEXANDER: Majuro, a village in the Marshall Islands. Fieldiana: Anthropology. XXXIX. Chicago 1949.

SPOEHR, ALEXANDER: Time perspective in Micronesia and Polynesia. SWJA. VIII. 1952.
STAIR, JOHN B.: Old Samoa. (London) 1897.
STANLEY, G. A. V.: Report on the geological reconaissance of Rennell Island, British Solomon Islands Protectorate. British Solomon Islands. Report for 1927, App. A. Annual Colonial Report. No. 1421. London 1929.
STEINEN, KARL VON DEN: Die Marquesaner und ihre Kunst. I—II. Berlin 1925—28.
STEPHEN, ERNEST: Notes on Nauru. O. VII. 1936—37.
STILLFRIED, BERNHARD: Die soziale Organisation in Mikronesien. Acta Ethnologica et Linguistica. 4. Wien 1953.
STOKES, J. F. G.: Fish poisoning in the Hawaiian Islands. BM-OP. VII, 10. 1921.
STOLPE, HJALMAR: Collected essays in ornamental art. Stockholm 1927.
SULLIVAN, LOUIS R.: Race types in Polynesia. AA. N. s. XXVI. 1924.
(TASMAN, ABEL JANSZOON, & VISSCHER, FRANCHOYS JACOBSZOON): De reizen van...1642/3 en 1644. s'Gravenhage 1919.
TAUTAIN; Étude sur le mariage chez les Polynésiens (Mao'i) des îles Marquises. L'Anthropologie. VI. Paris 1895.
TE RANGI HIROA: Samoan material culture. BM-B. 75. 1930.
— Ethnology of Tongareva. BM-B. 92. 1932 a.
— Ethnology of Manihiki and Rakahanga. BM-B. 99. 1932 b.
— Mangaian society. BM-B. 122. 1934.
— Material representations of Tongan and Samoan gods. PS-J. XLIV. 1935.
— Ethnology of Mangareva. BM-B. 157. 1938 a.
— Vikings of the sunrise. Philadelphia & New York 1938 b.
— Hawaiian shark-tooth implements. BM-B. 180. 1943.
— Arts and crafts of the Cook Islanders. BM-B. 179. 1944.
— An introduction to Polynesian anthropology. BM-B. 187. 1945.
— Material culture of Kapingamarangi. BM-B. 200. 1950.
THILENIUS, G.: Ethnographische Ergebnisse aus Melanesien, I. Abhandlungen der Kaiserlichen Leopoldinisch-Carolinischen Deutschen Akademie der Naturforscher. LXXX. Halle 1902.
THOMPSON, LAURA: Archaeology of the Marianas Islands. BM-B. 100. 1932.
— Southern Lau, Fiji. BM-B. 162. 1940.
— The native culture of the Marianas Islands. BM-B. 185. 1945.
THOMSON, BASIL: Notes upon the natives of Savage Island, or Niué. RAI-J. XXXI. 1901.
— The Fijians. London 1908.
THOMSON, WILLIAM J.: Te Pito Te Henua, or Easter Island. USNM-R. 1889. 1891.
TISCHNER, HERBERT: Die Verbreitung der Hausformen in Ozeanien. Hamburg 1934.

