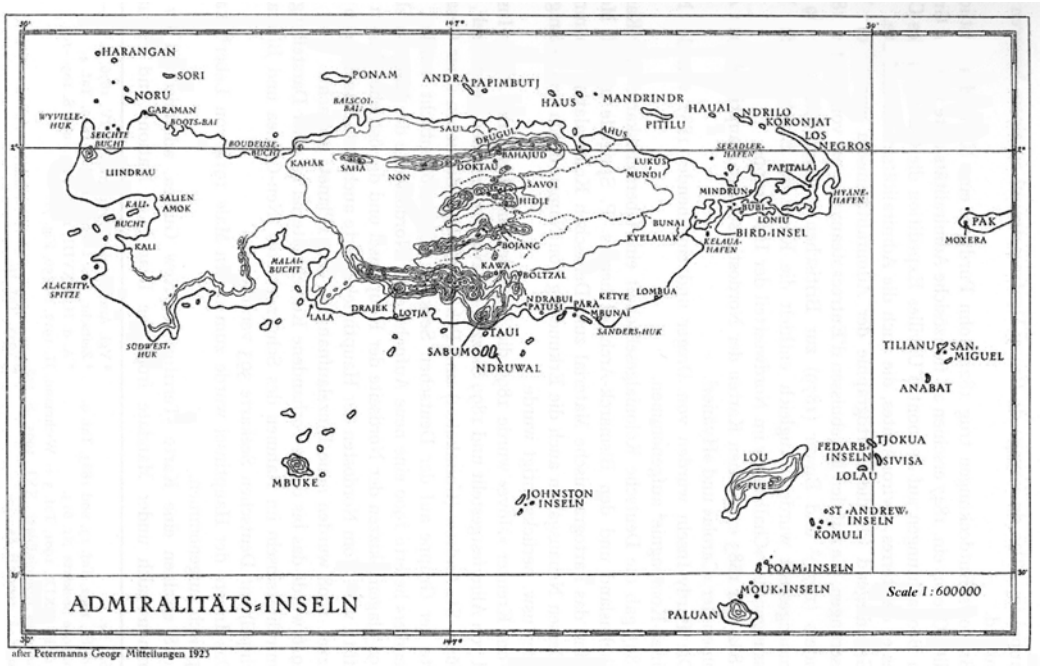
ADMIRALTY ISLANDS

BY

DR HANS NEVERMANN



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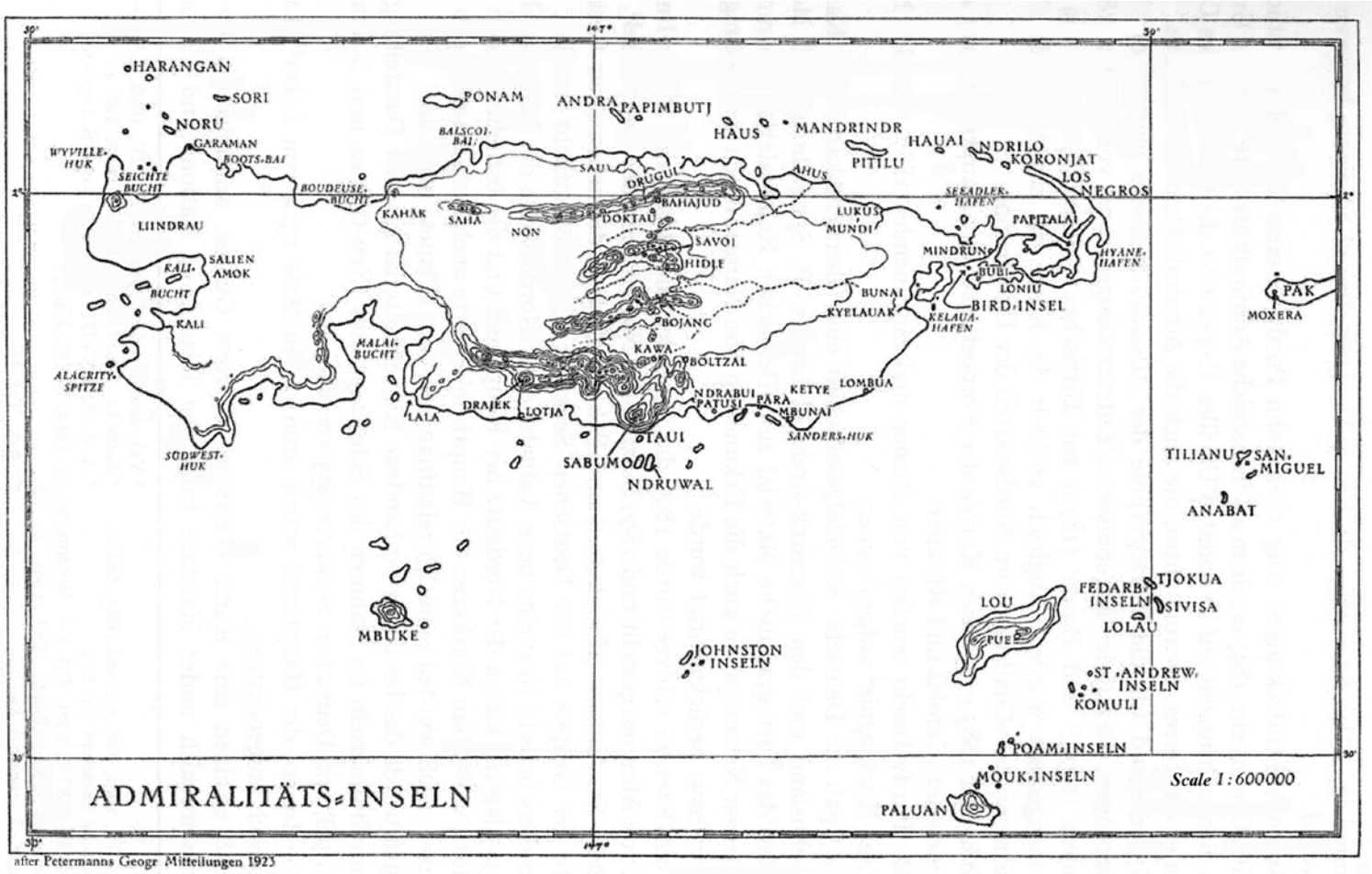

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HAMBURG SCIENTIFIC INSTITUTE
AND CONSULTATIVE ASSOCIATION OF GERMAN SCIENCE

RESULTS OF THE EXPEDITION TO THE SOUTH SEAS 1908 – 1910

EDITED BY
DR G. THILENIUS
PROFESSOR OF ETHNOLOGY
DIRECTOR OF THE HAMBURG MUSEUM OF ETHNOLOGY

II. ETHNOGRAPHY: A. MELANESIA
VOLUME 3

DR HANS NEVERMANN

ADMIRALTY ISLANDS

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1934

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UND NOTGEMEINSCHAFT DER DEUTSCHEN WISSENSCHAFT

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o. ö. PROFESSOR DER VÖLKERKUNDE,
DIREKTOR DES MUSEUMS FÜR VÖLKERKUNDE IN HAMBURG

II. ETHNOGRAPHIE: A. MELANESIEN
BAND 3

DR. HANS NEVERMANN

ADMIRALITÄTS-INSELN

HAMBURG
FRIEDERICHSEN, DE GRUYTER & Co. m. b. H.
1934

ADMIRALTY ISLANDS

BY

DR HANS NEVERMANN
BERLIN

WITH 231 TEXT FIGURES,
2 COLOURED- AND 21 COLLOTYPE PLATES
AND 1 MAP

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FOREWORD

The Hamburg Südsee Expedition undertaken at the end of the first decade of the twentieth century recorded many aspects of Pacific life that are of great interest to the descendants of those peoples living today. Although the Südsee Expedition concentrated mainly on Micronesia, apart from the introductory volume to the series there were a few volumes dedicated to New Guinea. Of the Papua New Guinea volumes four are of note:

i. The St Matthias Islands by Hans Nevermann published in 1933;
ii. The Admiralty Islands also by Nevermann published in 1934;
iii. The Sepik River by Otto Reche published in 1913,
iv. New Britain by Otto Reche published in 1954.

As these New Guinea volumes have never been published in English, and the German volumes that are available (both originals and facsimiles) are expensive, it is no wonder that few in New Guinea have even heard of their existence. In 2010 a translation of the St Matthias volume was undertaken by John Dennison and published as a monograph in the *Otago University Studies in Prehistoric Anthropology* series. Having an English translation readily available made a significant impact on the Emirau communities, allowing details of the past to be available to all. It is hoped that this translation of the *Admiralty Islands* will also make a significant impact on those from the modern province of Manus!

Manusians are thirsty for knowledge of the past. During research trips to Manus over the last decade it has become obvious that there is a deep pride in this province's history. Archaeological discoveries have demonstrated that people colonised the region over 20,000 years ago. The region played a pivotal role in the complex exchange network that sent obsidian from Lou Island to Borneo in the west and to Fiji in the east some 3000 years ago (Summerhayes 2010). Long-distance exchange networks persisted into the nineteenth century, with *Manus tru-* or Titan-speaking peoples sailing from islands off the south coast of Manus to the north coast of mainland New Guinea in order to exchange goods.

Such records of the past, however, are sparse and much more research is needed. Manusian academics such as Dr Bernard Minol, a leading academic from the University of Papua New Guinea, and Mr Stephan Pokawin, the ex-Governor of Manus and now the Chancellor of the University of Papua New Guinea, have worked hard over the decades to bring their history to the people of Manus and Papua New Guinea. It is their dedication and enthusiasm that inspired in me a determination to get this monograph translated. There is a thirst for knowledge of Manus' past! I remember the excitement of the late Father Paul Mohe when talking about Manus' past and his invitation to spend time in Manus to conduct archaeological research. I also have vivid memories of the time spent in the Horno Islands and Rambutso with both Dr Minol and Mr Kisakiu Posman, a Manusian lawyer based in Moresby. In 2011 we visited old settlements and I listened to Posman's stories of the past, in his account of the beginnings of Titan settlement on Rambutso. I was sure that Nevermann's account of the Admiralty Islands could add something to this history. It was John Dennison who allowed us into this world of knowledge by allowing us to read the German's accounts of these peoples. I am proud of John Dennison's fine work and his persistence in getting this translation finished. I am proud that I have played a role in this and proud that again the University of Otago has helped in getting stories of the past back to the people of Manus.

I dedicate this book to two great Manusians: Dr Bernard Minol and the late Father Paul Mohe. I met Dr Minol in the mid 1990s and his infectious enthusiasm in all things Manus has rubbed off on me. He is truly a great teacher. I first met the late Father Mohe in the late 1990s on the Anir Island group, New Ireland Province. I was excavating a 3300-year-old Lapita site, Kamgot, and Paul was the local priest. He joined me on the excavations and even conducted a few after I left. He was a

true intellectual, always asking questions and again inspiring in me a desire to understand Manus' past. In 2006 I was lucky enough to meet up with Paul in Manus, with Herman Mandui from the National Museum and Professor Lisa Matisoo-Smith from Otago. We stayed with Paul and listened to his stories of the region's history, and he even took us to a new obsidian source in northwest Manus. I am sure that he would have made a great archaeologist. We are at a loss with his tragic death at such an early age.

Dr Bernard Minol, 2011

The late Father Paul Mohe,
Lepong obsidian source, 2007

Glenn Summerhayes, University of Otago

Translator's Preface

This detailed study of the Admiralty Islands continues a series, and follows:

St Matthias Group, translation of Nevermann H. (1933): St. Matthias-Gruppe: Ergebnisse der Südsee-Expedition, II. A.2. (Ed. John Dennison, Glenn R. Summerhayes, Lisa Matisoo-Smith. University of Otago Studies in Prehistoric Anthropology, N° 22.) Seattle, Amazon. 230p. (2011) [978-1460976388]

St Matthias Group, translation of Nevermann H. (1933: St. Matthias-Gruppe: Ergebnisse der Südsee-Expedition, II. A.2. (Ed. John Dennison, Glenn R. Summerhayes, Lisa Matisoo-Smith. University of Otago Studies in Prehistoric Anthropology, N° 22.) Dunedin, Department of Anthropology, University of Otago. 209 p. (2010) [ISSN 0110-3709]

Thirty Years in the South Seas. Land and People, Customs and Traditions in the Bismarck Archipelago and on the German Solomon Islands, translation of Parkinson, R. (1907): Dreißig Jahre in der Südsee. Land und Leute, Sitten und Gebräuche im Bismarckarchipel und auf den deutschen Salomoninseln. Bathurst NSW, Crawford House Publishing (1999) xxxviii + 378 p. [ISBN 1-86333-167-0]

Translation of this 399-page volume started in May 2011 and has continued, in my own time, up to this day. As I have written previously, at the end of a long day's teaching gross anatomy, carrying out physical anthropological research, or conducting a skeletal forensic investigation, it is quite relaxing to translate the findings from research undertaken 115 years ago, published 79 years ago, and to make this available to modern scholars.

Technology has advanced a long way since I completed the Parkinson translation thirteen years ago — the seven files of the current 425 MB typeset translation will be transmitted electronically, directly to the publisher, rather than via two 1.3 MB diskettes on that long-ago occasion.

Once again, I owe so much to my wife, Ann, who proofread my draft for spelling and phrasing, and then very patiently discussed my draft with me, often far into the night. I am grateful to Professor Glenn Summerhayes, Department of Anthropology and Archaeology, University of Otago who, when an earlier avenue of publication became no longer viable, opened up another avenue, provided me with a bound photocopy of *Admiralitäts-Inseln* and will, again, see this work through to its final published form.

We are a team, who have worked together to make this second volume by Hans Nevermann and his team available to you. I wish you well in your research.

K.J. Dennison
Dunedin, July 2013

Author’s Foreword

The diaries of Messrs Father Fülleborn, F.E. Hellwig, Wilhelm Müller(–Wismar), and O. Reche, and the collections that they made during September and October 1908 in the Admiralty Islands, form the greater part of this work. In addition, the literature on the Admiralty Islands, the collections in the museums of Basel, Berlin, Dresden, Frankfurt, Hamburg, Karlsruhe, Leipzig and Stuttgart, the notes of Professor Augustin Krämer, the handwritten Catalogue of the H. Schoede Collection in Berlin, and the manuscripts of Hans Klink and L. Lukowski were consulted also. I owe particular gratitude to Dr. A. Bühler in Basel, who offered me the wealth of material that he had collected in the Admiralty Islands in 1931–1932 and, over and above this, gave me advice and information. I am, likewise, grateful to Professor Krämer for the selfless offer of his 1907 notes on the voyage of the *Planet*, which provided me with valuable material. For enabling my work in Basel I am very grateful to Professor Thilenius and Dr Paravicini. I am grateful to Professor Thilenius for providing a translation of N. Miklucho-Maclay’s work; Professor Hambruch for providing Klink’s records; Mr A. Speyer in Berlin for providing the Schoede Catalogue; Miss E. Weber for producing the illustrations, and Mr F. Doenitz and Dr E. Mayr in Berlin for their oral information.

The same rules apply for the transcription of indigenous words and names as for the St Matthias volume.

H. Nevermann

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c) Map

Admiralty Islands. 21

A. General Section

I. Recorded History

The Discovery Period

According to Navarette[1], the discoverer of the Admiralty Islands is Álvaro de Saavedra, who set out from Tidore on 3 June 1528 to sail to Mexico. Two hundred Spanish leagues [1,140 km] from Tidore, he stayed for 32 days on the island of Hamey, which Wichmann[2] regards as Pakémi. After another 14 leagues [80 km] east he reached an island, and a further 100 leagues [570 km] on, "Urais la grande" at 1°40' S., the main Admiralty Island according to Navarrete. Arrows(?) were fired at Saavedra's ship from the native canoes. By way of punishment he kidnapped three natives, whom he intended to release on a second visit. This does not appear to have happened, for, in the sparse reports of the second, equally-unsuccessful visit, *Urais la grande* is no longer mentioned.

Graebner[3] believed the *La Caymana* group of islands discovered on 29 July 1545 by Iñigo Ortiz de Retes to be the Admiralty Islands, since native "flint arrows" are mentioned by la Caymana. However, according to Wichmann and Friederici this can only be Luf[4].

Not until 4 July 1616 did Willem Corneliszoon Schouten and Jacob Le Maire sight the Admiralty Islands once more, although they did not go ashore. They named the main Admiralty Island *Hooch landt*, and the smaller islands on its eastern and southern sides those that remained to starboard, the *25 Eylanden*. Two smaller islands of the Purdy group were sighted in the evening of the following day — probably Mole and Mouse islands.

On 22 July 1722 Roggeveen sighted the Admiralty Islands, describing them as "meer als vyftig, zo groote als kleyne, hoog en lage, Eylanden" [more than fifty, both big and small, high and low islands] that all lay close together "niet meer of min als een uur van een gescheyden"[5] [separated no more than an hour apart]. Their position is recorded as 2°25' S., 156°13' E. of Tenerife. Roggeveen's fear of strife with the natives compounded by the gloomy outlook of health on board rendered any thought of landing impossible from the start. [2]

Philip Carteret on the decrepit *Swallow* had lost sight of the fleet commanded by Samuel Wallis on 11 April 1767 following passage of the Strait of Magellan. After discovering St George's Channel and New Hanover during the night of 14/15 September 1767 he saw the main Admiralty Island and the smaller islands offshore to the south[6]. With the *Swallow* coming closer inshore on the 15th, Carteret named the group "Admiralty Islands" in honour of the British Admiralty. He describes the position of the main island "I judge the middle of the largest to lie in latitude 2°18' S., longitude 146°44' E. and at the distance of five and thirty leagues from Queen Charlotte's Foreland in New Hanover, in the direction of W.½ N." He estimated the east-west extent of the island as 18 leagues. South of the main island he sighted Mbűke "which rises conically in a high peak". Carteret gives its position as 2°77' S., and 5°30' W. of Cape St George

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[1] V, 1839. p.125
[2] I, 1909. pp.18–20
[3] *Petermanns geographische Mitteilungen*, LV. 1909
[4] Wichman, II, 1912. p.812 *et seq.*
[5] *Tweejaarige Reyze*. 1728, p.66 *et seq.*
[6] Hawkesworth, I, 1773. p.382 *et seq.*

on New Ireland. He continues about the islands "They are clothed with the most beautiful verdure, the woods are lofty and luxuriant, interspersed with spots that have been cleared for plantations, groves of cocoa-nut trees, and houses of the natives, who seem to be very numerous." Because of their hostile behaviour his hope of coming into close contact with the natives failed. He answered their flung spears with gunfire, and took possession of an outrigger canoe abandoned in their flight. However, despite their hostility, he observed the natives quite attentively.

Two years later, on 21 September 1769 the *Saint Jean-Baptiste* under Surville approached the Admiralty Islands and, through great masses of driftwood, he established the presence of land at 0°40' N. and 144°54' E. of Paris; but, with the islands out of sight, he passed them by.

Not until a voyage by Francisco Antonio Mourelle de la Rúa, en route from Manila to New Spain [Mexico] aboard the frigate *Princesa* on 10 January 1781, was the main Admiralty Island[7] encountered once more, seen from the north and named *Isla del Señor Basco*. Four low, forested islands to the east were named *Isla de los Negros* after their inhabitants, who approached *La Princesa* on 11 January but did not go on board. In the evening hours of the same day, San Miguel (Tilianu and Anabat), Jesus Maria (Lămbŭtjo), San Gabriel (Pāk), San Rafael (Tong), and the Horno Islands (of which Maurelle saw only two), were seen and named; followed by Los Reyes around midnight, and La Vandola (Nauna, Băletwi) on 12 January.

John Hunter, who set sail from Port Jackson bound for England, under orders from the Governor of New South Wales on the chartered Dutch vessel *Waakzaamheyd*, passed between Lămbŭtjo and Nauna on 20 May 1791, recording his position as 2°19' S., 147°52' E. On 31 May the ship approached the island of St George (Lóu) from where canoes approached with trade [3] goods. However, due to a sudden rise in wind, they did not reach the ship[8]. Continuing onward, the ship passed the San Miguel and Dover islands, and sighted Pāk to the south-east. On 1 June Hunter passed north of the main Admiralty Island. He plotted its western end as 1°59' S., 146°30' E., although as Wichmann[9] notes, its actual position is 1°58' S., 146°44' E.

On Lóu Hunter fancied that he had found a trace of La Pérouse's expedition, which had been missing since February 1785. He reports on the natives: "One of them made various motions for shaving, by holding up something in his hand, with which he frequently scraped his cheek and chin; this led me to conjecture, that some European ship had been lately amongst them, and I thought it not improbable, that it might have been Mons. de La Perouse, in his way to the northward from Botany-Bay." In Batavia Hunter made further disclosures on this to Magon de l'Épinay and Préaudet, based on more than the misinterpreted offer of obsidian for shaving. Magon de l'Épinay's letter[10] to de Saint-Félix, commander of the French naval base on Mauritius records: "It was noted that two of the men in the canoes had belts similar to those worn by officers in Europe: they made signs as if they wanted to shave; several of them had scraps of red and blue material in their clothing, evidence that they had been in contact with Europeans." Préaudet's report[11] goes even further, and asserts: "He could even distinguish the uniform of French marines." Parkinson[12] suspected that Hunter had taken white body paint for the uniform trimmings of French marines, but it is also possible that it was not Hunter but de Saint-Félix's informants in Batavia who had been beguiled. In any case, Hunter later denied the content of their reports in Cape Town.

D'Entrecasteaux who had been charged by the French administration to pursue investigations on the fate of La Pérouse, received de Saint-Félix's reports on 16 January 1792 in

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[7] Milet-Mureau, I, 1797. pp.267–269
[8] Hunter, 1794. p.240
[9] I, 1909. p.247
[10] de Rossel, I, 1808. pp.23 *et seq.*
[11] de Rossel, I, 1808. p.25
[12] 1907. p.845

Cape Town, the day after Hunter's departure. Hence he was unable to question Hunter further. Despite his misgivings as to the validity of the accounts, d'Entrecasteaux decided to visit the Admiralty Islands and carry out investigations. He did not find any clues on the islands about La Pérouse's fate. However, his visit initiated a period of peaceful interaction with the natives. On 28 July 1792 the first island he sighted was Lămbŭ̋tjo, whose south-eastern point was plotted at 2°22' S., 145°28' E. of Paris[13]. Several canoes were sighted between the reef and beach, but these did not approach. The following day [4] they reached La Vendola and determined it at 2°18' S., 145°46' E. of Paris[14]. Although the reef prevented a boat landing, lively trading ensued[15]. Labillardière estimated the number of natives on the beach as 300; on the other hand, de Rossel estimated 150 men. De Rossel was also able to form an opinion of Hunter's report: "However, as all the natives of these islands wear ornamentation of white shells and waist belts of dark red, one could conjecture that people preoccupied with M. de La Pérouse's passing through this archipelago without having been ordered to do so, could have been able to take these ornaments for belts, and to confuse the skin colour of these islanders with that of the uniform colour of the French navy. The sign that had been taken to mean that one individual wanted to shave is nothing other than the gesture that the natives make with a shell ['more accurately, a sliver of obsidian'; Nevermann] that they use for that purpose and which was one item of the utensils that they were offering to trade[16]." The next day they sighted the main Admiralty Island, with Labillardière[17] writing: "There we saw a mountainous island, somewhat extended, forming the centre of this group whose flanks are made up of a large number of flat islets that appear to have risen only very recently from the bosom of the ocean." On 31 July they reached the Los Negros Islands and on 1 August sailed along the north coast of the main island, observing a quantity of small islands until they reached the Sĭ́sī group on the west coast of the main Admiralty Island. On 12 July 1793 d'Entrecasteaux coasted both islands once more, without stopping.

J. Dumont d'Urville's account of the visit to the Admiralty Islands by the fictitious Captain Pendleton in his ship *Ocean* traces back to Labillardière's report of d'Entrecasteaux's visit to La Vendola[18].

During their voyage from Sydney to Ireland, Hugh Reed and Nicholl reached the main Admiralty Island on 17 May 1800 and sailed along its southern coast. A pass was discovered between it and three smaller islands; Reed named it Friendship's Passage. He named the main island "Sovereign". Trading was initiated but was disrupted by shots fired from Nicholl's vessel.

The next person to see the Admiralty Islands was Austen Forrest, who approached them with his crew in two boats on 22 May 1806, two days after the loss of his ship. He spotted the islands in the NNE, but did not come any closer[19]. [5]

The Purdy Islands were discovered and named by Abraham Bristow on 16 February 1817. Bristow distinguished Mouse Island and Mole Island in the group and, separated by a channel, west of them the Bat Islands, although he took them for a single island. The position of Mole Island was plotted 2°51' S., 146°51' E. Neither inhabitants nor signs of a settlement were seen. Bristow noted several reefs in the vicinity. In addition he discovered Alim which he named 'Elizabeth' at 2°55' S., 146°49' E.; two miles to the east a small lagoon island; north-east of it the Hayrick Islands (Papialou) and Platform (Sauwai); and a rock south-west of the former. On 19

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[13] de Rossel, I, 1808. p.133
[14] Labillardière, I, 1796. p.256
[15] Labillardière, I, 1796. p.257; de Rossel, I, 1808. p.135
[16] de Rossel, I, 1808. p.136
[17] I, 1796. p.257
[18] *Voyage pittoresque autour du monde*, II, 1843. p.171 *et seq*.
[19] Wichmann, I, 1909. p.292

May four islands were seen from a point twelve miles further east: Round-, High-, Low- and an unnamed island. One of them was fixed at 2°24' S., 147° ¾' E. However, there are no islands at this position. Krusenstern's speculation that he might have meant San Miguel is incorrect, and doubt still exists over which islands Bristow meant[20].

The voyage of Louis-Claude de Saulses de Freycinet who sailed the corvette *Uranie* into the area of the Admiralty Islands on 14 February 1819 and the following day, produced no relevant news of any kind about the group. Similarly, Willink's voyage, where the eastern part of the main Admiralty Island was sighted on 13 June, brought nothing new[21].

Aboard the whaler *Lyra* Renneck discovered the circular reef south of the main Admiralty Island at 3°18' S., 147°40' E. on 7 November 1825[22].

In 1834 Benjamin Morrell aboard the *Margaret Oakley* came to the north coast of the main Admiralty Island, where, according to the fantastic account of his companion Thomas Jefferson Jacobs, a lagoon is formed by a chain of small islands surrounded by reefs. The lagoon was given the name Morrell Lagoon, and was said to contain a deep bay at its eastern end. They crossed this "lagoon". Beyond it they discovered a deep bay — Root Bay which, according to Wichmann[23], is probably Hyaena Harbour. The channel between the coast and Pāk was named Root Strait.

On 23 July 1843 Edward Belcher in the British warship *Sulphur* sighted Alim and small islands of the Admiralty group, and the Purdy Islands the following day. The warship *Maender*, under Henry Keppel sighted the Purdy Islands and the small south-eastern islands of the group, on 29 December 1849. Trading materialized with the natives of La Vandola[24]. On 17 July 1859 Cornelis Vonck in the *Loevestein* passed La Vandola and Los Reyes and, on 18 July, the main Admiralty Island without stopping. [6]

In September 1872 the schooner *Franz*, under Erwin Redlich sailed straight through the islands south of the main Admiralty Island. He anchored off the north coast, opposite Ăndră where he came into close contact with the natives and praised their friendly behaviour[25].

The Exploration Period

Saunders too commented on the natives' peaceful behaviour in 1874 when the British warship *Alacrity* was carrying out a survey in the group[26]. Initially he anchored "north of a small island that lay not far north of the south-east point (ca. 2°22' S., 147°55' E.)"[27]. Then Los Reyes, San Rafael, and Pāk, Bird Island Bay, the south-eastern tip of the main island with the Dover Islands, Hilly Point, Ndrűwal and Alacrity Point were measured. Mbűke and several small islands were also sighted[28].

On 3 March 1875 the corvette *Challenger* under G.S. Nares made landfall at the islands of Buchanan, Moseley, and Murray at the north-west tip, Wyville Point, of the main Admiralty Island, anchored in Nares Harbour on the island's north coast and undertook surveying, zoological,

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[20] Wichmann, I, 1909. p.300
[21] Wichmann, I, 1909. p.317
[22] Wichmann, I, 1909. p.321
[23] II, 1910. p.29
[24] Parkinson. 1907
[25] Redlich, 1874. p.32 *et seq*.
[26] *Annalen der Hydrographie*, 1876. p.203
[27] Wichmann II, 1910. p.194
[28] Wichmann II, *loc. cit*.

ethnological and other scientific tasks[29]. Peaceful accord reigned between the natives and the *Challenger*.

On 13 July 1875 — Wichmann[30] casts doubt on the date — the schooner *Rupak*, under B.E. Gall, approached La Vandola "which is moderately high and coneshaped"[31]. Natives did not show themselves. On the 14th, Lămbŭtjo was sighted, with several canoes coming out to the ship to trade. "These peoples [*sic*.] brought off considerable quantities of tortoise-shell of a superior quality, but demanded such high prices that very little trade could be done with them". Attempts to start trepang fishing failed owing to a lack of anchorage. On 17 July the schooner was off islands that looked like San Miguel, although its position did not agree with that given on the charts. After an initially friendly contact with the natives, the latter suddenly began to attack the crew of the schooner, most of whom were Yapese. In the subsequent fight 28 Yapese, who had been ambushed, were killed. After a brief second visit to Lămbŭtjo the schooner then left the Admiralty Islands. According to Miklukho-Maclay's account[32], Gall's visit and the attack took place in [7] October 1875. He is alleged to have fired on the Lămbŭtjo people without due cause when they were paddling towards them to trade and the Yapese, whom he had put ashore to launch an attack, got onto the reef and were slaughtered by the Lămbŭtjo people, while Gall sailed off. In 1877 Miklukho-Maclay[33] saw hair from the slain Yapese(?) as decoration of a Lŏnĭu(!) sailing canoe. From the form and quality of beads in the armbands of the Lămbŭtjo people it was evident that an Australian ship had visited Lŏnĭu.

In May 1877 O'Keefe and his schooner *Seabird* visited the Admiralty Islands. On board was Nikolai Miklukho-Maclay, who writes[34]: "In the vicinity of St Mathias Island turning S.W. we came through the archipelago to the eastern tip of the large Taui- (Admiralty-) Island, at whose east-south-eastern point the schooner dropped anchor for a couple of days off the villages of Loneu [Lŏnĭu] and Pubi [Bŭbi]. I spent the two and a half days ashore, and to some extent got to know the very interesting population. The schooner found a second anchorage on the north coast of the island of Taui in a bay beyond the small coral island of Andra. There I made further excursions to the main island, as well as to the island of Andra". At Bŭbi the Italian, Paldi, left the schooner, as did the Scot, Oohar, on Andra, to set themselves up as traders for a Singaporean firm[35]. Miklukho-Maclay visited the Admiralty Islands a second time in 1879, in the American schooner *Sadie F. Caller*[36]. He writes of this visit[37]: "Life among the natives of the Admiralty Islands has given me an insight into many interesting customs of these islanders". He was particularly preoccupied with the anthropology and the attire of the natives.

Webster[38] heard, 19 years later, of a captain who had visited Uainkatou in 1878. Unfortunately he did not give the captain's name, which was, at the time, still familiar to the natives.

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[29] Moseley, 1879. pp.448–480; Spry, 1876. pp.267–272; *Annalen der Hydrographie*, 1876. p.216; Birgham, 1877.
[30] II, 1910. p.212, footnote 2
[31] Robertson, 1888. p.56
[32] *Izvestji*, 1878
[33] *Izvestji*, 1878
[34] *Petermanns geographische Mitteilungen*, XXIV, 1878. p.407
[35] *Izvestji*, 1878
[36] *Petermanns geographische Mitteilungen*, XXV, 1879. p.314
[37] *Zeitschrift für Ethnologie*, XII, 1880. p.375
[38] 1898. p.315

In 1879 the British warship *Danae* under J. St C. Bower visited the Admiralty Islands and undertook a survey of the south coast of the main island — off Lóu, Sívĭsa, Pálŭăn, etc. In the process several shoals, reefs, sandbanks and islets were discovered[39]. In 1880 the British warship *Beagle* under De Hoghton undertook further surveys.

At the beginning of May 1881 the Scot Donald Dow, former boatswain on the *Dancing Wave* and now employed by the firm of Forsayth, settled into a north coast village on Lămbŭtjo and began to buy up trepang. An attack on Dow by the Naúna people was beaten back by the Lămbŭtjo people[40]. [8]

On 4 June 1881 the *Beagle* visited Lămbŭtjo[41]. In August the same year the German warship *Habicht* under Kuhn, having passed La Vandola and Lămbŭtjo, arrived in Bird Island Bay, and traded with the natives, who approached in canoes.

On 28 March 1883 the Russian corvette *Skobelev*, with Miklukho-Maclay aboard, anchored off the main Admiralty Island. From 9th till 12th July 1884 the German gunboat *Hyäne*, under Geiseler, lay in Alacrity Harbour.

The German Colonial Era

Through the Imperial Writ of Protection of 17 May 1885 for the New Guinea Company, the Admiralty Islands became a German Protectorate[42].

On a reconnaissance voyage, von Schleinitz in the *Ottilie* on 10 November 1886 arrived at the Purdy Islands[43], whose position did not correspond with that recorded on the charts, because Bristow's chronometric observations had been incorrect. The islands were surveyed more thoroughly on 10th and 11th November and their position was plotted. A study on guano that had been "occasioned by an earlier concession of the English administration" still yielded nothing positive. On 11 November Alim was sighted and its position plotted.

In December 1886 the Wesleyan missionary R.H. Rickard visited Uainkatou and Ndrűwal, and gathered a glossary on Ndrűwal[44].

The *Ottilie* visited the Purdy Islands again between 12th and 15th of November 1887. New surveys were undertaken; Hollrung carried out a botanical survey, and discovered a phosphate deposit[45].

In 1888 Alexander Craig visited the Admiralty Islands aboard the *Princess Louisa*[46]. There are no further details of this visit. At the year's turnover, 1888/89 the warship *Olga*, under Strauch[47], visited Nares Harbour.

The sequel to the discovery of phosphate in the Purdy Islands was Kärnbach and Richter setting to work mining the phosphate with workers from Mioko and Finschhafen in September 1888. However, the north-west monsoon and the lack of an anchorage made ship-loading next to

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39 Wichmann, II. 1910. p.270 *et seq.*
40 Wichmann, II. 1910. p.294
41 Romilly. 1893. p.149
42 *Nachrichten über Kaiser Wilhelms-Land und den Bismarck-Archipel*, I. 1885. pp.2–4
43 *Nachrichten über Kaiser Wilhelms-Land*, III. 1887. p.57 *et seq.*
44 Ray, 1892. p.3
45 *Nachrichten über Kaiser Wilhelms-Land*, IV. 1888. pp.32–34; Zöller, 1891. p.167
46 Wichmann, II. 1912. p.464
47 Strauch, 1892. p.228

impossible[48]. Kärnbach and Richter got on well with the natives of the Admiralty Islands and Alim, who periodically visited the Purdy Islands. When Hugo Zöller visited the Purdy Islands at the beginning of [9] November 1888[49] Kärnbach gave him word lists and ethnographica from the Purdy Islands and Alim.

From June to September 1889 Recknagel investigated phosphate on Mole Island and made weather observations at the same time[50]. The phosphate mined in 1888 was loaded onto the barque *Esmeralda* in 1890, which set sail for Hamburg on 19 September. Mining operations on Mole Island were again undertaken by 50 coloured workers directed by August Rocholl in December 1890. However a storm on 14 December destroyed all the buildings on the island[51]. On 14 March 1891 the *Ottilie* ran onto Latent Reef. The crew and three officials of the New Guinea Company who were passengers got ashore on Mole and Mouse islands[52].

On 27 April 1892 the cruiser *Bussard* was passing the main Admiralty Island when canoes approached with trade goods[53]. On 5 September 1892 Charles Butchard, the master of the pearling schooner *Clara Jackson* sent the mate William Pitt with three coloured crew to Drūgűl, where he was attacked by the natives. The cruiser-corvette *Sperber* which had more precisely plotted the position of Sabben Island en route, anchored in Nares Harbour on 7 January 1893. On 8 January she sailed along the north coast of Admiralty Island as far as Hắŭs Island but was unable to locate the offenders[54].

In 1893 the traders Möller and Andersen settled on Ulungau near Pāk with five coloured workers. Soon after, they and two of their coloured people were killed by the Pāk people[55]. In 1893 or 1894 Donald Dow was also murdered.

On 4 July 1894 the Norwegian schooner *Larsen* discovered Larsen Reef south-west of the main Admiralty Island[56].

In March 1896 a survey was conducted in the Admiralty Islands by the cruiser *Möwe* under Janke. The positions of Bird Island, the Purdy Islands and Alim were ascertained, and older, incorrect data on the charts were corrected.

On 7 January 1896, upon receiving the news of the murder of Dow on Lămbűtjo, the cruiser *Falke* put to sea in battle order to punish the guilty natives of Lămbűtjo and Tong. From the outset, the dense forestation of these islands allowed little promise of intervention, and as they also lacked both people with local knowledge and an interpreter, they backed away from further retribution[57]. [10]

On 3 April 1896 Rodolphe Festetics de Tolna and his yacht *Tolna* found himself off Nauna, and anchored in Bird Island Bay without the visit leading to any useful outcome[58].On 3 April 1897 H. Cayley Webster[59] on his yacht *Lizzie* arrived off the west coast of Pāk and stayed there several days. With the natives, whom he described as “born natural traders” there developed a lively trade, that enriched Webster’s beetle and butterfly collections only a little. Given the overemphasized

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48 *Nachrichten über Kaiser Wilhelms-Land,* V. 1889. p.27 *et seq.*
49 Zöller, 1891. pp.166–169
50 *Meteorologische Zeitschrift*; *Nachrichten über Kaiser Wilhelms-Land,* X. 1894. pp.48–50
51 *Nachrichten über Kaiser Wilhelms-Land,* VII. 1891. p.17
52 *Nachrichten über Kaiser Wilhelms-Land,* VII. 1891. p.26
53 *Deutsches Kolonialblatt,* IV. 1893. p.89
54 *Nachrichten über Kaiser Wilhelms-Land,* IX. 1893. p.47
55 Schnee, 1904. p.167
56 Wichmann, II. 1912. p.594
57 *Nachrichten über Kaiser Wilhelms-Land,* XII. 1896. p.63
58 Festetics de Tolna, 1904. p.120 *et seq.*; Wichmann, II. 1912. p.622 *et seq.*
59 1898. pp.301–319

friendship shown by the natives, among whom he found individual items of Dow's possessions, Webster warily did not go ashore. On 7 April he reached the main Admiralty Island, "entering the Barrier Reef between the two small islands on the north-east end" and anchored in Seeadlerhafen in the lee of a small island. The intrusive ways of the natives compelled him to relocate his anchorage to "Pichalew, which was low and densely covered with forest, and having a sheltered bay and sandy beach" i.e. to Pǐ́tĭlu. There the demeanour of the natives was totally different, and they brought numerous gifts of victuals. However, mistrust towards them dissuaded Webster's huntsman from going ashore there either. On 10 April they anchored off Lóu, "which is densely wooded, and attains an elevation of about 800 feet" and then passed St Andrew Strait. They anchored off Uainkatou, where they saw a pole village in the water. Later they anchored off the south coast of Lămbŭ́tjo near Nauna "which is entirely different in formation to any of the others, being of circular form and having a coast line of straight up and down cliff".

In December 1897 one of Dow's coloured workers succeeded in escaping from captivity by the Lămbŭ́tjo people, on a schooner[60].

Before 1898 the Hernsheim schooner *Else*, under Seyffert, also visited Lămbŭ́tjo[61].

On 15 January 1898 the cruiser *Bussard* visited Lămbŭ́tjo because of the murder of Dow. Since they were unable to go ashore, the proceedings had to be conducted with the natives who had approached in canoes and named Sǐ́vĭsă as the home of the attackers and the abode of Dow's captured Melanesians, and who begged for the station to be reopened. Release of the prisoners was achieved peacefully on Sǐ́vĭsă[62]. High seas prevented a landing on Pāk. And so, to punish the murderers of Andersen and Möller, Pāk was pelted with grenades. However the Pāk people only uttered taunts at this, and did not feel in the least discomforted[63].

That year the traders Molde and Maetzke of the Hernsheim company settled on Kŏmŭ́li. The Australian Captain Hamilton was also resident in the Admiralty Islands on [11] 1 January 1899, and fished for mother-of-pearl shell from his schooner, but he departed the islands in summer[64] and left his employees in charge of the pearl fishing.

The still abortively unpunished murder of Möller and Andersen prompted von Bennigsen to go and investigate the Admiralty Islands aboard the *Möwe*, under Dunbar, accompanied by Schnee, Thiel, Schulz and 20 police-soldiers[65]. On 31 July Maetzke, who had encountered the *Möwe*, was taken on board. The same day they landed in a pole village on Móuk, and a little later on Takúmal. It was intimated in a friendly manner to the resident Măn̆us that they should cease their ongoing hostility and accept the white people peacefully. After that they visited Kŏmŭ́li and deserted Uainkatou. On 1 August they put in to Seeadlerhafen and, on 2 August Pāk, whose inhabitants indeed gave up a weapon of the murdered trader, but then disappeared into the bush. The New Irelander, Oren, who was sent after them did not return. To avenge his capture or murder, the empty huts were burned down, after anything of ethnic value to the Berlin *Museum für Völkerkunde* had been removed from them. In the spring of 1899 Thilenius visited the islands of Kŏmŭ́li, Lóu, Uainkatou and Nauna on a Hernsheim schooner. Thiel was among his entourage. It was from his investigations that the foundations of ethnography of the Admiralty Islands were laid down.

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60 *Deutsches Kolonialblatt*, IX. 1898. p.244
61 *Deutsches Kolonialblatt*, *loc.cit.*
62 *Deutsches Kolonialblatt*, *loc.cit.*
63 Schnee, 1904. p.165 *et seq.*
64 *Deutsches Kolonialblatt*, X. 1889. p.407 and p.699
65 *Deutsches Kolonialblatt*, X. 1889. pp.697–700; Schnee, 1904. pp.160–171

A few weeks after the *Möwe*'s visit, Móuk natives murdered Maetzke and his coloured workers and plundered his trading post[66]. Molde had been away at the time. When he returned on the *Mascotte*, he pursued the murderers. The Móuk people, who had fled to Pălŭ̆ăn, shot him with the stolen guns. On 11 September 1899 the *Mascotte* brought news of the murder to Herbertshöhe. The raids of the Móuk people armed with guns prompted the Păpítălai̯ people to kill Captain Dathe, Johannsen the mate, and the coloured crew of the Forsayth firm's newly-arrived *Nukumanu*, while trading trepang, and to arm themselves with the guns on board. Molde brought the completely looted ship to Kŏmŭ́li. A little while later the schooner *Nugarea* of the same firm arrived at Păpítălai̯ with Forsayth, Captain Dollinger, and the English land surveyor Bullock to survey the plots of land acquired earlier, and unexpectedly found one of the *Nukumanu*'s boats, from which Păpítălai̯ people fled while two captive Buka people rowed the boat out. This boat and that of the *Nugarea* were fired upon from the bush. [12] Bullock was wounded. Fire was returned from both boats[67].

On 1 January 1900 two German and three Scandinavian traders were recorded in the Admiralty Islands[68].

In January 1900 Schnee, on the *Mascotte*, accompanied by Molde, Frings and Hamilton visited Kŏmŭ́li, where they gathered information about the murder of Maetzke. The traders Schlehan and Rebstock were taken on board, together with twelve Sĭ́vĭsa and Takúmal people as guides, seven Melanesian police-boys from the post, and armed workers. They then put in to the uninhabited island of Alim, which was only occasionally frequented by the Móuk people. They came upon Móuk natives and in repeated searching of the island four of the murderers were killed, while one more and a boy were captured[69]. On 20 January the *Seeadler* under Shack, with von Bennigsen aboard, arrived off Alim. The island was confiscated from the Alim people and then, as government property, gifted to Molde. In the evening both ships sailed to Pălŭ̆ăn, which had now become the dwelling place of the Móuk people. They landed very early on 21 January. Three villages were occupied after a lively encounter. A further village was destroyed by gunfire from the *Seeadler*, and, there too, a landing was made[70]. They anchored in Seeadler Harbour on 22 January and fired on Pĭ́tĭlu, whose inhabitants had taken part in the attack on the *Nukumanu*. On the subsequent landing there were several clashes with the natives. Items stolen from the *Nukumanu* were found in the abandoned houses. The following morning Păpítălai̯ was fired upon and, after the landing, completely destroyed. There, too, items were found from the *Nukumanu*. Afterwards surveys were carried out[71]. On 24 January Pom Lin was visited peacefully and through its inhabitants a caution was relayed to the people of Pom Mandrian, who had divided Maetzke's property with the people from Móuk, although they were not complicit in the murder. Thereafter Sĭ́vĭsă and Kŏmŭ́li were visited and a dance-feast took place[72].

In 1900 the *Möwe* made a further brief visit to the Admiralty Islands, to counter the raids of the Mắnus armed with guns. That same year, Wostrack was temporarily placed on Kŏmŭ́li as commander of the police-soldiers stationed there, and carried out various successful operations

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66 Schnee, 1903. p.362
67 Schnee, 1904. pp.181-189
68 *Deutsches Kolonialblatt*, XI. 1900. p.212
69 Schnee, 1904. pp.190–193; *Deutsches Kolonialblatt*, XI. 1900. p.327 *et seq.*
70 Schnee, 1904. pp.194–197; *Deutsches Kolonialblatt*, XI. 1900. p.328 *et seq.*
71 Schnee, 1904. pp.198–203; *Deutsches Kolonialblatt*, XI. 1900. p.329 *et seq.*
72 Schnee, 1904. pp.203–266; *Deutsches Kolonialblatt*, XI. 1900. p.330 *et seq.*

against the Mắnus and their allies, the Úsía͡i, "who in several areas had slaughtered hundreds of Usiai"[73]. [13]

As Molde had gone missing shortly thereafter[74], the traders Schneider and Carlbourn succeeded him on Kŏmű̀li. In July 1901 the Mbű̀ke, incited by the Sívĭsă people, killed Carlbourn[75].

In 1902 the firm of Hamilton & Wolff had twelve luggers in the Admiralty Islands fishing for mother-of-pearl. On the *South Australia* Thiel, accompanied by Wahlen, Warnecke and Fellmann, visited Kŏmű̀li on 5 January 1902, and Bird Island and Seeadler Harbour on 9 January. From there the pearl-fishing flotilla was towed to Sōri[76]; on 20 January it was towed back to Kŏmű̀ li[77]. Even though shortly before Thiel's voyage Mắnus had attacked the Pom Islands and killed 31 men, trade in the Admiralty Islands had developed "not unfavourably"[78]. On 1 January 1903 the trader count in the islands was three Germans and four Englishmen[79].

On 13 April 1903 the Hamilton and Wolff pearling lugger *Corea* was attacked close to Pí tĭlu; Howard the diver and several workers were killed[80]. In January 1904 the Mắnus attacked the schooner *Wild Colonial*, belonging to the same firm, and threw the crew overboard; only three Melanesians survived. Forceful intervention by the *Condor* and the *Seestern* followed[81], and the culpable village of Lő́niu was destroyed[82]. When Hahl on the *Seestern* visited Kŏmű̀li on 2 July 1904, he learned that the natives had in vain attempted to attack the post of the trader Martin on a small island neighbouring Pítĭlu. When he anchored off Sōri on 8 July the natives, who up until then had enjoyed friendly exchanges with the white people, again came alongside the ship in their canoes. The items offered, "by their poor presentation, clearly underlined that the decline in traditional diligence to trade brought about by the influence of European wares had already appeared here"[83].

In December 1904 Parkinson[84] visited the Admiralty Islands, among them the villages of "Punro and Sali" (= Pű̆ě) on Lóu.

Around 1903 or 1904 Griffith too visited the main Admiralty Island and the islands offshore to the east, preparing topographical sketches[85]. [14]

In 1905 the trader Schlehan was murdered and the trading post on Pāk plundered. A punitive expedition was undertaken at the beginning of 1906 by the regional officer on the *Condor*, against the villages of Lő́nĭu and Păpítă͡lai, which had taken part in the unrest; several hostages were taken[86].

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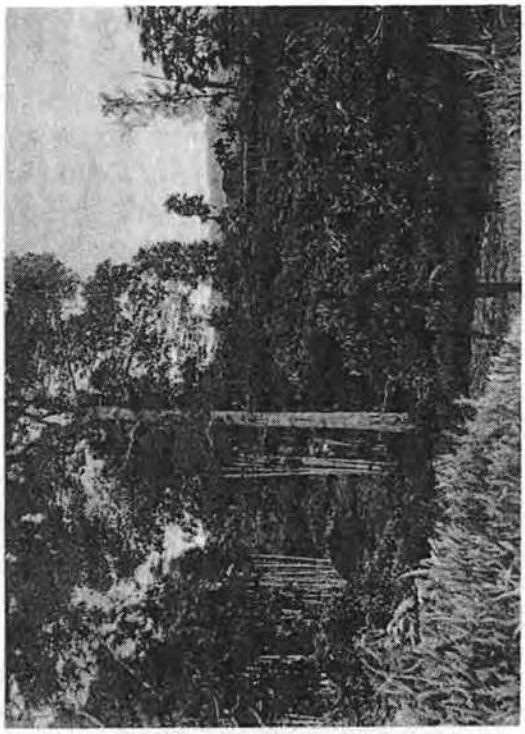
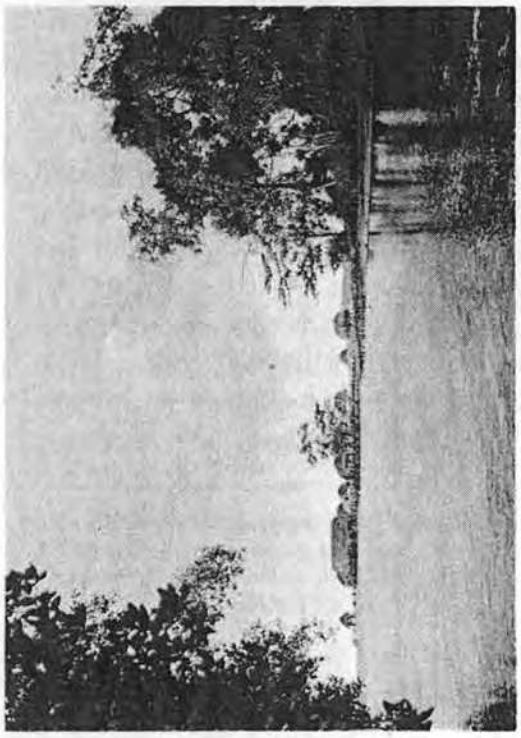
73 Schnee, 1904. p.206 *et seq.*
74 Schnee, 1904. p.207
75 Schnee, 1904. pp.207 *et seq.*; *Deutsches Kolonialblatt*, XII. 1901. p.862
76 *Deutsches Kolonialblatt*, XIII. 1902. p.198 *et seq.*
77 *Deutsches Kolonialblatt*, XIII. 1902. p.222
78 Schnee, 1904. p.208
79 *Deutsches Kolonialblatt*, XIV. 1903. p.499
80 *Deutsches Kolonialblatt*, XIII. 1903. p.442; Schnee, 1903. p.362; Schnee, 1904. p.208; *Deutsche Kolonialzeitung*, 1903. p.309
81 *Deutsches Kolonialblatt*, XV. 1904. p.441
82 *Planet* I, 1909. p.85
83 *Deutsches Kolonialblatt*, XV. 1904. p.617
84 1905. p.238
85 *Deutsches Kolonialblatt*, XVI. 1905. p.328
86 *Deutsches Kolonialblatt*, XVIII. 1907. p.516

Nevermann, Admiralty Islands, Plate I

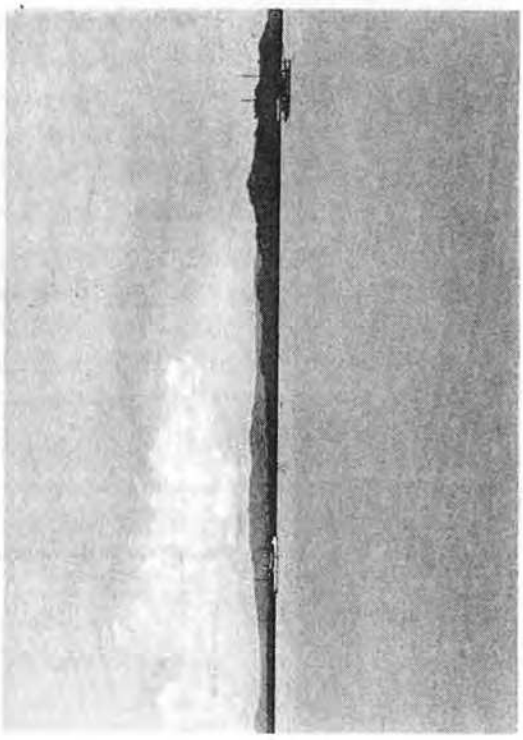
River landscape on the main island, opposite Ptîlu. phot. Fülleborn



Ûsâñ village of Mûndî. phot. Fülleborn



View of the pole village of Tâûî from the river phot. Vegel



View of the main island from Pônam (Sâhâ area) phot. Fülleborn

Between 4–7 October 1906 the *Planet*, with Krämer aboard, visited Kŏmű́li, where he was given visitor access by Lóu people, Pāk, Bird Island, the village of Dalá́lou, and Lő́nĭu[87]. On 15 and 16 November the *Seestern* brought the hostages back to Lő́nĭu and Păpítă͡lai, there intervening in native conflicts, and visited Kŏmű́li[88], where the trader Jüdtz had to have two Melanesians and four dogs keep watch every night[89]. In Păpítă͡lai the chief Pō Mĭ́nis, who had voluntarily been a pupil at the Rakunei mission station, was the source of information for Schnee, Father Meier, and the Hamburg Expedition, and served as interpreter[90]. Everywhere they visited, the natives behaved in a friendly manner towards the Europeans, and subsequently everything pointed to the beginnings of peaceful development[91]. A journey by Bishop Couppé to the Admiralty Island during this period probably also had a bearing on this[92]. Fortunately, the plan that surfaced in the press, of establishing a prison colony in the Admiralty Islands[93] never came to fruition.

In January 1907 Thurnwald[94] visited the Admiralty Islands, repeating the visit at the beginning of July. He carried out ethnological work in Păpítă͡lai, Pĭ́tĭlu, Lő́nĭu, Nő́ru, Kŏmű́li, and Lămbű́tjo.

Internal conflicts among the natives increased in scale in August 1907, necessitating the reappearance of the *Seestern* in November 1907, with the destruction of the Mắnus village of Pắlămŏt on Lămbű́tjo. Hostages were taken to Herbertshöhe. After visits to the Kŏmű́li and the Nő́ ru stations, fruitless attempts at recruiting were made on Sōri and Hắrăn̓găn. In addition, peace was established between Lő́nĭu and Păpítă͡lai; an anchorage was found off the Bird Islands thereby welcoming the Úsĭ́a͡i from Ndrowa; Pāk was visited; and an attempt was made to enforce the surrender of firearms in two villages near the south-east point of the main island, where there were still weapons from the attack on Maetzke and the Chinese Ahu, and also in Pắlămŏt[95]. On behalf of the German Marine Expedition, Walden accompanied them aboard the *Seestern*[96]. On [15] Pónam the recruiting ship *Samoa*, for reasons unknown, burned down 28 houses.

The crew of the cutter belonging to the five Hernsheim stations appears to have initiated assaults on the natives while buying sago. For that reason the Sōri people, together with the Úsĭ́a͡i from Lĭĭndra͡u, attacked the crew of the cutter *Waikatu* in January or February 1908, slaughtered them and ate them[97]. Móuk attacks on the Kŏmű́li station and attacks by the Ndrű́wal people on Mbű́ke failed, due to the wakefulness of the station-bosses Schmidt and Bastubbe. Accordingly, between 28 April and 3 May 1908[98] the *Seestern* visited the endangered stations; intervened against Sōri and Lĭĭndra͡u; visited abandoned Ndrű́wal; and left the surveyor Klink and 20 men

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87 *Planet* I. 1909. pp.83 *et seq.*
88 *Deutsches Kolonialblatt*, XVIII. 1907. p.516 *et seq.*
89 according to Krämer
90 Meier, 1906. p.213; Meier, 1907. p.646; Couppé, 1908. p.348; Vogel, 1911. p.82 *et seq.*
91 *Deutsches Kolonialblatt*, 1906/07. p.3
92 Meier, 1907. p.646
93 Parkinson, 1907. p.350
94 I. 1912. p.4
95 *Deutsches Kolonialblatt*, XIX. 1908. pp.622-624
96 *Deutsches Kolonialblatt*, XIX. 1908. p.183
97 *Deutsches Kolonialblatt*, XIX. 1908. p.855; *ibid.* 1907-8. 1. p.3; *ibid.* XX. 1909. p.897
98 Vogel's allegation (1911, p.116) that the predecessor of trader Stehr had been murdered by Sōri people in May 1908 is probably based on an error.

behind on Nőru[99]. Immediately after the *Seestern*'s departure the Pónam people attacked the portion of the Sōri people that had escaped the punitive expedition, mostly women, and attempted to attack Klink on Nőru, because he had sent ten of his men to the aid of the Sōri people[100].

From 10 October to 5 November 1908 the South Seas Expedition of the Hamburg Scientific Foundation worked in the Admiralty Islands on the *Peiho*, staying on Pāk, in Seeadler Harbour (Pǐtĭlu, Mŭndī, Păpítălai̯), on Hắŭs, Pónam, Nőru, Hắrăn̓găn, Kŏmŭli, Ndrŭwal, in Lắlā, Mbŭnai̯, Bird Island Bay, on Lóu and Lămbŭtjo[101]. In October 1908 the *Planet* was anchored at the same time in Seeadler Harbour, and on 5 November the *Sumatra* of North German Lloyd passed the islands. In December 1908 the surveyor undertook a census on Pāk and made inquiries about the natives and the possibility of laying out plantations[102].

On 29 March 1909 the revenue office of the New Guinea Protectorate received sole mining rights over the Purdy Islands[103].

Rumours of the alleged murder of the Japanese trader Komini at Lőnĭu occasioned a new punitive expedition by the *Seestern* from 20 to 25 April 1909. On Nőru information was gathered from trader Stehr and working conditions were checked. Komini was found on Pónam. He had been the victim of an assault; a punitive expedition was launched from Pǐtĭlu against the guilty Ndrauo people. In addition, the expedition visited Pāk to check on worker conditions; Lőnĭu, where a peace settlement had been concluded with Păpítălai̯; [16] Kŏmŭli, and Lămbŭtjo. On Lămbŭtjo the hostages who had been taken in November 1907 against the surrender of firearms, were released[104]. A short while later the *Sumatra* touched Pāk on her docking voyage. In the autumn of 1909 the District Officer from Herbertshöhe undertook a new expedition to the Admiralty Islands and was able to establish that, as of that date, all firearms, with the exception of three carbines, had been recovered from the natives[105]. Likewise in the autumn of 1909 the *Natuna*, sent out by the Hanseatic South Seas Syndicate, visited the Admiralty Islands. Friederici, Wolf, Pilz, Schön, and Prager were aboard to carry out geographical, geological, zoological and ethnographic research[106]. They touched on Pāk, Mőŭk and Lóŭ (on 11 September[107]), and Pắlŭăn. In 1909 H. Schoede undertook a freelance ethnological collecting journey to Lămbŭtjo, Pāk, Pǐtĭlu, Seeadler Harbour, and Pónam[108]. In October 1910 one of Komini's stations, at Kali Bay, was attacked. Seven workers were killed, and two were eaten. A punitive expedition from Rabaul, operating 2-16 September, was unable to retrieve the stolen weapons or determine the guilty party[109], but three villages were destroyed. Friendly rapport was found in Lőnĭu and Păpítălai̯.

Between 2nd and 5th August 1911 the *Cormoran* visited Kŏmŭli, Seeadler Harbour (Păpítălai̯ and Lőnĭu), and Pónam[110]. Finally, on 25 October 1911, Manus' police station, long hoped-for by the district authority, was established in Seeadler Harbour, with a station officer, a

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99 *Deutsches Kolonialblatt*, XIX. 1908. p.855 *et seq.*
100 Vogel, 1911. p.116 *et seq.*
101 *Ergebnisse der Südsee-Expedition*, 1908–10. I. pp.76-85; Vogel, 1911. pp.75–131
102 *Deutsches Kolonialblatt*, XX. 1909. p.364 and p.898
103 *Deutsches Kolonialblatt*, XX. 1909. p.364
104 *Deutsches Kolonialblatt*, XX. 1909. pp.888–890
105 *Deutsches Kolonialblatt*, XX. 1909. p.1104
106 *Deutsches Kolonialblatt*, XXI. 1910. p.141
107 Wichmann, 1911. p.79
108 *Katalog der Sammlung Schoede*, 1910
109 *Deutsches Kolonialblatt*, XXI. 1910. p.992; *Amtsblatt*, 1913. p.132
110 Ebert, 1924. pp.46–51

police constable, a sanitation assistant, and fifty coloured policemen, to look after the Admiralty and western islands[111]. On 6 December the Manus post office was added[112]. The *Sumatra* maintained a regular, three-monthly connection with Rabaul, Kavieng and New Hanover[113]. Establishment of peace in the islands still necessitated several smaller punitive expeditions from the station. The major one was an action against the village of Salien in Kali Bay to avenge the 1910 attack. On 21 April Salien was surrounded and burned to the ground. The weapons stolen in 1910 were recovered. However, the column was fired upon while retiring[114]. During the summer of 1913 the administration's steamer *Titania* visited Seeadler Harbour[115]. In 1913 the ornithologist A. Meek was collecting in the Admiralty Islands[116]. [17]

The main island was traversed for the first time in May 1914 from south to north, slightly east of 147° longitude, by Leber and Zwanzger. In addition, Leber visited Pāk, Kŏmű̆li, Pă̆lŭăn, Lóŭ, Sōri, Pónam, Ăndră, and Hă̆ŭs[117] aboard Hernsheim's schooner *Zabra*.

The Period of the Australian Mandate

The plan of the Catholic mission society of the Most Sacred Heart of Jesus to establish a station on the main island with two priests and a brother[118] was, like the further work of the colonial administration, thwarted by the outbreak of war, at the conclusion of which the islands were awarded to Australia as a mandated territory. They were now under the jurisdiction of the Administration of the Mandated Territory of New Guinea. Through regular round trips by government officials, which among other things also served tax collection and medical purposes, and by putting in place indigenous government agents[119], it would have transpired that the natives were now "a peaceful, industrious people"[120]. Village management was regulated afresh by the Mandate government and a poll tax of ten shillings was introduced[121]. In Lorungau, Manus' earlier station that continues as a government headquarters, a local hospital was set up, and in 1929 managed 1,116 cases. A police station was established in Nares Harbour. Government roads were established throughout.

During the spring of 1925 the government steam yacht *Franklin* visited Pāk, and Chinnery, the government anthropologist, found time to work there.

In 1929 ethnological research was carried out in the Admiralty Islands, especially among the Mă̆nus of the south coast of the main island, by R.F. Fortune[122] and his wife Margaret Mead, with the support of the American Museum of Natural History.

While they were there, a native catechist began missionary work in Mbű̆n͡ai̯, and the Catholic Mission planned the purchase of an island near Pắrā̄[123]. The mission stations of the

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111 *Deutsches Kolonialblatt*, XXII. 1911. p.926 and p.983 *et seq.*; *Deutsches Kolonial-Lexikon* I. 1920. p.15

112 *Deutsches Kolonialblatt*, XXIV. 1913. p.172

113 *Deutsches Kolonial-Lexikon*, I. 1920. p.344

114 *Amtsblatt für das Schutzgebiet Deutsch-Neuguinea*, 1913. p.132

115 Oral account from F. Doenitz, Berlin

116 Oral account from E. Mayr

117 Leber, 1923. pp.201 *et seq.*

118 *Deutsches Kolonial-Lexikon*, I. 1920. p.15

119 Mead, 1931. p.228

120 Mead, 1931. p.240

121 Mead, 1931. p.228

122 Fortune, 1932. p.XII; Mead, *Natural History*, XXXI. 1931. pp.62 *et seq.*

Catholic Hiltrup missionaries of the Most Sacred Heart of Jesus in Păpítăl͡aĭ and Bundralis, and the stations of the evangelical *Liebenzell* Mission in Lŏnĭu and Lugos (Lukus) and on Pĭ́tĭlu were already settled.

Between 24 December 1931 and 10 June 1932 A. Bühler compiled a collection from the Admiralty Islands, published by the Basel Museum. [18]

II. Geography

Names

Saavedra in 1528 named the main Admiralty Island "Urais la grande". The name "La Caymana" that Retes gave to an island group north of New Guinea should rather apply to Luf than to the Admiralty Islands. The actual discoverers, Schouten and Le Maire, named the main island "Hooch landt", and the little islands to the east and south-east the "vijfentwintig eylanden". On a chart by Frémont d'Ablancourt that appeared in Amsterdam in 1700 "25 insulae" is inscribed on the north coast of New Guinea, while "I. de la Madalena" is at the position of the Admiralty Islands. Since Wichmann has proven that the chart is the work of a "totally uninformed cartographer", and also, since the eastern part of New Guinea is named "Tierra de la Madalena" the name of a Spanish seafarer's designation for another region might have been given in error to the Admiralty Islands.

The name "Admiralty Islands" comes from Carteret, who dubbed the group in 1767 in honour of the British Admiralty, who had sent him out. The name stayed with the group and was rendered by the French as "Iles de l'Amirauté" and by the Germans as "Admiralitätsinseln". Von Luschan's proposal to name the islands in German also as "Admiralty-Inseln"[124] quite rightly met with no approval. Equally uncommon were renamings of the main island, as Mourelle de la Rúa attempted in 1781 with "Isla del Señor Basco" or "Don José de Basco y Vargas"[125], in honour of the Governor General of the Philippines; (and even later Strauch[125a] in 1900 with "Basco-Inseln" for the whole group); and Reed in 1800 with "Sovereign".

In 1834 Morrell and Jacobs wanted to have the local name identified as "Marso". Miklukho-Maclay believed that he had established the indigenous name as "Taui", which was also understood on Luf; and Thilenius[126] likewise proposed naming the main island "Taui", as this name was familiar to the natives of Luf and Ninigo, and was understood also in the south-east of the Admiralty group even were it possible that "Taui" designated only one region of the main island. Even though Schnee[127] declared that the name "Taui" was unfamiliar to the natives, it was nevertheless true that on the south coast of the main island there was a village whose name in 1908 had been heard as T͡aúi, T͡aúwŭ͡i, T͡aúŭī, and that the Ninigo people call the Admiralty Islands T͡aúwwŭ͡i [19] or T͡aúwi, as Hellwig was able to ascertain. Schnee[128] heard the main island called "Mănus" by its southern neighbours and "Usiai" by the inhabitants of the northern islands, and

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123 Mead, 1931. pp.238 *et seq.*
124 *Deutsches Kolonialblatt*, X. 1899. p.211
125 Not "Bosco" as von Luschan (*loc. cit.*) writes
125a 1900. p.76
126 II, 1903. p.109 *et seq.* and p.349
127 1901. p.240
128 1901. pp.240 *et seq.*

observed that that meant the inhabitants. For the Mắnus' name of the main island he heard "Tshĕbămu" (= bush), and as the Úsia͡i name common on the northern islands "Kor" (=place, land). Meier and Parkinson[129] contended that the name "Taui" was found generally, and corrected Schnee's name "Tjawómu" as being the name of a mountain ridge (Sabumo) visible for miles around, and "Patánkor", i.e. tree trunk = home territory, as the name of the "Moánus" (instead of Mắnus). According to them, "Kor" is a common Mătăṅkŏl name for the main island. In subsequent times the names "Tshĕbămu", "Tjawómu", "Kor", "Taui" and "Mắnus" were entered on the charts alongside the name "Große Admiralitätsinsel", and occasionally the entire group is named "Mắnus-Inseln" in line with Schnee's proposal[130]. In 1911 "Manus", which is actually the name of a group of natives, was used for the name of the administrative station in Seeadler Harbour; rechristened by the Mandate administration as "Lorungau"[131]. As for the other names proposed, only "Taui" was still in recent use from time to time. However, since it designates only a portion of the main island, the admittedly somewhat-bulky name "Große Admiralitätsinsel" is preferable, since it can allow no misunderstanding[132], as could perhaps arise from the occurrence of the name "Manus" (= Allison Island) in the Western Islands. "Manus" had however been introduced at the same time by the Mandate Administration, as the official name of the group.

The first namings of the smaller islands originate with Maurelle[133] who in 1781 introduced the names "Los Negros" (on account of the alleged resemblance of the natives with Guinea Negroes); "San Miguel"; "Jesus Maria"; "San Gabriel"; "San Rafael"; "Horno"; "Los Reyes"; and "La Vendola". Naturalized translations of these names into German, as Langhans[134] attempted, with "Schwarzen Inseln", "S. Michael", "Ofen Inseln", and "Die Könige", could not supplant the Spanish names. The Spanish names "Isla rasa pequeña", and the "La Bandurria" introduced by Espinosa to supercede "La Vendola", had an even shorter existence. Quite often it is written "La Vandola" (= jury mast) instead of "La Vendola".

In 1817 Abraham Bristow named the Purdy Islands after John Purdy, who published a chart of the Western Pacific in 1822, on which he inscribed Bristow's discoveries. Bristow named the individual islands "Mole Island, "Bat [20] Island" and "Mouse Island". Of the German translations of these names only "Mausinsel" gained any traction. Originating also from Bristow are the names "Elizabeth Island", "Hayrick", "Platform Island", and "Low Island" which in spite of its doubtful position referred to Lóu but this name was less used later.

Surveys by the British Navy, carried out by the *Alacrity*, brought back the names "Bird Island", "Alacrity Harbour", and "Sanders Point" in 1874. Surveys by the *Challenger* in 1875 brought the names "Nares Harbour" that was also the name of a government substation of the Mandate Administration; "Wyville Point"; "Shallow Bay"; "D'Entrecasteaux Island"; "Suhm Island"; "Carpenter Island"; "Wild Island"; "Buchanan Island"; "Moseley Island". "St Andrew"; "Violet Island"; "St George"; "Fedarb"; "Maitland Islands"; "St Patrick"; "Johnston Island" go back to surveys by the *Danae* in 1879.

An initial attempt at determining the indigenous names was made by Miklucho-Maclay, with "Loneu", "Pubi", "Perelu", "Soa", "Schou", "Lo", and "Andra". Since the beginning of the German colonial period, virtually only indigenous names were recorded, for instance, from Schack "Balètwi" instead of La Vendola; and from Thilenius[135] "Waikato" instead of St Andrew, "Lo"

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129 1907. p.382

130 *Großer deutscher Kolonialatlas*, Nov. 1904. N°. 25

131 "Lorengau" is occasionally written as well.

132 Where "main island" is written from time to time in the text, this is done solely for the sake of brevity, not with the intention of introducing a new name.

133 Milet-Mureau, I. 1797. p.269

134 *Großer deutscher Kolonialatlas*, 1892. N° 24; *ibid.* 1893. *D.N.K.* Sheet 2

135 II, 1903. p.349

instead of St George, “Mok” instead of St Patrick, “Epam” instead of Maitland Islands, “Rubal” instead of Green Island, “Buke” instead of Zuckerhutinsel or Sugarloaf Island, and “Fidap” instead of Fedarb. New names were bestowed only where there were no local names, such as “Hyänehafen” and “Seeadlerhafen”. The greatest credit for establishing local names was earned by the resident traders, von Bennigsen and Schnee[136], whose naming was subjected to an improvement by Parkinson[137], based on Meier’s information, which in turn traces back in most cases to the Păpítălai̯ man Pō Mi̍nis. In 1908 the names were recorded in phonetic script. Unfortunately, on the other hand, the names heard by Margaret Mead in 1929 were reproduced in a totally deficient manner. The Mandate Administration cast about for the possibility of determining local names. Thus they renamed Wyville-Huk “Sopa Sopa Head”. Given the great diversity of writing styles and the pronunciation itself, sometimes quite varied forms had earlier arisen[138]:

European name	Indigenous name used in subsequent text	Variant spellings of the indigenous name
Suhm Island[139]	Ahet	
Elizabeth Island	Alim	
	Ăndră	Anra
Browne Island	Awa	
	Bŭ̍bi	Pubi
	Brŭ̍nai̯	Bŭ̍nai̯ (cf. Mbŭ̍nai̯)
	Drūgŭ̍l	Drūkŭ̍l, Rugul, Ulkul, Mburukur
	Fedarb	Fidap
	Haníta	Onneta
D’Entrecasteaux Island	Hắră̍ngăn	Maréngan, Haréngan, Harangán
	Háuai	Hauei, Hauwei, Hóueï, Amey
	Hắŭs	Hau̯s, Haoss, Hŭs[140], Hūs, Huss, Arhus
	Kitsapon	Kintjáwon, Kitschapon
Broadmead Island	Kŏmŭ̍li	Kōmūlī, Kumúli
	Korónjat	Kŏrniat, Koruniat
	Kyĕlau̯ắk	Kelaua, Kĕllau̯a, Kĕllau̯ak
Jesus Maria Island	Lămbŭ̍tjo	Lambutĭu, Lămbŭ̍tju, Lambutyo, Lambusso, Rambútjo, Rambutchon, Lambutsu
	Lïïndrau̯	Linro, Liero, Liedo, Lindode, Lindoch
	Lŭ̍mbᵘá	Lómpoa, Lomba
	Lŭ̍nĭŭ	Lŏnyū, Loneu
	Lotja	Loitcha

[136] 1901. p.240
[137] 1907. pp.381–392
[138] Obvious printing errors (e.g. Naruval instead of Ndruwal; Los Reiyes instead of Los Reyes; Bilo instead of Ndrilo; Lon instead of Lou) are not listed here.
[139] Festetics de Tolna (1904, p.131) writes “Suchu”(!)
[140] The name used by Pi̍tĭlu people

European name	Indigenous name used in subsequent text	Variant spellings of the indigenous name
St George Island	Lóu	Lo, Lóŭ
	Lukús	Lūkŏ́s, Lugos
	Makareng	Moakareng
	Mándrindr	Mandrintr
Sugarloaf Island	Mbŭ́ke	Buke, Buge, Mlenka(?)[141]
	Mbŭ́na͡i	Mbrŭ́na͡i, Punai, Ponai, Mbonai, Bonai (cf. Brunai)
	Moγerǎ́	Moggera, Mochera, Mogara, Mǎ́γăra
	Móuk	Mok, Mok-mandrian, Mŏ́ŭk, Mouk mandrian
La Vendola (La Vandola)	Náuna	Bălètwi, Naúna
Perry/Berry Island	Ndréu	Ndreo
	Ndrílo	Drĭlo, Drillo
Dover Islands	Ndrówa,	Ndróva, Ndrowa rukor
	Ndritenbat	Ndritapat
	Ndrūbiū	Ndrūwiū, Rubiu[142]
Green Islands	Ndrŭ́wal	Rubal, Ndrubal
Violet Island	Ngówui	Ngabúi
Carpenter Island	Nŏ́ru	
Tracey Island	Okoru	
San Gabriel	Pāk	Paak
	Pǎ́lămŏt	Bǎ́lămŏt
St Patrick Island	Pǎ́lŭăn	Baluan, Bálual, Paluar, Palúal, Pălŭ́ăn, Păluăl, Balowan, Bálual liban
Hayrick Island	Papialou	
	Papimbutj	Papenbus
	Păpítălai͡	Papitela͡i, Păpítŭla͡i, Papitálai
	Pắrā	Pĕ́re, Peri, Berri, Berre, Bḗri
	Pătŭ́sī	Pedussi, Patussi, Batussi, Bätussi, Bälussi, Betussi
	Pǐ́tĭlu	Pǐ́tulu, Pitelu, Pidelo, Bidullo, Pichalew, Pitjilu, Perelu, Bit-chilu, Bitalu, Pitiliu
	Po͡am	Păm, Epam, Pom-mandrian and Pom-lin, Poam aru kor, Poam a ruo, Pwam, Pam lanu and Pam lid
	Poamatjau	Pamasau, Pamatchau, Boámasau

[141] Giglioli, 1911. p.233

[142] Not identical with Bird Island (*Deutscher Kolonialatlas*, Dec.1902, No.26)

European name	Indigenous name used in subsequent text	Diverse written forms of the indigenous name
Bird Island[143]	Potomo	Popapu, Túaral
	Pů̈e	Bue, Mbue, Lo-mandrian
Pigeon Island[144]	Réta	
	Sabumo	Tjawómu, Tshebamu
	Sau	Ssau, Sou, Souh, Schou, Soa
Platform Island	Sauwai	
	Sívĭsa[145]	Siwissa, Siwisa, Sebesa, Sepessa
Wild Island	Sōri	Sory, Sŏri, Sóhi
	Takúmal	Mok-lin, Mouk lid
	T͡auī (village)	T͡auŭī, T͡auwu͡i
San Miguel Island	Tiliánu	
	Tjápale	Tschábělě, Djambele
San Rafael Island	Tong	Putiu
St Andrew Island	Uainkatou	Waikatu, Waikato, Waikadō Uaimkatou, Beikatu
	Ulungau	Hulungau, Ulenau, Ulunau Gúnulau
	Wălů̈n	Ualun, Valun

Sometimes several names are in simultaneous use among the natives, such as Ndritenbat alongside Sau; Ndrů̈wal alongside T͡auī; Lŏmŏt, Kor e Po Pau, and Barakou[146] alongside Lŏnĭŭ; Polot (derisive nickname) alongside Uainkatou; and Kor e Pō Sĭṅ or Lolu[147] beside Păpítălai͡.

Meaning of the Indigenous Names

According to Meier[148] and Parkinson[149] the place names have the following meaning: Kalau = fish trap; Kéa = a type of tree; Kŏmů̈li = the spitting of the ornamental plant *ku*; Kor e Pō Sĭṅ = village of (the chief) Pō Sĭṅ; Korónjat = land of the *njat* tree; Lalewei or Lewei = a type of tree; L͡aues = taro seedling; Limbúndrel = end of the ladder; Loku = in the centre of the ornamental plant *ku*; Lolau = secret; Lŏmb^{u}á = the interior or centre of the hollowed out coral limestone cliff; Lŏnĭu = middle of the coconut palms; Lótja = middle of the mangroves; Louosen = middle of the rattan; Mándrindr = a type of tree; Mbů̈ke = *Tridacna*; Mbů̈nai͡ = trepang; Mbutjoruo = two uninhabited small islands; Móuk = a type of tree; Ndréu [24] = a shoreline tree; Ndrilo = the noise of coconut palm leaves pulled through water; Ndritapat = topside of the rock; Ndrombut = only *but*

[143] Since ‘Bird’ is a personal name, the translation “Vogelinsel” (*Deutscher Kolonialatlas*, 1893, *DNKomp.* Sheet 2), or “île del’oiseau” Festetics de Tolna, p.137) is invalid.
[144] A second Pigeon Island is located in Nares Harbour.
[145] With Tjókua, Lólau and Kéa, these comprise the Fedarb Group (Ulu)
[146] Parkinson, 1907. p.388
[147] Parkinson, 1907. p.408
[148] 1907. pp.650–666 and 637; 1908. pp. 195, 206, 656, 662, 671; 1909. p.356
[149] 1907. pp.382–390

trees; Ndrótjun = only *tjun* trees; Ndrówa = only rock; Ndrűwal = pole of the cousin; Ngówui = *mopui* = lemon grass; Paláiai = promontory jutting out into the sea, where you go swimming; Papanpapi = sandbank; Paliau = a species of fish; Palitaui = the rescuing spirit; Păpítăl͡aĭ = shoreline gravel of the eels; Pářā = my brain; Parajeu = under the *jeu* tree; Pătűsī = a rock; Poauárei = mouth of the Uarei River; Polot = ulcer (derisive nickname for a chief); Pongopou = *pongopong* = a type of sea grass; Potomo = the father; Pounda = *Triton* horn for calling pigs; Réta = *moreta* = betel pepper leaf; Tjápale = what a sail; Tjaretankor = (rocks) = land border; Tjawompitou = promontory of the *Calophyllum*; Uainkatou = water of (the chief) Katou; Ulu = spring flood; Ulungau = species of fern.

Cartography

The first time that the Admiralty Islands appeared was on Schouten and Le Maire's chart[150] as *Hooch landt*, with only the south coast represented, and as "25 Eylanden", among which Lămbútjo and Lóu are recognizable to some extent.

In 1700, as rendered by a barely trained cartographer, *Isla de la Madalena* appears on Frémont d'Ablancourt's chart. Schouten's 'Hooch landt', 'hoog land', or 'hoogh eylandt' was used not only for the Admiralty Islands, but appears on his own chart, Tasman's chart, and Struyk's (1705), as the designation of high coastal points, or smaller high islands, and quickly loses any connection with the Admiralty Islands.

The south coast of the main island, and the small islands to the south appear once more as the Admiralty Islands on Carteret's chart[151], while Maurelle's chart[152] shows only the north coast of the main island and the small islands eastward as far as La Vendola. In 1790 Fleurieu reproduced Carteret's chart, based on a chart drawn in 1785[153], on a simultaneously-published "revised" chart[154], but added the inscription "Î. Mathias ou Î. de l'Admirauté de Carteret" and "les 25 Îles de Schouten".

This error is corrected on a chart in the *Atlas du voyage de La Pérouse*[155], which recapitulates the observations of Carteret and Maurelle without taking into consideration the smaller islands to the east. Labillardière's chart is drawn the same way[156]. In 1807 Beautemps-Beaupré combined all the then-current observations [26] in the *Atlas du voyage de Bruny-Dentrecasteaux*[157] into a better overall picture.

In 1822 John Purdy inscribed Bristow's discoveries onto a chart of the western Pacific. In 1847 there appeared, as French Admiralty Chart 1152, based on the observations of Dumont d'Urville's expedition, the *Carte des Iles Carolines et des terres environnantes*, that also included the Admiralty Islands.

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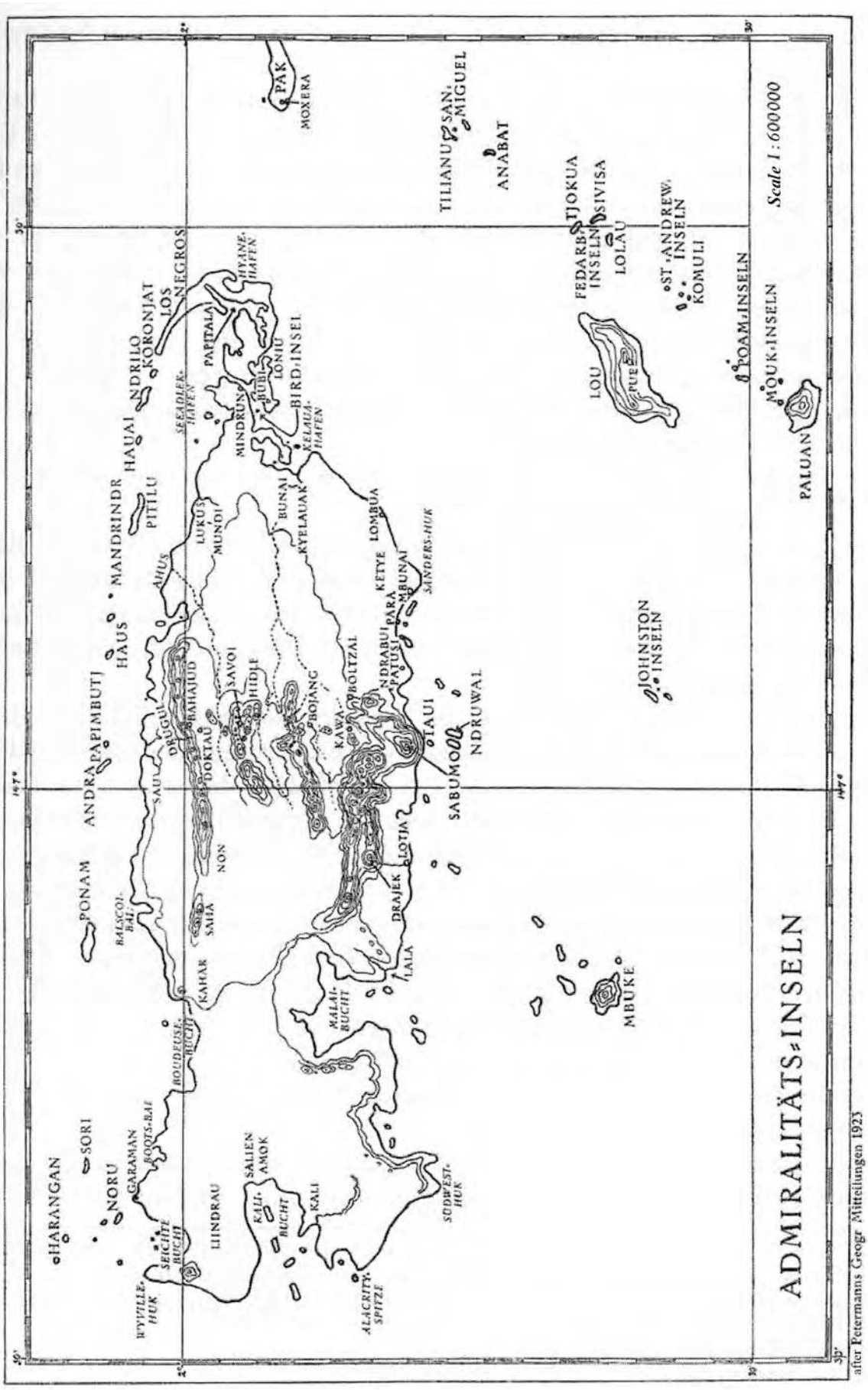
150 Herrera, 1622. p.172
151 Dalrymple, Class 17, Plate 52
152 Dalrymple, *loc. cit.*
153 *Découvertes des Français*, 1790. Chart 1
154 *Découvertes des Français*, 1790. Chart 9
155 Plate 68
156 *Atlas*, 1796. Plate 1
157 1807. No. 1



after Petermanns Geogr Mitteilungen 1923

Pivotal to the cartography of the Admiralty Islands were the improvements compounding the findings of d'Entrecasteaux (1792), Cheyne (1862), Sanders (1874)[158] and Bower (1879) into British Admiralty Chart 769. At the same time the chart contained the results of the *Challenger*'s surveys of the north-western portion of the group.

In 1882 and 1883 charts of the north-east coast of the main island were drawn from the records of the *Carola* and the *Hyäne*[159].

The Purdy Islands were incorporated by Dreger and, in more detail, by the New Guinea Company[160] in 1887.

In 1893 the *Deutsche Kolonialgesellschaft* issued an outline map of Kaiser Wilhelmsland and the Bismarck Archipelago. P. Sprigade and M. Moisel compiled the cartographical material into the *Deutscher Kolonialatlas*. Among its fresh information it included the investigation of names by von Bennigsen, Schnee, etc.

From the cruiser *Möwe* the position of Bird Island, the Purdy Islands[161], and Alim was determined in 1896, and in 1899 sketches were made of the north-eastern side of the main island[162], Pălŭăn, St Andrew (Uaimkatou) and Pāk, and published, in conjunction with a composite map of the whole group, as German Marine Chart 480. In 1900 the *Seeadler* provided a new record of the north-eastern side of the main island[163].

In 1905 Griffith's sketches of the northern side of the main island and the eastern islands became available[164]. In 1906 the *Planet* also provided a sketch of the north-east of the main island[165]. In 1908 new individual recordings were made by the *Planet*.

In 1916 all the available map material was reworked into an embodiment of the Admiralty Islands within the context of the Protectorate (New Guinea and the Bismarck Archipelago) on German Marine Chart 393.

In 1914 Leber[166] produced the first map of the interior of the main island.

In 1928 there appeared a map "Territory of New Guinea, administered by the Commonwealth under Mandate from the League of Nations and Papua, a [27] territory of the Commonwealth of Australia" that recorded the new official names in the region of the Admiralty Islands, the government- and mission stations. A further map, "Map of District of Manus, Territory of New Guinea" that, among other things, recorded the new government roads on a 1 : 250,000 scale, was published by the mandated government.

Position and Size

The Admiralty Islands, including the Purdy Islands, lie between 1°53' and 2°57'S, and between 146°0' and 148°16' E. The main island lies between 1°57' and 2°14' S, and between 146°32' and 147°22' E.

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158 Cf. *Annalen der Hydrographie*, IV, 1876. pp.209–217
159 *Annalen der Hydrographie*, 1882. Plate 13, and 1883, Plate 9
160 *Zeitschrift der Gesellschaft für Erdkunde zu Berlin*, 1889. Plate 4
161 *Deutsche Seekarte*, No. 613
162 *Annalen der Hydrographie*, XXVIII, 1900. Plate 4 and pp.103–105
163 *Annalen der Hydrographie*, XXIX, 1901. Plate 3 = Wichmann, II, 1912. p.756, Fig.71
164 *Deutsches Kolonialblatt*, XVI, 1905. p.328
165 *Planet*, I, 1909. p.85
166 1923. Plate 16

The positions of the smaller islands are:

Purdy Islands	2°49’–57’ S.	146°0’–22’ E.
Mbűke	2°23’ S.	146°49’ E.
Alim	2°45’ S.	147°3’ E.
Palŭăn	2°33’ S.	147°20’ E.
P͡oam	2°29’ S.	147°31’ E.
Koműli	2°27’ S.	147°26’ E.
Fedarb	2°21’ S.	147°30’ E.
Lóu	2°24’ S.	147°22’ E.
Pāk	2°5’ S.	147°38’ E.
Tong	2°3’ S.	147°46’ E.
Lămbűtjo	2°18’ S.	147°48’ E.
Los Reyes	1°56’ S.	148°7’ E.
Nauna	2°14’ S.	148°15’ E.

Together, the islands cover an area of about 2,600 km^2. Of this the main island accounts for 1,900 km^2. It is 50 nautical miles long and 10–15 nautical miles wide[167]. All the other islands are small. For instance Pāk is about 824 Ha, with a length of 9.3 km and an average breadth of 890 m., while its narrowest point is only 330 m. and its widest 1.5 km[168]. Alim is 1.3–1.5 nautical miles long and 0.25 nautical miles wide; and Mole Island in the Purdy group, which is 3–4 times bigger than Mouse Island, is merely 0.75 nautical miles long[169]. Amo off Ndrowa is just 200 m^2.

The largest of the lesser islands are Lămbűtjó[170] and Lóu. In order of size Pāk, Palŭăn, and Mbűke trail a long way back. [28]

Planar Geography

The main island is roughly the shape of a rectangle stretching from east to west — the western portion more richly subdivided by bays than the central and eastern parts. From its north-western tip, Wyville Point, the coastline runs due south but then bends sharply eastward, enclosing Kali Bay, whose southern shoreline is secluded in creases running south-west, subdivided by several side bays. In Kali Bay lie the small islands of Nabilau, Kali(?), Nihol, Palali, and Anur and beyond it the small island of Salien (Salchan). West of the latter lie the islands of Pahi and the two Sĺsī Islands, known to the Europeans as Sisi-mandrian and Sisi-lin. The natives call the former Bipi[171].

South of Kali Bay is a small bay with two offshore islands. Beyond, at Alacrity Point, the coastline bends south-east and runs in a fairly straight line, off which lies the Alacrity roadstead, to the south-west headland, followed in turn by a smaller bay, and then a somewhat bigger bay enclosing the islands of Jambol and Murai. Then the coast runs eastward until the islands of Patos and Patali lie offshore. This is the start of Malai Bay, which cuts deeply northward and then north-

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167 Parkinson, 1907. p.349 *et seq.*

168 *Deutsches Kolonialblatt*, XX, 1909. p.531

169 *Nachrichten über Kaiser-Wilhelmsland und den Bismarck-Archipel* III, 1887. p.59

170 About fity square miles (Seidel, 1894. p.24)

171 According to A. Bühler

west into the land, with two narrowing extensions to the north and north-east. Two islands lie offshore at its eastern end, and near Lálā there is a small inlet at the mouth of a river.

On from there, the steep coastline is less broken and runs eastward, mostly covered in mangroves. There is a small inlet between Lótja, with the offshore islands of Lanke and Putjoma, and Poai, with another small island offshore. Somewhat further east, Sabumo soars up to its summit. Offshore lie the islands of Peli, Tjovondra, and Ndrűwal (T͡auī). Next there is a divided, shallow bay beyond which a promontory with offshore islands marks the beginning of Pătűsī Bay (Mangles Bay) which stretches in a shallow arc right to Sanders Point, the south-eastern tip of the main island, and includes the small islands of Awulu, Peri (= Pár̄ā?) and Poahonda.

From Sanders Point, with the islands of Ndrówa and Amo (according to Krämer, Dagubō and Darau) offshore, the coastline runs nine nautical miles north-west, without any inlets, as far as Kelaua Harbour. This has an inlet toward the west, and extends as an estuary with a brackish river emptying into it. The bay widens toward the north and is separated from the sea by a narrow strip of land running north-south. On the seaward side of this strip of land is the start of Bird Island Bay, with the island of Potomo (Bird Island) and its small neighbour Bórome[172]. Bird Island Bay lies between [29] the south coast (now running north-east) of the north-eastern part of the main island and the Big Los Negros Island. It extends north-east in a second bay, that is formed by the coast of Los Negros Island and includes the small island of Tirr. It then transforms into a saltwater channel running north-east between the islands.

The north-eastern tip of the main island juts northward in a narrow tongue of land. To its west is a small bay with three little islands, the coastline of the Lukús region divided by less prominent bays, and the broad alluvial foreland of Ahus, to the west of which a smaller bay with one island to the south-east forms a gash. Westwards, the coastline of the Drūgűl region presents even smaller inlets, and beyond the coastal village of Sau there are no more bays, until Balscot Bay opens in the Sáhă region. West of there, the coastline runs eight nautical miles south-west before opening into the broad Ulalai Bay (Boudeuse Bay) in whose eastern part lies the small island of Malwes. Nearby, the small Boat Cove opens to the west, with the small island of Sabo or Savorsa (Richards Island) lying off its eastern tip. The coast west of there, with Pigeon Island offshore, then runs north-west as far as Moseley, and then south-west to form Shallow Bay penetrating three nautical miles inland[173], bordered to the west by a coastline running north-west and finally north to Wyville Point. Within it lie Ferguson, Butter, and Higham Islands, and offshore to the north the somewhat larger islands of Nőru, Ahet, Hắrăṅgăn, and others, with Sōri following to the east.

The Big Los Negros Island, which was considered part of the main island on the voyage of the *Hyäne* in 1883[174], extends eastward from the saltwater passage that divides it from the main island, and in the western portion of the south coast there is a bay opening to the east and widening towards the north-west. At the eastern end the south coast bends northward in a right angle, and extends to Hyäne Harbour on the east coast. North of there, both the east and west coasts run north-west until the island ends in the narrow region of Kitsapon. The western part of the island's north coast runs eastward and recedes into a double bay. East of there, where the coastline bends round to the north-west, a bay opens out — the counterpart of Hyäne Harbour on the other side of the island. The village of Păpítăl͡aì lies on this bay. It continues south-west, penetrating deep into the island, as the Poauai[175] saltwater canal. Numerous indentations in the coastline raise the

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172 *Planet*, I, 1909. p.85

173 Seidel, 1894. p.24

174 Seidel, 1894. p.24. Now the island bears the name Makareng, after one of its regions.

175 Meier, 1907. p.652. According to Krämer, Leutnant Schweppe cruised three nautical miles through the canal during the *Planet*'s visit.

thought that the island might consist of several islands. [30] Just such an indentation north-east of Păpítălai on the opposite part of the island bears the name Louoseu, and a south-eastern extension of the Poauai that is probably more like a creek has the name Lomondrol[176].

The north-western tip of Los Negros Island with the Kitsapon region sees its continuation in a long chain of islands extending northward off the main island. The islands are Korónjat, Ndrilo, Háuai, Pítīlu, Mándrindr, followed by a sandbank, Hanīta, and Hắŭs lying north of the Drūgŭl region of the main island. Opposite Sau there follow the islands of Papimbutj (Papenbus) and Andră and, after a long hiatus, the island of Pónam opposite Sắhă. Most of these islands are only narrow and extend from east to west.

The north-eastern tip of the main island, the island of Los Negros, and the islands from Korönjat to Pítīlu enclose Seeadler Harbour. The north coast of the main island from Moseley Point east as far as Ulalai Bay is delimited by the three-nautical-mile-wide Nares Harbour, and to the north by the D'Entrecasteaux Reef and the island of Sōri.

South of the eastern shoreline of Malai Bay lie the islands of Ewal, Wogali, and Mbŭke, with other small islands (14 in all) extending in a chain from north to south; to the east are the islands of Jombon, Uh, Malon and Olon. The islands of Lambutjo(!), Kălŏpa, and Kajŏni further eastward, and south of Patusi, comprise the Johnston group.

Again, the island of Lóu shows subdivisions — its axis running from south-west to north-east. The northern half of the north-western side has several shallow bays; on the other hand, the southern half has a broad, and not very high mountain spur whereas the south-eastern side is shaped directly the opposite.

South of Lóu are the Poam Islands, Takúmal, Móuk, and the bigger Palŭăn, whose oval shape is somewhat altered by points of land east and west, and a small bay on the north-western corner.

The island chain beginning east of Lóu and running north-north-east, consists of the small elongated islands of Kŏmŭli, Uaimkatou, Baleai, Déo[177] (Ndreo, Dromboéo), Ngówui (Ngăbúi, according to Krämer), Ulu, Lólau, Sívĭsa, Tjókua, semi-lunar-curved Anabat (concave to the west), and Tilianu with a promontory on its western side, as well as several smaller islands.

Between Sívĭsa and Pāk lies a group of about seven small islands, the biggest being Bútonu[178].

Pāk is an island whose southern coast describes an arc open to the north, while the northern coast is the same but with less of a curve and forming two small bays.