Tregear, Edward: The Maori-Polynesian comparative dictionary. Wellington, etc. S. a. (1891).
— The Polynesian bow. SI-AR. 1892. 1893.
Trench, D.: Rennell Island tattoo markings. O. XI, 2. 1940.
Turbot, I. G.: Fishing for flying-fish in the Gilbert and Ellice Islands. PS-J. LIX. 1950.
Turnbull, John: A voyage round the world...1800—04. I—III. London 1805.
Turner, George: Samoa a hundred years ago and long before. London 1884.
Vancouver, George: A voyage of discovery to the North Pacific Ocean and round the world...1790—95. I—III. London 1798.
Viala, M.: Les îles Wallis et Horn. Bulletin de la Société Neuchâteloise de Géographie. XXVIII. Neuchâtel 1919.
Visscher, Franchoys Jacobszoon, see Tasman, Abel Janszoon.
Waitz, Theodor: Anthropologie der Naturvölker. V, 2. Leipzig 1870.
Wallis, Samuel, see Hawkesworth, John.
Weckler, J. E.: Polynesians, explorers of the Pacific. SI-WBS. 6. 1943.
Wedgwood, Camilla H.: Report on research work in Nauru Island, Central Pacific. O. VI—VII. 1935—37.
West, Thomas: Ten years in south-central Polynesia. London 1865.
Whitcombe, J. D.: Notes on Tongan ethnology. BM-OP. IX, 9. 1930.
Whitmere, S. J.: The ethnology of Polynesia. RAI-J. VIII. 1879.
Wilkes, Charles: Narrative of the United States exploring expedition 1838—42. I—V. Philadelphia 1844.
— see Hale, Horatio.
Williams, Thomas, & Calvert, James: Fiji and the Fijians. I—II. London 1858.
Williamson, Robert W.: The social and political systems of central Polynesia. I—III. Cambridge 1924.
— Religious and cosmic beliefs of central Polynesia. I—II. Cambridge 1933.
— Religion and social organisation in central Polynesia. Cambridge 1937.
— Essays in Polynesian ethnology. Ed. Ralph Piddington. Cambridge 1939.
Wilson, Henry, see Keate, George.
(Wilson, James, etc.) A missionary voyage to the southern Pacific Ocean...in the ship Duff. London 1799.
Wise, see Handy.
Wolff, Torben: Rennellese names of animals. The Natural History of Rennell Island, British Solomon Islands. Copenhagen 1955 a.
— Introduction. The Natural History of Rennell Island, British Solomon Islands. I. Copenhagen 1955 b.
Woodford, Charles Morris: A naturalist among the head-hunters. 2. ed. London 1890.

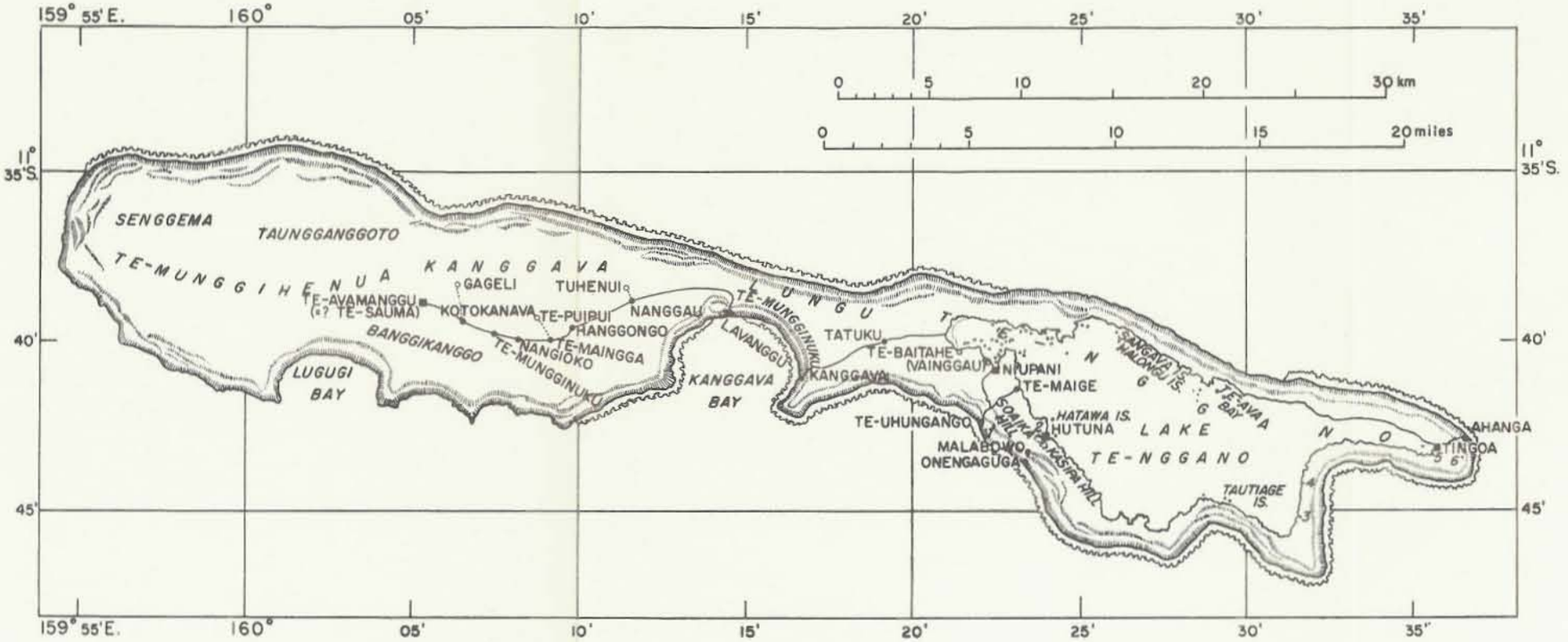
WOODFORD, CHARLES MORRIS: Some account of Sikaiana or Stewart's Island in the British Solomon Islands Protectorate. M. VI. 1906 a.
— Notes on Leueneuwa, or Lord Howe's group. M. VI. 1906 b.
— Notes on Rennell Island. M. VII. 1907.
— Note on a stone-headed mace from Rennell Island. M. X. 1910.
— On some little-known Polynesian settlements in the neighbourhood of the Solomon Islands, GJ. XLVIII. 1916.
— Fish-hooks from the Solomon Islands. M. XVIII. 1918.
WRIGHT, L. W. F.: (Comment on R. FIRTH: A living Polynesian religion). Congrès International des Sciences Anthropologiques et Ethnologiques. CR. de la deuxième session 1938. Copenhague 1939.