With Tong the shape of Lóu is repeated in miniature, in a somewhat simpler form.

[31] A greater wealth of subdivision is shown again by the larger Lămbŭtjo. From its south-western point, with a small island offshore, its northern coast runs north-east, rapidly retreating to a broad, shallower bay, the end of which forms the northern tip of the island. From there the coastline runs south-eastward, with two smaller inlets, as far as the projecting eastern end of the island, and then south-south-west. There, it has a harbour-like indentation. Soon after, the coast again bends gently westward with many small inlets, before opening into a larger bay at the south-western end of the island.

As for the more distant islands, only Alim in the south of the Johnston Islands has a distinct extension in a north-south direction. The others — Putúli, Mbatmanda and Naúna in the east;

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[176] Meier, 1907. Chart

[177] According to Krämer, these three islands are in a line (Uaimkatou at the western end, and Déo to the east).

[178] According to Krämer, this probably = *mbuton* = reef

Papialou, Sauwai, and the Purdy Islands in the south; and the Sabben- and West Islands in the west are round or oval islands without any more striking outline.

Geology

The islands of the Admiralty group consist either of older rock with geologically-recent igneous rock or else they are coral structures.

On the main island, the central massif (Dramsel and Drajek) consists of basalt[179]. The slopes and the more easterly mountains are covered in laterite. At Hidlé there are limestone walls and further north you will find limestone tending to outer basalt with marked warping[180]. Near Kětyḗ, beyond Mbűn͡ai, the hilly ground consists of old, quite varied coral limestone containing many caverns, in some cases with stalactites. Of the young igneous rock, augite andesite (or tuff) was found on the eastern tip of the north coast, near Műndī and Sā́hă[181]. A tangerine-coloured clay occurs near Műndī, and beyond Drūgűl in the interior of the main island there is red iron ore and red clay. Also, the Drūgűl people collect small quantities of a yellow earth dye from the interior. Near the Hĭlenha͡u (=Hidlé?) and Bűli(?) mountains they find lumps of pyrolusite[182]. In 1932 Bühler learned that a pyrolusite source lay near Bowat. The coastal stretches of the main island are alluvial flats; behind them are swamps in many places[183]. The coastline is bordered by a fringing reef.

On the island of Ndrówa the coral cliff rises high, with a cave that continues onto the plateau in a long narrow walkway, and is intersected by a deep cleft. A branch path leads to this intersection after a bend, and itself ends in a small round cave. The neighbouring island of Amo, only about 200 m^2 in area, likewise consists of weathered coral limestone that steeply drops around six metres. [32]

The bank of the Poauai Channel too, according to Krämer, has caves in the raised coral limestone.

Also of coralline origin are those islands offshore to the north of the main island, of which Hắrăn̓găn is strikingly high, and most of the islands to the south — Alim, the Purdy Islands, the Johnston Islands, Uaimkatou, Pāk, Tong, Fedarb, and Los Reyes[184]. However, trachyte was also found on Sĭ́vĭsă in the Fedarb group[185]; therefore the nucleus of that island might be volcanic. Krämer regards the islands of the Fedarb group as “low lava islands”. Similarly, recent limestone coats Lămbűtjo, which is an isolated volcanic cone 213 m high. The shoreline there rises fairly steeply. Nauna[186] and Pắlŭăn too are volcanic cones. On Mbűke so far only limestone has been found, yet the island’s cone shape, from which it got the name ‘Sugarloaf Island’, supports a conclusion that it comprises young igneous rock. There, and on the main island opposite Hắŭs, and at Tiliu, there are also quite significant clay deposits. On the low Purdy Islands phosphate is

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179 Leber, 1923. p.204
180 Leber, 1923. p.264
181 Herzenberg. pp.439 *et seq.*
182 Thilenius, 1900. p.202
183 Leber, 1923. p.204
184 Thilenius, 1900. p.201
185 Herzenberg, p.437
186 Thilenius, *loc. cit.*

deposited on the coral base[187]. Sulphur, which Schnee[188] mentions from the P͡oam Islands, is not found anywhere and was probably confused with yellow ochre[189].

Tall obsidian cones stand on Lóu, Móuk, and the two P͡oam Islands (Pom-mandrian and Pom-lin)[190]. Obsidian, which rises to 150 m on Lóu, appears in high walls in places. In a stream bed Thilenius[191] found microgranite, which is reported locally as occuring also on Móuk. He also found red iron ore which likewise occurs on Móuk, and pyrolusite on Lóu. The occurrence of coral sand and coral limestone at considerable altitudes, for example in the steep limestone cliffs that Krämer observed closely eastward of the South Point, demonstrate that Lóu and other islands have undergone fluctuations in height and the elevation of old reefs[192]. In 1908 trachyte that was to some extent vitreously solidified, trachytic obsidian, trachytic tuff, trachytic lava, disintegrated lava and alkaline pitchstone were all found in the stream bed on Lóu[193].

Topography

The middle of the main island, between Ndritenbat and Bahajud, is taken up by a central mountainous region with closely-connected folds whose centre point is Mount Dramsel, about 915 m, in the Grand Duke Friedrich Range in the southern half of the island. This range runs westward from Boltzal and includes, west of the Dramsel massif, the abrupt rise of lower-altitude Drajek[194]. South-east of Dramsel Sabumo or [33] Tjawomu[195] rises to 570 m, and nudges against the south coast opposite T͡aui (Ndrűwal). Toward the north-east Sabumo sinks slowly to the hilly Kisauke landscape.

West of Sabumo an undulating foreland extends to the south coast; in the north, near Ndrabui (10-15 m), it gives way to higher altitudes. Gorges and steep bluffs become more frequent, and near Boltzal the altitude is 280 m. North of Boltzal the Vailulu valley is a deep gash and after a further rise with a 45 m high basalt wall the Tilui valley is found, beyond which lies Bojang at an altitude of 150 m. North of Bojang the central mountain range, with the peaks Langalus, Pondrelis, Aluai, Puljähin, Dramdram, Ososo, Butual and Juhuju extends from east to west-south-west[196].

The hill country north of there, again at a lower altitude, is gashed in an east-west direction by the valleys of the Ramos and Mural. North of the Mural valley rise the limestone walls of Hidlé, dropping steeply 40–60 m. Near Savoi a mountain ridge running parallel with the central range reaches 210 m. Toward the south-west this is followed by the saddle (Ndrois). A rocky labyrinth extends between Savoi and Doktau, sluiced out by the rivers Warai and Tei, exhibiting among other things the 150 m long Bogohoo tunnel through the rocks[197].

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187 *Nachrichten über Kaiser-Wilhelmsland und den Bismarck-Archipel* IV, 1888. pp.237–41
188 1901. p.241
189 Meier, 1906. p.477
190 Wichmann, 1911. p.77 *et seq.*
191 1900. p.202
192 Thilenius, *loc. cit.*
193 Herzenberg, p.437 *et seq.*
194 Leber, 1923. p.203 *et seq.*, and p.264
195 Meier, 1907. p.933; Parkinson, 1907, p.382
196 Leber, 1923. p.262 and chart
197 Leber, 1923. p.263

Beyond Doktau the land flattens, then climbs once more toward the mountain range running east–west, with Bahajud at an altitude of 250 m, before dropping down to low hilly country on the coast. The mountain range touching Bahajud extends from the area around Drūgűl as far as the Sáhă hinterland where it is linked to the Tulu Mountains.

Mounts Bűli and Hĭlenhâu in the hinterland are familiar to the Drūgűl people, Hĭlenhâu being opposite Hấŭs, and possibly identical with Hidlé. Bűli is perhaps none other than *mbuli*, the general designation for any mountain[198]. Mount Pounda is also said to be in the interior[199].

The coastal hill country in the north of the main island rises to 200 m near Műndī, 50 m near Drūgűl, and 150 m near Sáhă. An alluvial plain lies before it, near Ahus (Ndragot)[200].

A relatively high plateau takes up the interior of the eastern half of the main island, fronting onto undulating lowlands towards the south coast. The north-east point and the islands around Seeadler Harbour are low and flat, although north of Lőnĭu there is low hill country near Ndrauo.

Relatively high hill country occurs a short distance from the coast on the western half of the main island, from South West Point as far as Malai Bay.

Further [34] inland, east–west folds are seen again but no high uprising. The north-west part of the main island shows only a few elevations, such as near Lĭĭndrâu and south of Wyville Point, rising to 152 m.

The island of Mbűke owed the name Sugarloaf Island to a rather steep mountain that rose in its centre. The mountain reached a height of 244 m.

Lóu supports obsidian peaks and reaches a height of 281 m east of the village of Pűě at about 150 m. Móuk is 92 m and Pắlŭăn 183 m high.

Lămbűtjo reaches 213 m, Náuna 180 m, and Sĭvĭsă 76 m in height. All the other islands are significantly lower. Pāk achieves only 37 m, Tilianu 21 m, Anabat 21 m, Tjókua 30 m, Lólau 27 m, the Johnston Islands 21 m, and Amo 6 m. Krämer estimated the islands of the Fedarb group to be 10 – 20 m high.

The Mătănkol Islands north of the main island are also low. Only Hấŭs and Hắrăngăn are higher than their neighbouring islands.

The Purdy Islands, Alim, Kŏműli, Ulungau, Los Reyes, Bútonu and other small coral islands are totally flat and low.

Cave formations and other erosions exist in the coral limestone of low- somewhat uplifted islands like Ndrówa and Amo and, according to Krämer, also on the banks of the Poauai Canal.

Rivers

The principal river on the main island empties into a narrow bay of Kelaua Harbour on which lies the village of Kyĕlâuắk, having flowed through the middle of the western half of the island. It arises from several water courses that flow from west to east in the valley folds of the interior mountain range in the interior. The southernmost of these is the Vailulu, which comes out of the region between Dramsel and Kisauke and traverses the land between Kawa and Boltzal. It is 5 – 6 metres wide, carries silt and clear water[201] and joins the Tilui in the east to form one river. The Tilui arises between the Grand Duke Friedrich Range and the Central Range. South of Bojang

198 Meier, 1906. p.476
199 Meier, 1907. pp.652 *et seq.*
200 Leber, 1923. p.204
201 Leber, 1923. p.204

it flows round an island with a 30-metre-wide (northern) arm with clear water, and a 15-metre-wide southern arm carrying sand and gravel over a muddy bed. Between Ndrois and Butual flows the Mural which, between Lojoro and Savoi, is 30 metres wide and 120 cm deep, and flows south of the walls of Hidlé. In the east it joins the river formed by the Vailulu and the Tilui. South of the Mural flows the 15-metre-wide Ramos, which joins the Mural south of Hidlé. Between Ramos and Tilui flow the Aju, Pulan and Narén[202]. The barely four-metre-wide Narén joins the Pulan, and all three open into the big river that reaches Kelaua Bay. [35]

North of Ndrois arises the Warei (Ware, according to Bühler), which has eaten through a rock labyrinth 10 – 12 metres wide with walls occasionally 20 – 30 metres high in places, between Doktau and Savoi. From the north the Tei stream flows to join it, coming from the Bahajud region, supplying a sago swamp at Doktau, and sinking into the Bogohoo tunnel, then flowing underground before uniting with the Warei in the rocky labyrinth[203]. The Warei empties at Ahus, forming great swampy areas, as it is dammed behind a high alluvial deposit[204].

In the Lukús region on the north-east coast of the main island empties a big river, navigable by boats. A stream from the Mŭndī region pours into it. About 100 metres to the east is a stream that falls in cascades, with clear, lime-free water; and, even further east is a larger river[205] navigable for two kilometres by boat, with a bar off its mouth that has only one pass, quite adequate for a boat. In Meier[206] the name of the western river is given as Tingou, although this appears to be based on a misunderstanding.

In the Drūgŭl area, the Sio (Ssio) River empties opposite Hă̆ŭs.

The Sou River empties a little east of Sau, and further east the Sombarendun, coming from the heights west of Bahajud. The shallow, eight-metre-wide Roman approaches it but is said not to join it[207].

Between Sắhă and the north coast of the main island there are shallow water courses, to some extent with muddy bottoms, used as untraceable access to Sắhă.

On Shallow Bay a river opens like a creek into the mangroves. It has formed a sago swamp in the hinterland at Lĩĩndrau̯[208].

A watercourse opens into Kali Bay, in a slight enlargement on the southern side of the bay.

On the south coast of the main island there are river mouths at Lắlā, Lótja, and Poauárei. The river at Poauárei is called Uarei[209], and has helped implement the name of the village at its mouth (*poan* = its mouth)[210]. From the western foothills of the Kisauke hills comes the Ulizan, which flows eastward from somewhat north of Ndrabui where it receives the smaller, clear Lelebé, which comes from the south, before continuing its easterly course[211]. Its mouth is unknown. At Tau̯ī a river empties into the mangroves, into which a similarly-sized tributary disgorges not very far from the coast. East of this spot, at the foot of a small knoll bearing the village of Kisoke (= Kisauke?) flows a [36] mangrove river. Finally, a river whose lower reaches are surrounded by mangroves and sago swamps empties at Mbŭ́nai.

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202 Leber, 1923. pp.262 *et seq.*
203 Leber, 1923. pp.263 *et seq.*
204 Leber, 1923. p.204
205 Vogel, 1911. pp.80 *et seq.*
206 1907. Chart
207 Leber, 1923. p.264
208 *Deutsches Kolonialblatt*, XIX, 1908. p.854
209 Cf. the Warei further to the north
210 Parkinson, 1907. p.383
211 Leber, 1923. p.202

On the smaller islands bigger rivers are usually not developed. For example Pǐtĭlu has only water holes with very limy water, while Pāk has sago swamps[212]. On Lóu there is an intermittently dry streambed between Pů̆ě and the coast, and only Lămbů̆tjo boasts a broader river, which empties into an arm of the sea that cuts deeply inland.

Reefs

Reefs fringe the main island at Alacrity roadstead, from Ndrů̆wal as far as the southern end of Kelaua Harbour; at Bird Island Bay north of Potomo; at the north-east point, from Ahus to Drūgů̆l; from Sovorsa as far as the eastern end of Shallow Bay; and from Wyville Point as far as the northern end of Kali Bay. At their widest they jut into the sea at Alacrity roadstead. In Pătů̆si Bay the reef binds both headlands together like a cord[213].

Similarly, the islands offshore from the main island are for the most part surrounded by reefs. For example Ndrówa and Amo are raised off a common reef, as are the islands of Poahonda, Awulu, and Peri in Pătů̆si Bay. From the northern tip of the Ndrů̆wal Islands a larger reef arcs south-east. The Bird Island reef encloses Potomo, and the reef of the north-eastern tip of the main island continues across the saltwater channel to the north coast of Los Negros as far as Păpítălai͡, and into the Poauai Canal. Another reef fringes the western part of the north coast of Los Negros, continuing via Kitsapon and enclosing Korónjat and Ndrílo. After a break, the reef then encloses Háuai and, after a further break, Pǐtĭlu and Mándrindr. After renewed breaks come a sandbank and Hanita, then Hă̆ŭs, followed by Papimbutj and Ăndră, and finally Pónam, after which it extends, in long narrow strips, east and west. After a wider break, allowing entry to Nares Harbour, the eight-nautical-mile d'Entrecasteaux reef runs from Sōri to Hă̆ră̆ńgăn; this also includes Ahet. Its northern edge is sharply defined, whereas south of it "shallows and mushroom-shaped rocks" lie in the anchorage of Nares Harbour[214]. Nő̆ru's north-eastern coast also has a reef, and the Murray-, Moseley-, and Buchanan Islands lie in a common reef. Also, Malwes in Ulalai Bay and Pahi off Kali Bay have reefs. Again, the western islands lie on a common reef.

A large reef that stretches [37] far to the east surrounds the Sabben Islands. To the west of them is a further offshore reef. South of them are the Petersen reefs and east of them again is the round Larsen reef. There are many small reefs between these reefs and the Alacrity roadstead.

A series of reefs begins south of South West Point and extends to Mbű̆ke. Mbű̆ke itself comes into contact with a reef running south-west to north-east. A parallel series of reefs begins south of Olon and ends somewhat north of Jombon. North of Ewal and Jombon the sea is again filled with many smaller reefs.

In the Johnston Islands the Stuart Bank and Kajŏni have larger reefs while long reefs extend northward in the north-west of the group, and southward from Kălŏpa in an arc as far as a sandbank.

Alim is surrounded by reefs, and also has a smaller reef offshore to the east.

Papialou and the second of the Hayrick Islands lie on a wide reef plate that joins in the south-west to a reef around Sauwai.

At Pắlŭă̆n a reef extends around the eastern half of the island until about the middle of the island it runs northward and southward out into the sea. Móuk too is completely surrounded by

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212 *Deutsches Kolonialblatt*, XX, 1909. p.530
213 Leber, 1923. p.205
214 Seidel, 1894. p.24

reefs and a broad reef plate extends from P͡oam to Ngówui. Lóu appears to be free of reefs right to the southern tip.

In the Fedarb group a reef divides Kéa from Sĺ́vĭsă[215]. At Anabat a reef joins the south coast, and at Tiliánu a reef attaches itself to the east coast.

Lămbŭ́tjo has a long coastal reef on its southern side from the western tip to the eastern tip, and a reef attached to the northern tip running north-west and enclosing the islands of Paripoi, Uaiuri, Mbululon, Tjalou and, bending westward, also Patúam.

Pāk is surrounded by smaller reefs (*malehū*, according to Krämer) that open into a pass only on the north coast[216]. Also, the Bútonu group between Pāk and Sĺ́vĭsă consists of flat islands on a reef (*mbuton*)[217].

North of Pāk the ocean reef is located at 147°36’ E., and 2°0’ – 2°2’ S.

A long reef connects the two Los Reyes islands, Putúli and Mbatmanda; and Nauna too has surrounding reefs.

Far to the south lies the big double reef at 148°1’ E., and 3°18’ – 3°21’ S, and the even bigger circle reef at 147°42’ – 147°50’ E., 3°23’ – 3°27’ S.

In the Purdy group there are reefs around all the islands. [38]

Ebb Tides and Flood Tides

The poles of several pole buildings in P̆árā̄ on the south coast of the main island rise 10–12 feet above the surface at low tide, while at high tide the platforms are only about three feet above the water[218]. In other houses the front platform is almost at water-level at full tide, but so high at low tide that a ladder is required to connect canoes and front platforms[219]. Generally, the difference in water-level between high and low tides is up to 80 cm.

Climate

In the Admiralty Islands a humid tropical marine climate predominates. The south-east trade wind blows in summer; in winter the north-west monsoon. In October and November 1908 we noticed almost constant easterly wind and mildly choppy sea[220], while in October 1906 on the other hand the *Planet* experienced westerly wind as well. Barometric pressure in October 1906 averaged 759 –760 mm; air temperature 25.2 – 30.5°, averaging 28°C. The sky was almost always partly cloudy[221].

For the Purdy Islands precise observations are available for the period between June and September 1889[222], with an average temperature of 27.6°. No great variations in temperature were

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215 Parkinson, 1907. p.384
216 *Deutsches Kolonialblatt*, XX, 1909. p.530
217 According to Krämer
218 Mead, *Natural History*, 1931. p.66 Fig.
219 Edwards, 1931. p.555, Fig.
220 Hellwig. p.85
221 *Planet*, II, 1909. pp.33 *et seq.*
222 *Meteorologische Zeitschrift*, XIII, 1896. p.37

observed. The predominant wind direction was south-east and east-south-east, with a wind strength of 2.9 – 3.3.

Rainfall is subject to wide variations, although it is fairly copious at any time of the year[223].

Flora

The main island is covered in dense rainforest[224] and is often surrounded by mangrove thickets on the coastline. The higher of the smaller islands are likewise thickly forested, with stands of *Areca*, *Ficus* and *Cordyline*. On its coastline are coconut palms, mangroves, or isolated *Calophyllum* trunks[225]. On Pāk Klink[226] found 57% of the surface area covered with high forest including two sago swamps, while 43% was secondary forest with many coconut palms, gardens and the like. The forested areas of the high islands are occasionally interrupted by fields of *alang-alang* (*Imperata arundinacea*). [39] For example Krämer saw a lot of low bushes, areas of *alang-alang*, and coconut palms on the higher parts of Lóu. The small, low islands present the typical vegetation of coral islands. On the Purdy Islands Hollrung[227] found a coastal ring of coconut palms, a second ring of wild taro, a third ring of *Areca*, and a forest nucleus of various plants. On the beach he found *Barringtonia*, *Hibiscus*, *Calophyllum*, *Ipomoea*, *Asterostigma*, *Tournefortia*, *Wedelia*, *Scaevola*, *Hernandia*, and others partially differing from island to island. On the occasional island like Alim and Ngówui the stands of coconut palms are surprisingly large.

The major plant species of the coast and the forest beyond, of the higher islands are *Calophyllum*, *Terminalia*, *Spondias*, *Canarium*, *Casuarina*, *Afzelia*, *Barringtonia*, *Cinnamomum xanthoneuron*, *Erythrina*, *Freycinetia*, *Inocarpus*, *Scaevola*, *Ocrenum*, *Hibiscus*, *Ficus*, *Parinarium*, *Palaquium*, *Pandanus*, mangrove, *Cordyline*, *Dracaena*, croton, bamboo, tree fern, *Pteridium*, *Trichomanes*, *Ophioglossum*, *Dendrobium*[228], *Calamus*, *Areca*, coconut, *Metroxylon*, *Piper methysticum*, *Coix lacrima*, *Rhizomorpha*, and various epiphytes. Börnstein mentions a white lily; Moseley[229] “a small fig”; Thilenius[230] a “coconut-like”, though smaller, tree fruit. Many plants are known only by their indigenous names.

Further into the interior of the main island Leber[231] found dense forest almost everywhere, with tall tree trunks and a luxuriant undergrowth of ferns and *Selaginella*. He also recognized *Alsophila*, *Calamodendron*, species of bamboo, *Zingiberaceae*, species of *Pteris* fern, liverwort, *Cyanopyceae*, succulents (*Dorstenia*), algae, moss, and a “confusion of epiphytes, lianas, and rattan tendrils”. On the heights a drying effect of the wind entered the botanical world, and *Nepenthes* thrived there, between *Xerophyllum* scrub[232] and *Lycopodium*.

Sago swamps are found in quite a lot of places on the higher islands and especially on the main island. Leber[233] found the biggest of them near Ndragot (Ahus) on the north coast of the main island.

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223 Seidel, 1894. p.25
224 Thilenius, II, 1903. p.110
225 Thilenius, II, 1903. p.111
226 *Deutsches Kolonialblatt*, XX, 1909. p.530
227 *Nachrichten über Kaiser Wilhelms-Land*, IV. 1888. pp.33 *et seq.*
228 Moseley, 1879. pp.455 *et seq.*
229 1877. p.402
230 Thilenius, II, 1903. p.133
231 1923. pp. 202 and 262
232 Leber, 1923. p.264
233 Leber, 1923. p.204

Cultivated plants are *Areca*-, coconut-, and sago palms, breadfruit trees, bananas, sugar cane, taro, yams, sweet potato, betel pepper, a vine with tuber-like fruit, and, for decoration, croton and *Dracaenae*. Hollrung[234] found wild papaya on the Purdy Islands. In the interior of the main island Leber[235] saw sweet corn and wild sorghum. [40]

Index of Indigenous Plant Names

Coconut palm (*Cocos nucifera*): Móuk, Mbŭn͡ai, Păpítăl͡ai, Lŏnĭu, and Hăŭs: *níu*; P͡oam: *bŏle*, *pōl* (Dempw.)

young nut (drinking coconut): Păl̆ŭăn: *pŏl* (Fr.); Móuk: *tyúi* (Fr.); Lóu: *kăn̆ĭn* (Fr.); Pāk: *păr̆ămăn̆ăn* (Fr.); "Usiai": *énion* (Thil.)

ripe nut (copra nut): *itjúi* (Thil.); Móuk and Pāk: *níu* (Fr.); Lóu: *mŏn̆ŭn* (Fr.)

Betel palm (*Areca catechu*): *bua͡i* (Thil.); P͡oam: *băm̆ē* (Dempw.); "Usiai": *kutúa* (Thil.); Lŏnĭu: *bŭ̆ĕ*; Hăŭs: *búe*.

nut: Păl̆ŭăn: *păme* (Fr.); Móuk: *ĕmbúe* (Fr.); Lóu: *păme* (Fr.); Pāk: *bămĕ* (Fr.), *bemē* (Kr.); Ndrŭ̆wal: *bue* (Ray); Alim(?): *mbung* (Zöller); Sōri: *mbung* (Moseley)

Sago palm (*Metroxylon*): Móuk: *ăpi* (Fr.); Lóu: *ĕbí* (Fr.); Pāk and Păl̆ŭăn: *ăbi* (Fr.)

leaves: Ndrĭ̆ol: *la͡un̆ăt* (Müller); Papítal͡ai: *la͡unābĭ̆* (Müller)

Parinarium laurinum: resin: P͡oam: *yănŭn* (Dempw.); Păpítăl͡ai: *ārĭt*; Pĭ̆tĭlu: *ărĭt*, *erĭt*; Hăŭs: *ĕ̆līt*, *arīt*; Pónam: *ălĭt*.

Canarium commune: P͡oam: *kănai* (Dempw.: nut); Păl̆ŭăn: *kăn̆a͡i* (Fr.); Lóu: *kĕ̆nĕ* (Fr.); Hăr̆ăn̆găn: *kenai* (Meier)

Breadfruit tree (*Artocarpus incisa*): Păl̆ŭăn, Lóu, and Móuk: *kŭl* (Fr.); Pāk: *gul* (Kr.)

Kava plant (*Piper methysticum*): Lŏnĭu: *ká* (P.)

Pangium edule: Lebbe: *boebáruai* (Bühler)

Betel pepper (*Piper betle*): Pāk: *băndyŏ* (Fr.)

leaves: Păl̆ŭăn: *tíŏk* (Fr.); Pāk: *hou* (Kr.); Păpítăl͡ai(?): *moreta* (P.)

Erythrina: Pāk: *bibiu* Kr.); Lămbŭ̆tjo: *bĭ̆biu* (Thurnw.)

Terminalia: Pāk: *dei* (Kr.)

Hibiscus tiliaceus: P͡oam: *pao* (Dempw.)

Freycinetia: Lŏnĭu: *wumbung* (Kr.: fruit)

Wild mango (*Mangifera*): Lămbŭ̆tjo: *unj*, *uéuej* (Thurnw.); Păpítăl͡ai: *unj* (Meier)

Inocarpus edulis(?): P͡oam: *năl̆id* (Dempw.)

Palaquium: Pāk: *barumes* (Kr. fruit)

Coix lacrima: Lŏnĭu: *bodoboi* (Kr.); fruit: Pĭ̆tĭlu: *sĭ̆lisĭ̆n* (He.); Lukús: *sĭ̆lsi* (He.); Hăŭs: *sĭ̆lisĭ̆li* (He.)

Cordyline terminalis: *drlŏ̄* (He.)

Ocrenum commune: Lămbŭ̆tjo: *kāuwĕ̆i* (Thurnw.: leaves)

Pandanus: Pāk: *sale* (Kr.), *buo* (Kr.: broad-leafed species); Hăŭs: *tsa͡u*, *tso*, *tša͡u*, *tšo* (He.: leaves); Lŏnĭu: *ménomai* (Kr.: leaves) [41]

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[234] *Nachrichten über Kaiser Wilhelms-Land*, IV. 1888. p.33.

[235] Leber, 1923. p.202

Menis permaceae: Lămbŭtjo: *pátankab* (Thurnw.). *kāp* (Thurnw.: fibres); Pāk: *kāb* (Müller: fibres); Tauī: *kāb, ắ káb* (Müller: fibres)

Species of liana (= *tawále* on St Matthias); Lămbŭtjo and Pătŭsī: *lắna*; Hắŭs: *bắraban*; Sōri and Gắramaṅ: *bĕrībắn* (He.)

Species of liana (rooting in the soil = *kălau* on St Matthias); Sōri and Gắramaṅ: *sŭ́rŭ* (He.)

Species of liana: Păpítălai: *ŏ́ăsḗū* (Müller)

Orchid species: Pĭ́tĭlu: *rŭ́ṅol*; Hắŭs: *kŏlabá*; Sōri and Gắramaṅ: *hoi*; Pătŭ́sī: *ḗn druṅól, en drugol* (Müller, He.)

Sugar cane (*Saccharum* spp.): Pāk: *túŏ* (Fr.); Poam: *koiyot* (Dempw. = sugar)

Lemon grass: *mopui* (P.)

Alang-alang (*Imperata arundinacea*): Móuk: *ĕ⌣pắl* (Fr.); Lóu: *ṅĕ́ríŭ* (Fr.); Pāk: *genŏ́r* (Fr.)

Bamboo: Lŏ́nĭu: *dedit* (Kr.); *baid* (He.); Hắŭs: *brŭ́, bŭ́, mbŭ́* (He. Müller)

Cane: *endredau* (Thil.), *punióu* (Thil.); Poam: *pāsid* (Dempw.); Pāk: *bắdid* (He.)

Rattan (*Calamus*): Păpítălai: *uosen* (P.)

Banana (*Musa paradisiaca L.*): 'Usiai': *ambúl* (Thil.); Poam: *mun* (Dempw.); Móuk: *mbŭr* (Fr.); Lóu: *mun* (Fr.); Pāk: *bŭn* (Fr.)

Taro (*Colocasia antiquorum*): *bō* (Thil.); 'Usiai': *emás* (Thil.); Poam: *kăl* (Dempw.); Móuk: *ĕ⌣mắ* (Fr.); Pắlŭăn and Lóu: *kăl* (Fr.); Pāk: *mă* (Fr.); Păpítălai: *láues* (Meier: taro seedling)

Yams (*Dioscorea*): Poam: *suwai* (Dempw.), *main* (Dempw.: type of yam); Móuk: *găn* (Fr.); Lóu: *mŏrḗn* (Fr.); Pắlŭăn *maien* (Fr.); Pāk: *uχ* (Fr.)

Sweet potato (*Ipomoea batatas*): Poam: *sue* (Dempw.); Móuk: *prŏṅgắn* (Fr.); Pắlŭăn: *súai* (Fr.); Pāk: *dúlĕu* (Kr.)

Tuberous plants: Păpítălai: *kis* (Meier)

Scaevola: Pāk: *nanas* (Kr.)

Mangrove: Păpítălai: *tja* (Meier, P.)

Aleurites: Laues: *ndá' aŏ* (Koelle: tree and fruit); Mbŭ́nai: *bógaba* (Bühler: nut); Pĭ́tĭlu: *dran* (He.: nut)

Decorative plants: Lămbŭtjo: *kū* (Thurnw.); Păpítălai *ku* (Meier, P.)

Shrub type: Poam: *malēo* (Dempw.)

Waterfront tree species: Păpítălai: *ndréu* (Meier, P.)

Tree species with pod fruit: Păpítălai: *moi* (Meier: tree), *pongopong* (Meier: tree and fruit)

Tree species with apple-like fruit: Păpítălai: *njat* (Meier)

Tree species with nut-like fruit: Lămbŭtjo: *bagabak* (Thurnw.)

'Almond': Păpítălai: *angei* (Meier)

Tree types lacking well-defined features: Păpítălai: *kéa*, *mándrindr*, *kei*, *lewei* (= *lalewei*), *móuk*, *but*, *tjun*, *jeu*, *tjiwo*, *mandrun*, *hi*, *kajar*, *kaui*, *mbuahat*, [42] *pitou*, *sa*, *piniu*, *pokapoak* (Meier, P.), *péī* (Müller); Lămbŭtjo: *mbut* (Meier), *ngul* (Thurnw.); Pāk: *tauχ* (Müller); Tau ĭ: ṅat = *ĕṅat* (He.) *rŏ́b* = *enrŏ́b* (He.: wood for lime spatula), *ké*; Pĭ́tĭlu: *tauwŭ́l* (He.), *drā* (Müller); Lŏ́nĭu: *lă* (He.), *kĕn* (= *kĭ́n*, He.), *kŏlanau* (Müller); Hắŭs: *dắ, sắ* (He.: identical with *lă* in Lŏ́nĭu); Hắrăṅgăn: *pekan* (Meier).

Type of hardwood: *ekuku* (Thil.); Pāk *gŭ́gŭ* (Kr.)

Tree fruits lacking well-defined features: Lămbŭtjo: *ngul* (Thurnw.); Poam: *kaid* (Dempw.); Lóu and Pāk: *beruhau* (Kr.), *buan* (Kr.).

Tree bark: Lămbŭtjo: *lāṅ* (Thurnw.: fragrant); Sōri: *mosu* (Schoede: *Massoi* bark).

Trees in general: Pā́lŭăn: *kai͡* (Fr.); Lóu: *kĕ* (Fr.); Po͡am: *kei* (Dempw.: ‘wood’); Pāk: *ke* (Fr.); cf. the tree species *kei* in Păpítăla͡i and *ké* in Ta͡uī.

Types of leaf: Lămbŭ́tjo: *laundrondrob* (Thurnw.: fragrant); Po͡am: *wei, yebin* (Dempw.: ‘foliage’); Pāk: *aum* (He.: similar to pandanus leaves), *hongei* (Kr.); Ta͡uī: *ägű́* (Müller); *bimběo* (Börnstein).

Type of fern: *ulungau* (Meier, P.).

Types of seaweed: Păpítăla͡i: *mot* (Meier), *pongopong* (Meier; cf. types of tree).

Types of fungus: Păpítăla͡i: *poepoau* (Meier).

Fauna

The most common mammal in the Admiralty Islands is the pig, which is kept as a domestic animal but occurs also in the feral state. Moseley[236] describes it as “unlike the Papuan pigs” and more reminiscent of the pigs of the New Hebrides. There are no pigs with particularly big tusks.

Of two small white dogs that Moseley saw in the vicinity of Nareshafen he says that they were “smooth-haired” and “like a Fox Terrier” in appearance. In 1908 badly-raised tan and black-and-white terrier-like dogs with pointed ears were seen in Mŭ́ndī and on Há͡ŭs. A long-legged specimen observed in greater detail stood 30 cm at the shoulder. It was fairly trusting but cringed quite noticeably. The dogs rejected the offer of meat but ate pieces of coconut. They could — at least on Há͡ŭs — bark loudly. They are eaten in Mŭ́ndī and on Há͡ŭs. Dogs were observed also on Pāk, Pā́lŭăn, Móuk, Lóu, and in Păpítăla͡i.

The largest feral land mammal is the dappled cuscus. According to Moseley[237] there are two species of flying fox (*Pteropinae*). The natives include them among the birds[238]. Living in the sea are live small whales, dolphins and the dugong *Helicore australis*. Rats appear to be absent. Mice have been mentioned on Mbŭ́ke[239]. [43]

A house cat was seen in Lā́lā in 1908. It was probably a single, introduced animal.

The avifauna is substantially richer than the mammals. Above all, the islands have an abundance of pigeons. This is particularly so on the small island of Réta, the so-called Pigeon Island, belonging to Pĭ́tĭlu[240]. In most cases they are the Island Imperial-Pigeon (*Carpophaga rhodinolæma*[241]), big grey birds with greenish blue wings. Other Admiralty Island pigeons are *Ptilopus johannis* [Sclater, 1877][242] and a yellowish-white species[243].

Admiralty Island birds of prey are the white-breasted sea-eagle (*Haliaeetus leucogaster* or *Pandion leucocephalus*), and on Lămbŭ́tjo *Baza bismarckii*[244].

As for other birds of the Admiralty Islands Moseley and Reichenow list gulls (*Sterna lunata* and *Sterna bergei*), boobies (*Anous stolidus*, and *Anous leucocapillus*), *Fregata ariel*, plovers (*Arenaria interpres*, *Charadrius mongolus*, *Orthorhampus magnirostris*), snipes

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236 1879. p.478
237 1879. p.479
238 Meier, 1908. p.199
239 Meier, 1908. p.199
240 Parkinson, 1907. p.390
241 According to Parkinson (1907, p.350) *Carpophaga oceanica*
242 Reichenow, 1899. p.54
243 Meier, 1908. p.200
244 Meier, 1907. p.663

(*Numenius variegatus*, *Totanus brevipes*, *Tringoides hypoleucos*), a rail (*Porphyrio melanotus ellioti*), herons (*Nycticorax caledonicus*, *Ardea sacra*), parrots (*Lorius hypoinochrous*, *Trichoglossus flavicus*[245]), kingfishers (*Halcyon saurophagus*, *Halcyon admiralitatis*), fly catchers (*Monarcha infelix*, *Monarcha inornata*, *Rhipidura semirubra*), singing starling (*Aplonis cantoroides*, *Calornis purpureiceps*), a humming bird (*Cynnyris frenata*), honey eater (*Myzomela pammelaena*, *Philemon albitorques*), and swifts (*Collocalia*). Besides these, Moseley mentions "skipjacks" (*Caranx*)[246]; Friederici a purple shining cockatoo (*kārḗn*[247]) from Pā́lŭăn; and Meier the honey eater *Philemon cockerelli*[248] not present on Lóu. In addition there is the tropic bird (*Phaethon aethereus*) and the frigate bird (*Fregata ariel*). *Buceros plicatus* should also be there, from the description of the feathers of a neck ornament in the Dresden Museum[249] but this has probably been confused with the feathers of the tropic bird. Hartert[250] nominates as birds of the Admiralty Islands: *Micropsitta meeki*, *Edolisoma morio admiralitatis*, *Pachycephala goodseni* and *Ptilinopus solomonensis johannis*.

The scrub fowl and domestic hen also occur. However, the domestic fowl is so rare that Moseley was able to establish its presence only from a hen's feather in a head decoration[251]. On Pāk, Lóu, and Pā́lŭăn it does not [44] appear to be so rare. According to Pō Mḯnis it was initially introduced to several islands by the Europeans, and is therefore called *manuai e Jap* (bird of the Europeans)[252].

In the mangrove swamps lives the saltwater crocodile (*Crocodilus porosus*). Among the turtles are the green turtle (*Chelone midas*), the hawk's-bill turtle (*Chelone imbricata*), and a third type[252a] with a totally dark shell. One species of snake (*Hydrophiidae*) lives in the sea, another on land. The island of Mándrindr especially, near Pḯtĭlu, has an abundance of land snakes and is therefore avoided[253]. As for monitors *Varanus indicus* lives on the islands[254]. Moseley mentions a gecko and *Lygosoma cyanurum* (= *Euprepres cyanura*, blue-tailed skink) from the vicinity of Nares Harbour. *Lygosoma fuscum* and *L. mivarti*[255] live on Sōri. *Lygosoma smaragdinum* is more widespread[256]. Frogs appear to be common.

Numbered among the fish are sharks, stingrays (*Trygon*), garfish (*Belone*), mullet, mackerel, eels, flying fish and other marine and freshwater fish known only by indigenous names. The "pig-fish" (*uri* in Păpítăl͡ai) named by Parkinson is possibly not a fish but a dolphin, although in Pḯtĭlu both it and the shark are called *ű́ri*.

Lower animals of the Admiralty Islands are *Trochus niloticus*, *Tridacna gigas*, *Terebra maculata*, *Hippopus*, *Amphiperas*, *Turbo*, *Trocus*, *Burgos*, *Nautilus*, *Meleagrina margaritifera*, *Avicula margaritifera* ('gold-lip'), and other molluscan species; a land-crab, shrimp (*Squilla*), hermit crabs, an octopus, the 'sea-polyp' and trepang. In 1896 the trepang of the Admiralty

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245 Meier (1906. pp.480 *et seq.*) includes the purple-capped lory (*Domicella atricapilla*) and the peach-faced lovebird (*Agapornis roseicollis*) as parrots.
246 Moseley, 1879. p.479
247 In Păpítăl͡ai two types of parrot are called *kareng*.
248 Meier, 1908. p.199. In Meier and Parkinson *Philemon coquerelli*
249 N°. 25931
250 Moseley, 1879. pp.478 *et seq.*
250 Moseley, 1879. pp.478 *et seq.*
251 Meier, 1906. p.480
252a Meier, 1907. p.935
253 Parkinson, 1907. p.389
254 Werner, 1900. p.51
255 Werner, 1900. pp. 59 and 63.
256 Werner, 1900. p.57

Islands, together with that of southern New Britain and the Carteret Islands was nominated the best in the Bismarck Archipelago[257].

Mosquitoes are common, as are millipedes (*Centipus*) whose bite gives rise to suppurative inflammation. Friederici mentions a green and a yellow grasshopper on Pāk. Walden[258] found sugar ants in the houses on Pǎlŭăn. White ants are found in Păpítălai͡[259]. Krämer found a praying mantis (*Phasma*) on Pāk. Hair lice and clothes lice, ticks, bedbugs, sandflies (*Phlebotomus*)[260] and the mites called 'bush-bugs' are, unfortunately also quite common. Of the beetles, the sago weevil (*Rhynchophorus bilineatus*) deserves special mention.

On Pāk, Webster[261] found the butterflies *Papilio ulysses gabrielis* and *Papilio codrus auratus*. He found numerous *Coleoptera* on all the islands.

On the Purdy Islands bush rats are the sole representatives of the land mammals. On the southern Bat Island Hollrung saw terns and "an iridescent green type of bush pigeon with a long feather collar" [45] that lived also on Mouse Island but was totally absent from the northern Bat Island[262]. Zöller[263] named "sea-eagles, gulls, sea-swallows, pigeons, turtles, and crabs".

Index of Indigenous Names of Animals

Mammals:

Pig: *épu* (Thil.); Poam: *bō* (Dempw.); Móuk: *póŭ*, *po* (Fr.); Pǎlŭăn: *pó* (Fr.); Lóu: *púŏ* (Fr.); Pāk: *bu* (Fr.); Păpítălai͡: *pou* (Meier); Lŏnĭu: *puou* (Bühler); Ndrawa: *pu* (Bühler); Pĭtĭlu, Pǎrā and Mbŭnai͡: *bu* (He.).

Dog (Group *Canis familiaris palustris*): *múin* (Thil.); Poam: *mui*, *moi* (Dempw.); Móuk: *múĭ* (Fr.); Pǎlŭăn: *múi* (Fr.); Lóu: *kǎmŏ* (Fr.); Pāk: *muĭ* (Fr.); Ndrīol: *mūĭn* (Müller); Mbŭnai͡: *mui* (He.); Hǎŭs: *mui*, *muǎ* (He.).

Spotted cuscus (*Phalanger maculatus E. Geoffroy*). Possum: *loat* (Thil.); Pǎlŭăn: *ṅoi͡ai͡* (Fr.); Lóu: *ṅŏră* (Fr.); Pān: *lau͡ăr* (Fr., Kr.), *lavat* (Schoede); Lămbŭtjo: *lavat* (Schoede), *lāuăt* Thurnw.); Manus dialect (south coast of the main island): *lăwăt* (He.); Pătŭsī: *láwat* (Bühler); Păpítălai͡: *lāuăt* (Thurnw.); Nŏru: *lāuăt* (Thurnw.); Sōri-Gărамaṅ: *ohai͡*, *kohai͡* (He.).

Flying fox (*Pteropus spp.*, considered a bird by the natives); Pāk: *bŭé* (Fr.); Păpítălai͡: *palimat* (Meier, P.; cf. the name of the flying fish).

Dolphin ("pig-fish"): Păpítălai͡: *uri* (P.; perhaps confused with a fish?)

Birds:

General: *sábu* (Thil.); Pǎlŭăn and Lóu: *mŏnmŏn* (Fr.); Móuk: *mănúai͡* (Fr.); Păpítălai͡: *manuai* (He.).

Pigeon: *bímban* (Thil.: *Carpophaga rhodinolaema*), *mánovai* (Thil.: *Ptilopus johannis Sclater*); Pǎlŭăn and Lóu: *pŏl* (Fr.); Pāk: *bŭl* (Fr.); Păpítălai͡: *pal* (P.).

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257 *Nachrichten über Kaiser Wilhelms-Land*, 1896. p.31
258 Vocabulary in the Berlin Museum
259 Meier, 1909. p.369
260 Leber, 1923. p.203
261 1898. p.379
262 *Nachrichten über Kaiser Wilhelms-Land*, IV, 1888. p.34
263 1891. p.169

Fish eagle (*Haliaetus e* and *Pandion leucocephalus*): Pāk: *manuai* (Kr.), *mănŭwa͡i̯* (He.), *manue* (Chinn,); Păpítălai̯: *poendrilei* (P.; cf. the names of fish); Sōri: *mănua͡i̯* (He.).

Baza bismarckii: Lămbŭtjo: *tou* (Meier).

Parrots: Păpítălai̯: *tjihir* (P.), *kareng* (Meier: purple-naped lori = *Domicella atricapilla* and peach-faced lovebird = *Agapornis roseicollis*); Pălŭăn: *kărĕn* (Fr.: "purple shining cockatoo"). [46]

Starling: Păpítălai̯: *tjilim* (P.).

Heron (*Ardea sacra*): Păpítălai̯: *karipou* (O.).

Tropicbird (*Phaeton aethereus*): Păpítălai̯: *kanaui* (P.).

Frigatebird (*Fregata ariel*): Lóu: *gara* (Kr.); Pāk: *kara* (Kr.); Păpítălai̯: *kata* (P.); Pĭtŭlu: kăra (Müller).

Seagull: Pāk: *mĕn* (Kr.), *kanau* (Kr.: *Sterna*).

Tern: Pāk: *duarui* (Kr.); Păpítălai̯: *ngong* (P.), *kanau* (P.; cf. seagull).

Friarbird (*Philemon cockerelli*): Păpítălai̯: *tjauka* (Meier-P.).

Whimbrel (*Numenius variegatus*): Pāk: *mai* (Kr.).

Turnstone (*Arenaria interpres*): Pāk: *búbekan* (Kr.).

Lesser sand-plover (*Charadrius mongolus*): Pāk: *duren* (Kr.).

Scrubfowl (*Megapodius*): Pāk: *polome* (Chinn.).

Domestic hen: Pălŭăn: *kăkăru* (Fr.); Lóu: *ŏa*, *a͡uă* (Fr.); Pāk: *kohă* (Fr.), *guhă* (Kr.); Păpítălai̯: *manuai manuai e Jap* (Meier); Alim(?): *koko* (Zöller).

Unspecified: Pāk: *bui*, *koho*, *kau* (Chinn.; bush bird), *hahai* (Chinn.; seabird), *holulo* (Kr.: thumb-sized); Salien: *kalou* (Bühler); Iringou: *driji* (Bühler).

Amphibians and crawlers:

Frog: Pălŭăn: *kŏma͡u* (Fr.); Pāk: *tĕña͡u* (Kr. and Fr.).

Lizard: Pāk: *bunrong* (Kr.).

Monitor lizard (=*Varanus indicus*?): Pāk: *vari* (Kr.); Pĭtŭlu: *warĭ* (He.); Lŏnĭu: *vari* (Kr.).

Turtle (*Chelonia*): Pălŭăn: *pŭn* (Fr.); Lóu: *púŏn* (Fr.); Pāk: *don* (Kr.); Păpítălai̯: *karaat* (P.); Lŏnĭu: *gărād* (Kr.).

Snakes: Pāk: *mār* (Fr.), *muad* (Kr.); Păpítălai̯: 1. *moat*, *muat*, *mat* (Meier), 2. *málai* (Meier, He.).

Crocodile (*Crocodylus porosus*): Móuk: *ĕ‿mbúa͡i̯*, *ĕ‿mbrúa͡i̯* (Fr.); Pălŭăn: *búa͡i̯*, (Fr.); Pāk: bŭai (Fr.), *búei* (Kr.); Ta͡uī: *bŭa͡i̯* (Müller); Păpítălai̯: *mbuai* (P.); Hăŭs: *bóă* (He.), *mbŭă* (Müller).

Fish:

General: *ni* (Thil.); Po͡am: *neg*, *niek* (Dempw.); Móuk: *ĕ‿ni* (Fr.); Pălŭăn and Lóu: *nĭk* (Fr.); Pāk: *ni* (Fr.).

Shark: Păpítălai̯: *pēū* (Müller, P.); Pĭtŭlu and Hăŭs: *ūri* (He.; cf. dolphin!).

Bonito: Pāk: *baliau* (Kr.), Lŏnĭu: *bāliau* (Kr.).

Ray (*Trygon*): Kŏmŭli: *bĕi* or *pĕi* (Thurnw.); Lămbŭtjo: *bé* or *pé* (Schoede); Pătŭsī: *bé* or *pé* (He.); Păpítălai̯: *pei* (P.); *leig* (? Thurnw.); Lŏnĭu and Hăŭs: *lă* (He.); Sabo: *bai* (Bühler); Lekum: *pei* (Bühler).

Mullet (*Mugil*): Pāk: *ganas* (Kr.); Păpítălai̯: *kanas* (Meier).

Flying fish (*Dactylopterus*): Móuk: *pălĭmat* (Fr.; cf. flying fox).

Freshwater fish species: Păpítălai̯: *rei* (P.). [47]

Eel: Păpítălai̯: *talai* (P.).

Sea fish in general: Nauna: *labot* (P.); Lămbŭ́tjo: *malat*, *kiar*, *e djo* (Thurnw.); Lóu: *neraiod* (Kr.); Pāk: *hurón* (Kr.); Pătŭ́sī: *kolang* (Meier); Păpítălai̯: *papai*, *kailou*, *paliau*, *kuel*, *muleu*, *palauar*, *kemendrei* (big), *poendrilei* (cf. sea eagle!), *al* (Meier, P.).

Myriapoda, insects and web-spinners:

Millipede): Pāk: 1. *tětăkeríu*, 2. *kemŭ́m* (Fr.).

Sago palm weevil (*Rhynchophorus bilineatus*): Lămbŭ́tjo: *aip* (Schoede); Matawórei: *rútoau* (Bühler).

Beetle species: Pāk: *dedógumai* (Kr.).

Bush fly: Pāk: *nambo* (Kr.).

Mosquito: Pāk: *mĕ́ni* (Fr.); Păpítălai̯: *njam* (P.).

Sugar ant (*Formica saccharivora*): Pắlŭăn: *loi̯loi̯* (Walden).

Biting ant: Pāk: *dábor* (Kr.).

Body louse (*Pediculus vestimenti*): Pắlŭăn: *tsumĕ́o* (Fr.).

Head louse (*Pediculus capitis*): Lóu: kŭt (Fr.); Pāk: *gurr* (Kr.).

Dragonfly: Pāk: *dábue* (Kr.).

Green grasshopper: Pāk: *kóhŏ* (Fr.).

Yellow grasshopper: Pāk: *bŏbŏdí* (Fr., Kr.), *sē* (Kr.).

Praying mantis (*Phasma*): Pāk: *ségai* (Kr.).

Spider: Pāk: *marāmolau* (Kr.).

Crabs:

Sea crab (*Palinurus*): Pāk: *kulĭtămú* (Fr.).

Sea crab species: Pāk: *sai̯lau̯* (Fr.).

Land crab: Pắlŭăn: *yắŭm* (Fr.); Pāk: *moĕ́* (Fr.); Păpítălai̯: *kobat* (P.).

Cephalopods and echinoderms:

Nautilus: Hắŭs: *boi̯ăbŭl*, *băbul* (He.).

Octopus: Pāk: *mămắk* (Fr.).

Sea urchin: Lămbŭ́tjo: *jalai* (Schoede); Sabo: *jang* (Bühler).

Sea star: Pāk: *dongedong* (Kr.).

Trepang (*Holothuria*): *mbŭ́nai̯* (P.).

Snails:

Turbo: Lóu: *laub* (Kr.).

Trochus niloticus: Lămbŭ́tjo, Móuk, Lóu, Pāk and Pătŭ́sī: *lăl* (Müller, He.).

Cypraea: Hắŭs: *mŭruhắs* (He.); Kyĕlau̯ắk: *wămenă* (He.).

Amphiperas: Pāk: *djāmĕ́*; Lămbŭ́tjo: *mắna* (Thurnw., Schoede), Tau̯ī: *mắna*; Pătŭ́sī, Mbŭ́nai̯: *e mena* (Bühler); Boáo: *mănĕ́* (Koelle); Buboi: *mana* (Bühler); Păpítălai̯: *mắna*, *manắ*; Lŏ́nĭu: *mắna*, *mĭ́ne* (He.); Pĭ́tĭlu: *mắna*; Pónam: *mắna*; Hắŭs: *mắnā*. [48]

Tritonium: Pāk: *tohu* (Schoede); Lămbŭ́tjo: *ra*, *andrago* (Schoede); Talắlo: *ndra* (Koelle); Păpítălai̯: *nda* (Meier; Pĭ́tĭlu: *dắ*, *dá*, *ĕndắ* (Müller, He.), *bolos* (Schoede); Hắŭs: *muinowắ*, *muinowĕ́* (Müller); Sắhă: *ĕndră* (Müller).

Conus: Kyĕlau̯ắk: *bruắdjŏkób* (He.); Pónam: *sau̯l* (Schoede).

Bivalves:

Tridacna gigas: Pāk: *musắl*, *muJắl* (Müller), *héngau* (Kr.); *mbŭ́ke* (P.)

Cardium: Búihann: *boegell* (Bühler).

"Oyster species": Păpítălai̯: *tjunjak* (P.; cf. pearl oyster).

Pearl oyster (*Meleagrina margaritifera L.*): *kasúp* (Thil.); *tjinják* (Thil. 'gold lip');

Pāk: *anjŏl*; Pătŭsī and Mbŭn͡aî: *tuiniakk* (Bühler); Păpítăl͡aî: *sawol* (P.), *kắdun* (He. = *manĭtó* on St Matthias, black); Hă̆ŭs: *änŭ́l*.

Unspecified bivalves: Pō͡am: *mamalai, pobenao* (Dempw.).

III. Settlement Conditions and Population Statistics

Mắnus, Mătăṅkŏ́l and Usĭa͡î

The name Ŭsĭa͡î was first heard by N. Miklucho-Maclay[264] when people from Lŏ́nĭu described natives who were paddling away from them as fast as possible as 'Ussija', and gave him to understand that they were cannibals. Consequently Miklucho-Maclay understood the word to mean perhaps 'enemy' or 'bad' or that it was name of a village. Thilenius[265] heard the natives divide themselves into Usiai and Manus, and established that this went back to differentiations in the manner of colonization and economy, but that it was at the same time also a value judgement in the mind of the Manus, who implied using Usiai "a dependent, debased, but occasionally also dangerous people, a slave". He also heard the Melanesian workers for the Europeans called Usiai. Schnee[266] located the dwelling places of the Mắnus, and similarly differentiated them from the despised Usiai. However, both he and Thilenius also include as Usiai those natives who appear in the eyes of Meier and Parkinson[267] as Matankor[268]. In 1904 Parkinson[269] heard that the Moanus inhabited pole villages, the Matankor villages on flat ground, usually on ridge tops, while the Usiai built only temporary [49] houses at sites where they laid out gardens. Pō Mĭ́nis distinguishes the three groups as Moánus who build their houses on the sea, Usiai in the bush, and Matánkor on the beach. At the same time, it emerges from his description that he did not regard the Mătăṅkŏ́l as highly as Mắnus, and totally despised the Usĭa͡î.

There are anthropological differences between the Usĭa͡î and the two other groups. Therefore Parkinson's assumption that the Ŭsĭa͡î were the original inhabitants of the Admiralty Islands, pushed back into the interior of the main island, (despite his earlier statement that there scarcely existed any difference between Mắnus and Usĭa͡î[270]), does apply. Mắnus and Mătăṅkŏ́l on the other hand are anthropologically fairly similar, and a Mắnus often differs less from a Mătăṅkŏ́l than from a Mắnus from another village. In any case, the many feuds and new settlements may have contributed much to a mixing of both groups. Friederici, who saw Usĭa͡î only on Pắlŭăn, believed[271] that all the inhabitants that he saw on the Admiralty Islands resembled one another somatically, and also found no linguistic difference between the Usĭa͡î of Pắlŭăn and the Mătăṅkŏ́l,

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264 *Izvestia*. 1878

265 II, 1903. pp.117 *et seq.*

266 1901. pp.240 *et seq.*

267 Parkinson, 1905. p.238; 1907. pp.374 *et seq.*

268 The islands of Pāk and Tong are occasionally designated (*Großer deutscher Kolonialatlas*, 1909. N° 26) as Matánkor.

269 1905. p.238

270 Parkinson, 1907. pp.376 *et seq.*

271 1912. p.228

although there was probably a difference from the Mắnus language of Móuk. That the Mătăṅkŏl and Mắnus language is different was documented in other ways as well, such as by Parkinson and the Hamburg Expedition. The Usĭa͡ĭ of the main island, on the other hand, speak dialects that sometimes differ markedly from the Mătăṅkŏl language, and also differ so much from one another that Pō Mĭ́nis[272] was able to say "Their language is evermore another". Thurnwald[273] in fact calls the languages of the Usĭa͡ĭ of the main island and those of the Mătăṅkŏl on Lămbŭ̊tjo and Po͡am "non-Melanesian"; however there is still insufficient grammatical material as evidence for this. Bühler found that people from Iru (Usĭa͡ĭ) communicated without difficulty with the Mătăṅkŏl from Lŏ́nĭu. On Pắlŭăn the Usĭa͡ĭ have always been exposed far more to foreign influences than have the Usĭa͡ĭ of the main island. Culturally also a reciprocal impact has been universally effective, so that the boundaries today are somewhat blurred. On Pắlŭăn and among the Mătăṅkŏl Friederici found houses built exactly the same, so that for him the customary differentiation between Usĭa͡ĭ and Mătăṅkŏl appeared more as artistic. Even so, the Mătăṅkŏl stand much closer to the Mắnus somatically and culturally, than to the Usĭa͡ĭ, and the distinctions are quite crucial to the natives.

The most essential feature is the type of settlement. The natives call all those who live in pole houses in the water Mắnus[274], the beach-dwellers Mătăṅkŏl, and the bush-dwellers Usĭa͡ĭ. Of Păpítă͡lai they virtually said "Their fathers were Mắnus because they lived on poles in the water. However, now they are Mătăṅkŏl because they have their houses on the coastal land." Mătăṅkŏl [50] literally means 'beach-villager'[275], combining *kŏ́l* = village and *mā̆t* = coast (Lămbŭ̊tjo dialect). Similarly Parkinson interprets Matánkor as the face of the land, land's beginning, and explains *kor* as land or village.

Often pole buildings appear on the beach or in the bush, where Mắnus had to relocate their place of residence while retaining the old style of building so as not to be Mătăṅkŏl. The Ndrĭ́ol people, who had to abandon their pole village and shift into the bush to avoid attacks from Lōkŭ́l, always set great store by their new settlement to continue being recognized as Mắnus, since to them, like all other Mắnus, this name seemed like a form of honorific.

Occasionally, Mătăṅkŏl who want to make a better impression on strangers also call themselves Mắnus. For example, in 1908 the Lŏ́nĭu people said that they were "Mo‿anus", and identified the real Mắnus from Păpítă͡lai disparagingly as Usĭa͡ĭ.

Originally Ŭsĭa͡ĭ perhaps only had the meaning "folk", for Parkinson[276] heard Mắnus from Lalobé (= Ta͡uī) called *Usiai Lalobé* = people from Lalobé, by a Ndrŭ́wal man.

Instead of Mắnus, Parkinson heard Moánus and Hellwig Mo‿anus whereas, like Thilenius and Schnee, the other participants of the Hamburg Expedition heard Mắnus. According to Walden[277] the Usĭa͡ĭ on Pắlŭăn called the Mắnus *ákalè*. The forms Mătắṅkŏr, Mắtăṅkŏl, Mătăṅkŏ́l, and Marankol (allegedly self-bestowed[278]) vary, but instead of Matánkor (Parkinson) and Mátankol

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272 Parkinson, 1907. p.376

273 Thurnwald, *Zeitschrift für Ethnologie*, 1910. p.111

274 Margaret Mead (1930, p.116) heard a synonym for "Mắnus" in Pidgin: "the soda water (= salt-water) boys".

275 According to Margaret Mead (1930, p.115) "eye of the land".

276 1907. p.374

277 Vocabulary in the Berlin Museum

278 Parkinson, 1907. p.369

(Thurnwald) they are always written as Matáṅkor and Mátaṅkol respectively. Instead of Úsĭâî Thurnwald[279] heard Ụ̂isîai.

Settlement

The inhabitants of Pāk belong to the Mătăṅkŏ̂l and are divided between the villages of Wălŭ̂n in the east and Moγerắ in the west of the island, both about ten minutes from the beach. Each village has around 35–40 huts. In addition, according to Klink[280], there is the small village of Habei with only five huts, in the vicinity of Wălŭ̂n. The inhabitants of Wălŭ̂n would have immigrated a long time before 1908, and are probably Mătăṅkŏ̂l from Naúna, driven out by the Lămbŭ̂tjo people about 1895. In 1906, besides Wălŭ̂n, Móyara (=Moγerắ) and Halai (= Habei), Krämer placed the villages of Drong and Laladun on Pāk. Parkinson[281] mentions the district of Tjawókil, in place of Wălŭ̂n, and in place of Moγerắ and Habei, the district of Hárai (= Habei?) and further, the districts of Lireu in [51] the centre and Poantólau towards the north of the island. Friederici[282] cites Mắγăra (= Moγerắ), Lirĭa͡û (= Lireu) and Lĕṅ. Chinnery[283] reported that the settlements of Hahai and Mogera existed on Pāk in 1925. North of the western tip of Pāk the tiny island of Ulungau, (Gúnulau, according to Krämer) sits on a reef. It only seems to be visited intermittently by the Pāk people, probably those from Wălŭ̂n.

The island of Tong has a sparse Mătăṅkŏ̂l population.

Towi is the domain of the Mătăṅkŏ̂l, but it is probably not permanently inhabited. Ptuli and Mbutmanda similarly ordinarily appear to be deserted. According to Parkinson[284] the Mắnus of Păpítă͡lâi laid claim to all three islands.

Naúna had a small Mătăṅkŏ̂l population that was, in part, killed by Lămbŭ̂tjo people while the other portion fled to Pāk, leaving the island uninhabited[285].

On Lămbŭ̂tjo Romilly[286] saw only a single large village in 1881. However it possesses villages of the Mắnus and the Mătăṅkŏ̂l. The Mắnus settlements were originally the villages of Ndrĭ́ol and Pắlămŏt. Ndrĭ́ol was a big settlement earlier, but lost many warriors in raids by the Pāk people, and some of its inhabitants fled to Patúam, the northernmost of the Horno Islands, and were slain there[287]. When Mắnus from Takúmal, after many wanderings settled down in Lōkŭ̂l on east Lămbŭ̂tjo, they feuded with Ndrĭ́ol, which at the beginning of 1908 was still a pole village somewhat west of the extreme north end of the island, and forced the inhabitants to retreat into a new settlement on the land opposite, on the eastern side of the island. The new settlement was again given the name Ndrĭ́ol while the old settlement became derelict. In November 1908 only the remains of poles denoted the site of the old Ndrĭ́ol, yet at the beginning of 1909 three pole huts

279 1910. p.111
280 *Deutsches Kolonialblatt*, XX, 1909. pp.530 *et seq.*
281 1907. p.391
282 1912. p.226
283 p.54
284 1907. p.385
285 Parkinson, 1907. p.385
286 1887, p.113
287 Parkinson, 1907. p.385

were seen in a sea-like cove of a creek surrounded by mangroves[288], giving the impression of a new settlement. The second Mănus settlement, Pălămŏt, was similarly constructed as a pole village in the mangroves. It was situated on the western part of the south coast, on a small island at the end of a bay backing onto a pass into a broad lagoon that could be entered by boats at the small village of Lenkou[289]. Earlier, it had been a big settlement, but was laid waste when it was burnt to the ground by the *Seestern*, and later feuded with Lokul. Before the immigrant Mănus from Takúmal moved into the pole village of Lōkŭl, they settled on the small island of Mătâūĕn near Pălămŏt. From Lōkŭl in 1909 some of them founded the small village of Galingai in the Tyal region at the south-west tip of Lămbŭtjo opposite the small island of Haum (Achum), where the village of Langambulos[290] stood at the beginning of 1902; the latter was probably not very big. [52] Up until the founding of Galingai, Haum was the property of the Mătăṅkŏl[291]. Parkinson[292] identified Polotjal as the sole Mătăṅkŏl village on Lămbŭtjo; However Meier[293] also named Konou, connected with Polotjal, on the north-western tip, and Palitaui on the south-east part of Lămbŭtjo. In 1908, instead of Polotjal and Konou, several local centres were found to be consolidated into one village, but each with its own chief. Five minutes from the beach Pătăndrŏ, the first settlement, was located on a fairly steep bank about 20 metres high; beyond were Tšălăṅgŭp, Pětěkŭī, and Pŭrâu, and half an hour inland was another settlement in the bush, connected to Pŭrâu. On Lămbŭtjo's north-east coast, and southeast of Ndrĭol, lies the village of Tägŭb with the village of Wăllătjâi nearby, possibly corresponding with Meier's Palitaui. Parkinson[294] speaks of Usĭâî on Lămbŭtjo, with the spirit gully of Limbúndrel said to lie in their region; although this account is not confirmed elsewhere.

According to Meier, the Horno Islands are Mătăṅkŏl territory though probably scarcely any of them are inhabited. The most northerly, Patúam, was for some time a place of refuge for the Mănus from Ndrĭol[295].

Tilianu was, according to Parkinson, the property of the Pălămŏt people, whereas Meier identifies the island as territory of the Mătăṅkŏl.

The Fedarb Islands are inhabited by Mănus. The most important of them is Sĭvĭsă with a well-constructed pole village. Belonging (or formerly belonged) to Sĭvĭsă are the islands of Tjókua and Lólau and probably also Kéa. Earlier, Mătăṅkŏl who had been driven out of Sĭvĭsă or killed[296] by the Mănus, lived on Lolau. Around 1900, Takúmal people moved to Sĭvĭsă, which must have been densely populated at that point, but they left some time later. In 1906 it appeared to the observers on the *Planet*[297] to be deserted.

Also the St Andrew Islands —Uaimkatou, Paláiai, Ngówui, Ndréu and Kŏmŭli are the property of the Mănus who, however, live permanently only on Uaimkatou. In 1899 Uaimkatou

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288 *Deutsches Kolonialblatt*, XX, 1909. p.900
289 *Deutsches Kolonialblatt*, XIX, 1908. p.622
290 *Deutsches Kolonialblatt*, XX, 1909. p.900
291 Meier, 1907. Chart on p.649.
292 1907. p.391
293 *loc. cit.*
294 1907. p.386
295 Parkinson, 1907. p.385
296 Parkinson, 1907. p.384
297 According to Krämer

was uninhabited. In 1897 Webster[298] saw a pole village still in existence over the water. Thilenius[299] found only the remains of poles. Schnee[300] heard that it had belonged earlier to the Usĭâî (= Mătăṅkŏl?)

Lóu is a Mătăṅkŏl island. Inland from its north coast lies the village of Réi; at the southern end the village of Mangon; north of there, inland from the south-west coast, is the village of Meli; in the middle of the south coast is the village of Bubuuot; and east of there, inland at an altitude of 150 metres, is the village of Pŭ̋ĕ, that Leber[301] called Mbue and Thilenius[302] called Lo-mandrian. It consists of several (three, according to Thilenius) groups of houses that are separated from one another by fences. The landing place [53] and the path to it are the property of the village[303]. Parkinson[304] names two villages that should be identical with those visited by Thilenius — Punro and Sali. Friederici[305] names Umré (= Réi) and Úmbŏă as villages or districts on Lóu. The latest Mandate Administration map shows, in addition to Umrei (= Réi), Umbua (= Úmbŏă), Bue (= Pŭ̋ĕ) and Meling (= Meli), the village of Lagou in the northern part of the east coast. Bühler too identified these villages, with the exception of Umrei, which he did not visit.

Both of the Pôam Islands are inhabited by Mătăṅkŏl.

On Móuk and Takúmal live Mă̋nus who are closely interdependent. In 1899 they had two villages on Móuk and one on Takúmal[306]. After conflicts with the Europeans they emigrated at the end of 1899. A number of the Móuk people twice returned briefly to Móuk in 1907. In 1932 Móuk was settled by Mă̋nus who, it appears had come from the south coast of the main island[307].

Pă̋lŭăn is an island of the Usĭâî, who live in the villages of Pă̋lŭăn and Liban on the western side. Friederici[308] mentions the region of Leut or Laût on Pă̋lŭăn. At the end of 1899 Mă̋nus from Móuk settled on the island. At the start of 1900 they had two villages, one of which consisted of three groups of houses one behind the other[309]. They left Pă̋lŭăn soon after, when these villages were destroyed by a punitive expedition.

The Johnston Islands — Papialou, Sauwai, and Alim — are uninhabited, although the Mă̋nus from Móuk claimed Alim on account of its stands of coconut palms, until it was denied them by the Administration at the beginning of 1900. Similarly, the otherwise uninhabited Purdy Islands were visited from time to time by the Mă̋nus only on account of the palms.

Mbúke was one of the biggest Mă̋nus settlements, until some time before 1908 (probably even before 1906), when a large part of the population saw themselves compelled to move to Lắlā on the main island for their own safety.

The Mă̋nus village of Lắlā lies at the eastern end of Malai Bay on the south coast of the main island, and consists of two pole villages about a kilometre apart. The area around the village, with a river mouth in the vicinity, also bears the name Lắlā. Identical with Lắlā, or adjoining it, is the village of Roleo, which Bühler visited in 1932. Going eastward along the south coast of the

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298 1898. p.305
299 II, 1903. p.146
300 1904. p.164
301 1923. Chart
302 *loc. cit.*
303 Thilenius, *loc. cit.*
304 1907. p.373
305 1912. p.225
306 Schnee, 1904. pp.161 *et seq.*
307 According to A. Bühler.
308 1912. p.224
309 Schnee, 1904. pp.196 *et seq.*

main island are, (according to Parkinson), the Mắnus villages of Lótja in the mangrove thicket, Poauárei at the mouth of the Uarei River, and Tjápale that, like Lấlā, is connected with Mbúke[310]. According to the German Marine Chart[311], inland from Lótja lies the village of Poai (= Poauárei?) and [54] further on, below the Sabumo, is the village of Peli. Meier's chart[312] includes Tjapale (Tanu e Tjapale) as the area name of the Sabumo region. In 1899 Lótja was virtually depopulated by an Usĭấî attack[313] and remained a small place, although it still existed in 1929.

Offshore from the Sabumo lie the two small islands of Ndrű̇wal and Tjovondra. The northern tip of Ndrű̇wal (Rubal) is opposite the village of T͡auī (T͡auŭī, Tâ͡uwuî), which also, like the island, bears the name Ndrű̇wal and was called Lalobé by Parkinson[314]. Mắnus also live there. One part of the village lies on the seashore, and the other on both banks of a small river[315].

The bay lying opposite Ndrű̇wal is bordered to the east by a promontory called Loka, according to Meier, and is Mắnus territory. In the hinterland lies the Usĭấî settlement of Ndrabui, consisting of two groups of houses a kilometre apart[316], and Sembrun. Eastward is Daptou (north of Pătű̇sī), with Gabou further east[317]. In the interior to the north of Ndrabui is Boltzal, and north-west is Kawa and Kisauke[318]. Usĭấî inhabit all three villages. An open tip to the north marks the borderline between Kawa and Bojang — the border itself is a rock face[319]. Meier claims Lohi as the Usĭấî settlement, instead of the Boltzal region. North of this he records Mburukur on his chart; this however is incorrectly entered for the identical Drūgű̇l, which is to be found at another more northerly location.

Going eastward along the south coast of the main island, on a bay beyond the Ndrű̇wal bay is the Mắnus village of Pătű̇sī, which, like the neighbouring Mắnus village of Masawal, is built upon an extensive reef platform upon a small island. A small freshwater stream empties into the sea opposite Pătű̇sī. A major part of Pătű̇sī's population migrated from the destroyed Móuk villages on Pắlŭăn, and another group migrated from Mbű̇nấî. In 1907 the *Seestern* burned the village to the ground. However, it was resettled by the beginning of 1908. According to Kölle[320], the village of Ndrondro lies in Pătű̇sī bay. Inland from the western side of the bay, on a ridge virtually overhanging the sea, he found the village of Woréi, which is backed onto by the village of Boắð, on the seaward side[321]. Off Pătű̇sī to the west is an island, which Meier called Lakewei, belonging to the Mắnus. Directly offshore from Pătű̇sī is the island of Awulu[322], and east of it the island of Peri(?) off the Mắnus settlement of Pắrā̄, which around 1899 was the most densely populated Mắnus village on the south coast, with the exception of Tjápale[323]. In 1929 [55] Pắrā̄

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310 Parkinson, 1907. p.382
311 N° 480
312 1907, at p.649
313 Schnee, 1904. p.209
314 1907. p.370
315 Vogel (1911, p.124) identified T͡auī with Lấlā.
316 Leber, 1923. pp.201 *et seq.*
317 According to A. Bühler
318 Leber, 1923. p.204; *Deutsches Kolonialblatt*, XIX, 1908. p.856: Kisoke
319 Leber, 1923. p.262
320 *Deutsches Kolonialblatt*, XIX, 1908. pp.622–624
321 Kölle Collection, Hamburg.
322 Kölle's notes to Berlin, VIII B 6390 *et seq.*
323 German Marine Chart, N° 480

owned sago swamps that it had either bought from the Usĭáĩ a long time before, or pirated[324]. Off the west coast of the south-east tip (Sanders Point) of the main island, there follows, according to the German Marine Chart, the island of Poahonda, which M. Mead[325] calls Tchalalo. Further eastward is the Mắnus village of Mbűnáĩ (Mbrűnáĩ) beyond the south-eastern tip of the main island. In 1908 this was only a small village. A number of its inhabitants had migrated to Pătűsī while others had settled in Mĭndrűn under the chief Bogắsi.

There is a river mouth opposite Mbűnáĩ. A sago processing area lies 500 metres to the left, near the start of the territory of the Usĭáĩ who live inland, in the village of Kětyế on a fifty-metre high hill. Probably, the Katin inscribed on the recent map produced by the Mandate Administration is identical to Kětyế. Inland, north of the midline between Pătűsī and Mbűnáĩ is Sohéneliu; with Búihann south-east and Drana north-west[326].

Offshore from Mbűnáĩ is the island of Ndrowa that, like the small neighbouring island of Amo, is uninhabited, although visited by the Mắnus of Mbűnáĩ because of the coconut palms, and used as a burial place. Amo and Ndrówa were once inhabited; on the beach in 1908 a number of poles of destroyed houses were still standing in the water. The inhabitants had fled to Mbűnáĩ[327]. Meier's chart labels the islands as 'Ndrowa rukor', while the German Marine Chart includes the island of Dawara alongside Ndrówa.

South of Mbűnáĩ as far as Sanders Point, are the Mắnus settlements of Tjokawou and Tjawouauit, while Parkinson[328] names Tjawompitou as a Mắnus settlement.

On the east coast of the main island going north from Mbűnáĩ is the inland village of Iru, while the Mắnus coastal village of Lőmb^{u}ă had been wiped out in 1908 by the Lắlă people. According to the German Marine Chart, the village of Peka lies further north, with the Usĭáĩ village of L͡aues "about three nautical miles upstream"[329] on the heights, and the Mătăṅkől village of Poamatjau in front of it. In contrast, in 1932 Bühler described the inhabitants of Boámasau (= Poamatjau) as Mắnus, i.e. people from Pătűsī, Mbűn͡aĩ or that vicinity. Garung lies in the interior, between L͡aues and Iru, and west of Iru[330] Sira[331].

Northward, on the easternmost point of the southern shore of Kelaua Harbour, according to Meier, lies the Mătăṅkől village of Ndramolou. Further inland from the harbour, Kyělá͡uắk (Kelaua) lies on a narrow river-like brackish arm of the sea emptying into the bay. The village belongs to the Mắnus, and was settled from Mbűnáĩ. Behind it, the larger Brűnáĩ (Bűnáĩ) was likewise settled from Mbűnai. Beyond Brűnai is Dr͡auŭ, which was populated by Ndrūbiū [56] people when an epidemic in their village drove the still-healthy people to migrate.

The north-eastern tip of the main island is separated from the Great Los Negros Island by a narrow sea channel whose southern end widens into Bird Island Bay. Inland, north-west of the bay, on the main island Usĭáĩ occupy the heights in Ndrowa[332] (Ndrawa, according to Bühler). Meier maintains that this is the site of the Usĭáĩ village of Peheu or Lopekeu. North of Bird Island Bay, in

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[324] Schnee, 1904. p.209; Parkinson, 1907. p.382
[325] Mead, 1931. p.10
[326] 1931. p.281
[327] According to A. Bühler.
[328] Parkinson, 1907. pp.385 *et seq.*
[329] 1907. p.382-
[330] According to Kölle (Berlin, VIII B 6390 *et seq.*)
[331] According to A. Bühler.
[332] *Deutsches Kolonialblatt*, XIX, 1908. p.623

a bay-like expansion of the arm of the sea, lies the island of Tirr (a͡î Tirr, Girr), and, on the shore of the main island, the villages of Bĕ́ka and Mĭndrŭ́n, all three consisting of only a few huts. Mĭndrŭ́n has a Mắnus population that originated from Mbŭ́na͡i.

Lying off the smaller island opposite Bird Island (Potomo[333]), which belongs to the Mătăṅkŏ́l of Lŏ́nĭŭ on Los Negros are the little islands of Ndruwiu (= Ndrūbiū?) and Tjuándral, which are uninhabited but visited by the Mătăṅkŏ́l for fishing. Beyond the island of Ndruwiu, on a small bay on the coast of Los Negros Island, lies the village of Ndrūbiū, which was a big village until the emigration to Dra͡uŭ; later however it had only a few huts. Identical with, or neighbouring it, is the village of Dalắlou[334] or Talallo[335]. Eastward is the small village of Bŭ́bi and the big Mătăṅkŏ́l village of Lŏ́nĭŭ on the south coast. Lŏ́nĭŭ is also called Lŏ́mŏt and during the lifetime of the chief Po Pau it was also called Kor e Po Pau. According to Parkinson[336] its inhabitants are said to call it Bárakou(?)

One hour north of Lŏ́nĭŭ and six hours from the north coast of the island, sited on a hill, is the village of Ndrauo[337]. West of Lŏ́nĭŭ and beyond a bay, according to Meier, are Toui and then Lomoau — both settlements of the Mătăṅkŏ́l.

On a southern cove of Seeadler Harbour penetrating deeply into Los Negros Island, lies the Mắnus village of Păpítă͡lai which previously, according to the chief Pŏ Sĭṅ, also bore the name Kor e Pŏ Sĭṅ. Following an epidemic that raged in Păpítă͡lai shortly before 1908, many people left the village and settled in the neighbouring creeks, so that the village itself was reduced. They had probably abandoned the pole village close by Păpítă͡lai, with a big house still not completed in 1908[338]. Reportedly the Păpítă͡lai people also came from Mbŭ́na͡î. Before their arrival only the village of Tă̆ṅ existed, lying opposite Păpítă͡lai on the inner bay and inhabited by Mătăṅkŏ́l. Mắnus and Mătăṅkŏ́l of both villages have totally integrated[339]. North [57] of Păpítă͡lai are Tjawokaleu and Sau which, according to Meier, are both Mătăṅkŏ́l villages. However Meier also describes Păpítă͡lai as a Mătăṅkŏ́l village. According to Meier, on the Great Los Negros Island (which is dissipated into three islands on his chart), Momote and Lohauai are Mătăṅkŏ́l settlements in the south-east; north of Hyena Harbour are Lau, Pongópou (according to Parkinson[340] Pongopong in the Mắnus language), and Hamalau; and on the western side of the northern part called Makareng (Moakareng): Parajeu, and inland, somewhat south of there, Kalau. In 1909 Makareng gained a Mắnus settlement from Păpítă͡lai, which the chief Pō Mĭ́nis founded with several supporters[341]. The northern tip of the island is called Kitsapon (Kitsawon).

The little islands stretching in a long chain westward off the north coast of the main island all belong to the Mătăṅkŏ́l. They live in Korónjat and Ndrilo and used to live also on Háuai until they had to retreat to Pĭ́tĭlu. The western part[342] of the island of Pĭ́tĭlu (Pĭ́tulu) is uninhabited,

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333 Also said to be Túarel (*Planet*, I, 1909. p.85). Rubui on the Parkinson chart is based on confusion with Ndrubiu.
334 *Planet*, I, 1909. p.85
335 Kölle Collection (Hamburg, 14, 38 : 33 *et seq.*)
336 1907. p.388
337 *Deutsches Kolonialblatt*, XX, 1909. p.896
338 Vogel, 1911. p.82
339 Parkinson, 1907. p.383
340 1907, p.388
341 *Deutsches Kolonialblatt*, XX, 1909. p.896; and XXI, 1910. pp. 991 *et seq.*
342 Schnee, 1904. p.200

although in the east it has five groups of houses: Pā́kērăn, Bŏ́rĭtŏ, Dâuer, Lŭ́hū́ and Tūrūlḗ, under two chiefs. Parkinson[343] on the other hand declares that the Pĭ́tĭlu districts are Lúhuan in the west, Poekálas in the middle, Pahakáreng (= Pā́kērăn?) and Ndrel in the east but does confirm its division into two parts. The small islands of Mándrindr, Réta[344] and Mbutjoruo belong to the Mătăn̆kŏ́l of Pĭ́tĭlu.

Opposite Pĭ́tĭlu on the main island is the Usĭâ̂ village of Lukus (Lukós) — now the mission station of Lugos; further inland is the Usĭâ̂ village of Mŭ́ndī; further west is the Usĭâ̂ village of Ŭrĕpḗ. In addition, beyond Lukus lies the Usĭâ̂ village of Tóbŏn. Leber[345] states that in the interior of the Mŭ́ndī district is the village of Tsapon with Tsingou east of it, whereas according to Meier Tsingou is the name of a small river. The new chart inscribes Tingou, which Bühler visited in 1932, instead of Leber's Tsingou. Opposite Háui lies Manus' administrative headquarters (now Lorengau or Lorungau) off which lies the small island of Rara, while in the interior of the north-east tip of the main island, south of the administrative headquarters is the village of Rosun.

Uarwei or Uarawei is stated by Meier to be the Usĭâ̂ settlement south of Tingou and west of Peheu. Ndrótjun, which is said to be a further Usĭâ̂ settlement in the interior, south-west of Uarwei appears to be, according to Parkinson's remarks[346], only an uninhabited gorge, a place of spirits but not a settlement.

A coastal village on the main island south-west of Pĭ́tĭlu is Ahus or Ndragot at the mouth of the Warei. In the middle reaches of the river, in the interior, [58] lies Matawórei, with Loi south of it. In the centre of the main island, south of Onneta is Bowat, with Búrumbo further east[347].

Following Mándrindr westward is the uninhabited island of Hanita (Onneta) and the Mătăn̆kŏ́l island of Hā́ŭs, the owner of the former. Hā́ŭs is called Hŭs by the inhabitants of Pĭ́tĭlu, and has the two settlements Pĕlūăha and Râ̂i.

Opposite Hā́ŭs on the main island, about 1.5 km inland on a 50 metre knoll, is the Usĭâ̂ village of Drūgŭ́l (Drūkŭ́l), which is identical to the Mburukur recorded by Meier in a totally different place. In the Drūgŭ́l area lies the uninhabited swampy site of Gali[348]. After 1910 the Usĭâ̂ of Drūgŭ́l gave up their village and, at the invitation of the station head, settled on land where he directed in the Lisi region[349], on the coast of which lies the village of Sau (Ssau) or Ndritenbat. Near the old Drūgŭ́l habitat, beyond Lisi and toward the south-east, lies the village of Bahajud, and south of there the villages of Doktau and Savoi. Beyond the centre of the main island, where Búundru is located, the villages of Lojoro (Lojaro?) are to the south, and due south of Búundru Bojang (Buijang according to Bühler) close together, with another group of houses between them. Neighbouring Bojang is the village of Boai. Kawoliabbb [*sic*.] lies east of Bojang and, north of Pătū́sī, is Tungou with Iringou in the north-west[350]. South of Bojang are the already-mentioned Kawa and Kisauke[351]. The Usĭâ̂ settlements Souh and Ndritapat, which Meier's chart places in the vicinity of Bahajud, are nothing other than the dual-named coastal village of Sau[352] or Ndritenbat,

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343 1907. p.388
344 Also Ereta (*Deutsches Kolonialblatt*, XIII, 1902. p.199)
345 1923. Chart
346 1907. p.386
347 According to A. Bühler.
348 Memorandum from L. Lukowski.
349 Leber, 1923. p.264
350 According to A. Bühler
351 Leber, 1923. pp.262–264, and Chart
352 In Miklucho-Maclay (*Izvestia*, 1878) "Schou" or "Soa"

which is drawn much too far south, and the Ulkul who live, or lived[353], on steep escarpments in the hinterland of Sau appear to be none other than the Usĭa̯ĭ of Drūgŭ̊l. The new chart records Patolokk [*sic*.] south of Sau, visited also by Bühler.

The next Mătăṅkŏ̊l island, opposite Nditenbat on Hă̆ŭs, is Ăndră, which owns the small island of Papimbutj (Papenbus) to the east[354] — depopulated by Mbúke warriors.

Further west, off Balscot Bay, lies the Mătăṅkŏ̊l island of Pónam, which is called Poném in the Mătăṅkŏ̊l language according to Parkinson[355]. A village occupies the eastern half.

Three kilometres inland on the main island, south of Pónam and about 150 metres up, is the Usĭa̯ĭ village of Să̊hă, between the Usĭa̯ĭ villages of Nŏn to the east and Kåhā̆k to the west. Somewhat east of Boudeuse Bay the [59] Catholic mission station of Bundralis was established after the war. At the western end of the bay lies Tulu, a new beach settlement of the Usĭa̯ĭ from the interior[356].

West of Boudeuse Bay, off the the northern coast of the main island is Tjahalosa (Savorsa) which is inhabited by Mătăṅkŏ̊l, according to Meier, but probably served only as a retreat village for the Sōri people, as happened in April 1908[357]. In 1931–32 earlier Sōri people settled the island now called Sabo. Meier reports the Mătăṅkŏ̊l island of Haliwes as being to westward. This might be identical with Halovat, whose inhabitants were later slain by Mbŭ̊ke people. Pigeon Island[358] to the west is also uninhabited.

North of there is the Mătăṅkŏ̊l island of Sōri, where there were three chiefly settlements[359]. In Spring 1908 the Sōri people retreated before the *Seestern* to Savorsa (Sabo) and Boat Cove, and then also settled in Gắramaṅ (Baramang according to Bühler) on a wide but short tongue of land on the coast of the main island opposite, in dense forest of tall trees. There they remained. Today, they also inhabit Lebbe, a neighbouring village[360].

Usĭa̯ĭ are the sole inhabitants elsewhere in the region of Shallow Bay. Moseley[361] found the coast of the main island at Nares Harbour uninhabited, but east of there, by a small river mouth, was a small settlement. Meier reports the Usĭa̯ĭ village of Lewei (= Lebbe?) as being in the interior. In 1932, inland from Shallow Bay, Bühler found the village of Nada; Rajeu north of there; and, on the west coast of the main island a little south of Wyville Point, Lesau. Earlier on, in the hinterland behind Shallow Bay lay the Usĭa̯ĭ settlement of Lĭĭndrâ̯u, which was abandoned in 1908 and rebuilt, more strongly fortified, on a neighbouring hill[361a]. The village of Rassilio(?) is probably nearby, but is sited at least in the western part of the main island.

The island of Nŏ̊ru is close-west of the island of Sōri, also inhabited by Mătăṅkŏ̊l. To its north is Hắrăngăn, whose Mătăṅkŏ̊l population fled from the attacks of the Mbŭ̊ke people and settled on a neighbouring island, which they named Hắrăngăn from then on. The small Ahet used to belong to the Hắrăngăn people[362].

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353 *Deutsches Kolonialblatt*, XXI, 1901. pp.991 *et seq.*
354 Parkinson, 1907. p.390
355 1907. p.390
356 According to A. Bühler.
357 *Deutsches Kolonialblatt*, XIX, 1908. p.855
358 Réta near Pĭ́tĭlu is also called Pigeon Island.
359 Parkinson, *loc. cit.*
360 According to A. Bühler.
361 1877. p.396
361a *Deutsches Kolonialblatt*, XIX, 1908. p.854
362 Parkinson, 1907. p.391

The remaining islands of the north-west — Murray Island, Moseley Island, and Buchanan Island — are not continually inhabited, but are probably visited by the Măt̆aṅkŏ̵l.

On Kali Bay, in the west of the main island, live the Amok, a group of Usĭâ̵ĭ who probably also own the village of Salien[363], while according to Meier the village of Kali on the southern edge of the bay is inhabited by Măt̆aṅkŏ̵l. North of Kali [60] Bay there now lies the village of Buboi and, in its north-west, Bogai or Bogohai; earlier inland-dwellers migrated to the island of Salien in the south of the bay[364].

The Sĭ́sĭ Islands in the west of the main island belong to the Măt̆aṅkŏ̵l, who have a village on each of the two islands.

On the bay between South-West Point and Malai Bay, in the south-west part of the main island beyond the small island of Murai, is a village whose name and inhabitants are as yet unknown.

In the north-west corner of Malai Bay lies Kogo, according to Bühler, and on its south-west shore, Lekum.

Artificial Islands

In the Mắnus village of Pắrā̄ in 1929 Margaret Mead[365] learned of the existence of several small islands that had been artificially established near the pole buildings. Most of these islands served the children of individual family groups as playgrounds[366], and two were also used as dance places[367]. The islands were built by ramming in poles around the intended island then filling the gaps between them with blocks of coral limestone and finally covering the whole thing with pieces of bark and greenery[368] to form humus.

Population Statistics

The total number of indigenous people of the Admiralty Islands before the war was estimated at about 30,000. Currently that number is only 13,904.

The Mắnus group comprises the smallest percentage of that number. On Pāk, which appeared to Webster[369] to be the most densely populated island, Klink[370] counted 319 inhabitants in the villages of Wă̵lŭ̵n and Moγerắ , each with 35 – 40 huts and Habei with 5 huts. Thus there were around four living in each hut. Half of the population, who lived in Wă̵lŭ̵n, would have immigrated and had, at the time of Webster's visit, probably come directly from Náuna.

On Lămbŭ̵tjo in 1908 Old-Ndrĭ́ol had only three pole huts, while New-Ndrĭ́ol had fifteen huts with more than one family living in each. Added to this were two shacks for widows. Lōkŭ̵l on Lămbŭ̵tjo had about twenty huts. Of five sites at the north-west end of the island that together

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363 *Deutsches Kolonialblatt*, XXI, 1910. p.992; *Amtsblatt*, 1913. p.132
364 According to A. Bühler
365 1930. p.116
366 Mead, 1931. pp.246–249, and 271
367 Mead, *Natural History*, XXXI. 1931. p.69
368 Edwards, 1931. p.554
369 1898. p.302
370 *Deutsches Kolonialblatt*, XX, 1909. pp.530 *et seq.*

made up a village, Pătăndrő had eleven huts, Tšălăńgŭp three, Pětěkūī four, Pŭrā́u three, and one further bush settlement that belonged to Pŭrā́u had six huts. Tšălăńgŭp however would earlier have been bigger. [61]

In 1899 Schnee[371] estimated the number of inhabitants of the smaller Po͡am Island (Pomlin) to be 50 at the most. On Sĭvĭsă he saw fewer than 50 people capable of bearing weapons[372].

Until shortly before 1908, Mbűke was one of the most populous Manus settlements. However most inhabitants then migrated to Lálā, which in 1908 had two parts, each with 20-30 huts.

In the Mănus villages from Lőmbʷá to Tjápale Schnee never found more than 20-30 houses, although there were, additionally, a few small bush huts, with 50-60 men capable of using weapons in each of Párā, Tjápale and the neighbouring villages, although there were fewer in the rest of the Mănus villages[373]. In 1908 Ta͡úī had about 200 inhabitants. In 1929 Párā had 210 inhabitants in 53 households in 43 houses[374]. In 1908 Mbűna͡i consisted of only a few huts, each housing 3-4 families although earlier it must have been quite large, because Mănus had gone from Mbűna͡i to Pătűsī, Mĭndrűn, Kyěla͡uák and Brűna͡i.

In 1908 Tirr had only three houses, Mĭndrűn just two and Bűbi eight houses. In one house in Mĭndrűn there were two men, a boy, five women and three girls, and in another house, apart from a man who had decamped, one man and three women, or two women and a girl — a total of 17 inhabitants.

Lőnĭu has 72 houses (in 1906, 50-60 houses according to Krämer), and 2,000 inhabitants from Schnee's[375] estimation. In Dalálou about 20 houses stood in 1906[376].

Hăŭs has about 300-400 inhabitants.

Thirty-eight men and twenty-eight women were counted in Gárama̍n. No children under 12 were seen. On Sōri Moseley[377] found about 400-500 inhabitants, and on Hărăngăn, which had 30 houses, 250-300 inhabitants.

The population of the interior of the main island totals, insofar as they live in the mountains, scarcely more than 1,500 people[378]. For this region Leber[379] has obtained the following population statistics:

Village	Ndrabui	Boltzal	Bojang	Savoi	Bulumandra	Average
Children per 1000 married adults	619	812	729	1130	1187	895
Female births per 100 male births	116	100	285	228	216	188
Child mortality % . . .	23	23	29	30	31	
Men per 100 married women	61	68	54	53	100	67

371 *Deutsches Kolonialblatt*, XI, 1900. p.331
372 Schnee, 1904. p.209
373 Schnee, 1904. pp.208 *et seq.*
374 Mead, 1931. p.274
375 1904. p.209
376 According to Krämer.
377 1877. p.397
378 Leber, 1923. p.265
379 1923. p.265

[62] In the interior of the main island the male component of child mortality is 82%. This corresponds with 10 women and 14 children; on the coast and on the small islands however, 23 children. For 1,000 married adults there are 1,220 children, compared with 895 children in the interior.

According to Margaret Mead[380] the Usĭa͡i of the main island live in “very small scattered communities of ten people and five dogs”.

Of 210 inhabitants of Pā́rā̄ in 1929 Mead[381] found 44 married couples with 87 children and 9 unmarried young people, 20 widows and 6 widowers. For each married couple there were 1.9 children and for each household 1.6 children. Of the children 24% or 26% were adopted. Child mortality was extraordinarily high there.

IV. Demography

Anthropology

Stature

Von Suhm and Moseley[382] determined the average stature of the natives at Nares Harbour to be 1646 mm for men and 1549 mm for women. Miklukho-Maclay[383] found (Lŏ́nĭu and Bŭ́bi and on Ăndră) a male stature range from 14870 to 1780 mm with an average 1510-1640 mm; and for women 1400-1670 mm. Thilenius[384] found among Mắnus and Usĭa͡i (and probably Mătăn̆kŏ́l as well) an average height of 160-165 cm. On Pāk Friederici[385] found the women to be “quite tall”. Chinnery[386] determined the average height of the men there to be 165 cm, and women 154 cm.

In Păpítă͡lai the average height of men was 1600 mm, and women 1570 mm. On Pónam several men of about 175 cm were seen, while others, admittedly fewer, measured only 150 cm and less. In general, the darker people from the islands on the north coast of the main island are quite tall; the paler people from the south-east, on the other hand, are smaller. In Ta͡ŭ́ī the average for men is 150–160 cm. In Kyĕla͡uắk and Lŏ́nĭu the average is the same as in Păpítă͡lai, although one man in Kyĕla͡uắk was about 170 cm tall, while in Lŏ́nĭu there were no significant variations. On Lămbŭ́tjo where similar statures to those in Păpítă͡lai are the general rule, one man had a height of even 180 cm. Parkinson[387] found the Mătăn̆kŏ́l of the southern islands to be generally smaller and slimmer than the medium-sized Mắnus, whose women are shorter and somewhat stockier. [63]

Among the Usĭa͡i of Lukús who generally have the stature of the Pĭ́tĭlu and Păpítă͡lai people, in addition to taller individuals with pale skins, there are surprisingly short individuals with

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380 1930. p.115
381 1931. p.274
382 1877. p.384
383 *Izvestia*, 1878
384 II, 1903. p.120
385 1912. p.29
386 p.56
387 1905. p.238

normally-darker skin tone. At Drūgŭ̊l their height is only slightly less than at P̌ítĭlu. The women of the Usĭa͡i of Mŭ̊ndī are particularly short, on average attaining scarcely more than 140 cm.

Pygmies

Battle ornament bones and amulet bones that stood out for being particularly small, prompted von Luschan[388] to accept the occurrence of pygmies in the Admiralty Islands as proven. From the length of the humerus he calculated the stature of the pygmies to be 132–133 cm. The bones examined are not recent, but could be a good hundred years old(?)[389].

From quite clear and prosaic statements by the Usĭa͡i in the region of Savoi and Doktau, pygmies would still have been living between these two villages at the time of their grandfathers — the accounts dated from 1914 — but would have died out during their fathers' lifetime[390].

Given the small stature of the Usĭa͡i of Lukús and Mŭ̊ndī, the earlier existence of pygmies is quite likely.

Skin Tone

Carteret[391] describes the skin colour of the natives as "a very dark copper colour, nearly black", and Hunter[392] calls them "darker than the natives of the Duke of York's Island". Maurelle[393], less critically, reckons that they are exactly the same as the negroes of Guinea and accordingly named an island group north-east of the main island "Los Negros". Labillardière[394] labels the skin colour "not very dark". Redlich[395] pronounces again "a copper colour", and Rickard[396] describes them as "more coppery and bright" than the people of New Britain. Robertson[397] found in the skin shade more similarity with the people of Yap and Palau than with those of New Ireland and New Hanover, and Festetics de Tolna[398] even calls the Nauna people "pure Polynesians"(!). The individual reports contradict one another therefore when the natives are described at one moment as particularly dark and then later as paler. [64]

Miklucho-Maclay[399] found in Lŏ̊nĭu, Bŭ̊bi and on Ăndră, generally a darkish cinnamon-coloured skin tone of varying shades. In general he saw a characteristic darkish tone, although in odd individuals he found the paler shade of the Yap and Palau people, and in an eight-day-old baby a cinnamon-coloured grey skin.