Indleveret til selskabet den 12. september 1955.
Færdig fra trykkeriet den 10. februar 1956.



Map of Rennell Island.

■ Village with more than about 50 inhabitants.
● Garden or village with one or a few houses only.
○ Garden or village not visited by the Danish and British expeditions 1951 and 1953.
1—6. Natural caves.



Map of Rennell Island.

■ Village with more than about 50 inhabitants.
● Garden or village with one or a few houses only.
○ Garden or village not visited by the Danish and British expeditions 1951 and 1953.
1—6. Natural caves.

Bind **41** (kr. 96.–)

kr. ø.

1. HJELHOLT, HOLGER: British Mediation in the Danish-German Conflict 1848–1850. Part One. From the March Revolution to the November Government. 1965 ..... 40.–
2. BUKDAHL, ELSE MARIE: Diderot est-il l'auteur du «Salon» de 1771? 1966 ..... 30.–
3. JONES, SCHUYLER: An Annotated Bibliography of Nuristan (Kafiristan) and the Kalash Kafirs of Chitral. Part One. With a Map by LENNART EDELBERG. 1966 ..... 18.–
4. HAMMERICH, L. L.: An Ancient Misunderstanding (Phil. 2,6 'robbery'). 1966..... ..... 8.–

Bind **42** (kr. 110.–)

1. HJELHOLT, HOLGER: British Mediation in the Danish-German Conflict 1848–1850. Part Two. From the November Cabinet until the Peace with Prussia and the London Protocol (the 2nd of July and the 2nd of August 1850). 1966 ..... 40.–
2. JONES, SCHUYLER: The Political Organization of the Kam Kafirs. A Preliminary Analysis. 1967..... 16.–
3. BIRKET-SMITH, KAJ: Studies in Circumpacific Culture Relations. I. Potlatch and Feasts of Merit. 1967..... 18.–
4. RUBOW, PAUL V.: Shakespeares Sonetter. 1967..... 12.–
5. RUBOW, PAUL V.: Goldschmidt og Nemesis. 1968..... 24.–

Bind **43**

(uafsluttet/in preparation)

1. In preparation.
2. ØHRGAARD, PER: C. F. Meyer. Zur Entwicklung seiner Thematik. 1968 ..... 30.–

Printed in Denmark
Bianco Lunos Bogtrykkeri A/S