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388 1908. pp.551 *et seq.*; 1910. p.939

389 It is questionable whether von Luschan took into account the short durability of bone in the climate of the Admiralty Islands.

390 Leber, 1923. pp.263 *et seq.*

391 Hawkesworth, 1773. I, p.384

392 1793. p.240

393 Milet-Mureau, I, 1797. p.268

394 I, 1796. p.255

395 1874. p.32

396 Ray, 1892. p.5

397 1877. p.56

398 1904. p.120

399 *Izvestia*, 1878

Moseley[400] described the common skin colour in the Nares Harbour region as blackish-brown and darker than that in Humboldt Bay. Among young men and women he found a somewhat paler skin tone, and even, in two girls and one youth, a pale buff.

Thilenius[401] compares the skin tone with Vandijk Brown [PMS 181], which can be mixed with a little yellow, but does mention that their skin might be darkened by weather and sun. He found that the palms of their hands and the soles of their feet were considerably paler, with the nails almost white, without any appreciable red coloration. There is hardly likely to be any confusion with Melanesians of the Bismarck Archipelago and the Solomon Islands — much more likely with the natives of northern New Guinea or Micronesia.

Parkinson[402], who says that the Mǻnus and Usĭa͡i are dark like the inhabitants of the Gazelle Peninsula, claims that the Mătăn̆kŏl of the southern islands[403] are paler than the Melanesians of the Bismarck Archipelago, and that a paler yellow has been mixed with their chocolate brown, which occasionally even dominates, and then approaches that of the Samoans.

Such a pale skin tone was noted in the mountains of Lóu in 1908. There it is a surprisingly pale yellow, like the southern Chinese. On the coast of Lóu the skin colour again is darker.

On Pāk too the skin shade is often surprisingly pale, especially in the face, where it often approaches Skin Tones 23–25, usually with an orange-coloured shade (about No. 21 on the colour chart) mixed in. The body is considerably darker than the face, and often approximates Tones 27–29. Above all, the back and shoulder blades are quite dark. Friederici[404] labels the skin colour of the Pāk people as brown without trending toward black, and as darker than that of the Polynesians but paler than that of the people (of the coastal region?) of Lóu. With their paler skin tone the Pāk people contrast clearly with the natives of Pĭtĭlu, Păpítă͡lai, Lŏnĭu etc.

Admittedly, on Pĭtĭlu the skin shade does resemble the tone of that on Pāk, but it is much darker. Thus pale individuals such as on Pāk do not seem to appear.

Among the Usĭa͡i of Lukús and Mŭndī the skin is somewhat darker than among the Mătăn̆kŏl on Pĭtĭlu, yet a surprisingly tall man with pale fawn skin was seen there.

On Hăŭs and among the Drūgŭl the skin tone resembles that of Pĭtĭlu. Thus Mătăn̆kŏl and Usĭa͡i match each other in this. [65]

The skin colour of the Pónam people is usually somewhat darker, and the faces especially, of some people show a remarkably dark tone.

Right across the board, the people of the islands off the northern coast of the main island who are Mătăn̆kŏl feature a darker skin shade than do the Mǻnus of the south coast.

A paler skin colour particularly distinguishes the people of Pala͡ua and Po͡am. Likewise in Tā́uī, Pătŭsī, Mbŭna͡i, Kyĕla͡uā́k, Brŭna͡i, Dra͡uŭ, Ndrūbiū, Lŏnĭu, Bŭbi and Păpítă͡lai, both Mǻnus and Mătăn̆kŏl, the skin colour is paler than on the islands off the north coast, but darker than on Po͡am. However, some individuals are just as pale as, or even paler than, the average person from Po͡am. Parkinson[405] found the Mǻnus women to be paler than the men. Also, on Lămbŭtjo the same skin shade predominates as on Tā́uī, although a few individuals are paler. The Lămbŭtjo people call their skin colour *ndramandraman* (*ndramán* = red), in contrast to the dark Solomon Islanders[406], while elsewhere, when comparing themselves with the "*Jap*", (Europeans and

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400 1877. p.385
401 II, 1903. p.120
402 1907, p.352
403 1905. p.238
404 1913.
405 1913. pp. 28 and 31
406 Thurnwald, 1912. p.12

Polynesians) who are pale, they describe their own skin as being dark[407], and place their skin tone on a level with the Melanesians of the Bismarck Archipelago[408].

Physique

The natives of the Admiralty Islands generally have a lean, fine-boned structure. According to Moseley[409] the body weight of the people of Nares Harbour averaged only 57.14 kg.

Younger men carry only a small amount of body fat. Older men tend more towards this body form and to paunches[410]. However in 1908 only one man in Păpítă͡lai was seen to be remarkably stout, although the food situation was generally good there. On Pāk the level of corpulence is somewhat greater than elsewhere in the Admiralty Islands[411].

Their arms are relatively short[412]. Muscles are not well-defined through the skin, and round forms predominate even in skinny men. On the other hand, in Păpítă͡lai arm musculature appears quite powerful. The limbs are fairly thin, with narrow hands and feet[413]. However, only the Drūgŭ̊l people gave an impression of frailty.

The shortness of the great toe, noted earlier by Miklucho-Maclay[414], is remarkably common. In four out of six cases among the men in Păpítă͡lai the second toe was longer than the first. Furthermore, the great toe almost always deviated quite noticeably. Miklucho-Maclay often noted the lateral orientation of the outer toes, particularly the fourth and fifth.

[66] As for the women, Miklucho-Maclay reckons that they had a physique which, especially when they were seated, could at times almost lead to confusion with men, and even the difference in clothing and manner of walking, at first glance scarcely prevented such confusion. Friederici[415] did not find the hag-like features among the aged Pāk women, such as is found in other Melanesian women. Parkinson[416] found the Mắnus women to be somewhat stockier than the men.

The population of the interior of the main island in Bojang and Savoi differ from the population of the islands and the coast of the main island. The inland population consists of stocky people “with the characteristic disposition of mountain-dwellers”[417]. Parkinson[416a] too considers that physically the Usĭa͡i are typical mountain people. Margaret Mead[418] describes them as more-stockily built than the Mắnus and often bow-legged.

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407 1905. p.238
408 Meier, 1908. p.658
409 1877. pp.384 *et seq.*
410 Thilenius, II, 1903. p.120
411 Friederici, 1912. p.28
412 Moseley, 1877. p.384
413 Thilenius, *loc. cit.*
414 *Izvestia*, 1878
415 1912. p.29
416 1905. p.238
417 Leber, 1923. p.262
418 1930. p.115

Normal Facial Features

The faces of the Pāk people are fairly sharply defined with an intelligent expression. Their nose is hardly less prominent than among northern Europeans and, in profile, often also displays the depressed tip of the so-called Jewish nose. At the same time it is fairly broad, at least at the lower end, since the wings of the nose are widely flared. One man was even distinguished by an almost "ancient Egyptian Type" face with somewhat slanting almond-shaped eyes, without the Mongoloid fold, and with a prominent nose with the tip bent slight downward. The mouth is quite finely cut in the Pāk people, with relatively narrow lips and an orthognathic dentition. Besides the well-developed forehead in Pāk women, according to Friederici's[419] observation, the shaving of their hair also contributes to their faces appearing open and intelligent.

On Pǐ́tĭlu the noses are lower and broader, and the faces are flatter and appear less intelligent. Many faces are immediately reminiscent of the St Matthias people. Occasionally they have a tendency to prognathism, with a fuller mouth than on Pāk. At the same time, their faces are often quite narrow.

The Usĭai͡ of Lukús and Mŭ́ndī almost all have the somewhat angularly projecting nose, a wide full mouth, and a tendency to prognathism.

In Păpítă͡lai a few heads were conspicuous because of their extraordinary length. Several measured more than 190 mm in length and one at over 200 mm long. In many, the forehead width is quite small and the zygomatic processes jut out laterally. There too, the face is not as sharply chiselled as on Pāk. The nose is often broad and blunt, with quite a wide low root. The thickness of the lips is usually unremarkable.

The Hā́ŭs people resemble those of Pǐ́tĭlu, although their faces are on average [67] more sharply-cut and the noses more prominent. The Drūgŭ́l resemble the Hā́ŭs people, but, apart from several sharply-cut faces they generally have a somewhat stouter nose.

Of the Sōri and Hắrăngăn people, Moseley[420] says that their foreheads are inclined to be flat with a well-defined recess at the root of the nose. The nose itself is usually short with broad nostrils and a flat tip. However, for every 15–20 people there is one with a 'Jewish nose'. The cheek bones are somewhat prominent and the chin is straight. He did not see any prognathism. Their lips too are relatively narrow.

On Pónam their noses are often somewhat bowed, with an indication of the "lower Nasion". These are usually quite broad. Besides this, prominent noses are also found; in some cases, even aquiline noses.

In Tā́ŭī, there are often quite broad faces with flat noses. In Kyĕla͡uā́k too, broad faces are not rare. There, the noses are usually not prominent, but have broad flat roots and flared nostrils. A tendency to prognathism is quite common. Beside this form, in Kyĕla͡uā́k we also found another type with a sharply-chiselled profile, a distinctly prominent aquiline nose, and a somewhat receding forehead.

In Lŏ́nĭu their faces are usually relatively narrow, yet alongside this, some have extraordinarily broad faces. Quite often the lower border of the mandible drops away quite steeply anteroinferiorly, so that the point of the chin literally hangs down. This occurs especially in people whose upper face gives the impression of being pulled downward in length. This was also seen occasionally in other sites.

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[419] 1912. p.29

[420] 1877. pp.386 *et seq.*

On Lămbŭtjo the facial type hardly differs from that of the south coast of the main island. There too their faces are often either quite narrow or alternatively very wide, with a broad, flat root of the nose or also with a prominent and markedly arched nose.

Throughout, Thilenius[421] most often found slightly crooked noses right through to the Semitic form and, less commonly, straight noses with a broad base, as in Polynesians. In the skulls he almost always detected a certain degree of dolichocephaly, while pronounced brachycephalic forms were missing. However, he probably found prognathism, but never to a marked degree, though always a fairly small number of thick lips. Miklucho-Maclay[422] was likewise able to detect a tendency toward brachycephaly in mesencephalic skulls. As indicative values he found 73.2 – 84.5 for men, 70.5 –78.6 for women, and 75.8 – 79.8 in children.

In an abnormality among Usĭai͡ skulls from Kětyĕ, a huge atlas bone was found on one occasion in 1908 and, another time, an over-developed *torus occipitalis*. [68]

In natives from Ăndră, Lŏnĭu, and Bŭbi, Miklucho-Maclay[423] found a *plica semilunaris* up to 4 – 5 mm wide, and, in many individuals, a small nodule on the mucous membrane of both of the upper and lower eyelids, in the region of the eyelashes.

Faces of the ‘Mongoloid’ type

A clearly occurring Mongoloid fold appears surprisingly often among people from Poa͡m, Palŭăn and Lămbŭtjo. In addition broad faces are seen, often with protruding cheek bones, very flat nasal roots, and often, quite pale skin tone. This facial form is at its most pronounced and most common on Lóu, in combination with a dark-yellow skin shade that has an almost southern Chinese effect. On Lămbŭtjo the Mongoloid fold also occurs more or less distinctively among darker individuals.

On Pāk only a few people have a Mongoloid fold. One such man also had a nose departing from the general form, with a flat and low bridge, bent-over tip and surprisingly projecting cheek bones. His son also had a broad nose, with a flat bridge and a weakly-suggested Mongoloid fold.

This type was not seen in the coastal villages of the main island nor on their small offshore islands.

Special type of face

While the facial form of the Usĭai͡ of Lukús and Mŭndī do not differ from the normal form, one quite large man with yellowish-brown skin shade stood out because of his extraordinarily strongly-developed upper eyebrow bulges. They almost appeared to be genuine *Tori supraorbitales*. An unbroken bulge, from the beginning of one temporal line to the start of the other, jutted out a long way, and barely showed a recess over the quite deeply sunken root of the nose. The forehead was markedly sloped and extraordinarily narrow. The zygomatic processes of the frontal bone jutted a long way laterally. The hair of this man resembled the normal type.

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421 II, 1903. p.121
422 *Izvestia*, 1878
423 *loc. cit.*

Eye colour

The iris colour is dark brown, as Moseley[424] has already reported. It corresponds in both darker and pale skin types, and conforms on Pítĭlu and Hā̆ŭs, among the Drūgŭ̊l, in Păpítă͡lai etc., mostly with Number 2 of Martin's Table of Eye Colour, occasionally also with Numbers 2–3. On Pónam too, [69] the iris colour corresponds with Number 2, and sometimes Number 3. On Pāk the dark brown often passes over into a blackish-brown.

In a man from Ăndră, Miklucho-Maclay[425] found a surprisingly pale iris, whose colour fluctuated between Numbers 3 and 4 of Broca's table.

Hair

The hair of the natives is portrayed in all the older reports as woolly and black. Moseley[426], however, distinguishes the head hair as "naturally black" from the body hair, which he describes as "being of a glossy black".

On the main island and its offshore islands the hair of the adults is always black, and almost always frizzy and tightly rolled. On Pāk the hair form is the same but the colour is blackish-brown.

The tightly-rolled form of the hair is altered somewhat by rubbing in red ochre and coconut oil. The hair that, in such cases, is left very long, is no longer tightly rolled, but more woolly. Its natural more or less tightly-rolled windings are pulled apart. Also combing and bulking up of the hair appear to contribute to its spiral twist being somewhat reduced[427]. Thus the hair is not at all "hanging down long" and "smooth", as Schnee[428] describes it.

Occasionally there also appears curly or smooth hair, even paler in colour. Almost totally taut shiny black hair was seen on a young man from Tā́ūī. Otherwise, deviations from the normal hair colour and type were seen only among boys. Thus one little lad on Pāk had broadly-wavy, almost straight hair, that passed into a paler dark-blonde colour at the ends. This did not appear to be based on artificial dye but probably on random bleaching through seawater and sunlight. On Hā́ ŭs one boy had curly black hair while another had woolly hair whose lower part was dark, but blonde at the ends. The paler or blonde colour at the tips of woolly hair is more common on Pónam, where it was observed in six boys. Two of them had fairly long, totally-blonde hair at the edges of their forehead. In Lŏ́nĭu, a dark red blonde tip of woolly hair appears often among boys, while in the Kyĕla͡uā́k neighbourhood medium-blonde, almost straight, only slightly curly hair was seen in one boy and in another rather older boy, dark-blonde or brown crinkly hair.

Beard hair, eyebrows and body hair are generally only quite mildly developed. Of Sōri, Hắrăn̆găn and their neighbourhood, Moseley[429] mentions a [70] sporadic curly hairiness of the arms and legs that almost seemed to be "growing in separate locks", and in a few men this grew also on their chest and back.

Delicate blonde body hair was seen only on boys on Hā́ŭs and Pónam. On Pónam these were only boys with woolly hair with blonde or pale tips, and on Hā́ŭs only one boy with pure

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424 1877. p.386
425 *Izvestia*, 1878
426 1877. p.386
427 Mikucho-Maclay, *loc. cit.*; Parkinson, 1907. p.352
428 1903. p.362
429 1877. p.362

black woolly hair. Another boy with curly partly blonde head hair had quite markedly developed body hair.

Miklucho-Maclay[430] saw matt black, very thin hair 15–22 mm long on a baby 7–8 days old in Lőnĭu.

Mobility of the Toes

Miklucho-Maclay[431] noted astonishing mobility of the toes, hardly inferior to that of the fingers, in men from Sau. The men entertained themselves with this when relaxing on the beach, spreading all their toes, bending individual toes to the side, and rapidly lying one toe over another.

Physiological

Standing on one leg

Friederici[432] observed that only teenagers and bigger boys on Pāk would stand on one leg. The right leg serves as the support while the sole of the left foot is laid tightly over the knee on the inner side of the right thigh. At the same time they always hold some kind of stick-like object in their hand as a flimsy support.

Sitting posture

They usually sit on the ground with their legs drawn up so that their knees are high. At the same time they clasp their forearms over their knees, or their arms are laid over the knees in such a way that their hands are folded. When sitting on sleeper beams or benches, their arms are in the same position, or they let their hands lie in their lap.

Less often, they squat without their haunches touching the ground. Their hands are in the same position as when they are sitting on the ground.

Women sit in the same manner as the men and, again, the legs are fairly wide apart[433]. People do not find this somewhat unseemly.

Sitting with one knee drawn up while the other leg is outstretched on the ground, was observed only among the older boys. [71]

Resting position

When relaxing, the men prefer to lie on their stomach on the beach. When sleeping in this position, their face lies on their hands under their heads. If the men are awake, the arm supports the chin while their legs swing in the air or scrabble around in the sand[434].

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430 *loc. cit.*
431 *Izvestia*, 1878
432 1912. p.57
433 Miklucho-Maclay, *Izvestia*, 1878

When relaxing and sleeping on beds and platforms they use a back support. Since the beds are only short, their knees are drawn up, and their feet placed on the edge of the bed. On the longer beds in the interior of the main island they seem to lie outstretched. Any other position than lying on their back is not quite possible, because of the neck support. If they are not sleeping but only relaxing on the bed, they prefer to clasp their arms on the neck support under their head.

Carrying children

Women carry children astride their hips, held firmly in place, or the children can, when they are bigger, ride on the mother's back with their legs round her hips, and their arms round her neck. Thus they are holding themselves up while the mother has both arms free. Infants are carried on the arm.

Swimming

All Mắnus and most Mătăṅkŏl can swim. Children learn by imitating other children. They use strong hand-over-hand movements after the style of crawling. Admittedly, the movements are not rhythmic, although great speed can be achieved[435]. Labillardière[436], who likewise saw "precipitate" swimming movements, reports that the swimmer, whose movements did not differ any other way from those of good European swimmers, required less physical effort, with part of the head, mouth-closed, kept under the water. He saw individuals supporting themselves solely by treading water. Children prefer to swim near a canoe, holding on with their hand while making other swimming movements[437].

Springing into the water is done with the body straight, so that the feet enter the water first. Diving head first is unknown[438].

Climbing

To climb a palm, they fashion a ring of bast fibre for the feet, and lay it against the trunk in such a way that a loop is developed on each side, one for each foot. [72] Their arms are free when climbing and grip first, while the feet and the ring follow jerkily.

The *Planet* Expedition[439] observed that a man who wanted to climb a *Terminalia*, preferred to climb a neighbouring coconut palm first, and reach the tree from there.

Younger people climb trees and palms without any aids.

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434 Miklucho-Maclay, *Izvestia*, 1878
435 Mead, 1931. p.23
436 I, 1796. pp.261 *et seq.*
437 Mead, *loc. cit.*
438 Moseley, 1877. p.405
439 *Planet*, I, 1909. p.85

Sickness and Medication

Illnesses

Although Thilenius[440] was unable to observe any cases of elephantiasis or ringworm, two cases of elephantiasis were seen in Păpítă͡lai in 1908, with a painful chronic oedematous swelling of the left foot and calf and left-side inguinal glands in a third man — possibly a third case of elephantiasis (lymphadenitis) — among some five men. During 1908 no case of ringworm or yaws was seen anywhere. That ringworm does exist, is demonstrated by Friederici's[441] being able to record the word *mā́kŭă* from the Usĭa͡i of Pā́lŭăn. Also, the 4–5 cases of pityriasis seen by Moseley[442] on Sōri and Hā́răngăn could have been ringworm. On both Pā́lŭăn and Móuk there is a type of scabies *ĭ́ĕbĭ́ĕb* or *ka͡úă*. During the survey period by the *Planet* they were surprised that "disproportionately few people suffered ringworm, yaws and *kaskas*."[443] The health and nutrition levels of the natives seemed generally good to the Hamburg Expedition. They did not see any ulcers. However, Börnstein saw one case of severe ulcerative facial leprosy and "purulent, weeping facial sores". Leber[444] too saw a suspected leprosy case in 1914 in Bojang, where skin diseases were rare.

On the islands in Nares Harbour Moseley[445] saw two growths — one that appeared to indicate an inguinal hernia, and the other on the side of the face, near the ear.

Labillardière[446] thought that he had seen ulcerations of the penis caused by wearing penis shells, but these were never subsequently observed.

According to a comment by the chief Pō Mĭ́nis, some time before the arrival of the Hamburg Expedition an epidemic prevailed in Păpítă͡lai with about thirty [73] people falling victim. It appeared to have been a pulmonary disease, and was purported to be the reason for the dispersion of people who had earlier lived side by side. On Komuli a man was brought before Börnstein[447], having suffered this illness, which appeared to be "something between measles and dengue". It presents "fever, bronchitic- and intestinal irritation, severe conjunctivitis and photophobia, mucopurulent discharge, volatile skin rash, occasionally tending to ulceration, like measles, duration 4–10 days". The illness, which Wiek labels as "morbiloid" is highly infectious and "appears, like an epidemic, every couple of years in the archipelago". In Ndrabui and Boltzal it claimed only a few victims, who died less from the illness itself than from secondary illnesses such as pulmonary inflammation[447]. From Lămbŭ́tjo Thurnwald[448] records as endemic illnesses: tussis (*ngalingan*); head colds (*bungatut*); fever (*tjanginändri*); and headaches (*pálapang*). Similarly from Pāk, Krämer identifies tussis (*sorel*) and head colds (*drou*). Thilenius too alludes to the prevalence of coughs and sneezes. Börnstein recalls a case of acute pneumonia.

According to Fülleborn, who found thickened spleens in four men whom he examined, malaria predominates on Lóu. Malaria also seems to occur in Păpítă͡lai. At the very least, Fülleborn

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440 II, 1903. p.133
441 1912. pp. 225 and 228
442 *loc. cit.*
443 Börnstein, 1916. p.316
444 1923. p.262
445 *loc. cit.*
446 I, 1796. p.261.
447 Leber, 1923. p.266
448 I, 1912. p.448

palpated a thickened spleen in one boy. Malaria is absent from the interior of the main island, or is only of minor importance[449]. Parkinson[450] too stresses that malaria is not common.

While Thilenius did not notice any sexually-transmitted diseases, Börnstein saw gonorrhoea. However it seems to have been a case of only sporadic appearances. Dysentery too spread just before 1914 but did not penetrate into the interior of the main island[451].

Remarkably, in 1908 two people in Păpítă͡lai were both missing a right eye, while one man who indeed retained both eyes was almost totally blind. From his behaviour he seemed to retain at least a small glimmer of light. One blind man was seen on Pāk.

In addition to these afflictions there are: purulent inflammation from the bite of a centipede[452], transient paralysis of the bladder muscles from wearing a penis shell[453], and wounds caused by obsidian- and stingray barb weapons and the like, which, apart from severe cases[454], heal surprisingly well.

Fortune frequently noted neuroses of a sexual tenor on the Admiralty Islands. He traces this back to "a prudish sex life without individual freedom"[455]. This can relate only to the Mắnus. [74]

Medicine

Illnesses, insofar as these are not obvious battle injuries, are ascribed to the evil influence of supernatural beings but not to humans[456]. Deforming curvature of the arm, according to the Usĭa͡i of Drūgŭ́l, is a consequence of the theft of *tabu* betel nuts; emaciation, according to the Lămbŭ́tjo people, is from violating the law of exogamy[457]; illness of an Usĭa͡i chief, from the kidnapping of his soul by spirits[458]. To prevent ghosts from harming the living, *Cordyline terminalis* is planted, with an incantation, alongside the grave[459]; or, among the Mắnus, ginger is laid beside the deceased and his corpse is spat on with chewed ginger[460]. Preventative measures against illness, and against the spirits of the dead (*bĕ́lī́t*), who are especially feared as causes of death and illness, are: ornamental shrubs with long reddish leaves planted in front of their houses; human bones wrapped in leaves and worn as an arm band; and stones in a small plaited container worn round the neck. In Pā́rā̄ they try to cure children stricken with malaria by one or two men calling upon the ancestral spirits to give the child back the total substance of his soul, and waving water containers, while the female relatives sit wailing around the child[461].

The healing of illnesses is, in severe cases, a matter for the sorcerer or women skilled in sorcery who act by spitting medicinal substances onto the patient, using bone amulets, remnants of chewed magic betel, striking with leaves, investigation of the spirit that has kidnapped the soul of

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449 Leber, *loc. cit.*
450 1907. p.350
451 Leber, *loc. cit.*
452 Börnstein, *loc. cit.*
453 Thilenius, II, 1903. p.129
454 Thilenius, II, 1903. p.133
455 Fortune, 1932. p.248
456 Fortune, 1932. p.157
457 Thurnwald, I, 1912. p.325
458 Parkinson, 1907. p.387
459 Fortune, 1932. p.114
460 Parkinson, 1907. p.403
461 Mead, *Natural History* XXXI, 1931. p.71

the sick person, and so on[462]. If they accept that the soul taken by a spirit cannot be returned to the sick person, then the latter is killed.

Falling within the sphere of sickness sorcery are leaf rings around the neck for pulmonary inflammation[463], and a wife's championing of her sick husband by winding plaited cords round her upper body[464].

Infusions of wild mango; extracts of taro leaves, taro, and fish; and the application of heated leaves of a tree like *Calophyllum* etc. for fever and headaches on Lămbŭ̋tjo[465] are more effective in our opinion. Wounds are healed by firmly binding reportedly haemostatic leaves over them[466]. Women heal minor wounds in children by using spit to remove the thin surface layer from the wound and then dry it, lick it out and blow on it[467]. According to Börnstein[468] centipede bites are treated with the sap of the white lily; gonorrhoea among the Mắnus with a tea-infusion of leaves; and suppuration from the face with an adhesive dressing of [75] smoked leaves. They also try to heal skin diseases by branding scars[469]. For headaches, the Usĭa͡i of Bird Island Bay wear a strip of bast fibre round their foreheads. *Massoi* bark among other things is consumed as a remedy on Sōri, where it is called *mosu*[470], and also in Sau[471].

During epidemics the as yet unstricken part of the population of a village migrate and establish a new settlement. This happened shortly before 1908 in Păpítă͡lai and Ndrūbiū.

Fatigue is banished by the wearied person's head being squeezed and pressed front to back and then left and right for 2-3 minutes. From Miklucho-Maclay's observation[472], one man who had been treated in this manner by his wife stayed alert until evening, despite having been so tired earlier that his eyes were almost closing.

In 1932 people attempted to banish headaches on Sabo by pounding the forehead with a little wooden stick or rib of a palm frond armed with a shark's tooth or sliver of glass. The bleeding was said to allay the pain[473].

Hygiene

To keep flies out of the house at night in the pole village of Mbū́n͡ai, a wide shelf is hung by cords in front of the door, and a smoky fire is kept alight with ordinary fresh wood. Fig. 1.

Freshly pierced ear lobes are protected on Pāk and in Pătū́sī by pieces of palm leaf sheath sewn into the shape of a bag.

Apart from that, little of a hygienic way of life is seen among the Mắnus and Mătăn̆kŏ́l. Even so, they keep their houses and the grounds in front of them clean, despite being unable to do anything against vermin, and they are careful about certain personal hygiene, although they do not

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462 Parkinson, 1907. pp. 387 and 403; Thurnwald, I, 1912. p.444
463 Börnstein, 1914. p.316
464 Thilenius, II, 1903. p.133
465 Thurnwald, I, 1912. p.448
466 Thilenius, *loc. cit.*
467 Miklucho-Maclay, *Izvestia*, 1878.
468 *loc. cit.*
469 Thilenius, II, 1903. p.123, Note 1
470 Schoede Collection, Berlin
471 Miklucho-Maclay, *loc. cit.*
472 *Izvestia*, 1878
473 Bühler Collection, Basel

appear to be familiar with any regular cleansing of their bodies. Bathing is only a matter of personal inclination. Only newborn babies, and the mother twenty days after delivery, must [76] undertake bodily cleansing[474]. But even without specific rules about washing, uncleanliness is regarded as ugly and it is an important fact that the Mǻnus mock the Usĭa͡i about it — they are said to have bad breath, their bodies are dirty and their teeth are encrusted[475]. Mothers clean an infant's dirty face by licking the child[476].

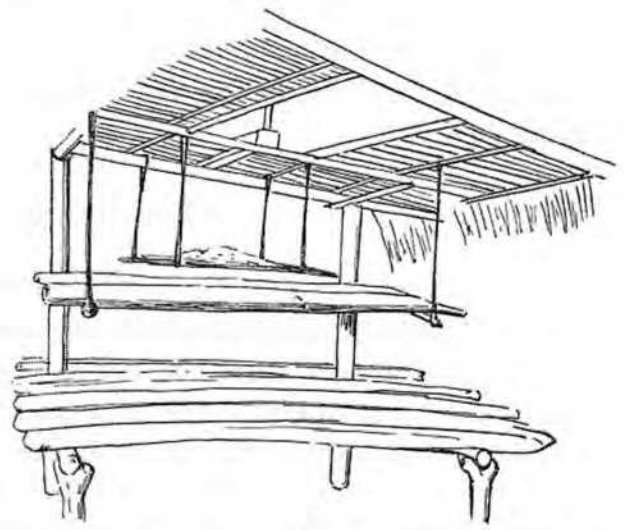

Fig. 1. Steps, with a hanging fireplace, to smoke out mosquitoes. After a sketch by H. Vogel

Then again, the burial behaviour of the Mǻnus, and of many Mătăńkŏl and Usĭa͡i, (among whom the corpse decays on a framework or in an open grave within the house, in the immediate vicinity of the living), stands in stark contrast to hygiene of any kind. That repugnance of this custom *does* exist — probably due to the smell rather than for health reasons — can be recognized by the Pĭtĭlu people's ridiculing it[477] and the Mbŭna͡i people's procedure of laying out of the corpse on the uninhabited island of Ndrówa.

In the mind of the Mǻnus, dietary restrictions too are hygienic for the mother-to-be, because they are intended to prevent the expected baby being misshapen. Also, women's fear of spending a night in the open, because it could lead to a miscarriage brought about by a spirit, comes into this bracket[478].

The inhabitants of Boltzal, Bojang and Savoi in the interior of the main island stand out from the other natives, through a series of effective hygiene measures[479]. Here there are no food restrictions for pregnant mothers. The afterbirth is carefully dealt with by tying off the umbilical cord; during the first three months infants are breastfed only; and for answering the call of nature, small bridges are constructed out over a hillside.

Psychology

Intelligence

It has been pointed out by anyone who has had anything to do with them that the Admiralty Islanders differ from other Melanesians such as the inhabitants of New Ireland, the Gazelle Peninsula, and the Solomon Islands, owing to their lively nature and their greater intelligence[480]. The greater mental agility of the Admiralty Islanders must have been particularly striking to the Hamburg Expedition after having visited St Matthias, Emĭr, and Tench. Moseley[481], who had

474 Parkinson, 1907. pp.398 *et seq.*
475 Parkinson, 1907. p.376
476 Miklucho-Maclay, *Izvestia*
477 Parkinson, 1907. p.389
478 Parkinson, 1907. p.395
479 Leber, 1923. p.265
480 Thilenius, II, 1903. p.121; Parkinson, 1907, p.352
481 1877. p.417

previously got to know the inhabitants of Humboldt Bay, must of course have found the Admiralty Islanders more sedate. Even though he reports that the natives did not understand many things such as telescopes [77] or the locomotion of a ship by steam, it is clear from his remarks that they showed a lively interest in anything novel, and even though they were not astonished by individual items such as matches and convex lenses, they nonetheless attempted to find an explanation for these in their own way. Labillardière[482] reports that looking-glasses were examined and then destroyed by the natives in order to find the tangible reflection behind the glass. Thilenius too was questioned about the significance and use of any unfamiliar item, and everything was discussed in a lively manner. They showed hardly any fear of unfamiliar items. Even blood sampling, undertaken in 1908, awakened more interest than fear.

Combined with their unique thirst for knowledge is a readiness to explain anything in detail to others. Fatigue from protracted interrogation, which is very common on St Matthias for example, hardly ever occurs. On the contrary, the natives are anxious to give their explanation quite clearly to the inquirer, and they are not satisfied until they are aware that he has actually grasped what has been explained to him. They talk just as eloquently and insistently when they want to sell something[483].

They often seem even to attribute a certain mental slowness to the foreigner, that they are convinced that they themselves do not have. That such slowness actually does not exist among them, is demonstrated by the fact that those who had the opportunity of learning Pidjin or European languages, needed only a short time to do so. This became apparent at the mission station in Rakunei with the Păpítă͡lai chief Pō Mĭ́nis through his easy and rapid learning and also in his diligence. Remarkable accuracy is also revealed in the repetition of foreign words[484].

That a good memory is also combined with the quick understanding emerges from Webster's remark[485] that on Uainkatou many natives had given him the name of a captain who had visited the island nineteen years previously.

Self-confidence

The natives, especially the Mắnus and Mătăṅkŏ́l, have a marked self-assuredness that is expressed in secure appearance and accented pride. They feel comfortably superior to others and look down particularly on the Usĭa͡i as not fully adequate people. However, the Usĭa͡i themselves likewise have a pronounced self-confidence even though they also often have to acknowledge in practice the superiority of the Mắnus and Mătăṅkŏ́l. Foreign Melanesians who come to the Admiralty Islands as labourers are regarded as inferior.

They also display a marked self-assuredness towards the Europeans that [78] is often only one step away from insolence. For example, in 1908 Pāk people came high-handedly aboard the *Peiho* and wanted to speak with the captain. Other Europeans were not good enough for them, and they sought to avail themselves of the servility of the coloureds on board.

Occasionally this self-confidence turned into insolence. For instance Po͡am people, to whom the trader Schmidt had forbidden access to the Kŏmŭ́li station, did not leave the island, which they visited regardless, until Schmidt's Melanesians threatened to resort to fisticuffs[486].

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482 I, 1796. p.255
483 Webster, 1898. p.305
484 Labillardière, I, 1796. p.254
485 1898. p.315
486 Vogel, 1911. p.115

The officiousness of the people frequently had a nasty impact on more peaceful occasions as well. Especially annoying is their superior self-confidence during trading, where they feel induced to demand extras[487].

Courage

The Admiralty Islanders, especially the Mǎnus, are generally regarded among the other Melanesians and also among most Europeans who have come into contact with them, as extraordinarily bold and warlike. However among a few Mǎnus, Friederici[488] had to find out that they were definitely not as brave as other Melanesians, and that they withdrew with little courage from a forthcoming battle. Nevertheless, the snide judgement that he accordingly dumped on the much-vaunted bravery of the Mǎnus, may not be generalized. The very ease with which the Admiralty Islanders decide upon a war expedition contradicts it, since as Parkinson[489] justifiably emphasizes, each person risks his neck during war expeditions, and cannot expect any favours from the enemy should he fall into their hands.

However, there is a strict proviso to belief in the courage of the natives, in light of their manner of fighting. Man-to-man fighting is avoided as much as possible, and for this reason they are keen to attack their opponent from behind as much as they can. Webster[490] was surprised to find that spear wounds were usually seen in the back, and he concluded "that they do not present a bold and fearless front to their enemies". The preconception of fighting openly, however, does not extend so far that the danger of a war is avoided. On the contrary, recruiting attempts on Pāk and Pǎlŭăn failed because nobody wanted to leave his village since that would weaken its military strength[491]. On the other hand, the Pǎlŭăn people were happy to have their boys recruited, in order to keep them safe from enemy attacks.

Courage therefore does exist, but they endeavour to nullify the dangers as much as possible. By and large, however, the opinion [79] that the natives might be braver than others, is based on the continual feuds and the related exposure of their disregard for 'outside' life — but not their own. Added to this, Europeans and the more-southerly Melanesians regard their obsidian spears as particularly dangerous weapons, and defensive weapons are totally unknown.

Irritability

The loud and excitable nature of the natives is evident to all visitors to the Admiralty Islands. They cast this aside only after prolonged association with the visitors. The tension aroused by curiosity plays the main role. However, also on other occasions — war or internal squabbles — irritability can suddenly erupt, and in odd cases[492] develops into almost unbridled rage. The impact of this irritability can be particularly disastrous when men of two villages meet, given their constant preparedness for war.

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487 Thilenius, II, 1903. p.122
488 1912. pp.53 *et seq.*
489 1907. p.402
490 1898. p.316
491 *Deutsches Kolonialblatt*, XX, 1909. pp.531 and 896
492 Moseley, 1877. p.416

Self-control

Trials of self-control have not been observed very often, but it follows that since men and women in Păpítă͡lai behaved calmly during blood sampling, they probably know how to suppress misgivings and feelings of anxiety. Furthermore, Moseley[493] quite justifiably suggests that the strong abstinence from betel indulgence among some men indicates strength of character.

Guile and Brutality

A disregard for the life and property of others is characteristic of the Admiralty Islanders. Quite by spontaneous suggestion, the need for slaves, women, and material possessions is met by war campaigns, which are launched without further ado. Thilenius[494] regretted not having photographed girls and women: a chief suggested plundering girls from the village of his father-in-law. This is typical. The Păpítă͡lai chief Pō Mĭ́nis' proposition to give the crew of the *Seeadler* only a big pig and shell money as restitution for several captured Pắlŭăn women[495] demonstrates how easily they undertake such raids.

A defeated enemy is killed without mercy. Often the eyes of the dead and seriously wounded are removed using obsidian daggers, or their heads are cut off[496]. Pắrā people used to take the heads with them and [80] smash them up at home with rocks[497]. Women are similarly killed without thought. Insofar as the natives are cannibals, they eat the slain. Those among them who "abhor" cannibalism, especially the Mắnus, have no scruples about selling corpses, for eating, to their cannibal neighbours or to their trading partners. Among those spared are a few men who can be used as slaves and a few girls who are worth considering as prostitutes for the bachelors' house.

When they want to attack enemies, they first attempt to beguile them by friendliness, until all mistrust is laid to rest; then suddenly, they attack. This happened in a similar manner to most European traders. In no way are such attacks considered contemptible — they even boast about the deed accomplished. Furthermore, attacks on people from other villages who have come to trade, or attacks by those allegedly harmless traders on the inhabitants of the village being visited, are quite common.

However, peace is scrupulously adhered to in all cases where a basket of betel nuts is handed over during a visit to an enemy village, and when both visitors and hosts receive and chew betel nut together[498]. Whoever does not chew betel in concert or does not receive betel at all, does not need to feel obligated to keep the peace. That the right to hospitality is rigorously respected as a general rule, is demonstrated by the Pāk people's being reproached by other natives because they infringe the right to hospitality[499]. Whether this is said with justification or not remains undecided. Also the Mătăn̆kŏl from Pónam, Hă̆ŭs and Ăndră are reproached: they kill outsiders who visit

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493 *loc. cit.*
494 II, 1903. p.128
495 *Deutsches Kolonialblatt*, XVIII, 1907. pp.516 *et seq.*
496 Thilenius, II, 1903. p.129
497 Parkinson, 1907. p.382
498 Thilenius, II, 1903. p.127
499 Parkinson, 1907. p.391

them, with poison magic (*ngam*)[500]. On Lămbŭtjo on the other hand, they have little fear of poison magic (*nan*)[501].

Even though Labillardière's[502] "great sweetness" cannot be attributed to the natives, more thoughts, other than those only brutal and deceitful, are not foreign to them. In 1908 it was learned in Mĭndrūn that a man named Matakabet had deserted his sick, emaciated wife Ba͡laije "because he did not want to watch her die". That may indeed be brutal by European standards, but attests to an insurmountable compassion for the sick person.

Greed

Labillardière[503], who regarded the natives as happy and unspoiled children of nature, according to the attitude of his time, nevertheless had to concede that they carried out thefts with considerable audacity and skill, and that the older people stood out as the most venturous thieves. This skill [81] and boldness subsequently was frequently observed[504], although in 1809 it was scarcely apparent. The tendency to theft seems, like the often-exaggerated claims in trade dealings, especially the demand for purchase-extras[505], to go back to the people's strong feelings of self-esteem. A person demands, and what a person does not receive a person simply takes, as though it were a denied tribute.

The natives are no more honest among themselves than they are with the Europeans. Thefts of dogs or pigs, cheating over the boundary of fishing grounds, and bogus claims on others' fruit trees are certainly not rare[506]. According to allegations made by the people of Păpítă͡lai the Pāk people are particularly dangerous thieves[507]; although this allegation seems founded on a spiteful attitude of the Păpítă͡lai people who have not behaved any better, carrying out attacks on European schooners just like other natives, out of pure greed.

In war campaigns, enrichment through the spoils and the possession of enemy territory with its coconut palms, mineral wealth, and fishing grounds does not play a significant role; nevertheless, nobody spurns enrichment.

A more essential element is enrichment through trade, which is practised extensively by the Mănus in particular, and by many Mătăṅkŏl. They try not to let the Usĭa͡i rise up economically alongside them, and monopolise trading as much as possible, so as not to let the profit escape.

Generosity

Generosity constitutes a strange contrast to greed, and often appears in totally surprising ways. Zöller[508] found "a remarkable propensity for giving" among Mănus from Alim, who were visiting the Purdy Islands. They brought unsolicited foodstuffs, weapons, pieces of jewellery, and

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500 Parkinson, 1907. p.390
501 Thurnwald, 1912. p.444
502 I, 1796. p.262
503 I, 1796. pp.254 *et seq.*
504 Moseley, 1877. p.417; Webster, 1898. p.315
505 Thilenius, II, 1903. p.122
506 Parkinson, 1907. p.398
507 Parkinson, 1907. p.391
508 1891. p.168

other items without asking for payment or expecting to be paid. Webster[509] too, who usually complains a lot about thieving, commends the gift-giving of the natives of Pāk and Pǐ́tĭlu, and emphasizes that the women of Pǐ́tĭlu even sent him over “a large bowl of cooked potatoes”. When mixing among themselves, the natives also tend to be quite lavish with presents and shell money, foodstuffs and the like, although they expect gifts in return. They view trading and exchange of gifts in the same light, and on the south coast of the main island they call them both *kawǻ́s*[510]. A certain display of splendour is essential to *kawǻ́s*. Also, the gifts and reciprocated gifts at [82] ceremonial occasions such as marriages, funerals and the like, bear the stamp of *kawǻ́s*. The propensity for gift-giving thus constitutes a form of initiated bartering on a grand scale, in which a person shows himself to be gracious and expects at least an equally-gracious gift in return. On the other hand, for some time they do not appear to have often given a *kawǻ́s* gift to Europeans, since the latter probably usually misinterpreted its character and offered no gift in return for the perceived gift. In 1908 a *kawǻ́s* was given on only one single occasion, by a Pătŭ́si chief; it was however handed over as an additional gift after a bartering session. Such bonuses are customary during interactions among natives — for example at spear-buying on Lóu — and are not given only in those cases where no value is placed, (in the eyes of the partner (usually the Usĭ͡ai)), on being an open-handed, wealthy man.

Honesty

The convention of initiating a trading transaction by giving a gift without the expressed demand for a reciprocated gift, and the expectation that a buyer will show himself to be gracious and give a bonus at the completion of the transaction, is based on the natives’ feelings of honesty. Nobody neglects to respond to a *kawǻ́s* gift to the best of their ability, so as not to bring himself into bad repute and, likewise, everyone endeavours to pay his debt from a transaction. Also with the Europeans who are ordinarily measured by other standards, such candidness in trade occasionally comes to the surface. For example a Hǻ́răńgăn man gave Moseley[511] to understand, after a trading session, that he need give nothing more, since he was completely satisfied.

Testament to a generous spirit was also shown when Păpítă͡lai people absolutely wanted to give the Hamburg Expedition a wild pig killed at their request, complete or, at least in part, when they themselves were not the hunters.

Standing toward the Europeans

Whereas Carteret complained about an attack by the natives and did not himself treat them gently, from Maurelle’s visit onwards, friendly behaviour was always observed by the men who came out to the foreign ships in outrigger canoes. Barter trade with the Europeans began very early, and iron especially, which probably came into the natives’ possession for the first time through Maurelle[512], had been highly sought for a long time. At the arrival of the [83] *Challenger*, men were immediately on the scene with turtle shell, mother of pearl and the like, wanting to begin trading. They put no obstacles in the way of landing, although they were initially uncomfortable,

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509 1898. pp.305 and 309
510 Mead, 1931. p.64
511 1877. p.416
512 De Rossel, I, 1808. p.140

probably because of their women. However, once they perceived the peaceful disposition of the *Challenger*'s crew, their mistrust subsided. A few years later, men from Lămbŭtjo went aboard the *Seabird* without hesitation, whereas earlier, prolonged blandishments had been necessary. However, women never went aboard the *Seabird*[513], with the exception of one, probably a prostitute. Later too, women were seldom seen by the Europeans; it appears that they were always sent into the bush in time, to keep them safe from possible fights. In 1908 women could be measured anthropologically initially only in Păpítă͡lai after encouragement from Pō Mĭ́nis, the chief, who was already comfortable with Europeans.

The natives' tendency to theft and violence brought them into steadily increasing conflict with the Europeans from the eighties onward, and through summary punishment of many villages, where innocent people must also have suffered, and through the sometimes not blameless behaviour of trading schooner crews, the bitterness of the natives grew stronger. The Europeans, who were probably initially admired as "*Jap*" — pale-skinned almost legendary folk with rich treasures, were now regarded as unwelcome intruders, and the people sought to gain possession of their wares by stealth and by force, and also to defend their property. Remarkable too, is the evidence of the otherwise quite unreliable Festetics de Tolna[514] — the Nauna people had felt to him more like sellers than buyers.

In odd villages the natives soon accepted the immutable fact that the Europeans were simply there. And so they adopted the attitude of always being friendly towards them during visits to the Purdy Islands[515], and sometimes went into service on the plantations. Where people could not make up their minds to work with the Europeans, often the intention was not to weaken the defensive power of the village. The trend towards willingness to allow themselves to be recruited, proceeded at different rates in individual villages. Thus worker recruitment was fruitless on Sōri and Hắrăngăn in 1908, while at the same time Lŏ́nĭu offered 21 recruits for the police troop[516].

Through their contact with the Europeans, the Mắnus and a few Mătăn̆kŏ́l gained even more importance compared with the Usĭ͡ai, since they sold them the goods as distributors for the traders[517]. [84]

Vanity

Thilenius[518] emphasizes the vanity of the Admiralty Islanders as a trait that, like their vivacity, was reminiscent of the Papuans. Unkempt hair, as seen on St Matthias, is never found among the Admiralty Islanders and most of them love to wear decoration, in fact to a surprisingly opulent extent among a few of the younger men. The women and girls too are entitled to adorn themselves, and do so, although usually to a somewhat lesser extent than the men. When old men adorn themselves excessively, it is regarded as derisory and the subject of banter.

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513 Miklucho-Maclay, *Izvestia*, 1878
514 1904. p.126
515 Zöller, 1891. p.168
516 *Deutsches Kolonialblatt*, XIX, 1908.
517 Thilenius, II, 1903. pp.118 *et seq.*
518 II, 1903. p.122

Sense of Shame

Hunter[519] found no clothing among the men. Labillardière[520], who was approached by men wearing penis shells, saw on the other hand that having removed the shells, they then hastily put on a tapa binding. Other men who had no tapa binding with them, removed the shell but without any appearance of shame. Moseley[521], too, saw that the men having removed the penis shell immediately reclothed themselves. Also, in 1908 on Pónam men when removing the penis shell had concerns about allowing the naked penis to be seen, and turned away when removing the shell. For the dance itself, women and boys are allowed to watch on Pónam and the south coast of the main island[522]. On Nőru dancers from Hắrăṅgăn wanted the women present to go away, because they did not want to exhibit themselves before them with the penis shell. However, this seems only to be contingent on the discretion of foreigners, for whom on Nőru, Kŏműli, etc. penis shell dances are performed from time to time. The penis shell dance is admittedly regarded as something out of the ordinary and with a sexual emphasis, in contradiction to the conventions of everyday life, however people probably experience little shame in it. Only the disapproval of the Europeans (or also their acclaim) allows the obscenity to come fully into the consciousness of the men[523]. To the untainted perception, covering of the glans with the penis shell seems to suffice; however, the denuded penis appears to be offensive.

Elsewhere the men are always clothed, and only the Mắnus are purported sometimes to lay aside the tapa apron in their canoes and also in their villages (??) according to Parkinson[524]. Klink[525] even reports that the men and women (probably on Pāk) are commonly “completely naked” and put on an apron only on special occasions. This is in marked contrast with all other situations, and even if it is possible that the men in the canoes among themselves [85] lay aside the tapa apron to protect it from water, going around naked in the village contradicts the simplest imperatives of common decency.

In contrast in 1908 the men, even without the presence of women, could be persuaded either only after great effort or usually not at all, to take off their apron for an instant for anthropological measurements; and information about whether circumcision had been carried out in individual men could not be gathered by others.

Margaret Mead[526] too found a sense of shame bordering on prudery among the Mắnus of the south coast of the main island. No man stripped there in the presence of others, nor did any woman or girl before their fellow females, much less before the opposite sex. Every sexual act and defecation was concealed, and men knew nothing about the menstruation of unmarried girls[527]. Prostitution in the men’s houses and women’s houses in Bojang and Savoi[528] reveals however that there are also less prudish customs.

Boys and girls are unclad only during very early life. A long time before puberty they receive — the girls earlier than the boys — the clothing of the grown-ups, which they then no longer remove in the presence of others.

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519 Hawkesworth, I, 1773. p.384
520 I, 1796. pp.260 *et seq.*
521 1877. p.398
522 Mead, 1931. p.34
523 Ebert, 1924. p.51
524 1907. p.370
525 Manuscript
526 1931. pp.38, 130, 161
527 Mead, 1931. p.124
528 Leber, 1923. pp.262 *et seq.*

Colour Sense

Thurnwald[529], who considered the question with a Lămbŭtjo man, found little concrete in the colour descriptions of the Admiralty Islanders. These always consisted of a series of shades. The survey revealed the following principal colours: 1. sulphur-yellow, buff; 2. teal-blue, chlorophyll with a tinge of blue; 3. red; 4. pale, white; 5. dark, black; 6. dingy reddish brown, dark purple; and 7. red ochre.

Seat of the Emotions

Alarm and astonishment originate in the liver, in the opinion of the natives. Anger begins in the belly or, at least, internally. Sorrow has its seat in the neck. It is said of hunger that it eats men.

Expression of Emotions

Astonishment is expressed by sticking one finger, (for great astonishment a second finger), between the teeth. Miklucho-Maclay[530] saw people who had no hands free showing their astonishment by [86] poking out their tongue, "with the degree of amazement being marked by the length of extruded tongue". Even more frequent than these gestures is a loud "ah" as a sign of astonishment. While Miklucho-Maclay says that he heard no sound for astonishment, Schnee[531] found that a finger was stuck in the mouth and simultaneously they ejaculated "ah". Again, in 1908 in Păpítă͡lai, on Hăŭs and on Pónam only a loud "ah" was noted, without any gesture.

Wonderment and delight are expressed at the same time by slapping themselves on their naked thigh[532].

Moseley[533] saw admiring astonishment over the *Challenger* expressed "by holding up the hands vertically, with the palms facing forwards, and moving them upwards with a series of jerks as if to express the great height".

Pleasure is displayed by clapping their hands, and anger by furious shouts and contraction and twitching of the facial muscles particularly around the eyes. Distrust and bewilderment are expressed by wrinkling the eyebrows[534].

A woman who had been terrified beyond all measure by the unexpected encounter with Miklucho-Maclay shuddered to such an extent that the load she was carrying fell from her head, and her legs threatened to give out. Her face bore the expression of extreme terror, her voice failed, and great drops of perspiration flowed over her forehead.

They display fury by raising the upper lip, biting their teeth together, wrinkling the eyebrows, and lowering the head in the direction of the object of the anger[535]. Mikloukho-Maclay watched a man who had bumped his knee against a tree stump seize a piece of coral limestone and belabour the tree stump with it. Then the relieved man sat down and began to blow on his knee and rub it. Nobody laughed at his behaviour.

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529 1913. p.12
530 *Izvestia*, 1878
531 1904. p.165
532 Schnee, *loc. cit.*
533 1877. p.395
534 Moseley, 1877. p.396
535 Moseley, 1877. p.395

Generally, Miklucho-Maclay saw “more often differences rather than commonalities” with our way of expressing emotions. In one case, when a group of men suddenly sprang up in excitement with loud, lively talk upon receiving a message, it was impossible for him to work out whether pleasant or disagreeable news had so aroused them. It was the same for him in many other cases, where their facial expressions were incomprehensible.

In excited conversation the voices often rise to a falsetto, “producing a sort of affected girlish tone”[536]. Webster[537] observed on Uainkatou that the [87] natives repeated individual words more and more quickly, and that they grew steadily louder, until their speech had transformed into a scream. On Ăndră Miklucho-Maclay heard the natives repeating the same word very rapidly and for a long time. They did this alternately or in pairs, and were endeavouring to outdo each other in endurance and rapid speech. The whole thing gave the impression of being pure entertainment.

Laughter is no different to that of Europeans, but can go on for so long in children that they finish up rolling about on the ground.

To encourage one another to a more lively rhythm in rubbing firesticks, paddling, drumming, manhandling canoes and any vigorous physical effort, they emit a sharp hissing between their teeth[538].

Women in Lőnĭu, who did not want to undergo anthropological measurement by Miklucho-Maclay[539] covered their faces with their hands, lowered their heads, and turned away.

Mothers express their love for a baby by squeezing and cuddling the child. In so doing they sniff and bite it. Also licking dirt off a child’s face appears to be an expression of motherly tenderness[540].

Gestures of Acceptance

Affirmation is expressed by an abrupt slight throwing back of the head. At the same time the eyebrows are raised[541].

For negation they tap the outstretched forefinger of their right hand sideways against the tip of their nose. In an immediate negation the tap is rapid; in a more hesitant denial it is slower and transforms into rubbing the tip of the nose[542].

To beckon, they raise the arm, open palm forwards, and move it in the direction of those beckoned[543].

In canoes that approached the *Challenger* Moseley saw peaceful disposition expressed by holding the paddles high and beckoning with them.

Items being offered for sale are held up high in the canoes to show them clearly.

Invitations to use prostitutes are made by closing the fist and inserting a finger of the other hand into the fist. Ideally the fist is placed on the knee of the prostitute[544]. A man who had four wives used the same gesture to make Miklucho-Maclay understand — the man went to each wife in turn and made the sign. [88]

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536 Moseley, *loc. cit.*
537 1898. p.316
538 Vogel, 1911. p.112
539 *Izvestia*, 1878.
540 Miklucho-Maclay, *Izvestia*, 1878.
541 Thilenius, II, 1903. p.126
542 Moseley, 1877. p.396
543 Moseley, *loc. cit.*
544 Miklucho-Maclay, *Izvestia*, 1874; cf. also Festetics de Tolna, 1904. p.138

Sign Language

When communicating with people who do not speak their language the Admiralty Islanders attempt to carry on a conversation using gestures. Even when they think that their remarks have not been properly understood, they aid their words by signs. Thus, when offering an object for sale, they readily make a characteristic gesture for its availability. This can go to the extent that anybody who wants to buy a penis shell puts it on and performs dancing movements with it.

To demonstrate that a man had been killed by a flying spear, they first make the throwing gesture. Then they quickly put both hands on their chest or side, throw their head back, close their eyes and poke their tongue out. That a meal is ready is announced by holding their hand up to their mouth as though putting something in it[545]. Sleeping is typified by closing their eyes and lying their head on their arm[546]. According to Miklucho-Maclay's observations, sometimes an astonishingly great amount of time is devoted to this, to portray an event by signs, and the gestures are manifoldly analogous to those of the inhabitants of the Maclay coast. [89]

[545] Miklucho-Maclay, *Izvestia*, 1878.
[546] Festetics de Tolna, 1904. p.131

B. Specialist Section

I. Body Attire

Body Painting

The colours for body painting are powdered black pyrolusite, red ochre, and white lime. These are rubbed with oil and then put on their bodies. Painting with pyrolusite gives the body a metallic sheen[547].

Red and black are used the most. Men in particular paint their chest and face with these. Frequently in Lőnĭu, on Pĭ́tĭlu, in Mŭ́ndī and on Pāk one half of the face is painted red and the other black. At Nares Harbour Moseley[548] saw one half of a face painted red while the other side was unpainted. Often also, crude black and red lines appear on their faces, occasionally extending as far as the chest. For example Lőnĭu men had vertical red and black stripes running from their forehead, over face and neck and down to the stomach. At a dance festival Thilenius[549] found a red-white line on the right cheek with a correspondingly-coloured line on the left breast or vice-versa, while uniform painting of identical facial sites was absent. Moseley[550] on the other hand records that men painted themselves with donated European colours in curved lines "leading from the nose under each eye". Such curved lines — also those surrounding the eyes and passing downward — are common in red or black on Lămbŭ́tjo[551] and Pāk. Thurnwald heard *gatalo* and *tatalő* on Lămbŭ́tjo as the names of patterns where they play a role. Krämer saw a face painting in Lőnĭu with a vertical line on the forehead representing the head-, two curves on the eyebrows and cheeks representing the wings-, and a diamond on the nose representing the body- of the frigate bird, in exactly the same form as its representation on spears and daggers.

Parkinson[552] talks of face painting with red, black or white lines and spots over forehead, nose, eyes and cheeks, as men's dance paint. Otherwise, white is seldom used, and Moseley does not mention [90] it at all. In 1908 a narrow white stripe was seen around the hairline on the forehead and temples of a boy from Pā̆lieas(?) on the south coast of the main island, and a Pónam man had two white curves on each side of his chest, extending as far as his upper arm and, in addition, full painting of the lower leg with limewash. Otherwise, white was seen only as a women's mourning paint. For example a widow on Pāk[553] had the right half of her body totally white except for hand and foot, and the entire body of a widow in Pĭ́tĭlu was smeared greenish-white with a dye of unknown origin.

Pĭ́tĭlu men in mourning paint their bodies in single stripes of black dye. As a sign of mourning, a widow on Lóu completely blackened her upper body. Moseley[554] saw exclusively black lines on the arm, chest and face of a man that he took to be a priest, and a different, probably

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547 *Atlas*, 1796. Plate 3
548 1877. p.401
549 II, 1903. p.141
550 1877. p.401
551 Thurnwald, 1913. p.134, and Plate 4, Fig.55a b–56
552 1907. p.365
553 Illustrated in Ebert (1924. Plate before p.1) as "Papua"; photo, Klink
554 1877. p.402

more comprehensive blackening of the body in a group of women who had probably gathered for magic treatment.

Both Labillardière[555] and Parkinson[556] mentioned painting the body red, which has to be assumed to be full skin coverage.

Women appear to paint themselves only in cases of mourning, and only rarely otherwise. Painting is much more common among men and no special reason is required, although it is more extensive and popular during dance festivals. In 1908 a few men had painted their faces in every village. Only in Drugűl were no painted men seen, probably more by accident. The Drugűl people are very familiar with dyes for body painting, especially as they collect them in the bush and trade them to Hấŭs. On Pĺtĭlu it was apparent that face painting was consistently richer than in Păpítălâî.

Decorative scarification

In his atlas Labillardière[557] illustrates a man with tiny round decorative scars running up from the nipples to his shoulders, where they form a circle. Moseley[558] too mentions these scars as chest and shoulder decorations that often continue over the back "in two lines leading obliquely downwards from the shoulders to meet one another about the middle of the back". He did not see other patterns. Thus the decorative scarring hardly goes back to the influence of the Buka workers in Kŏműli as Thilenius[559] assumed, even though in individual cases Buka people might embellish Admiralty Islanders with their familiar scar patterns. [91]

In 1908 small round decorative scars were seen fairly often among men and also a few women, whereas earlier Webster[560] alone reported on a Pāk woman: "she had a great many small, round marks burned into her body in rows". This seems to be an exceptional case, as this woman also had a male hairstyle. In 1908 decorative scars were observed on women in Păpítălâî, Műndī and on Pĺtĭlu. Boys and girls were never seen with scars. Instead Moseley[2561] reports that a twenty-year-old man had only "the spots fresh and raw, apparently by burning". The Usĭâî of the north coast of the main island are also recorded in 1899[562] in regard to branding scars[563]. From Pō͡am too Dempwolff[564] mentions "moxibustion" (*lălaíp*).

In 1908 decorative scars were seen on the chest and arms of men from Pāk, Lămbűtjo, Pō͡am, Palŭăn, Păpítălâî, Pĺtĭlu, Hấŭs, Ăndră, Pónam, Hắrăṅgăn, Drugűl, Műndī, Dra͡uŭ, and from Mbűnâî. The most common is an arrangement of scars in a line down the arms; a cluster of scars on the upper arm near the shoulder; and a dotted line from the shoulder to the centre of the chest. Of these three arrangements, two of them are often connected. The line running obliquely over the chest can also be applied to both sides of the body, though this is less common than one side. Rare too is a duplication of the chest line, or a cluster of dots over the nipples sending out a line to the arm. Only one Palŭăn man had an upward curve below the nipple on the right side of his body.

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555 I, 1796. p.263
556 1907. p.365
557 *Atlas*, 1796. Plate 3
558 1877. p.401
559 II, 1903. p.123
560 1898. p.305
561 1877. p.401
562 *Deutsches Kolonialblatt*, X, 1899. p.699
563 1905. p.209
564 1905. p.210

Complex patterns were seen only in odd cases on Hắŭs and Pāk, and a P͡oām man, who combined the scars with a tattoo. On Pāk this involved five rows each of three scars with a curved row of scars over the chest on each side adjoining these.

Decorative scars are found also on Lóu; these are called *gul* according to Krämer, whereas Friederici's[565] vocabulary makes the statement "*kŭl* = to make decorative scars, to inject". On Pāk they use the same expression, but according to Krämer it is *gun*. Schnee[566] gives the local name for scars as *gameit*[567] without naming a location.

Women's scars are restricted to single or double-sided lines from the middle of the chest to the shoulder, which may be joined to lines down the arms, or a cluster of points on the upper arm from which the arm lines extend. Below the V-shaped chest decoration Miklucho- [92] Maclay[568] saw zig-zag lines of small incisions down as far as the navel among Lŏnĭu women. The scar decoration observed by Margaret Mead[569] on a Móuk girl, who had a lizard figure between her breasts, was an isolated case. Margaret Mead described this as "in the fashion of the Matankor", and declared that rubbing lime into the incisions had enlarged the scars.

Decorative scars on the back were seen only once, in a Păpítălâi woman, as an irregular arrangement in conjunction with lines on the chest and arms.

The burn scars are made with charcoal. Raised scars, which are found most often, arise as a consequence of "rubbing in any kind of material" to a small wound incised by obsidian[570].

On Pāk, in addition to the small round decorative scars, rows of small incisions were observed cut into the face, using obsidian; for example, one man had a series of vertical incisions on each cheek with a star-shaped figure between the eyes. Other examples of such incisions were seen on the Mătăṅkŏl islands in the north and north-east of the main island. They might be nothing other than tattooing where dye has not been used, and correspond totally with normal tattooing right down to this point. Miklucho-Maclay[24] saw scars of this type on an Usĭâi woman — probably a prostitute — in great numbers of asymmetrical lines that often crossed, on face, body and thighs.

The children in Pár̄ā and the neighbouring Mắnus villages[571] burn temporary branding scars onto their arms with glowing pieces of wood, as a game.

Small scars develop also from the common treatment of headaches on Sabo, where a shark's tooth tied firmly into the fork of a wooden handle, or a sliver of glass in the rib of a palm frond, is thrust into the skin of the forehead to ease the pain by blood-letting[572]. On Sabo this instrument is called *bé ei* or *pé ei*, like the little tattooing hammer seen in 1932.

Tattooing

According to Thilenius[573], tattooing originally extended only to men, whereas Moseley[574] found it universally on women, and on only two men as exceptional cases. Miklucho-Maclay[575]

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565 1912. p.226
566 1904. p.211
567 Cf. *kamuĕ́t* in Lŏniu and *gamŭét* or *kamŭét* on Pĭ́tĭlu as the general designation for decorations.
568 *Izvestia*, 1878
569 1930, p.118 Figure
570 Miklucho-Maclay, *Izvestia*, 1878
571 Mead, 1931. p.96
572 Bühler Collection, Basel
573 II, 1903. pp.124 *et seq.*
574 1877, p.401; 1879. p.463

also saw women as being more richly tattooed than men. He ascribed this to the fact that tattooing stands out better on their paler skin than on the darker, wrinkled [93] skin of even thirty-year-old men. The Hamburg Expedition found tattooing on men of Pāk, Păpítălâi, Ăndră, Palŭăn, Mbŭn͡aî, Pō͡am, Hắrăṅgăn, and the Sōri men in Gắramaṅ. No tattooing was noted among women, which does not mean that it was totally absent. Sōri men, where tattooing was quite common compared with men from other places, were reportedly tattooed by the women. On Lóu and the Fedarb group Thilenius found very many, though not all men tattooed, and also noted beautiful patterns on children. For the actual tattooing they use little obsidian knives to make small incisions, about 5 mm long, in the skin[576]. Originally they did not use tattooing needles or corresponding tools[577], but in 1932 Bühler obtained tattooing hammers on Sabo (*pé ei*) in the shape of two wooden sticks about 12 cm long with two or three sharp fish bones inset between them at one end. That end was wrapped round with bast fibre. For tattooing, the instrument with the bone points is held in the hand and tapped gently. Also, Krämer learned from a Lóu man that tattooing was usually done by striking and, more rarely, by incising.

The patterns are usually only fine, and do not cover any great skin surface. They are barely visible at short distances[578]. Moseley saw a simple ring around one eye of a boy; a man with rings around both eyes; and likewise among the women "rings round the eyes and all over the face" and "diagonal lines crossing one another so as to form a series of lozenge-shaped spaces". Thilenius determined a series of incisions round the eyes, lozenges following the hairline on the forehead and into the neck, and a series of lozenges on the spinous processes of the vertebrae, to be tattooing (*kamúmet* in the south-east), and he noticed that the lozenges were formed from individual incisions. Tattoo incisions seen on the face of a man on Pāk in 1908 were: small circles to the sides under the eyes, a double-arch of dashes directly under each eye, and a fish-like figure on both sides of the chin as well as on the right cheek. Other men had figures on random places of their chests and arms. In Păpítălâi only star-shaped ❋ figures composed of simple lines were observed over the root of the nose and alongside the outer angle of the eye. These were similar to what Miklucho-Maclay saw, as "*madalamai*", on the bridge of the nose, the temples, and under the eyes, together with fan-shaped figures between the angles of the eye and the temples. On one occasion in Păpítălâi a cross was seen on the chest. Men from Mbŭn͡aî, Palŭăn, Pō͡am and Ăndră had a fairly random jumble of short tattoo lines. A Pō͡am man had combined them with decorative scars into a complex pattern. A tattoo called *niaue* [94] on a Hắrăṅgăn man consisted of short strokes round the eyes and three double rows of such strokes on the forehead, one running vertically over the nose with the other two to the sides, converging on the root of the nose. Krämer observed a man from Lóu wearing a somewhat irregular pattern of incised tattoos on forehead, upper arm, right breast, and the back in particular, combined with decorative scars. These were predominantly angles (*gara* = the frigate bird) and, in places, diamonds provided with a vertical line. A V-shaped pattern was declared as *búon*; with lateral lines added, transforming it into an M, *badun* = head (of the frigate bird).

Tattooing appears to be no more than a decoration, and correspondingly its execution is determined by taste and possibly also by the desire for individuality. Only in chiefs is it supposed to be requisite, although Thilenius doubts this allegation. Possibly the ornamentation signifies wooden human figures that are clearly indicative of individual tattoo designs[579], although in practice the 'wholeness' of tattooing is hardly ever attained. Even though in a few instances, as

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575 *Izvestia*, 1878
576 Thilenius, *loc. cit.*
577 Moseley, *loc. cit.*
578 Moseley, *loc. cit.*
579 Thilenius, *loc. cit.*

Moseley and Thilenius allege, part of the tattooing is already done on boys, this has nothing to do with the celebration of manhood.

According to Friederici[580] tattooing is called *ṅŏmṅŏm* on Lóu and *āmăm* on Pāk[581]. The finished tattoo is called *laolao* on P͡oam, according to Dempwolff[582].

Ear Piercing

Universally, the ear lobes of boys and girls are pierced at about the beginning of puberty or between their eighth and tenth years. This is carried out with a sliver of obsidian. In Pătŭsi and on Pāk the wound is protected until it heals, with pieces of palm frond sheath sewn into a tube.

Should the boy or girl violate the *tabu* proscriptions that are in force before the ceremony, people fear that the ear lobe will tear. If before or during the confinement at the celebration there is sexual activity by the adolescent boy or girl, the widened ear lobe is ripped off by way of punishment[583].

This is viewed as equally scurrilous, since ear lobes not bored are grounds for mockery.

On Lóu in 1908 a woman was seen who, from a dark mixture, probably twine overlain with a mud- or gum mixture (*Parinarium* putty?) had produced a replacement for her torn ear lobe [95] and had fixed it so skilfully to her ear that from a distance people could be mistaken.

They insert a spiral made from a strip of pandanus leaf[584] into the pierced ear lobe, which gradually enlarges the opening. On Pāk Friederici saw a system of four such leaf rolls in the openings in the ear lobes. When the lobe is sufficiently enlarged, so that it hangs down a little, the usual ear ornaments are attached, or the ear lobe is allowed to hang down unadorned.

Nose Piercing

The nasal septum is generally pierced in both men and women. This is performed on older children some time after the ear lobes are pierced. However, among the Mănus, according to Parkinson[585], piercing of the ear lobes and nasal septum should happen at the same time. A thorn, which is left in the wound[586] to prevent it from closing, is used for the operation.

Jewellery is worn in the pierced septum, gradually pulling down the septum's lower edge through its weight "so that in a profile view of the face the large aperture in the septum is looked through by the observer"[587] and the shape of the nose is perhaps altogether changed by this custom[588].

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580 1912. pp.226 *et seq.*
581 Also according to Krämer
582 1905. p.210
583 Thilenius, II, 1903. p.133
584 Labillardière, I, 1796. p.264; Moseley, 1877. p.400; Thilenius *loc. cit.*; Friederici, 1912. p.42
585 1907. p.400
586 Parkinson, *loc. cit.*
587 Moseley, 1879. p.460
588 Thilenius, II, 1903. p.121

Circumcision

According to Parkinson[589] and Friederici[590] male circumcision is carried out only on Pāk and Tong and in Lo̍nĭu. According to Parkinson it happens at the same time as the haircut of the boys and — at least on Pāk — after the ear piercing ceremony according to Friederici[591], but prior to this, according to Chinnery[592]. Friederici thinks that it is carried out as *Incisio*[593], whereas Chinnery talks of *Circumcisio* on Pāk. Similarly, in 1908 universal circumcision was found only on Pāk and Lo̍nĭu (Tong was not visited), with one case in Păpítălâ͡ĭ, while the men of Pĭ́tĭlu, Kyĕlâ͡ŭák, Mbŭ́nâ͡ĭ, Drâ͡uŭ, Hắŭs, Drugŭ́l, Ponam, Sisi etc. were uncircumcised, as Friederici found also on Lóu, Móuk, and Palŭăn. Labillardière[594] too saw only uncircumcised men. Hence, for the boys from Pónam, Hắŭs, and Drugŭ́l, there is no fixed time for the first entry to a canoe house. Circumcision in Păpítălâ͡ĭ does not seem to be [96] universal or obligatory. In fact a few natives energetically disputed that it ever happened in Păpítălâ͡ĭ, while others declared that it was universally practised.

Circumcision takes place in the canoe house or bachelors' house and is carried out with an obsidian knife[595]. Now, slivers of glass are also common as a tool.

Enlargement of the Teeth

Miklucho-Maclay[596] was struck by an enlargement of the incisor teeth and, in some cases also the canines, in many people on the main island. Most commonly he found hypertrophy of the maxillary incisors and was able to measure one incisor tooth of the upper jaw as 24 mm long and others 11–12 mm long. Not uncommonly, the teeth of the lower jaw were likewise enlarged. The upper dental arch always projected beyond the lower. Many people had vertical teeth while others had strongly projecting teeth. Since he also found enlarged teeth among boys, and less commonly, among women and girls, he concluded that it was an inherited, and not a pathological, hypertrophy of the dental tissue. Thilenius[597] ascertained that only the more distinguished men had enlarged teeth as an artistic product, and were very proud of them. As Miklucho-Maclay also later assumed[598], Thilenius traced the enlargement to development of dental calculus due to deliberate avoidance of tooth cleaning, and using the anterior teeth for chewing, and he ascribed contribution of betel lime as a contributing cause. They produced the desired shape in enlarged teeth by filing, and made sure not to damage them when eating or chewing betel, even though the enlarged bulk is fairly tough.

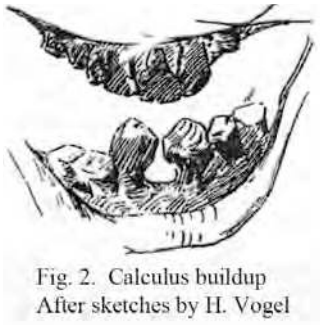

Fig. 2. Calculus buildup
After sketches by H. Vogel

In 1908 enlargement of the incisor teeth, usually the two upper

589 1907. p.399
590 1912. p.46
591 1912. p.41
592 p.58
593 1912. p.46
594 I, 1796. p.261
595 Friederici, 1912. p.47; Chinnery, p.58
596 *Izvestia* XIV, 1878
597 II, 1903. pp.122 *et seq.*
598 *P.L.S.* X, pp.683 *et seq.*

centrals, was also observed in several people. These were always chiefs or prominent men, as Parkinson[599] also surmised. One chief declared simply that his dental calculus, like his plait glued together with red clay, was a sign of chiefly status, Fig. 2. Calculus on the upper incisors projects between the lips; in one man, who had a marked calculus deposit only on the lower incisors, the lower lip was pushed forwards. His enlarged teeth were so loose that they wiggled when touched and threatened to fall out. In another elderly man the upper incisors were [97] enlarged and firmly fixed, while both central incisors of the lower jaw were missing and the two enlarged laterals were loose. On the other hand, Miklucho-Maclay[600] found that enlarged teeth sat firmly, and also resisted pressure without causing pain. Usually, according to the observations of the Hamburg Expedition, all four upper- and the two central lower incisors were enlarged, often to such an extent that the lips could barely close in front. Like the normal teeth, the enlarged teeth are darkly stained from chewing betel (cf. Plate 5).

Hair Style

Of the hair style of the Lóu natives Hunter[601] says “their hair appeared wolly [*sic.*], and was knotted or tied up upon the top of their heads”. Labillardière[602] enlarges upon this account with the remark “Their hair is frizzy, and black in colour; they often redden it with ochre mixed with oil; sometimes they relieve it with a head band of tree bark.” This might relate to Nauna and Los Negros. Bound up hair is mentioned later from Lămbŭ́tjo[603], from the north-west and north of the main island[604], Pāk[605], and other parts of the group[606]. Friederici[607] saw it on Palŭăn and remarked that this hairstyle had earlier been generally widespread, and originated in those times. In 1908 this hairstyle was seen among people from Pāk, Pĭ́tĭlu, and Hā́ŭs, and also in Drugŭ́l. They let their hair grow very long, sweep it backwards and wrap the tuft at the back with a broad band of *tapa* (*pā́rŭn* on Palŭăn[608]) or palm frond which can be either green or dried; or palm frond sheath sewn together with rattan or cords and occasionally coated with *Parinarium* gum. In Buboi tubes like this are called *káowo*, and in Lesau *päragg*[609]. On Pāk a type of wide-mesh net made from strips of bast fibre is stretched over the ends of the hair extending backwards beyond the band. By smearing the hair with coconut oil and red ochre it is dyed dark crimson. The dye mixture is put on so thickly that the oily red colour drips down in front, especially to the sides in front of the ears. The hair shape is also somewhat altered by the dye method. The hair left very long in such hairstyles is no longer tightly wound but more woolly, and its tight windings are pulled apart[610]. According to Thurnwald[611] *bī́biu* blossoms are used for hair dyeing on Lămbŭ́tjo. This hairstyle was never [98]

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599 1907. p.365
600 *Izvestia* XIV, 1878
601 1793. p.240
602 I, 1796. p.263; *Atlas*, Plate 3
603 Robertson, 1888. p.56; Miklucho-Maclay, *Izvestia*, 1878
604 A. de Herrera 1876. p.216
605 Webster, 1898. p.302
606 Thilenius, II, 1903. p.120
607 1912. p.39
608 Friederici, 1912. p.225
609 Bühler Collection, Basel
610 cf. Thilenius, *loc. cit.*
611 I, 1912. p.448

seen in old men. According to Parkinson it is adopted only after marriage[612], and among the Ŭsĭa͡ĭ it is worn only for a dance[613].

Even more widespread is the custom of letting the hair hang down loosely or piled up in the 'Papuan hairstyle'. Moseley[614] saw it only among men of 18–30 and thought it was a battle hairstyle. The hair piled up with combs is often parted in the middle[615]. The piled-up hair was occasionally dyed red, but only on Hā́ŭs, among the neighbouring Ŭsĭa͡ĭ, and on Pónam. Moseley also describes it as "often reddened and greased". Hair was only in rare cases worn long in Drūbiū, Dra͡ŭŭ, and Lŏ́nĭu, and then it was decorated with feathers and vines or with flowers; otherwise it was a woolly head of hair cut fairly short. Aside of the shock of hair and the Papuan hairstyle, medium-length hair was seen on Hā́ŭs, with sections shaven from the hairline, above the eyes.

Fig. 3
Pony tail. Worn at a "Sing-sing"
1057 I. Length 38 cm.

On Nauna[616], Pāk, Hā́ŭs, and Lămbŭ́tjo on Bird Island Bay and occasionally also in Lŏ́nĭu, the hairs in a hank at the back of the neck are glued together with ochre which hardens into a red substance. Individual braids of this type extend right down below the girdle. Only the upper part appears to consist of living hair — the rest is hair that has been cut off and glued back on. On Hā́ŭs and on Bird Island Bay an even wider plait was seen, giving the impression that it was composed of several hanks side by side. On Hā́ŭs individual braids were wrapped in beads. On Bird Island Bay the plait was obviously thickened below and hung with tassels (Fig. 3, (cf. Plate 5)). Horizontal threads were woven through it to hold the hanks together. On Hā́ŭs the matted braids are called *dssa*[617] or *kabuă̆r*, and on Lămbŭ́tjo *kamuṅbā́l*. A Mbū́na͡ĭ man in Mĭndrū́n wore two matted locks hanging down behind his ears, as a sign of mourning for his dead brother.

Medium-length hair appears in Drūgū́l with an unmatted longer tuft on the neck. In Pĭ́tĭlu the hair is often shaven with only one small lock, or two, left on the neck. In Lŏ́nĭu and on Hā́ŭs only boys were seen with shaven hair with one tuft on the neck. Kyĕla͡ŭá́k people often have the back of the head close-cropped and the hair on the front half of the head razored between long twisted locks, or totally close-cropped. [99]

According to Parkinson[618] the Mắnus have the custom of letting their children's hair grow sufficiently long until they can bind it into a tuft, then have it completely shaved off by the sorcerer, and then never cut again. However the children's hairstyle is not consistent. For instance, boys were seen on Bird Island Bay with the neck tuft mentioned above, others with uniform mid-length hair, and one whose hair was longer round his face than anywhere else. Very small children were shaven bald. Moseley[619] saw boys only with shaven heads.

Women are almost universally bald or shaven[620]. Only in rare cases do they have somewhat longer hair, which could probably be traced back to neglecting to shave it. According to

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612 1907. p.399
613 1907. p.381
614 1877. pp.400 and 458; 1879. pp.385 and 461
615 Parkinson, 1907. p.365
616 Festetics de Tolna, 1904. p.125
617 This is also the name of a fruit.
618 1907. p.399
619 1877. p.400; 1879. p.461
620 Cf. Moseley, 1877. p.400; Friederici, 1912. p.37; Leber, 1923. p.202

Parkinson[621], among the Mătăṅkŏl, in contrast to the Mắnus, women also wear their hair short, or longer hair is piled up, as Parkinson shows in an exception from Lóu. Similarly uncommon is a hairstyle described by Webster[622] in a Pāk woman 'with hair matted with some filthy substance all over her head'.

In individual cases older men also have shaven heads[623]. This appears probably to be a sign of mourning. It was at least explained as that on Pāk[624], Pĭ́tĭlu and Lŏ́nĭu together with their neighbouring villages. In Pĭ́tĭlu the hair appears to be shaved off only some time after the death, and it is then hung in bunches inside the house. Among women too, shaving of the head hair is associated with mourning, despite normal head-shaving. Plantation workers from Ăndră, Pal͡aùa, and Pō͡am who were working on Nŏ́ru also wore their hair close-cropped, completely in contrast to the prevailing male hairstyle.

They shave using thin sharp slivers of obsidian, roughly the shape of shark's teeth[625]. For plucking out individual hairs, according to Bühler, they use a shell called *amiam* in Gắramaṅ.

Moseley[626] saw one instance of sideburns as "a small black streak on the very upper part of the cheek, looking like a continuation of the hair of the crown almost"[627]. He describes a man with a full bushy beard combined with sideburns as an exception, and one or two men with "short pointed beards without whiskers". Generally sideburns were carefully shaved off[628], and it surprised Carteret[629] that none of the men who visited his ship wore a beard. Nor did the Hamburg Expedition see beards. Only on [100] Sĭ́sī in 1908 were beard styles similar to the 'chin curtain' worn more often, also with a moustache, and in Drugŭ́l sideburns were common but not goatees or moustaches. On Bird Island Bay a single Mắnus was seen with a shaven chin together with sideburns and a moustache; in Păpítălâ a man with a goatee, and another with a moustache; and at Lŏ́nĭu an old man with a heavily matted and tasselled full beard with two points down as far as his nipples.

Eyebrows are shaved off on Pónam and in Drūgŭ́l. Among the Ŭsĭâ in Drugŭ́l this is usually done only in a sloppy manner. Thilenius[630], Moseley[631] and Miklucho-Maclay observed shaved-off eyebrows more often in the Admiralty group. However in 1908 not a single example was seen in Păpítălâ.

Labillardière[85a] felt that he had established that all other body hair was shaved off. Pubic hair was missing from all the men in his illustrations; however in 1908 it was not removed by the Pónam people.

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621 1907. p.371 and Plate 25
622 1898. p.305
623 Robertson, 1888. p.57
624 Friederici, 1912. p.37
625 Miklucho-Maclay, *Izvestia*, 1878; Labillardière, I, 1896. p.255
626 1879. p.386
627 Hawkesworth, I, 1773. p.385
628 *loc. cit.*
629 Thilenius, II, 1903. p.121
630 *loc. cit.*
631 1877. p.460; 1879. p.386

II. Clothing and Jewellery

Men's Clothing

In 1767 Carteret[632] noticed no clothing of any kind among the men; nor did Rickard[633] on Uainkatou in 1886; whereas Hunter[634] saw 'a wrapper round their waist' in 1791. The natives that Labillardière[635] saw in 1792 had put on a penis shell instead of clothing, although many also had "their belt" with them, which they put on when they took off the penis shell. However, apart from the penis shell many natives had not brought any item of clothing with them. According to Klink[636] an apron is put on only for special occasions such as a dance celebration, while at other times they are totally naked.

In 1875 Robertson[637] and Moseley[638] mentioned a piece of *tapa* as men's clothing, seen everywhere by Thilenius[639] as well. Moseley describes it as white though often dyed red but never patterned, and as a tubular piece of bast fibre pulled off a tree trunk. Parkinson[640] describes the clothing as "a strip pulled between the legs to conceal the genitalia", and that of chiefs or people of higher rank as "a strip of bark, a hand's breadth wide, hanging from the loin belt both in front and behind, [101] extending almost to the ground". According to his account, the Mănus, both in their canoes and in their villages, are not always clothed, whereas the Mătăṅkŏl are always clad.

The men's *tapa* cloth is worn as a so-called T-binding. They hold one end of the strip of *tapa* in front of their chest and take the strip down between the legs and back up to above the sacrum, hold it firmly while dressing, and then lead it at right-angles to the right, around the hips until the strip comes back to the sacrum. There it is led under the piece that is being held firmly, and wound round to the left. The end of the strip is secured by leading it twice or more under the piece running around the hips to the left of the sacrum. The end of the strip that was initally held against the chest is now allowed to fall, so that it hangs down in front of the piece running around the hips, Fig. 4. This clothing was seen in 1908 in, among other places, Lŏnĭu and Păpítălâî; on Pĭtĭlu, Hărăṅgăn, Ăndră, Sĭsī, Hâŭs, and Pónam; among the Ŭsĭâî of Lukús and Drugŭl; and on Lămbŭtjo, P͡oam and Pāk[641].

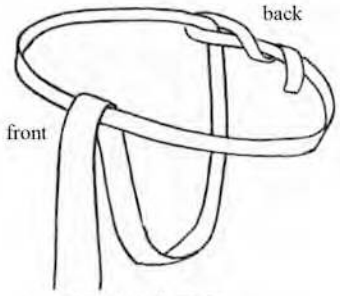

Fig. 4. Loincloth
After a sketch by H. Vogel

A second way to put on the strip is by first binding a cord around the hips then passing the strip under it in front, drawing it between the legs and drawing it once more under the cord over the sacrum. They then let both ends of the strip hang down over the cord. Many men were seen dressed in this manner in Păpítălâî, Drugŭl, Kĕtyĕ, Ndrĭol; on Pāk, Pĭtĭlu, Pónam, Hâŭs; and the Mătăṅkŏl settlement on Lămbŭtjo.

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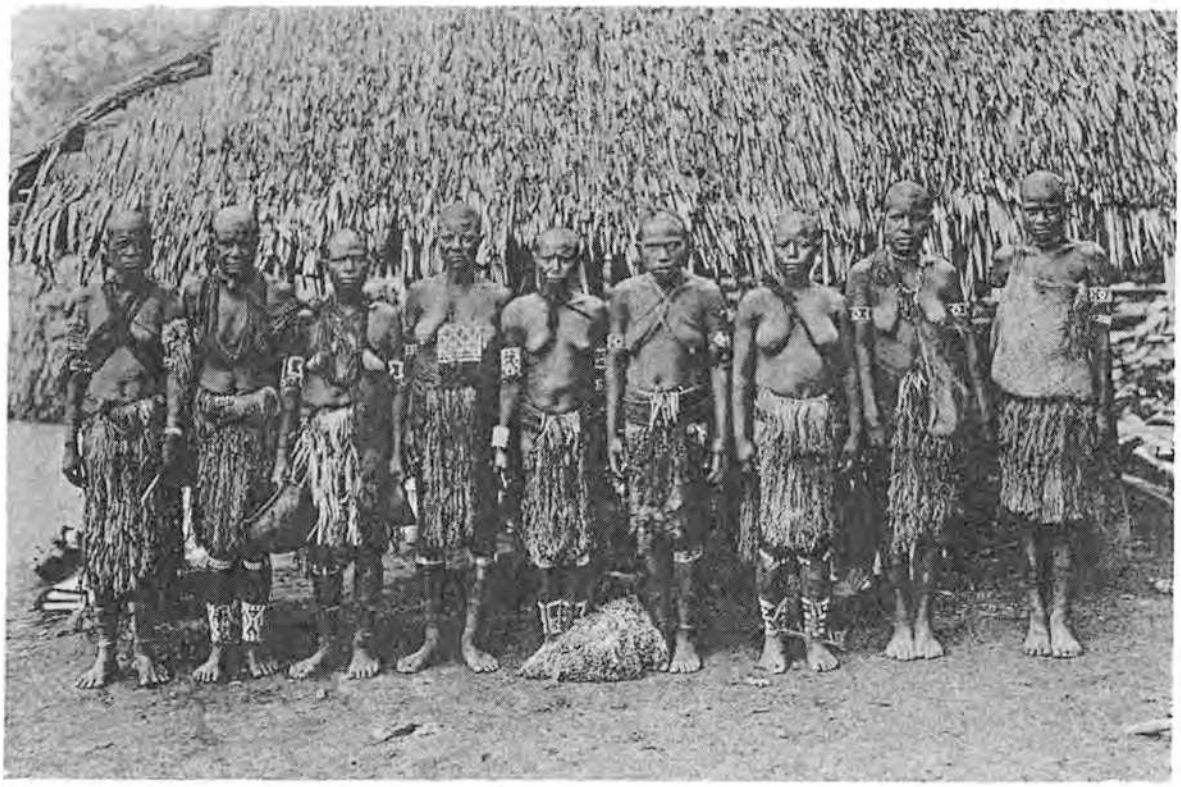
632 Hawkesworth, I, 1773. p.384
633 I, 1796. p.260
634 Ray, 1892. p.5
635 1793. p.240
636 Manuscript
637 1888. p.56
638 1877. p.397
639 II, 1903. p.138
640 1907. p.370
641 Cf. Webster, 1898. p.305

Men of Pāk phot. Fülleborn



Women of Pāk phot. Fülleborn

In very many cases the *tapa* had already been supplanted by European cotton cloth worn in the same manner as the *tapa*. Other larger pieces of cotton were slung round the hips like a skirt. The tip of the upper edge of the cloth, left free when putting it on, is folded back to secure the cloth and tucked beneath it. When the cloth is secured by a leather belt of European origin, the occasional person lets the tip hang down over the belt. In 1908 skirt-like cloths, especially red ones, were already highly favoured in Mbűnai̯, Păpítălai̯, Drugűl, on Ăndră, Pónam, Pĭ́tĭlu, Po͡am, Lóu and Lămbűtjo etc.

In 1929 the *tapa* clothing was no longer to be found among the Mắnus, and occurred only among the residents of inland villages which were well-endowed with trees[642]. The skirt-like cotton apron had however in no way replaced the T-binding. [102] *Tapa* aprons are called *na͡i* according to Hellwig on Pāk; *wa͡i* according to Friederici[643] on Pāk and Palŭăn, *wă* on Lóu, and on Móuk *kő͡lau̯*; *boluo* according to Schoede on Lămbűtjo and *wau* according to Dempwolff[644] on Po͡am.

A man's costume never seen anywhere else was observed in 1899 among the inhabitants of the north coast of the main island when they approached the *Möve*. These Ŭsĭai̯ wore "only leaves as a loin apron"[645], yet Schnee[646] mentions unprocessed bast fibre as the clothing material.

Boys go around naked only when very young, and later put on clothing that resembles that of the men.

Women's Clothing

Women always wear an apron. However Klink[647] observed — probably on Pāk — that the women usually went about totally naked, just like the men, and put on an apron only for festivals.

Women's clothing consists of two aprons that are worn on a belt in front and behind[648]. Both aprons extend to the knee or even below. The rear apron is always longer than the apron in front. The material for the aprons is simply large leaves or long brownish fibres.

The fibres are, near their upper end, woven over double-twisted horizontal cords in such a way that they firstly run outside around the cords and then hang down between them. The suspended ends are occasionally twisted into cords, with two knots at the lower end to prevent them from unwinding, Fig. 5. In other aprons a type of panel is formed by interweaving horizontal cords between the raw unprocessed vertical fibres. This panel is worn below the waist belt. The upper unprocessed end of the apron falls down over the belt. Frequently it is so short that it barely covers the belt, but equally often it does not extend so far. Among young girls — at least on Pāk — [103] the hanging end may also be longer. According to Thilenius[649], the apron for young girls is not, as is usually the custom, transversely interwoven with natural coloured fibres, but with fibres

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642 Mead, 1931. p.233
643 1912. pp.224–228
644 1905. p.210
645 *Deutsches Kolonialblatt*, X, 1899. p.699
646 1904. p.165
647 Manuscript
648 "A piece of matting around the belt" in Labillardière (I, 1796. p.254) is probably based only on vague observation from a distance. At Ndrabui Leber (1923, p.202) mentions "Loincloths made from rough *pandanus* material", without saying whether they were worn by men or women.
649 II, 1903. p.138

dyed black. Dyeing or patterns on aprons are not found elsewhere[650]. Leaf aprons are less commonly interwoven at the upper end than the fibre aprons, but are usually simply bound together with bast fibres at the corresponding place. On Pǐ́tĭlu there are also aprons made from coconut palm fronds that form a plaited panel above, from which hang five narrower, diagonally-plaited strips that then merge into bunches of frond-ends.

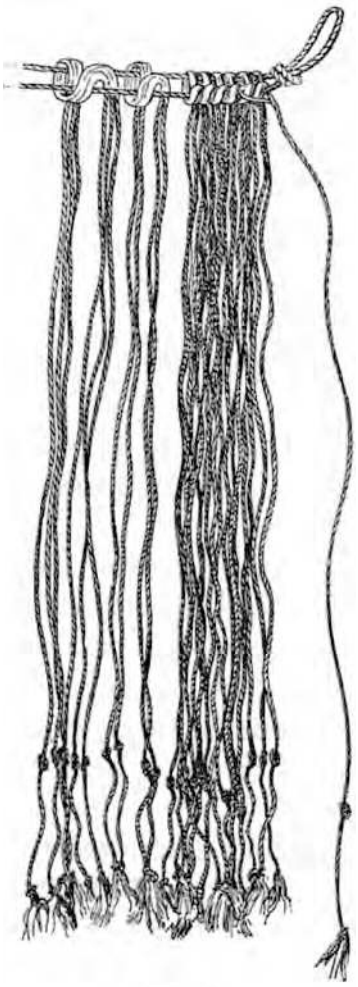

Fig. 5
Captured woman's skirt
9396[I], ½ nat. size

The belt is usually fashioned from a thin twisted cord about 20-37 metres long sometimes coated with *Parinarium* resin, that is wound round the torso enough times that it covers a strip about 15 cm wide. Belts like this were seen in 1908 in Păpítălâ̂ı, Bŭ́bi, Lŏ́nĭu, worn by an Ŭsĭâ̂ı woman from Tohavou(?), on Hắŭs, Pāk and Lóu, and in 1932 on Móuk. Therefore they are not, as Parkinson[651] maintains, found only among the Mắnus. A few women (Păpítălâ̂ı, Tohavou) wear it in such a way that the terminal windings of the cord are laid over the end of the apron that drops down in front, and completely cover it. Such belts are called *drăĺaki* in Pătŭ́sī, according to Bühler. In Mataworei, Bühler found other cord belts (*parimuoe*) consisting of up to 7-10 pieces, worn by women, particularly widows. These were 110-120 cm long. Their middle section consisted of a thin woven cord that is wound round the body 30-40 times and fastened together at either end by a thick cord ending in a tassel.

A wide bark belt or a broad belt of pandanus leaf may be worn instead of a cord belt. In 1908 this was seen only in Mŭ́ndī, but by 1932 it was observed more widely. These belts do not have patterns. A two-piece women's apron (*nai*) that Bühler came across on Sabo in 1932, probably came from New Guinea. It consisted of pale yellow and reddish-brown fibres knotted in bunches into a cord position in the upper third, and a thick bundle of cords right at the top. On the front apron the loose cords of this bundle serve on both sides to fasten onto the back apron which, instead of the loose cords on both sides, presents primarily a piece of knotted cord belt.

Skirt- or rather sarong-like cloths were seen in 1908 on the occasional woman and girl in Mŭ́ndī and on Pǐ́tĭlu, and on women from Palŭ́ăn and Tanga(?) Such cotton cloths of European origin are worn in the same way that men wear them, usually without a belt. A girl in Mŭ́ndī wore over her skirt a wide black and yellow plaited belt that had a thin wooden cross catch at each end, fastened [104] in front by cords. Bühler found belts like this in Bogai, Buboi and Lŏ́nĭu, and on Sabo (cf. Plate 7,i).

Totally-European clothing was worn by women only in odd instances, such as the Christian wife of the chief Pō Mǐ́nis and the women who processed copra on Nŏ́ru. Otherwise, the old leaf and fibre clothing has been retained by most women up to the present day.

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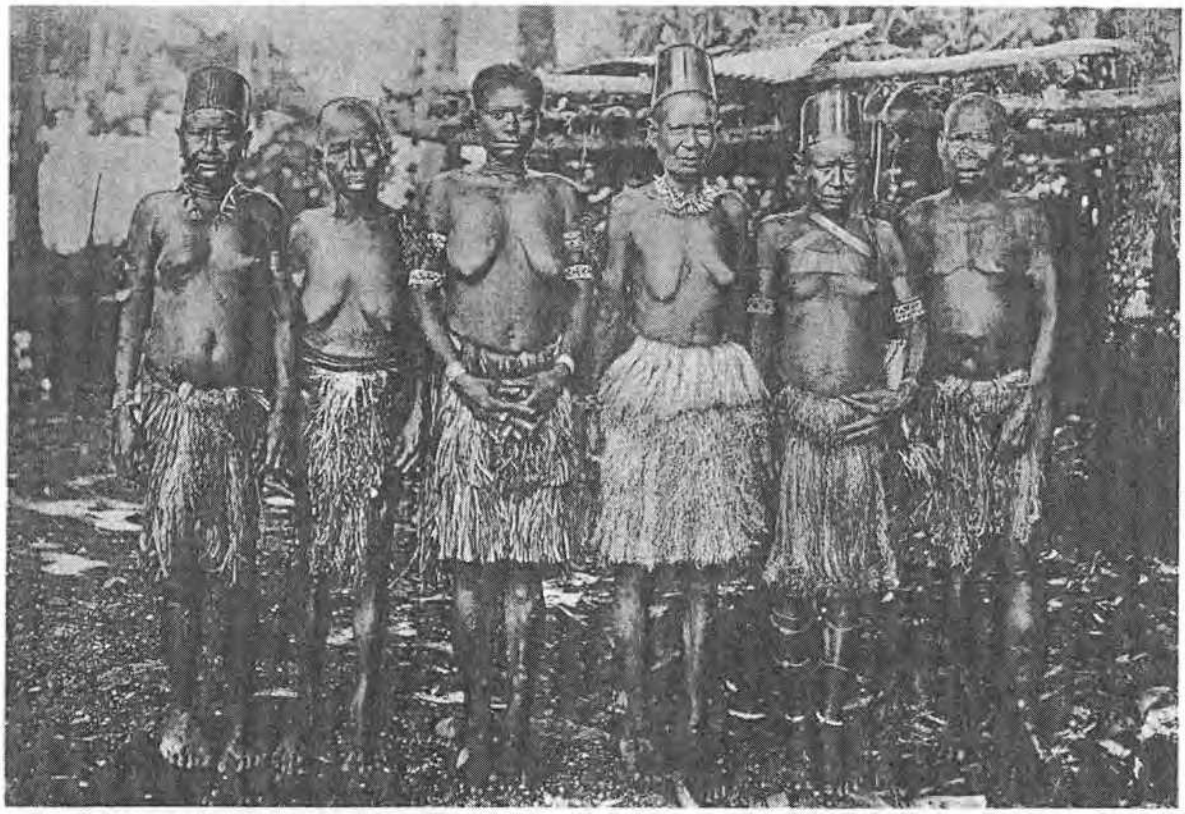
[650] Moseley, 1877. p.309
[651] 1907. p.371

Nevermann, Admiralty Islands, Plate 3



Women from Lóu, some with mourning decoration

phot. Fülleborn

phot. Reche

Némonai, woman from Pāpítālāi.

phot. Fülleborn

Mătāńkôl from Lāmbâtjo decorated for war

The Mắnus designation for the apron is *uo* according to Parkinson. On Pǐtĭlu it is called *la͡ujang*. According to Friederici[652] it is called *nĕ́nĕ* on Pāk; and *u̲ò* on Palŭăn, according to Walden[653]. According to Schoede it is called *kombu* on Pónam and *hombana* on Pāk or, when it consists of ruffled grass, *laviang*. Thilenius heard it called *bibinessi* by the "Usiai". According to Bühler it is called *ou* in Pŭ̌ĕ on Lóu; *drójang* in Nada; *lóunkei* in Pătŭ̌sī; and *laungei* in Mbŭ̌nâ.

Girls as young as four are dressed like adults[654].

Rain Clothing

Fig. 6. Rain hood. 2010 : 05
length 1.23 m., breadth 35 cm.

To protect their head and back from the rain, on Pǐtĭlu, on Hắŭs, on Pāk and in fact everywhere on the south coast of the main island they wear folded mats sewn together along one narrow side (called *dúo* on Pāk, according to Krämer), made from strips of pandanus leaf (called *tsa͡u*, *tso*, *tša͡u*, *tšo* on Hắŭs; and on Pāk *ménomai*, according to Krämer), Fig. 6. On Pāk they also make these mats out of *aum* leaves. On Hắŭs only men are said to wear rain mats (*tsa͡uŭ*, *tsoŭ*), which are so short that they cover only the head and neck, Fig. 7. However, on the south coast of the main island the women wore longer rain mats as *tabu* clothing, until they recently replaced them with cotton cloths or blankets, while the pandanus leaf mats are worn as further protection against the rain[655]. Mats on Pāk are given a decorative hanging made from tufts of *aur* bast fibre[656]. [105]

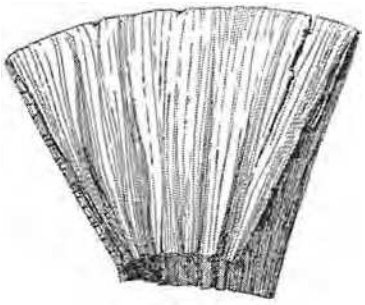


Fig. 7
Rain cape for men. 1052[1].
length 30½ cm, breadth 45 cm.

Thilenius[657] saw another type of wet-weather clothing (*ngalujeu*) among the Ŭsĭâ of Ahus (Ndragot). It consisted of three tubular pieces of *tapa* made from the bast fibres of *Ficus indica*. The largest piece formed the actual garment while the smaller pieces formed the sewn-on sleeves. These rain shirts were certainly familiar to the Mắnus but were worn only by the Ŭsĭâ, reportedly men and women[658], during the rainy season.

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652 1912. p.226
653 Vocabulary in the Berlin Museum
654 Mead, 1930. Plate at page 194
655 Mead, 1931. p.234
656 According to Krämer
657 II, 1903. pp.137 *et seq.*
658 Thilenius, II, 1903. p.280

Tabu Clothing

During the confinement after the ear-piercing ceremony, boys and girls may leave the house only when they cocoon themselves “right up to the crown of their head in a type of bag made of pandanus leaves”[659].

This *tabu* clothing consists of pandanus leaf strips sewn together. The mat thus formed is folded and sewn together along a narrow side, developing into a pointed hat combined with a back covering[660]. The *tabu* clothing thus has the shape of a rain mat. Recently however, only actual rain mats are made from pandanus leaves, while the *tabu* clothes are roughly sewn together from two pieces of European cotton material destined for loin aprons, or are simply replaced by an imported woollen covering[661]. Among the Mắnus of the south coast the betrothed maidens wear such a *tabu* garment to enable them to hide their faces from their betrothed[662]. There, married women shroud themselves outside their houses so as not to be seen by their fathers-in-law[663]. However, according to Köller[664], women from Pắrā also cover themselves when they are ‘creditors’. The cloth is arranged with its centre over the crown of the head, so that it can be pulled down over the face and held together by their hands over their stomach, wrapping the girl from head to toe and, nine times out of ten, it leaves only the face and the front part of the torso free.

Dance Clothing

Men and women wear dance aprons hanging down from the belt. The men have aprons that are produced for the most part, out of *Conus* discs. Chiefs wore them in front and behind for dancing. Women on the other hand, wear two *tapa* aprons — one in front and one behind — suspended from the belt. More recently women also put on a single men’s dance apron of *Conus* discs for dancing and other celebrations[665]. In Pắrā and other [106] Mắnus villages, brides currently wear two dance aprons with *Conus* discs and both are regarded as the bridal outfit[666].

The upper part of men’s dance aprons has an edging of vertical, braid-like, plaited three-ply cords of bast fibre and horizontal, thinner, somewhat twisted cords of the same material woven through the vertical cords. The cords are usually brown, although a proportion of the horizontal cords can be darker, and form transverse stripes[667]. Another pattern can be formed by the horizontal stripes not running fully through the edging, but allowing odd vertical cords to lie free so that lengthwise slits appear in the edging[668]. Much more common is a decoration formed by sewing on cords horizontally appliquéd with light grey or brown[669] grains of *Coix lacrima*. These cords run over the full width of the edging. Occasionally even more *Coix* cords are added, running horizontally and vertically over shorter sections thus forming a rectangular pattern. Finally, small red, yellow, green, white, and blue feathers — usually from parrots — or white feathers alone, can

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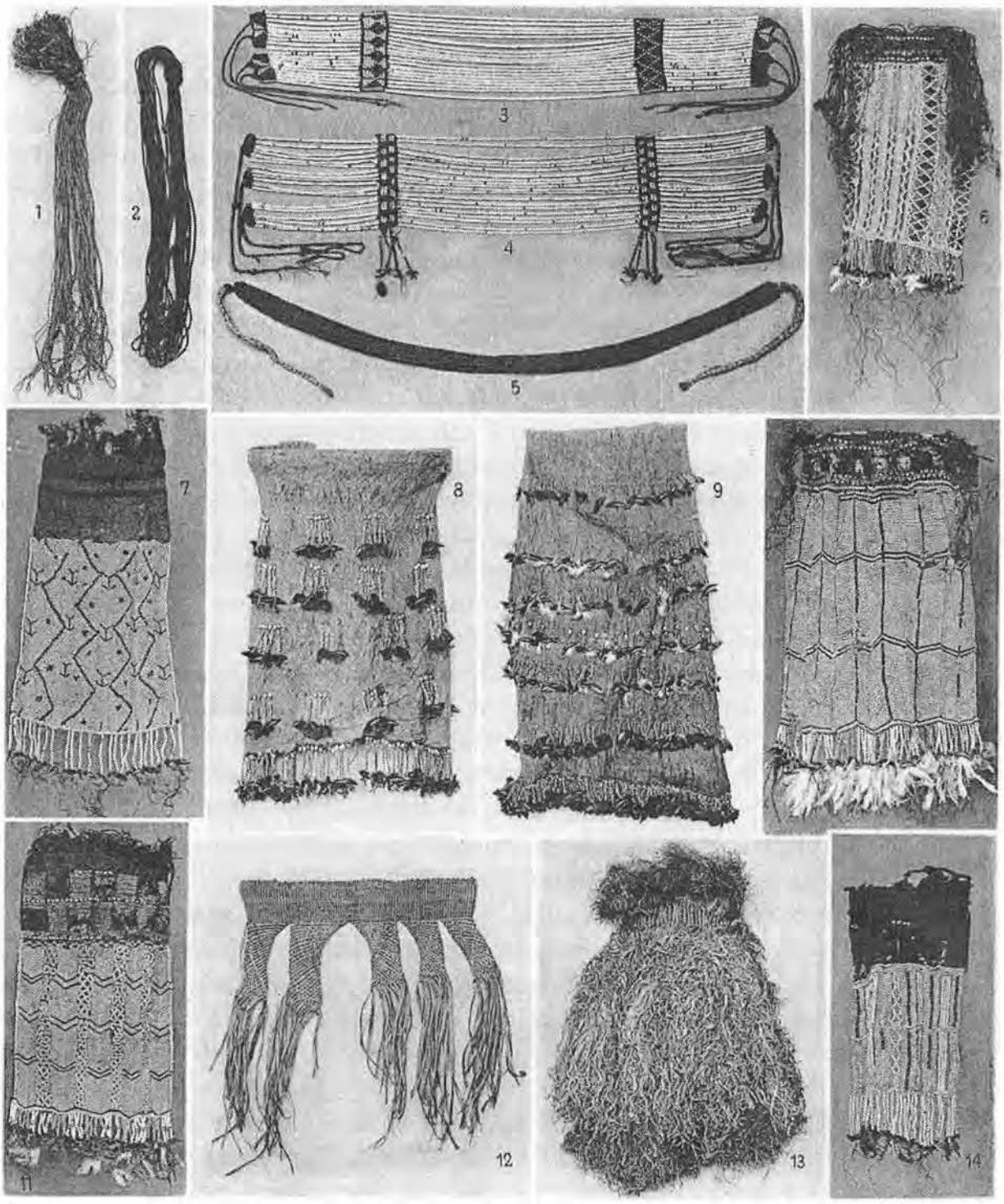
659 Parkinson, 1907. p.400
660 Mead, 1931. p.234
661 Mead, *loc. cit.*
662 Mead, 1931. p.46, and Plate at p.124
663 Mead, *Natural History* XXXI, 1931. p.63 figure
664 Berlin VIII B, 6390 *et seq.*
665 According to A. Bühler
666 Mead, 1930. p.129 figure
667 Finsch, 1914. p.59
668 Eichhorn, 1916. p.268
669 Finsch, *loc. cit.*

Nevermann, Admiralty Islands, Plate 4



No. 1 and 2 Mourning cords; No. 3 and 4 Decorative belts; No.5 Decorative chain; No. 6, 7, 10, 11, 14 Men's-dance kilts; No.12 plaited skirt; No. 8 and 9 Women's dance kilts; No.13 Fibre skirt for women.
about 1/8 actual size

be stuck into the edging. In some cases, the feathers, particularly the white ones, cover only small sections of the plaiting, while in others, they form a colourful mosaic that while not depicting any representational figure, is splendid in its colours.

The most expensive part of the men's dance apron is topped off below the edging and consists of *Conus* discs threaded like shell money cords elsewhere. The *Conus* discs are either strung on cross-over threads, giving rise to a network pattern, or tightly arranged with varied threading, or drawn on cords running perpendicularly, not connected with one another, held together only by transverse catches studded with shell discs[670]. Usually the network arrangement of the threads appears in conjunction with the formation of thicker pieces. They always try to arrange similarly-prepared pieces as perpendicular strips, attaching differently prepared pieces as perpendicular strips to right and left, followed in turn by other strips. They integrate several other discs or seeds between the *Conus* discs, standing out as zig-zag lines, angles or diamonds against the white or pale yellow of the *Conus* discs. They prefer black herbal beads for this, probably mangrove beads (*bambin* in Lṓnĭu[671]), brown *Coix* grains, several other dark seeds, and red and blue beads. By these means (on [107] Pāk etc.) figurative representations of iguanas are occasionally produced on closely-worked aprons[672]. The *Conus* discs and the coloured material are always threaded in such a way that their flat sides abut one another. Only in the loose vertical cords do the *Conus* discs sometimes align themselves with their edges touching.

Cords with *Conus* discs in both these threading configurations form the lower end of the men's dance apron. On each apron cord hangs a *Palaquium* half-shell bored through the top; white tern feathers, dog's teeth, fragrant bunches of leaves and, more recently, pieces of red material, are knotted so firmly beneath it that they seem to be suspended from the shell. The thread on which the *Conus* discs and *Palaquium* shells are strung always continues down as a long, loose end[673].

The local term for the dance apron of the men is *bāk* on Pāk and Pḯtĭlu; according to Giglioli[674] in Pā́lămŏt *elétun*(?); according to Schoede on Pāk *wag*; according to Finsch[675] *bag*; according to Bühler on Pḯtĭlu and in Lṓnĭu *nei*; and according to Krämer in Lṓnĭu *buāk*.

Women wear dance aprons made from *tapa*. Among the Mā́nus they are painted with red and black lines (vertical strokes, zig-zag lines, angles, net patterns)[676], and have a fringe of short cords on the lower edge with horizontal and vertical *Conus* discs and half a *Palaquium* shell. Other women's dance aprons are more richly decorated with fringes, but are not painted. With the exception of the uppermost part of the apron which is worn beneath the belt, horizontal rows or groups of tassels made from *Conus* discs, *Coix* grains, less well-prepared bottoms of *Conus*, and *Palaquium* shells are fastened on, with red or white feathers or red pieces of material hanging down. Often three or more such tassels emerge from one point. Cords strung with *Coix* grains and other fruits, beads and white or brightly-coloured feathers are added as decoration. Embroidery of the dance aprons with threaded *Conus* discs running horizontally in a fishbone pattern is rare[677]. The *tapa* dance aprons of the women are called *éndri*[678]; on Sōri and the main island near Seeadler Harbour, *kolau*[679]; and on Nṓru *n'gŏlāu*[680]; in L͡aues *kojau*; and on Bipi *nai*[681].

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670 Eichhorn, 1916. pp.268–273
671 According to Krämer
672 Eichhorn, 1916. p.272. Fig.41
673 Finsch, 1914. p.60
674 1911. p.231
675 1914. p.59
676 Thilenius, II, 1903. p.138
677 Eichhorn, 1916. p.276
678 Thilenius, II, 1903. p.360
679 Schoede Collection, Berlin

Earlier, like the men, individual women also wore aprons of *Conus* discs although at that time these were only the wives of very rich chiefs. On the other hand, by no means all men are sufficiently wealthy to be able to aspire to *Conus* disc aprons, and many men at the dance therefore wear a simple T-band of *tapa* differing from everyday wear only by a fringe [108] of tassels made of *Conus* discs, beads, and *Palaquium* shells on the end[682]. As a substitute for the shell aprons, the Mắnus also sometimes wear painted *tapa* aprons, like the women.

The apron illustrated by Parkinson[683] as a woman's dance apron and named "feather hair apron" by Eichhorn[684] probably belongs among the men's dance aprons. Like these, it has a woven upper edge with a particularly rich mosaic of white and coloured feathers, and hangings of *Conus* discs with *Palaquium* shells and tiny pieces of possum skin at the sides. Hanging from this edge section are numerous *Conus* disc cords with "dark seed husks", cream *Coix* grains and threaded tassels of cuscus hair, with bunches of white feathers tied below[685]. Other aprons of this kind have cords of greyish-yellow pieces of possum skin as a hanging.

As a substitute for *tapa*- or shell disc dance aprons, younger girls in Pắrā and among the neighbouring Mắnus today wear brightly-coloured pieces of cotton that hang down from the belt in front and behind[686].

Suspensorium

Fig. 8. Jockstrap
E. 3547. ½ nat. size

To beautify the scrotum a *suspensorium* is worn for special occasions. It is folded from a broad leaf tied together at one end with a cord, with the narrow sides sewn together to the other end. A cord is also sewn on the narrow side, reaching up to the T-band, in front. The other cord is lengthened by knotting a new end-cord that is, in turn, knotted crosswise to the T-band, Fig. 8.

Penis shells

Neither Carteret nor Hunter mentions the penis shell. It was recorded for the first time by Labillardière[687] and de Rossel[688]. Only adult men capable of bearing arms wear the shell, which is put on only for war expeditions and war dances. The fact that it was worn when paddling out to ships was probably based on the expectation that it might come to a fight with the foreigners; or, in some cases where during dance movements the Europeans [109] would focus on the shell, as did Miklucho-Maclay[689] and

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680 Thurnwald Collection, Berlin
681 Bühler Collection, Basel
682 Schnee, 1904. p.162
683 1907. p.367, Fig.66b
684 1916. pp.273 *et seq.* with Fig.44
685 Eichhorn, 1916. p.274
686 Mead, 1931. Figure at p.138
687 I, 1796. pp.260 *et seq.*
688 I, 1808. p.136
689 *Izvestia*, 1878.

the Hamburg Expedition in 1908 in Lo̍ňu, it signalled an intent to sell the shell.

The penis shell is a white *Amphiperas* shell (*Ovulum, Bulla ovum*) whose internal spiral is cut out, while the natural opening is enlarged only slightly, or not at all; but not so much that the glans can easily be inserted.

To put on the shell, the foreskin is pulled over the glans and jammed with it into the shell opening[690]. In some men only part of the corpus cavernosum can be accommodated within the opening, while Moseley saw only the foreskin covered in a man with a well-developed penis.

Labillardière[691] observed several cases of penile ulceration among penis shell wearers, which he believed was due to pressure from the shell's narrow opening. Moseley did not observe any such manifestations, but he did emphasize that wearing the shell had to be extremely uncomfortable for the wearer, and he mentions a case of marked flattening of the glans by the shell. Thilenius found, besides not-inconsiderable elongation of the penis by the heavy shell, urinary obstruction, probably brought about by temporary paralysis of the bladder muscles, a conditional reflex of the mistreated glans. Krämer observed that one man, who was trying in vain to remove his penis shell for the dance, leapt into the water and was then able to remove the shell without effort. Perhaps this can be traced to an erection, which was otherwise unnoticed during a dance.

Those who removed their shell, immediately put on a *tapa* binding, according to Labillardière's observation. On the other hand, others who had no binding with them removed the shell without thinking. Moseley[692] too noted that the men hastily reclothed themselves.

When the shell is not worn on the penis, it is placed behind the ear for temporary storage[693]. Bühler noticed this in 1932, often among young girls(!) especially at major dance festivals. Men carry the shell also in a small plaited pouch on their chest or beneath [110] their armpits. The pouch is readily adorned with bright beads on strings like a net, and also hung along the lower edge with bead tassels and scraps of trinket, Fig. 9 (cf. Plate 7, N° 4).

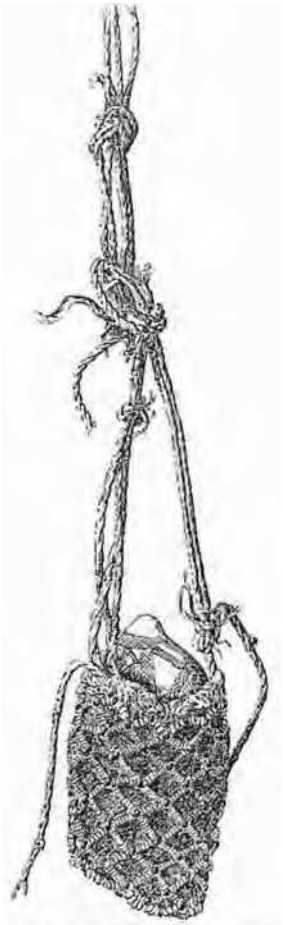

Fig. 9. Chest pouch, containing penis shell
2064:05. ½ nat. size

Only Moseley[694] saw the penis shell worn under the T-binding, in the vicinity of Nares Harbour.

The shell, even when it is not worn as a penis shell and serves other purposes such as canoe decoration etc, is called *mắna* or *manắ* in Păpítălâ͡ì; *mắnă* on Hă̆ŭs; *mĭ́ne* or *mắna* in Lo̍ňu; *mắna* on Pĭ́tĭlu, Lămbŭ́tjo[695], [111] Pónam[696], and in T͡aūī; and *mănĕ* in Buao[697]. On Pāk it is called *djāmé*; while in Pătŭ́sī and Mbŭ́n͡aî it is called *emena* according to Buhler; and in Buboi and on Pónam *mana*.

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690 Thilenius, II, 1903. p.129; Moseley, 1877. p.397; Miklucho-Maclay, *Izvestia*, 1878
691 I, 1796. p.261
692 1877. p.398
693 Miklucho-Maclay, *Izvestia*, 1878.
694 1877. p.397
695 Thurnwald and Schoede Collections, Berlin
696 Schoede Collection
697 Kölle Collection, Hamburg

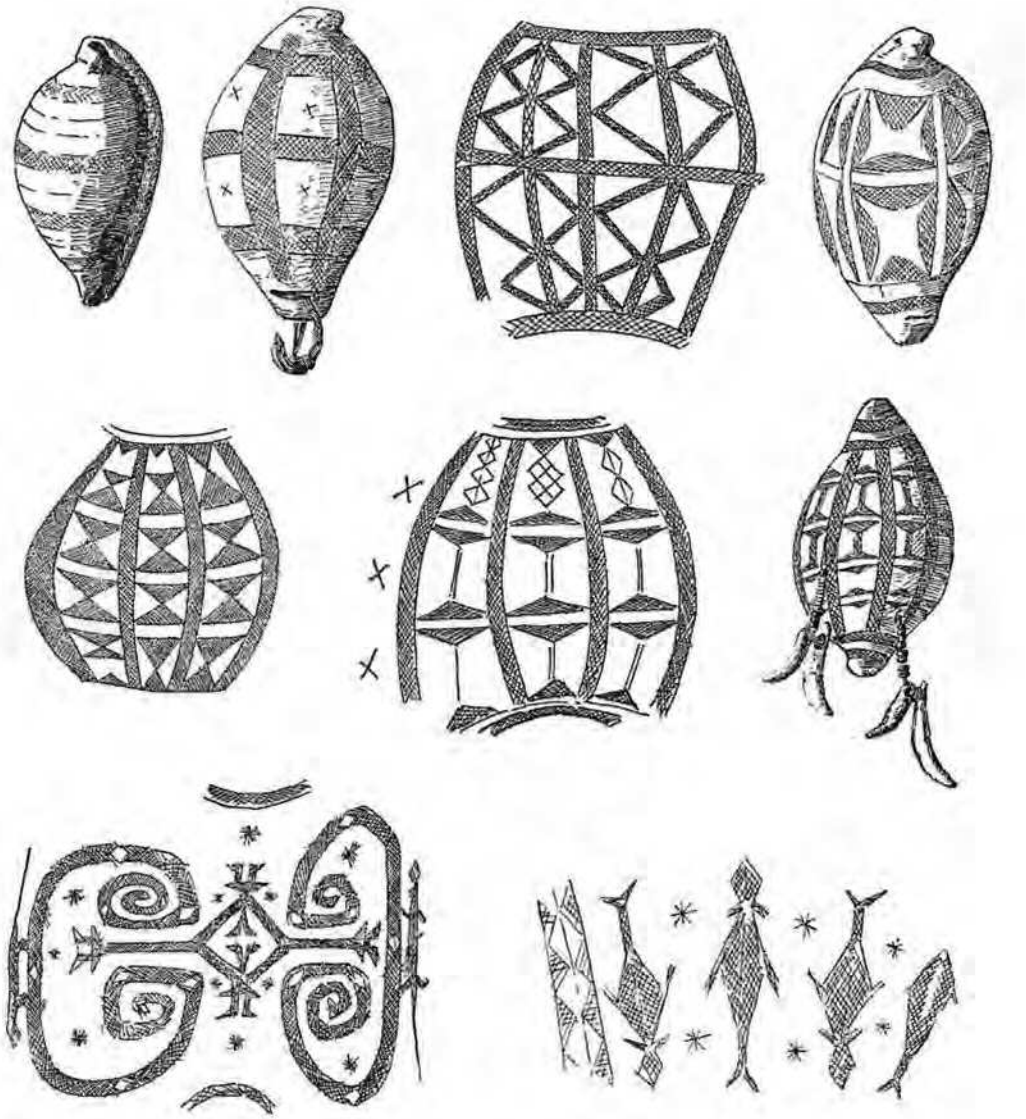

Fig. 10. Penis shells with incised decoration ½ nat. size

Few penis shells are undecorated. On the curved outer surface most are completely covered in cross-hatched, incised patterns; and after a few wearings, these stand out darkly against their white background because of the dirt that gathers in them; or they are deliberately blackened from the start with soot or pyrolusite. They are composed of vertical and horizontal bands, triangles, star-shaped figures, curved lines ending in spirals, diamonds, scratched lines with angular branches (a degenerating lizard pattern?) and figurative representations of fish or crocodiles with *Palaquium* tassels. There is a predominant tendency towards an arrangement of the individual parts into series between lines. Triangular drawings are called *ĭnīn* on Pāk, and parallel lines added to their points, *boinắ*. A penis shell was observed on Pāk in 1908 boasting a short bead cord with two possum teeth in each of two holes in its lower half.

The penis shell is worn by all Mắnus and Mătắṅkŏl (except for the named villages in Lálā and Pắrā̄[698], in Boao(??) on Pāk and Nŏ́ru). Parkinson[699] mentions it among the Ŭsĭā̂, and in 1908 a penis shell was obtained from the Ŭsĭā̂ in Kětyḗ.

[698] Mead, 1931. p.34
[699] 1907. p.381

Nevermann, Admiralty Islands, Plate 5

phot. Fülleborn
Chief from Sísī with calculus and topknot

phot. Reche
Bóe, man from Pāpítālāi.

phot. Reche
Dróhan, a man from Drūgúl.

phot. Reche
Wóátí, a man from Drūgúl.

phot. Reche
Lóbéhín, a man from Pāpítālāi.

phot. Reche
Nuambu, a man from Háūs.

phot. Fülleborn
A man from Ndriol.

phot. Reche
Héněū, woman from Pāpítālāi.

Since only adults are allowed to wear the shell, 10-12 year-old boys among the Mănus of the south coast of the main island put on a hollowed-out nutshell as a substitute, in order to practise the penis shell dance[700].

Hairpins

Tiny pieces of wood serve to pile up the men's hair. They are kept in the hair, and their ends are decorated with feathers or leaves so that they stand out from the hair. In practice, men always insert the pin above their forehead so that the decorated end of the hairpin points forward. Many men wear two or three hairpins; some more than ten in a radiating pattern. When in threes, two hairpins are pushed into the hair over the temples, and the third above the parting (cf. Plate 5).

In many cases, dried yellow-brown leaves form the decoration for the hairpin, firmly fastened in several rings around the end of the little piece of wood, so that their ends stick out in all directions. The innermost leaves are usually more finely spliced than the outer. In the centre of the bunch of leaves, there is preferably a further [112] decoration of one or more feathers bound in; or the end of the piece of wood may also extend a little beyond the bunch of leaves, Figs 11 and 12.

Instead of leaves, very often feathers from a tern, crowned pigeons, scrub turkeys, parrots, kingfishers and other birds are attached in the same manner. Either the feathers are left in their natural shape, or triangles are cut out of the vane.

Fig. 11. Hairpin with leaf decoration. 797[1]. 28½ cm long

Fig. 12. Hairpin with leaf and feather decoration 3197[1]. 24½ cm long

Fig. 13. Hairpin with notched feathers. 621[1]. 21 cm long

In T͡auī the hairpin is called *ämöl*; on Pāk *kaba͡u* or *kōl*; on Lămbŭtjo[701] *rognol*; and *dī* in Lŏnĭu[702].

They make a substitute for the piece of wood out of the quill of the wing feather of a frigate bird, cut in such a way that only triangular pieces of the vane remain. Smaller feathers are tied

[700] Mead, *loc. cit*
[701] Catalogue of Schoede Collection, Berlin
[702] According to Krämer

around the central piece like stalks, in the same manner, Fig. 13. Other hairpins with a big feather as the centre retain only the upper end of the vane of that big feather. Six or more such hairpins are inserted with other hairpins in that portion of the hair that extends from one ear to the other, standing out upwards and to both sides, like a tiara. [113]

Individual feathers, those of the sea eagle in particular, are also worn as hair decoration. The vanes are usually reduced to two thirds, and only the tip area remains. They often cut this piece off and stick it back on to the sharpened part of the quill. They let the feathers stand out from the middle of the crown over the back of the head, and value the fact that they bob about with the movements of the wearer. In Nada this ornament is called *bóbolau* according to Bühler.

Sometimes, medium-sized feathers are inserted obliquely downwards and a little sideways into the hair behind the ears.

Occasionally, odd undecorated little sticks (*susus*) appear on Pāk; these are used for scratching the skin of a head plagued by lice[703].

Combs

No youth can wear a comb in his hair before his first beard has grown[704].

For piling up their hair, and as a head ornament, the men use combs with 8-18 (usually 10-14) teeth of small tapered sticks of hardwood. They work with *kŏlanaû* in Lŏ́nĭu, and *drā* on Pĭ́tĭlu as the kind of wood for the teeth, and often elsewhere with coconut palm wood. Thilenius[705] names coconut fibre as material for the teeth.

Very simple combs are made in such a way that the teeth can be joined together in a bundle at one end with a wrapping of cord or strips of rattan. Below the wrapping the teeth kept separate by a narrow crosspiece bound on by strips of rattan, and between that crosspiece and the upper wrapping there is a further rattan crossbinding, or, alternatively, below it cords are interwoven between the teeth. Admittedly such combs are used only very rarely, Fig. 14.

Fig. 14.
Comb with cord lashing
2497[I].
25 cm long

In the vast majority of combs, the teeth are bound together likewise at the upper end, but densely braided below in a simple manner with thin, twisted cords. Below this cord braiding, one or more crossbars are attached, as in the simple combs, to hold the teeth in one plane, and to prevent the comb from arching due to the wrapping at the upper end. The crossbars are often made from two thin, narrow wooden ledges, and plaited onto the teeth with strips of rattan. These can also be substituted by a soft, pulpy piece of wood, through which they push the teeth. The points [114] of the teeth are tied, preferably with a thin fine grass cord, so that they are not too far apart. To wear the comb, the crossbars and cords must be removed, and only the uppermost crossbar can be left on the teeth; they do not do this very often.

The braided surface at the upper end of the comb, which is triangular, is always given a coat of *Parinarium* resin. To produce the gum coating (*ĕrit*[706]) on Pĭ́tĭlu, they rub the *Parinarium* nut on coral lime and mix it with chewed betel nut. Before the resin coating has congealed, it is often embellished with incised patterns or small malleable shapes. When it has

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703 According to Krämer
704 Parkinson, 1907. p.399
705 II, 1903. p.282
706 On Hắŭs *arĭ́t*

hardened, it holds the teeth themselves in the desired position, and the crossbars become superfluous; however in many cases, they are retained as a precaution.

In most combs, the binding of the teeth beneath the *Parinarium* coat forms a rather widened, thickened area. Above it stretches a narrow flattened portion, and below it a flat portion, steadily widening toward the visible part of the teeth. In a few instances, a narrow braiding of the teeth is attached below this, not coated with resin.

The coated triangular tip of the comb has the blackish-brown coloration of the *Parinarium* resin and, in many cases, this does not change any further. In other instances it is painted red, and is broken up by one or more black transverse lines, or they add black or red diamond- or hourglass figures on a red or black background.

Other combs receive simple patterns of curved lines, diamonds and triangles scratched in the monochrome coat. Most often there is a form of relief carving, with the deepened places of the coat painted white and the raised parts red and black. In so doing, they decorate the widened places above the binding, then the lower broad flat part, and finally in many cases the narrow flat upper part. The favourite for the upper and middle part and the sides of the lower part are rows of triangles that stand one above the other in such a way that a zig-zag line (*kamuét*, in Lŏnĭu) is formed between them; rows of diamonds with a diagonal pattern between; and simple coloured lengthwise or transverse lines. They prefer to decorate the middle and the centre of the lower part with the *Tridacna* pattern, i.e. with circles, rectangles or triangles, serrated at the edge and divided into four parts by diagonal lines with a circle in the centre, or they use parts of these figures or derivations of them, Fig. 15.

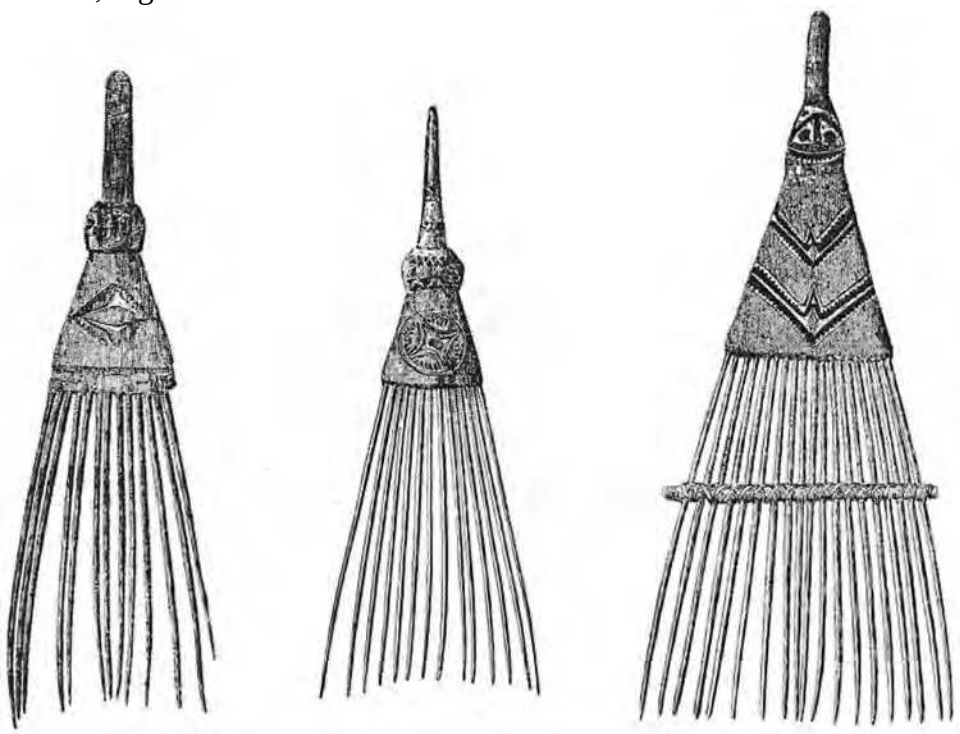

Fig. 15 Combs, upper ends with a coating of Parinarium resin and ornamental decoration
3299[I], 2060:05, 2764[I]. 25 – 37 cm long

Other patterns for the lower part are lancet-shaped figures, to some extent with small curves or angles near their upper and lower ends giving the effect of arms or legs of a living person beside the lancet figure; in addition, spirals, that also [115] occur in pairs, dentate or connected by an arch; hourglass figures that are typically angular decoration for obsidian spears, etc. The front and reverse sides of the *Parinarium* surfaces are similarly patterned virtually throughout, and in

those few combs where this is not the case, minor deviations manifest themselves only in minutiae, whereas at least the arrangement of the ornamentation on both sides is consistent.

In three-dimensional configuring of the *Parinarium* layer only the accessory ornamentation of both sides is the same — the three-dimensional representations are different. The middle area above the binding is often elaborated as a human face (in Lǒnǐu *hamắt*, i.e. dead person, or, according to Krämer, *pomata rámad*). The narrow sides of the comb then display the ears in the corresponding positions, while the reverse side represents either the back of the head or features other patterns. Only rarely [116] does the face on the front side correspond with the face on the reverse side of the comb. The face is usually directed toward the teeth of the comb, seldom in the other direction, Fig. 16. In several cases, instead of faces two figures (one male and one female) are also depicted as decoration.

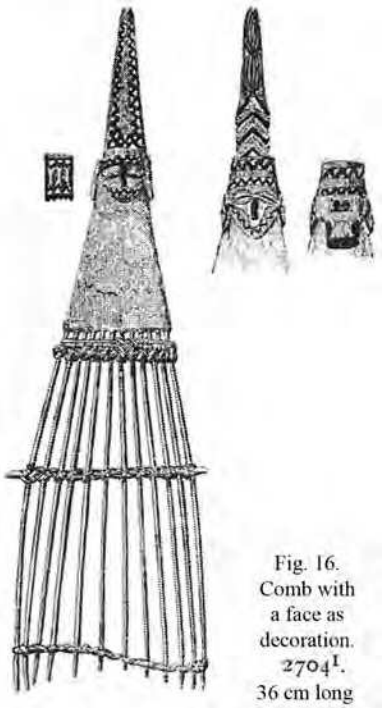

Fig. 16. Comb with a face as decoration. 2704I. 36 cm long

The second motif for three-dimensional moulding of the resin surface is a crocodile head, which is carved out of the coating of the narrow upper part and the middle part, so that the eyes are represented on the sides of the middle part, the tip of the snout at the outer end of the upper part, and the teeth at its sides. The reverse side then represents the lower jaw, Fig. 17. They apply ornamental rows of triangles etc., corresponding to some extent with the maxillary dental arch on the middle section of both sides of the upper part of the comb. The facial representation may also be combined with the crocodile representation, with the face sitting below the crocodile head. In the process, it can again completely disperse into decorative lines.

Fig. 17. Comb with crocodile head. 2858I. 28 cm long

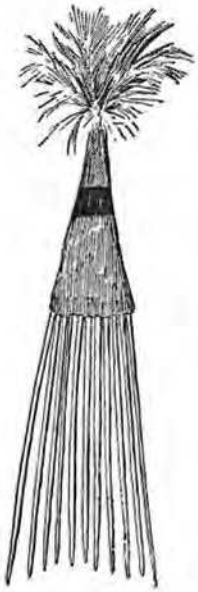

Fig. 18. Comb with a bunch of feathers. 30. 215:1. 12½ cm long

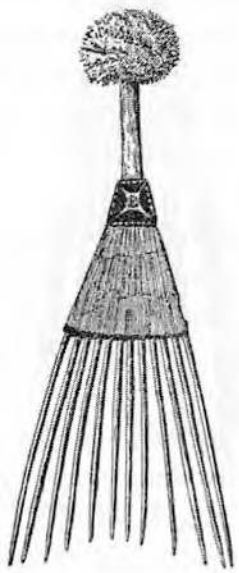

Fig. 19. Comb with fruit decoration. 1100I. 29 cm long

The paint is red ochre, pyrolusite, and lime. Quite rarely they press a few *Conus* discs or beads into the resin.

Instead of a three-dimensional treatment of the *Parinarium* coating, a small wooden carving, with one or two human figures, a fish figure, and the like may be found on the tip of the comb. They bind this together with the comb's teeth at the outset, and secure it with the coating.

Serving as the upper end of the comb, (should they be dissatisfied with the [117] upper portion decorated with *Parinarium* resin, which often becomes rather thickened at the outer extremity), there may be: a bunch of parrot feathers, (and more recently) hen's feathers (Figs 18 and 19). Alternatively, there may be a brownish-black or white-limed barbed fruit; or eyes and spiky cuttings of wood or rattan together with perpendicular shark's-tooth-shaped pieces from the tail fin of a bonito (*baliau*)[707], or pieces of bird's bill. Or there may be a half-moon section of a coconut shell placed concave-upwards on the tip of the comb, with a long feather stuck onto a wooden cone; or a glued-on frigate bird feather trimmed in the same manner as in the hairpins. *Conus* disc cords with *Palaquium* shells each with two teeth are sometimes fastened on to the middle or upper sections as a hanging, Fig. 20. Among the Sōri people in Gắramaṅ, combs with possum skin (*ohâĩ, kohâĩ* [708]) and human hair (*hătuháma*) are worn as decoration. Occasionally the *Parinarium* surface is pierced, since at this point portions of the teeth have to be removed.

Fig. 20
Comb. 4300I, with feather. 64 cm long

Fig. 21.
Double comb 2745I. 50 cm long

Double combs do not appear to be very common. They consist of two combs with their ends abutting, with a common coating of *Parinarium* resin, Fig. 21.

The length of the simple combs, excluding the embellishments mounted on the end, ranges from 21 to 41 cm. The most common are combs 25–30 cm long.

They wear the comb above the forehead, pushed into the frontal hair. In so doing so, the *Parinarium* part slopes forwards and upwards, or juts horizontally, or slants slightly downward over the forehead. Some men wear hairpins at the same time. [118]

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[707] According to Krämer
[708] Mắnus language: *lăwăl*

Comb names in Pătŭ́sī are *boé́niŭ*, *ă djŭ́* (*ă dsŭ́*) or, according to Bühler, *poenju*; in Kyĕlâ͡ûák *ä djú*[709]; in Lŏ́nĭu *tu* or, according to Bühler, *tšu* and, according to Krämer, *édju* or *djū*; on Pĭ́tĭlu *rŏadju*; on Hā́ŭs *tšū́*; on Sōri *šū́*; and on Hắrăngăn *boĕnĭ́ŭ́*. Thilenius[710] heard the name *puéndju*; Krämer on Pāk *dū*; Schoede[711] on Lămbŭ́tjo *pointjū*, and at Seeadler Harbour *tju*; Thurnwald[712] on Kŏmŭ́li *bŏ́íntjú*, in Păpítălâ͡ì *buéndjú* (*buéntjú*), and on Nŏ́ru *bointjú* or *buéndiú*; and Bühler in Salien, on Pónam and on Sabo *su*, and in Ndrawa *ro su*.

Since the women are usually shorn bald, they do not use combs. On Pāk, where occasionally they let their hair grow, they also have combs (*tū*)[713]. These are decorated with a brightly-coloured bunch of feathers at the end, and totally match the men's combs in the way they are made. Apart from painting the *Parinarium* layer red, sometimes with a black line across it, the women's combs have no decoration. They are considerably smaller than the men's combs and, excluding the bunch of feathers, they are only 10.5 – 14 cm long. On Lămbŭ́tjo the women appear to use bigger combs (*pointjū)* resembling men's combs. In Mbŭ́na͡ì, Bühler observed that men at festivals wore as many as 15 combs of this sort, 14 – 16 cm long, in their hair in such a way that they stood out like rays from their head.

Fig. 22. Wooden comb 14. 74:79. 29½ cm long

Combs made from a single piece of wood without a *Parinarium* coat are extremely rare. Their teeth are parallel with one another. The upper section is triangular in its basic shape but, in contrast with other combs, always has perforations in the form of circles, lancets, and narrow slits. Decoration occurs, insofar as it happens at all, through engraving and painting, Fig. 22. In Lŏ́nĭu Bühler also found a decorative comb made from a single piece of bamboo with 13 teeth 15-16 cm long with rounded tips. The base of the 25 cm long comb featured engraved linear and zig-zag patterns, painted black in places.

Hair Ties

Men who have bound their long hair up into a topknot with a band of leaves or 1-5 *tapa* sleeves (according to Bühler *dšu* in Buboi, and *niaándro* in Nada), or who have tucked it into a tube of palm leaf sheaths sewn together with rattan or a cord and occasionally given a coating of *Parinarium* resin[714], overlay the hair in front of the binding and the hair [119] oozing out the back of the binding with cords, around which fragrant wood shavings are twisted. This convention is particularly common on Pāk, where they call the cords *lion*. The hair in front of the band is bound by two or three cords, all running parallel over the crown from the ear or the neck. Likewise, two or three cords are laid around the end of the topknot. Below these cords, others are fixed on to the topknot in a garland-like arch that hangs down on both sides and beneath, from the outermost straight cord towards the band of the topknot (cf. Plate 5). In Nada, cords over ten metres long (*domimóndra*) are used in the same manner, except in multiple windings, for binding back the

709 According to Rickard (Ray, 1892. p.7) on Ndrŭ́wal *etu*
710 II, 1903. p.360
711 Catalogue of Schoede's Collection, Berlin
712 Thurnwald's Collection, Berlin
713 Catalogue of Schoede's Collection, Berlin
714 Bühler's Collection, Basel

topknot. The cord has a fragment of bone at one end[715]. When not in use, they store the cords spirally wrapped around a little stick, Fig. 23.

On Pāk, Pónam, and Lămbŭtjo, with their woolly hair piled up, they occasionally lay just one or two cords made of strands around the front of the hair in a simple manner. On Lămbŭtjo they also let longer, thin strands of this cord hang right down to the forehead, or they fasten leaves onto a cord, densely covering the hair over the forehead.

On all the islands, on cords strung with threaded seeds, *Conus* discs, or beads in the hair, small *Tridacna* discs with pierced turtle shell toppings are worn on the forehead.

Twisted cords are worn in the hair as an ornament of mourning.

On the Sĺsī islands a bast fibre binding, about three fingers wide, was seen worn by a man as a head ornament. This was said to have no particular significance. Another man wore a type of basket on his head. Ostensibly, he alone had this mannerism — wanting to imitate European headgear, as it occasionally appeared on the heads of station workers and other men.

Fig. 23. Hair ties made from fragrant wood chips 1121[1]. Stave 54 cm long

Head Decoration when in Mourning

Mourning adornment, which is called *lă* on Lóu; *mŏl* in Lā́lā; *wésen* on Pāk, according to Krämer; *pall* or *mol* in Pătŭ́sī according to Bühler; and *muol* on Mbŭ́ke, is prepared by men and women and worn by both, although more often by women. In Pătŭ́sī today women who are not in mourning[716] also wear it. It consists of a narrow braided cord[717] coated with a thin layer of *Parinarium* resin. They produce the braiding over a round piece of wood [120] of corresponding thickness. The ornament forms a rectangle, although it is often somewhat narrower towards the ends than in the middle. Three cords are fastened to it at either end; these are likewise coated with a mass of *Parinarium*, and quickly unite into a single cord. When the decoration sits on the mourner's forehead, both cords are tied behind the neck. The ornament is seldom identical in size to a closed-in object plaited with narrow band strips for the back of the head. Often a vertical line of bright glass beads, or several of them, runs over the surface of the rectangle. In the past, *Conus* discs were fastened on, instead of glass beads. Individual ornamental pieces also display an open slit which runs horizontally across the middle.

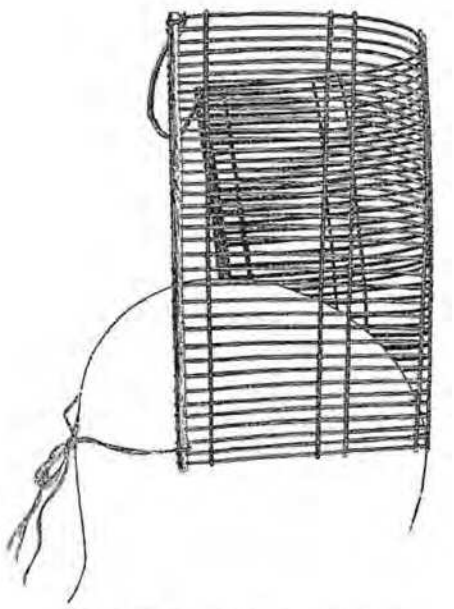

Fig. 24. Mourning ornamentation 751[1]. 24 cm high

[715] According to A. Bühler
[716] Bühler Collection, Basel
[717] Not from tree bark (Parkinson, 1907. p.369)

A variation of this mourning decoration lacks a *Parinarium* coating, and consists of vertical and horizontal rods of bamboo(?) tied together with plant fibres. The ends of the horizontal rods each insert into a vertical, thicker piece of softwood, at the lower lower end of which they fasten the cord, which is knotted at the back of the head. A beaded cord connects their upper ends, and hangs down in a backward arc when the ornament is worn. Of the small rods, the vertical rods are always wrapped in fine fibrous cord, as, often, are the horizontal rods too, Fig. 24. Between them, triangular patterns can be formed from this cord. Vertical rows of threaded beads are also often added.

Parkinson[718] believed that mourning decoration of this type was characteristic only of the Mătăṅkŏl, yet in 1908 it was also discovered among the Mắnus in Lắlā. The Pāk people told Krämer that it came from the main island.

Ear Ornaments

A spiral of fresh, broad leaves is inserted into the pierced ear lobes to widen the lobe. On Pāk they sometimes insert a further four smaller leaf spirals inside the main spiral[719]. The leaf spirals, which are called *hŏ́nĭŭ* on Pāk according to Friederici, are not worn only by boys and younger [121] people, but also by several older men, for whom they would probably serve only as decoration.

Fig. 25. Ear ring 1061[I]. 7 cm diam.

As earrings they use small pieces of turtle shell, rectangular with a short process on the narrow sides. These are bent together into a ring in such a way that both processes lie on the outside. On the opposite sides of the ring, they may fasten one or more tassels of half *Palaquium* shells with two dog or possum's teeth inside, on a short chain strung with glass beads (originally *Conus* discs). These appendages are not every-day wear, and people are satisfied with simple turtle shell rings. They are called *brűădil* on Hắŭs; in Sắhă *pūkĕpűn*; and on Salien, according to Bühler *bisipoi*. Often a ring is worn in only one ear lobe, although two rings hung one inside the other, are also found as an ornament. Mostly it is the men who wear turtle shell earrings, but many women do, as well[720]. In rare cases the turtle shell earring is surrounded by a plaited ring of plant fibre (cf. Plate 5).

Another type of earring consists of coconut shell that is cut in a circle and is usually notched on the outside like a toothed wheel, Fig. 25. A slot in the upper part, near the middle, enables it to be suspended on the rim of the ear lobe. Sometimes two beaded cords with bast fibre tassels hang from the under-surface of the ring. They call these earrings *bóbŭi* in T͡ắuī; *puebil*[721] in Păpítălā͡ī; *bajabill*[722] in Pătűsī; and, according to the material, *niu* in Lőnĭu; on Hắŭs *boäniu taliṅan*[723]; and in Mbűn͡ai *rumboe niu*. Similar toothed turtle shell earrings are called *drom* on Móuk, according to Bühler. Also, great numbers — Bühler

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718 1907. p.369 and Plate 25
719 Friederici, 1912. p.227
720 According to A. Bühler
721 According to Schoede, *pupuil* is the name of the turtleshell earrings on Lămbűtjo.
722 Bühler Collection, Basel
723 *taliṅan* = 'his ear'

counted 87 on one ear — of very tiny smooth turtle shell rings (*putingarat*), roughly 1 cm in diameter, are pushed onto the rim of the pierced ear lobe.

Ear pendants are cut out of mother-of-pearl shell. The pendants show a small, perforated diamond above, a separated piece on both sides below and, as the main component (again below), a wider diamond piece ending in three spikes, Fig. 26. Often the middle piece is notched at its edge, or the lower edge of the whole thing is jagged; frequently the middle piece, and often the [122] lower part as well, is perforated — the lower part sometimes with multiple perforations — probably to accommodate cords for hanging. The mother-of-pearl pieces are fastened with cords, small bead chains, and, today, with wire in the ear lobe. Women mainly wear this kind of ear ornament. Another type of ornament consists of serrated, round mother-of-pearl discs with an eye attached[724].

Fig. 26.
Ear ornament
2038:05, actual size

Earrings are also made from bone on Pāk, Fig. 27. On the Sĺsī islands ear pendants of spirally-wound possum tails are popular, Fig. 28. In Drūgűl and Ndrĺol, limbs of the millipede are pulled onto a thick bast fibre thread that is knotted, thus forming a ring, Fig. 29.

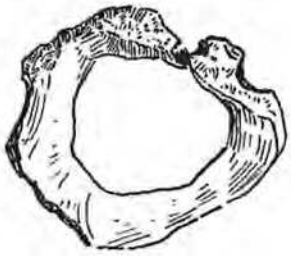

Fig. 27.
Bone ear ring 541ᴵ,
actual size

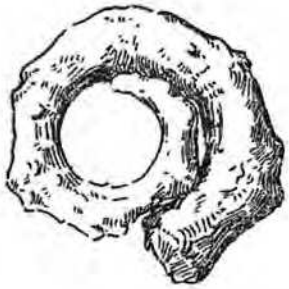

Fig. 28.
Ear pendant made from possum
tail 839ᴵ, actual size

Fig. 29. Ear pendant made from
millipede limbs
1176ᴵ. Diameter 7 cm

Other ear pendants are formed by people threading glass beads, *Coix* seeds, and other fruits (e.g. green fruits on the Sĺsī islands), conch shells, and often also dog or possum teeth on a short cord, which is fed through the opening in the ear lobe, after which the ends of the cord are intertwined. Such ear pendants of glass beads, *Palaquium* shells and dog's teeth are called *awejam* in Pătűsī according to Bühler. In Matawórei and on Lămbűtjo short ear chains of twisted bast fibre strung with breast plates of the sago beetle *Rhynchophorus bilineatus* were seen worn. In Matawórei Bühler heard *rútoau* as the indigenous name for these, while Schoede heard *aip*[725] on Lămbűtjo.

Another form of adorning the ear consists of people wrapping the ear lobes, to right and left of the ear piercing, with cords threaded with glass beads (*báiab*[726]). This practice was still a novelty at the time of Thilenius' journey[727] and back then they wrapped the lower rim of the ear lobe as well, as was done in 1908 on Lămbűtjo, whereas, on Hắŭs and in Műndī, the lobe was left

[724] According to A. Bühler
[725] The beetle itself is called *aip*.
[726] According to Krämer
[727] II, 1903. p.132, and Fig.19

free for putting on a turtle or coconut shell earring. [123] Instead of wrapping with glass-beaded cords, they also clad the lobe with pieces of material studded with glass beads.

For festive occasions 20 – 40 cm long ear pendants are designed and produced from *Conus* discs. Their upper part consists of horizontal rows of *Conus* disc cords as for shell money, arranged one above the other. Two or more narrower bands of the same type are added beneath these, or two cords with *Conus* discs strung edge-to-edge. These cords and bands often split off again, or are connected by cross bars. *Coix* seeds, half *Palaquium* shells, *Haliotis* shells, *Cypraea* shells, and (likewise inside the *Palaquium* shells) brightly-coloured feathers, possum teeth, and pieces of possum skin, hang from the bands or cords to complete these. Sometimes long ends of cord hang from the *Palaquium* shells. Also, there are often *Palaquium* shells in the lower part of the pendant, and sometimes *Coix* seeds, glass beads, and herbaceous beads are encased there. Some pieces resemble men's dance aprons in that they have an upper plaited border decorated with a mosaic of feathers[728]. The ear pendants are produced in ever-changing variations in shape, so that not once are two pieces belonging together exactly alike.

Instead of an ear decoration, some men habitually tend to wear bunches of leaves in their ear lobes. This is probably because they prefer fragrant leaves. In 1908 one man in Lőnŭu wore a tuft of European blanket material in his ear.

An *Amphiperas* shell is also to be included among the ear ornaments — probably a penis shell that a Pónam man fastened into his hair and left hanging over his right ear, or perhaps wore pushed onto his earlobe. Festetics de Tolna[729] also saw *Amphiperas* shells as a decoration for one or both ears. Miklukho-Maclay[730] mentions that the penis shell is stuck behind the ear for storage. In 1932 at great feasts Bühler found them stuck behind the ear, even among young girls.

According to Schoede and Bühler, nuts called *ndáaŏ* in L͡aues from the tree of the same name[731], (constricted in the middle, resembling a double nut), are worn as ear ornaments on Pǐtĭlu and in Mbŭn͡ai; i.e. stuck behind men's ears. The fruit called *dran*, and *bógaba* in Mbŭn͡ai according to Bühler, are usually carved, and display a black pattern deeply incised into a pale background. The pattern usually consists of vertical rows of ovals on the outside, and a continuous series of small transverse lines or triangles within, and small horizontal ovals [124] between these. Or there are groups of four ovals, abutting one another at their tips, with dots between; or circles of lancet-shaped figures that may simply lie horizontally over one another. Spiral patterns are also found on the fruit.

Nasal Ornaments

Although generally the nasal septum in both men and women is pierced, an ornament worn in the nose is fairly rare.

Bars of *Tridacna* 13 - 20 cm long are polished. These are round or rectangular in cross-section, and somewhat rounded or tapered at the ends. A rounded end is always perforated. The *Tridacna* bars are embellished with cross-hatched incised patterns in the form of cross-bars, rows of opposing triangles, diamonds, and the like. Fastened on to the opening at the end of the bar is a cord threaded with *Conus* discs or glass beads, to which possum teeth may also be added. Less common are two dog's teeth on a double cord, held together by cord wrapping[732]. Instead of just a

728 Eichhorn, 1916. p.264
729 1904. Figures on pages 127 and 135
730 *Izvestia*, 1878
731 Kölle Collection, Hamburg
732 Frankfurt Museum: N.s. 26218

single cord, they readily add two or more beaded cords that cross over like a net, or combine into a thicker cord in the upper part, Fig. 30. According to Moseley[733] and Parkinson[734] the *Tridacna* stave is worn in such a way that the cord is pulled through the hole in the septum, leaving the stave dangling. Miklucho-Maclay[735] and Bühler noticed a little stick in the septum, from which hung the cord and the stave. This style was not seen in 1908. The *Tridacna* staves are called *butắn* in T͡auī; *mununan* in Gắramaṅ; *mắlemắle* on Pĭtĭlu; *borgin, musắl* or *muθắl*[5736] on Pāk; on Lămbŭtjo *bleo* according to Schoede; and on Pónam *matamae* according to Thurnwald. Bühler heard them called *búleu* in Pătŭsī; *munumai* in Gắramaṅ; *monomann* in Buboi; and *mununaṅ* on Sabo.

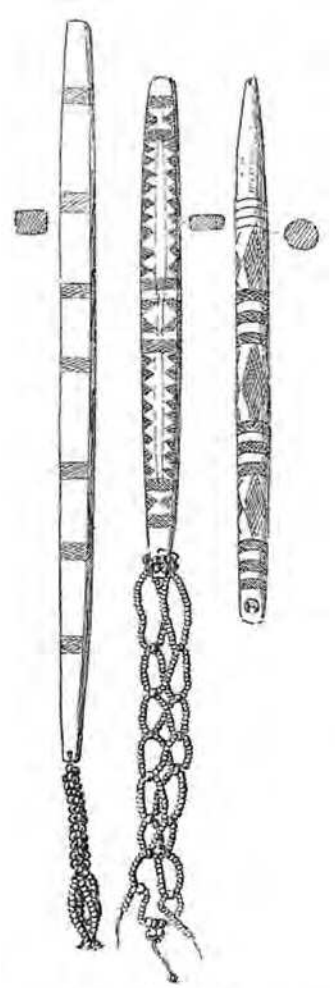

Fig. 30. *Tridacna* nose stave. 3199I, 3050I, 2538I, 13—19 cm long

A nasal ornament of a number of dog's teeth hanging on a [125] cord pulled through the nose is uncommon[737]. Today they thread glass beads on the cord, and also insert a glass bead between each tooth. In many cases they do not pull the cord itself through the septum, but form it into two loops for a simple cord that can pass through the nose. According to personal taste such a nasal ornament may comprise 3–12 teeth, very often engraved. According to Schoede the teeth in the nasal ornament are said to be called *buna* on Pāk[738].

Far more widespread is the custom of putting a straight wooden stick horizontally through the septum. Such sticks do not boast decorations but they are sometimes up to 30 cm long. Usually they are 12–20 cm long, Fig. 31. In T͡auī *bŏ́ĕnĭu* was named as the wood used. On Pắlŭăn, according to Friederici[739] the straight nasal sticks are called *púyut*. On Pāk Friederici[740] heard *părắṅgí* and Schoede heard *palauan* as the name for the sticks. On Pónam they are called *kaī̂*. Sticks like this were seen in Păpítălaī̂ and T͡auī, and on Hắŭs, Pónam, Pāk, Lămbŭtjo and Sĭ́sī.

Fig. 31. Simple wooden nasal stave. 2907I. 20 cm long

733 1877. p.400
734 1907. p.365
735 1886. Nos. 131–132
736 This is also the name of the *Tridacna* disc of the *kapkap*.
737 Labillardière, I, 1796. p.265
738 Catalogue of Schoede Collection, Berlin
739 1912. p.225
740 1912. p.227

In place of the wooden sticks, a piece of pipe about 12 cm long can sometimes be found; it is engraved with patterns of triangles and transverse bands, and in the middle it has a cord threaded with glass beads. The cord is pulled through the hole in the septum, Fig. 32. In effect this corresponds to a 31 cm long piece of rattan seen by Bühler on Móuk, wrapped in cord and coated with *Parinarium* resin.

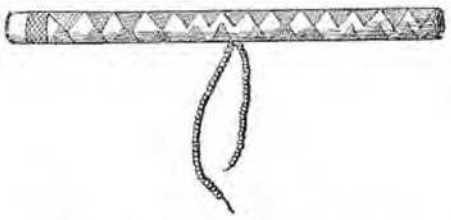

Fig. 32. Tubular nasal stave. 2043:05. 12½ cm long

Instead of the wooden stick, in Drūgűl and Műndī, and on Ăndră, Móuk, Lămbűtjo, and Pāk they use a semi-circular piece cut from a coconut shell and worn with the concave side downwards. In order to secure a curved piece of coconut shell in a septum that is already too wide, they insert a short wooden peg into the septal opening at the same time. On Móuk the coconut shell arch is *pa͡ipŭĭl*[741], and on Lămbűtjo *udinge*[742]. In Pĭtĭlu a woman imitated this ornament with a short curved pale piece of wood.

Parkinson[743] mentions a complete ring of coconut shell that is about 1 cm wide in the middle [126] and tapers towards the ends, as a nasal ornament. Somewhat narrower coconut shell rings, about 10 cm in diameter, are familiar on Lămbűtjo; these are called *drŏn̆ŭ̆s* in Ndrĭol, and *rongus* on Móuk according to Bühler. They open at the top, to the side, in order to be able to put the ring on, and in their lower half they have a trimming of seven pairs of glass-beaded fibres. Each pair of fibres is knotted together in one or two places, while the individual fibres are otherwise free and end in a bundle of bast fibre. The ring is hung in such a way that it does not impede the mouth, but with its attachments it hangs some way down over the neck, Fig. 33.

Fig. 33. Nasal ring 850[1] diam. 10½ cm.

As a substitute for a *Tridacna* nasal bar, on Pónam they also, in exceptional cases[744], prepare nasal pegs out of whale tooth (*malamal*). On Pāk nasal pegs (*geha*), slightly curved in shape and forming a narrow oblong rectangle, are cut out of mother-of-pearl shell[198]. Bühler found similar, but semicircular, curved nasal sticks (*rongus*) of snail shell in Mbűna͡i. Also, in 1932 the Móuk people had mother-of-pearl nasal sticks with a pattern of incised lines. According to Bühler's observation, slightly curved nasal sticks made from *Trochus*(?) or *Tridacna*(?) — called *káde* in Buboi and *mű̆nuwei* in Gă̆ramaṅ — are worn, by women in particular, in the north and north-west of the main island. On Hă̆ŭs in 1908, an old, somewhat foppishly-bejewelled man wore a bird bone (from a hen?) in his nasal septum.

741 Friederici, 1912. p.228
742 According to Schoede
743 1907. p.365
744 Catalogue of the Schoede Collection, Berlin

During dances, men on Pā́lŭăn wear under their noses an ornament on Pā́lŭăn usually worn, and in Lŏ́nĭu only worn, as a chest decoration. It consists of two pig's tusks whose roots are joined by a wooden stick pushed into the tusk cavity, with an incised and painted pattern then coated with *Parinarium* resin[745]. [127]

Necklaces

The most expensive necklaces consist of dog's teeth bored through at the root and threaded onto a string. The suspended crowns of the teeth are very often incised with simple hatched patterns in the form of several transverse lines, triangles, angles or diagonal lines. Up to 35 dog's teeth can belong on a good chain. They never thread just the teeth on a string, but insert between them either small slices of *Conus* or the vertebrae of a small shark, called *barehimbei* on Pāk, or up to about six *Conus* discs or, far more commonly, 1–20 white, and more especially red, glass beads, but usually just three or four. They also arrange the glass beads in vertical rows, threaded on several horizontal strings with the teeth fastened on in groups of two or three, Fig. 34.

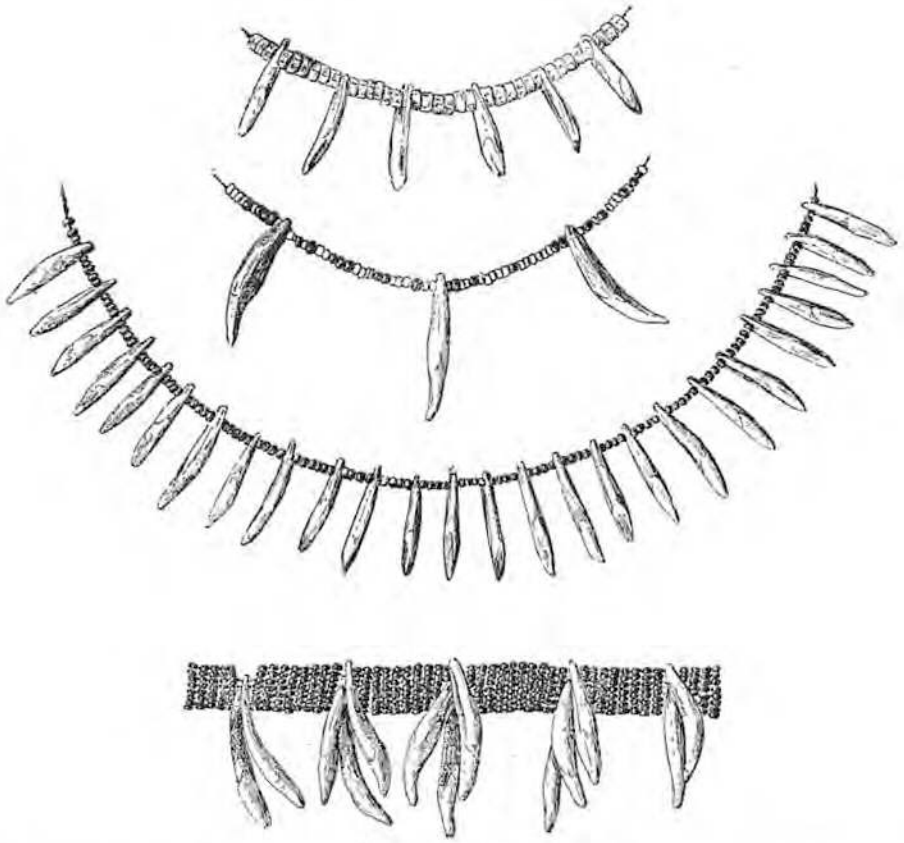

Fig. 34. Necklaces
20. 75:1 Dog's teeth and small backbone of shark 14. 2:62, 2958[1], 2491[1]. Dog's teeth and glass beads

The dog's tooth neck bands are called *panuo* on Lămbŭ́tjo[746], *ṅĭ́* in Drūgŭ́l, *amin* in Pătŭ́sī, according to Bühler; and [128] *kägun* on Pāk, according to Krämer. On Pāk people also call them *lĕ́muĭ* or *lĕ́hĕmuĭ* after the dog's teeth themselves. On Hā́ŭs they differentiate big dog's teeth as

[745] According to A. Bühler
[746] Schoede Collection, Berlin

lekämŭi and little dog's teeth as *kárun*, and they also name the entire chain after the greater number of teeth. Dog's teeth chains appear to be worn by men only.

Less valuable, although relatively rare[747], are chains of possum's teeth bored through in a similar manner. They also insert glass beads and *Conus* slivers between these teeth, or they dispense with this and knot the cord between pairs of teeth, Fig. 35. Schoede heard these chains being called *jelavat*[748] on Lămbŭtjo, and *kelavat* on Pāk; Thurnwald[749] heard *lia-lāuăt* on Lămbŭ tjo, and *liē-lāuăt* on Nŏru; Thilenius heard them called *lealoat* on Nauna; and Bühler heard *lialawat* in Pătŭsī. Both men and women wear them. Also, bones from the upper arm and thigh of the possum, their articular heads bored through, are strung onto a neck chain together with glass beads.

Fig. 35. Necklaces
2045:05. Possum teeth and glass beads
1863:08. Possum teeth and bones

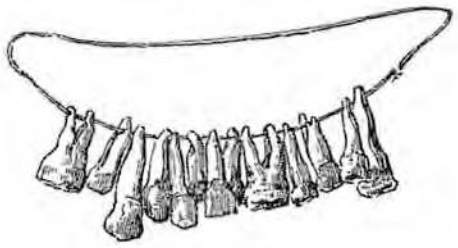

Fig. 36.
Necklace of human teeth 25 cm wide. Stuttgart IC. 58007. ½ actual size

The distal part of individual bones is also pierced in order to hang short cords of beads, teeth, *Palaquium* shells, and fibres from them[750].

Necklaces strung with crocodile teeth were found only by Thilenius[751]. Equally rare are short chains of shark's teeth, pierced through the middle.

Pig's teeth are hardly ever prepared, although on Nauna they wear necklaces with wooden imitations of pig's teeth between glass beads.

From the teeth out of the skulls of the deceased, stored in the house, the Mănus — for example the sister of the deceased, according to Parkinson[752] — make a necklace that is worn more as an amulet than a decoration. The teeth are bored through the tip of the root. They are strung without beads or the like, Fig. 36. On Lămbŭtjo the teeth of dead relatives are strung together with dog's teeth on glass-bead chains[753]. Miklucho-Maclay[754] also found [129] small bones strung between the dog or human teeth "among others also human *Phalangi digitorum*". In Pătŭsī the chains with human teeth are called *calamat* according to Bühler.

A favourite material for men's and women's necklaces is the milky-grey seed of *Coix lacrima*, bored through lengthwise. Chains composed entirely of *Coix* seeds are called, like the seeds themselves *sílsi* in Lukús; *sílisín* on Pítĭlu; *sílisíli* on Hăŭs; and in Pŭě *mutmut* or *wanúggi*, according to Bühler. They love to put *Coix* seeds together with *Cypraea* shells, which are pierced at one end, so that one *Cypraea* shell always alternates with several *Coix* seeds. Such chains are called *mānā* in Sáhă. On Lămbŭtjo Thurnwald heard them called măna, while elsewhere that is the

747 Finsch, 1914. p.200
748 *lavat* = possum
749 Catalogue of the Berlin Museum
750 According to A. Bühler
751 II, 1903. p.139
752 1907. p.405
753 Catalogue of the Schoede Collection, Berlin
754 *Izvestia*, 1878.

name of the penis shell; and the *Cypraea* is called *mŭruhắs* or *kămĕnă* on Hắŭs; and *wåmenắ* in Kyĕlâûắk. Often glass beads are inserted between the *Cypraea* shells instead of *Coix* seeds. Also, *Cypraea* shells alone are strung onto necklaces, Fig. 37.

Chains that consist exclusively, or for the most part, of glass beads, are called *bóĭjắb* in Kyĕlâûắk; in Lŏnĭu *bŏ́ajăb*; on Hắŭs *wóăjăb*; and on Lămbŭtjo *buàjắp*, according to Thurnwald. They are usually assembled from groups of different-coloured glass beads, or red and white beads alternate. A special sort of neckband of glass beads does not consist of beads simply threaded onto a string, but has an inner portion consisting of a strip of *tapa* or material, around which a string of glass beads is wrapped in a spiral, so that only the ends of the *tapa* strip emerge from the wrapping of glass beads and can be knotted when this ornament is worn. The wrapping can also be interrupted at regular intervals by particularly large glass beads pushed onto the *tapa* strip. [130] These jewellery items are named in the same manner as the glass-bead chains, Fig. 38.

Fig. 37. Necklaces ½ actual size
4035[I], Coix seeds
2510[I], Coix seeds and *Cypraea* shells
2697[I], *Cypraea* shells and glass beads
Stuttgart IC. 60998 *Cypraea* shells
3138[I], Glass beads and Coix seeds
3140[I], Glass beads

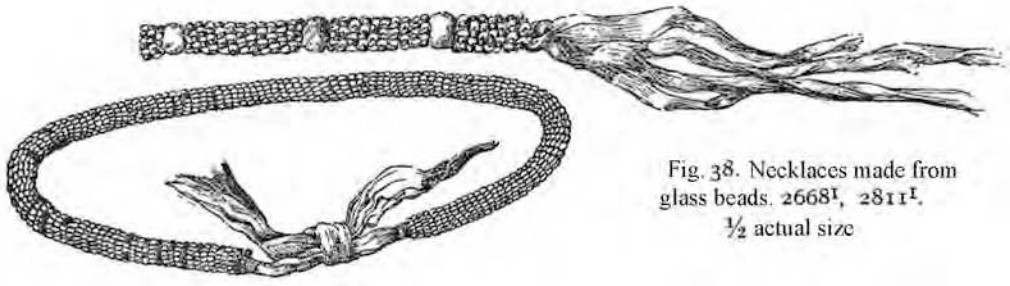

Fig. 38. Necklaces made from glass beads. 2668[I], 2811[I]. ½ actual size

Small mother-of-pearl shells are pierced near the hinge and strung together with blue glass beads quite far apart, Fig. 39.

Fig. 39. Necklace of mother-of-pearl shell and small glass beads. 2954[I]. ⅓ actual size

The *Conus* discs, strung principally for strands of shell money or men's dance aprons, were the forerunner of the glass beads. However, men also use the shell money strings with several interspersed glass beads as necklaces (*ketjil*, according to Schoede on Lămbŭtjo), and embellish them at intervals with one tassel per three *Conus* discs strung edge-to-edge [131] and a small bunch of bast fibre, or they line up single *Cypraea* shells between the *Conus* discs, Fig. 40.

Fig. 40. Necklaces
14. 38:31, Bivalve discs and glass beads
2511[I], Bivalve discs and *Cypraea* shells
½ actual size

Ranked among dance decoration are: necklaces of halved nutshells of *Palaquium edule*, Fig. 41, (*múesemues* in Pătŭsī, according to Bühler); and chains of *Palaquium* shells, *Conus* slivers, red seeds (probably *Erythrina indica*), sometimes also several dog's teeth, with feathers at the end[755].

Schoede found necklaces strung with small fruits (*apĕtā*) and others of strung breastplates of the sago beetle (*aip*) on Lămbŭtjo. Very rarely, white sea urchin shells are also combined into a necklace[756]. In Ndrawa Bühler saw a necklace (*gígiu*) of eleven green land snail shells.

Fig. 41. *Palaquium* shell necklace. 1290:07. ½ actual size

Twisted black cords are worn round the neck as mourning jewellery. On Pāk women seem to put on 22 coils of these cords as simple decoration, without their being in mourning.

Simple knotted strips of *tapa* or strips of material were seen as neck ornaments in Păpítălâî and Mŭndī, and on Pĭ́tĭlu and Pónam.

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755 Eichhorn, 1916. p.263

756 Frankfurt Museum. New Series 22328

They often put several coils of the necklace round their necks. Many people knot them together in such a way that both ends hang down on to their chest.

According to Thilenius' observation[757], men in general wear more long-lasting jewellery than the women, and in 1881 Romilly[758] found that women on Lămbŭtjo wore no jewellery at all.

Chest Cords

Natural- or red-dyed twisted cords are worn by men and women, crossed over the chest, as a mourning jewel. This jewel consists of two parts, each coming over a shoulder, across the chest, under the upper arm of the opposite side, returning across the back, cf. Plate 5, Figs 1 and 2.

Similar cords are also worn as a decoration when not in mourning. Among men this was only on Pónam, in the form of two simple cords or one [132] pair of cords, each of three beaded strings, tied together at the cross-over point by a long dangling band of cotton material; and on Sĺsī in the form of two cords decorated with *Conus* discs and pig's teeth.

Elsewhere diagonal cords are worn around the chest only by women, particularly often on Pāk and in Păpítălâî. These are pale as in Nature, or blackened. Many women wear the cords, which always have several coils, as a brassière. The cords then either run below the breasts, or other coils at the same time, pass above the breasts. Older women abandon supporting their breasts, and let the cords, each pair divided into two parts, pass over their pendulous breasts (cf. Plate 2).

Mourning Cords

Twisted cords, naturally pale in colour, limed or dyed red, are worn by men and women in several coils around the forehead, crossed over the chest, as a waist belt, or as arm bands or leg bands. The coils are held together by pale or red rattan braids at wide intervals. A Pónam man wore mourning jewellery for his wife, in the form of black neck cords after the style of women's jewellery. In Sáhă men wear pale mourning cords on their chests, from which hang two amulet pouches strung with glass beads, and with beaded cords as tassels. Both pouches are bound together by two short diagonal glass bead cords. Each of them hangs on twelve cords. The cords are united into a bundle at the other end by a cord wrapping, and continue beyond as frayed fringes. The ornament is put on in such a way that the fringe ends hang down over the neck, Fig. 42.

Fig. 42. Mourning cord with amulet. 634[I]. 1/4 actual size

On Lămbŭtjo the mourning cords are called *drlagi*, in Lálā they are called *sălŏsól*, on Lóu *talki*[759], and in Sáhă *mol*.

Very similar cords, bearing no relation to mourning, are worn mainly by women. [133]

[757] II, 1903. p.140
[758] 1887. p.115
[759] Walden-Thiel. Berlin VI, 30398

Shell Discs and Turtle Shell Discs

The opercular discs of a large species of *Conus* are partially ground in the preparation of a chest ornament until a white disc (*bŏŭmbŭ̊l* on Pĭ́tĭlu) about 5 cm in diameter is formed; a string round the neck is threaded through its natural hole so that the *Conus* disc hangs over the chest, Fig. 43. These discs are also worn on necklaces of dog's teeth, glass beads, *Coix* seeds etc. Imitations of such discs are made out of wood.

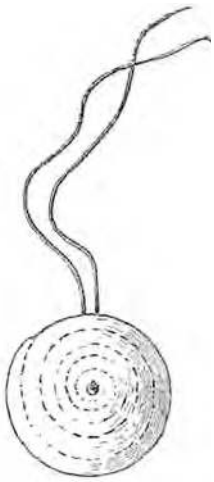

Fig. 43. Chest ornament *Conus* disc. 4021[I], diam. 5 cm.

Pearl shells of a species of *Avicula* are polished thin, and, in a semilunar shape, hung round the neck by a thin cord threaded through a small hole in the middle of the upper rim[760]. According to Giglioli[761] such ornaments are called *ewak*(?) on Nauna; and *poinju* on Lămbŭ̊tjo, according to Schoede. A fish-shaped neck ornament of mother-of-pearl is called *tuiniakk* on Móuk, after the material, according to Bühler, similar to another such made out of a possum tooth with a small plate of mother-of-pearl 7.5 cm long.

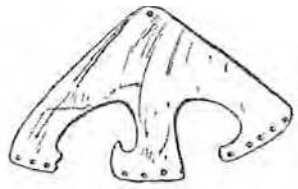

Fig. 44. Chest ornament, Mother-of-pearl shell. 550[I]. 1/3 actual size

Other pearl shells are cut out in such a way that two notches are raised on their underside, and the remaining pieces of the underside are given hook-like processes at the sides. These pieces are about 11 cm wide. Others are oblong, sometimes pierced by cut-out curves, or dentate on the rim and offset above to a narrower piece with short side projections. The women on Pắlŭăn wear such decorative pieces, about 7 cm long[762]. The undersides of all these items are pierced multiple times close to the rim for hanging cords with *Conus* discs, seeds, and dog's teeth. A further hole at the upper end serves for accommodating a thin hanging cord, Fig. 44.

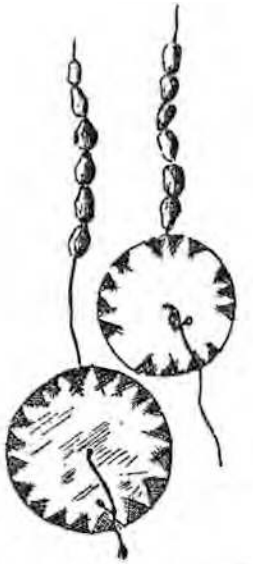

Fig. 46. Chest ornament made of *Tridacna* discs and *Coix* seeds. 3312[I]. ½ actual size

Discs of *Tridacna* are very popular. The smallest of them have a diameter of 3 cm. They are bored through the centre. Through the hole run both ends of a cord that is threaded behind the disc with *Conus* slivers, like shell money. This ornament, called *bŏl* on Hắŭs, [134] is worn in the hair or around the neck, so that the *Tridacna* disc lies on the forehead, the throat, or the chest, Fig. 45.

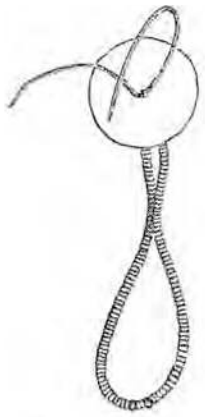

Fig. 45. Chest ornament. *Tridacna* disc. 2674[I]. ½ actual size

One particular way of wearing such *Tridacna* discs consists of fastening one each of a pair at either end of a cord threaded with *Coix* seeds or similar. This is done by knotting each end of the cord on the front surface of the disc. The chain is hung round the neck, the ends with the *Tridacna* discs hanging down over the right and left sides of the chest, Fig. 46.

Bigger *Tridacna* discs are worn over the chest on simple cords or incorporated with necklaces.

The only patterning inscribed on these discs is a scratched cross-hatched design round the edges, almost always depicting small triangles with their bases on the edge and the apices toward the centre.

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760 Finsch, 1914. p.103
761 1911. p.230
762 According to A. Bühler

This type of scratched design always occurs on *Tridacna* discs with turtle shell overlays belonging among the most expensive jewellery items in the Admiralty Islands (cf. Plate 6). Such pieces and their components are named as follows:

	Whole item	*Tridacna*	Turtle shell
Lǒnĭu	*buembúl*[763], *búduli*[764], *boémbu*$^{1}{}_{r}$[765]	*bŏdelĕ́*	*bo͡ípó͡n, bo͡íbó͡n boepón, gărād*[766]
Sōri	*bombŭl*		*kulpūn*
Nó͡ru	*buembúl*[217]		
Pāk	*bŏl*; *pol*[767]	*muʒắl, musắl*	*pún, p^{b}ú͡n*
Pắlŭăn	*poắmpul*^{u}[768]		
Lămbŭ́tjo	*neit*[221], *pūĕmbŭ́l*[769]		*koat*[5]
Kyĕlâûák	*bámbŭl*		
Lắlā	*pūĕmbŭ́l*		
Sá́hă	*kāmă̆k*		

Bühler heard these names for the whole piece: In Irun *béambun* or *kéamet*; in Mbŭ́na͡i *témet* or *póembul*; in Pătŭ́sī *bójembrue*; on Móuk *bóambul*; and on Pónam *mbuol*. Schnee[770] records the name *puembul*.

[135] The turtle shell overlays are bigger than in the corresponding pieces of jewellery from New Ireland, and extend almost to the ornamented edge of the *Tridacna* disc. The linking of both parts is achieved solely through the carrying cord, whose ends pass through a hole in the *Tridacna* disc and the turtle shell overlay, and are knotted in front of the latter. These days a brightly-coloured glass bead is often attached at the knot.

Given the diversity of filigree patterns of the turtle shell overlays an interpretation would hardly have been possible, had Thilenius[771] not succeeded in detecting the output as being the form of four human figures passing outward from the centre, on one specimen. Four, occasionally only three, but often as many as ten, spear-shaped figures are derived from this human representation; or, for each figure, two smooth or serrated curved lines. These radiate from the centre, and are surrounded by a rim piece, which is smooth or serrated towards the outside, and decorated with curves, triangles or other incised patterns. A narrowing of the human figure is combined with a paired, uncinate transmutation of its upper part — probably the arms — and leads to the formation of fishhook-, intertwining-, and spiral forms on the rim piece. Occasionally even this rim piece can drop out. However, the narrowing of the human figures can also lead to the cutouts between them

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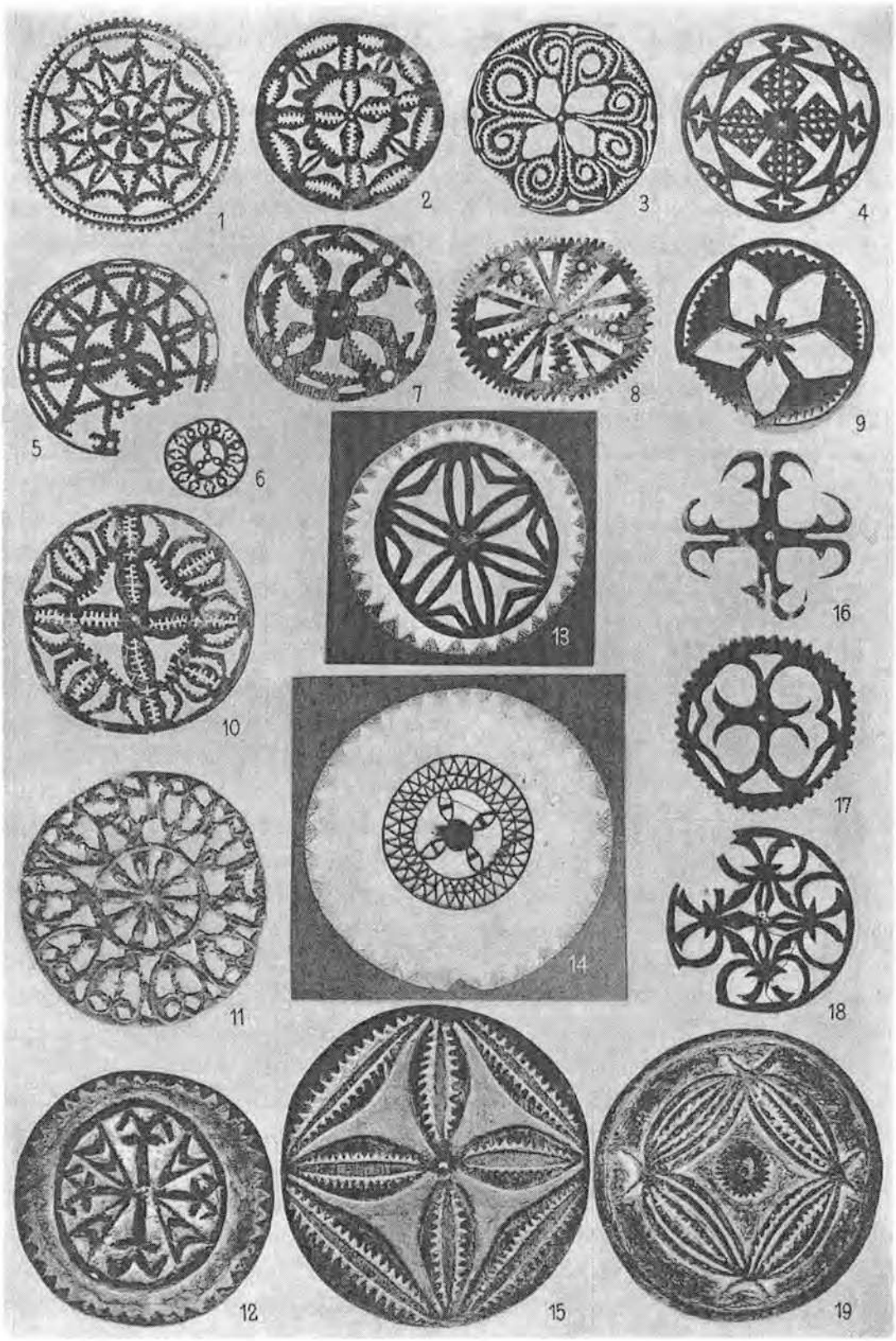
763 Thurnwald Collection, Berlin
764 Bühler Collection, Basel
765 "Pronounced half-r, half-l". According to Krämer
766 Probably the name of the turtle. According to Krämer
767 Schoede Collection, Berlin
768 Walden Vocabulary, Berlin
769 In Ndrí́ol
770 1904. p.211
771 II, 1903. p.140 and Fig.25



Kapkaps.

1—4 ca. $^1/_3$ actual size
5, 7—19 ca. $^2/_5$ actual size
6 ca. $^1/_2$ actual size

becoming significant, and forming a flower-like pattern, or it leads to cross-shaped figures, or to new intercalations of other figures in the central piece, Fig. 47

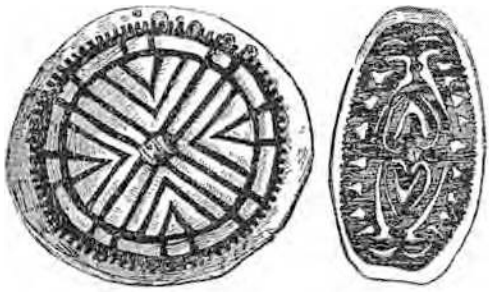


Fig. 47. Chest ornament. Curved bivalves with turtle-shell overlay. I4. 74:7, I4. 74:8. 1/3 actual size

Most turtle shell overlays are inferior to those of New Ireland[772] in the refinement of their execution, but surpass the latter in the wealth of forms, particularly in view of the fact that this does not depend so much on a strong symmetry as it does in New Ireland. Indeed pure geometrical patterns occur fairly rarely, but are always recognizable as derivatives of the human motif.

As a substitute for the *Tridacna* disc, they also use a round disc of whitewashed wood or mother-of-pearl shell. Very occasionally they cut the mother-of-pearl shell lengthwise, almost in an oval, and provide it with a correspondingly shaped turtle shell overlay; it then displays only two derivatives of the human figure in a rim piece.

Buka people working at the trading stations and plantations [136] occasionally produce turtle shell overlays for *Tridacna* discs in the customary Buka designs, which are worn by the Admiralty Islanders.

The perceived costliness of European material can also beguile them into fashioning the filigree disc for the *Tridacna* disc out of tin instead of mother-of-pearl shell. If they also go to the effort of carefully cutting out a pattern, this then mars — quite apart from the unconscious barbarity — the colours, as the curved rims of the tin overlay mar the beauty of the ornament.

Far better are wooden imitations of the ornamental items, which simultaneously replace both *Tridacna* and turtle shell in a single piece. The forms of the turtle shell overlays are embossed and stained black. They do the same in the engraving of the rim of the *Tridacna* disc, which may also be indicated by a simple embossed ring on the rim. They endeavour to reproduce the colours of the *Tridacna* disc in the deeper sections by painting with lime. Many wooden discs show painting of individual decorations in red. Since it is not very important in wooden imitations that the lines of the turtle shell disc hang together below one another, the pattern on wooden discs can also change and, by indicating a centre point and uniting the spear-shaped figures, several components can resolve into a circle.

They wear the *Tridacna* discs with turtle shell overlays on a neck cord on the chest or, if they are small, also on the necklace or on the forehead.

Pig's Tusk Chest Ornaments

In Lőnĭu they combine two tusks into an ornamental piece by pushing a little wooden stick into the two pulp cavities and smearing a thick layer of *Parinarium* resin over this area and then scratching designs into it. They later colour in the designs. Men wear this pig tusk ornament, called *ehe puou* on a cord round the neck when dancing. It appears in the same manner on Pălŭăn, where the men wear it also under the nose[773] when dancing. [137]

[772] Parkinson, 1907. p.366
[773] According to A. Bühler

Chest Ornament made from Leaves and Nuts

Fig. 48. Chest ornament
Double cucurbit
2054:05, E 179. ½ actual size

The double-nut-shaped fruits of the tree called *ndáaŏ* in La͡ûes are usually worn as an ear ornament, but in some cases also on strings as a chest ornament. The nuts are always carved in relief, Fig. 48.

Bunches of leaves on a cord are probably worn mainly as amulets, for example in combination with a human arm bone; however, in Pĭ́tĭlu, leaves called *wă̆gĕi* are worn as a chest decoration because of their fragrance, Fig. 49.

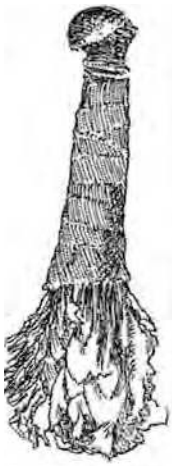


Fig. 49. Amulet worn as a chest ornament. 828I. 11½ cm long

Neck Ornaments

On war expeditions and for war dances men wear ornaments of hair, bones or wood about their necks.

The hair of a man's head is pulled through a long sleeve and is visible in a bunch at the lower end. At its upper end it is either braided into a loop[774], or it wells out of the sleeve which is then decorated with long loops of glass bead cords. Instead of the long, one-piece sleeve, several short ring-like tubes can be pushed over the shock of hair at intervals, with the hair visible between them (cf. Plate7, Fig. 7).

The sleeves around the bunch of hair consist of *Ficus* bast fibre, and is coated with a stiff film of *Parinarium* resin and other ingredients (lime?), decorated in relief, and painted red and black, with white in the deeper places.

Fig. 50.
Tuft of hair. 3053I.
¼ actual size

Other sleeves consist of a braid of fine, twisted brown fibrous cords overlaid with brightly-coloured glass beads or, originally, *Conus* discs. These form patterns (diamonds, triangles etc.), or the plaiting is over-sewn with glass-beaded cords and coated in between with *Parinarium* resin. In Ta͡ûī they add a stick of hardwood (*ké lóndian*). As an appendage there are cords of *Conus* discs and *Palaquium* shells at the lower end of the bunch of hair[775], Figs 50 and 51.

On Hă̆ŭs it is said that the tufts of hair are removed in battle from slain Ŭsĭa͡î from Drūgŭ́l, and worn at a *labắn*-designated celebration dance, [138] i.e. probably at a war dance put on by the chief (*labắn*). They call the shock of hair *dsă*; on Hă̆ŭs *kabŭă̆r*; on Bird Island Bay *triteituha*; in Lắlā *lŏ́ŭmbălaî*; and in Ta͡ûī *kamuṅbắl*. Thilenius heard it called *tjatja* on Sĭ́vĭsă; Thurnwald[776] heard *kadiŏ́mbalŏ́m-bălắi* on Lămbŭ́tjo; while Schoede heard *lomvelorama* on Seeadler Harbour, and on Pĭ́tĭlu *lampal*.

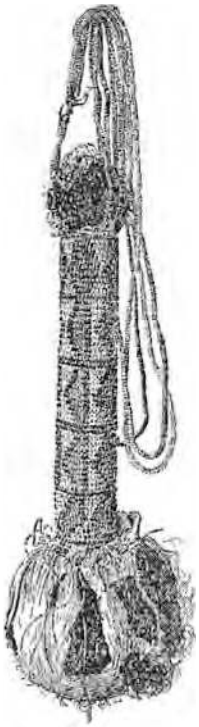


Fig. 51.
Tuft of hair. 3220I.
⅓ actual size

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774 Thilenius, II, 1903. pp.130 *et seq.*
775 Eichhorn, 1916. pp.280 *et seq.*, with Fig.68
776 Thurnwald Collection, Berlin

The shock of hair is worn either on a cord slung round the neck, or hanging down the back from the hair at the back. When not in use, its tufted end is covered with *tapa* or cotton material and wrapped in fibre.

A second war, and war dance, neck decoration is prepared from a human humerus or femur. Often only the upper half of the bone is used; or the epicondyles and the greater trochanter are cut away[777]. Occasionally, instead of the humerus they take a human radius and ulna, or a bone from the sea eagle[778]. They decorate the middle section of the bone with a few scratched decorations of a simple kind, Fig. 52. Primal feathers of the frigate bird or the sea eagle are clipped in such a way that the feather remains only at the tip, or is retained on the quill only in small triangles. It is bound to the bone by a thick wrapping of twisted cords. They occasionally coat the binding site with *Parinarium* resin painted in triangles. Only the bony condyle appears above the bunch of feathers. It is occasionally coloured with red ochre. When wrapping with frigate bird feathers, many bones are wrapped in leaves into which a couple of small feathers can be inserted, Fig. 53.

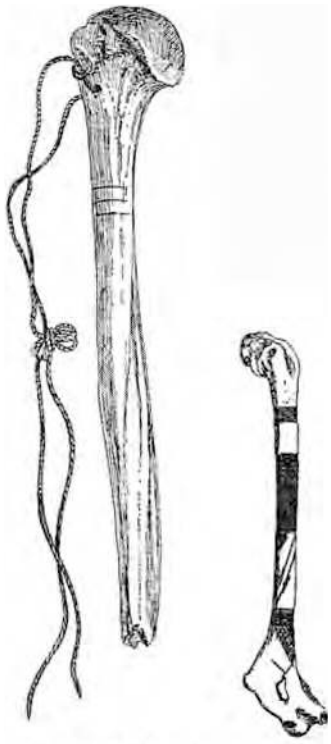

Fig. 52. Battle ornament. 2506I, 2709I. 1/3 actual size

Fig. 53. Battle ornament 1123I. 26 cm long

An imitation of the bone decoration, produced nowadays only on Pāk although previously widespread, consists of a piece of wood carved in the form of a face, corresponding with the condyle of the bone and, like the bone, studded at its lower end with cut frigate bird feathers. Imitation feathers are occasionally also carved out of a piece of wood. [139] On a specimen in the Berlin Museum[779] acquired by the German Marine Expedition (Walden), the feathers are missing and in their stead, towards the head, are carved a torso, arms and legs. By the semicircular configuration of the cross section of the wooden portion below the head, they achieve a more regular arrangement of the feathers than in the bone ornament. Above the [140] wooden part, the bound-on feather quills are spread with *Parinarium* resin, or a network of glass beads, and decorated in places with dog's teeth added between them[780]. The ear lobes of the wooden head are often wrapped with glass-beaded cords. On Pǐtǐlu the feathers are called *kā́ra* (= frigate bird), and on Pāk, according to Krämer, *lumun kara*. The wooden head sits on the smooth lower part with feathers wrapped round with cords, and clearly shows by its form that it is an imitation of the joint condyle. It is very often curved somewhat forwards. Relief decoration is often added above the forehead, near the cheeks, and on the neck. The back is kept free of decoration and is somewhat convex. Its upper part is pierced to take a string. Preferably *Conus* disc cords are fastened onto head and feathers with a *Palaquium* shell, Fig. 54 (cf. Plate 3, Fig. 3, Plate 7, Fig. 5).

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777 von Luschan, 1908. p.552
778 Meier, 1908. p.203
779 VI 34794
780 Eichhorn, 1916. pp.281 *et seq.*, and Figs 71–73

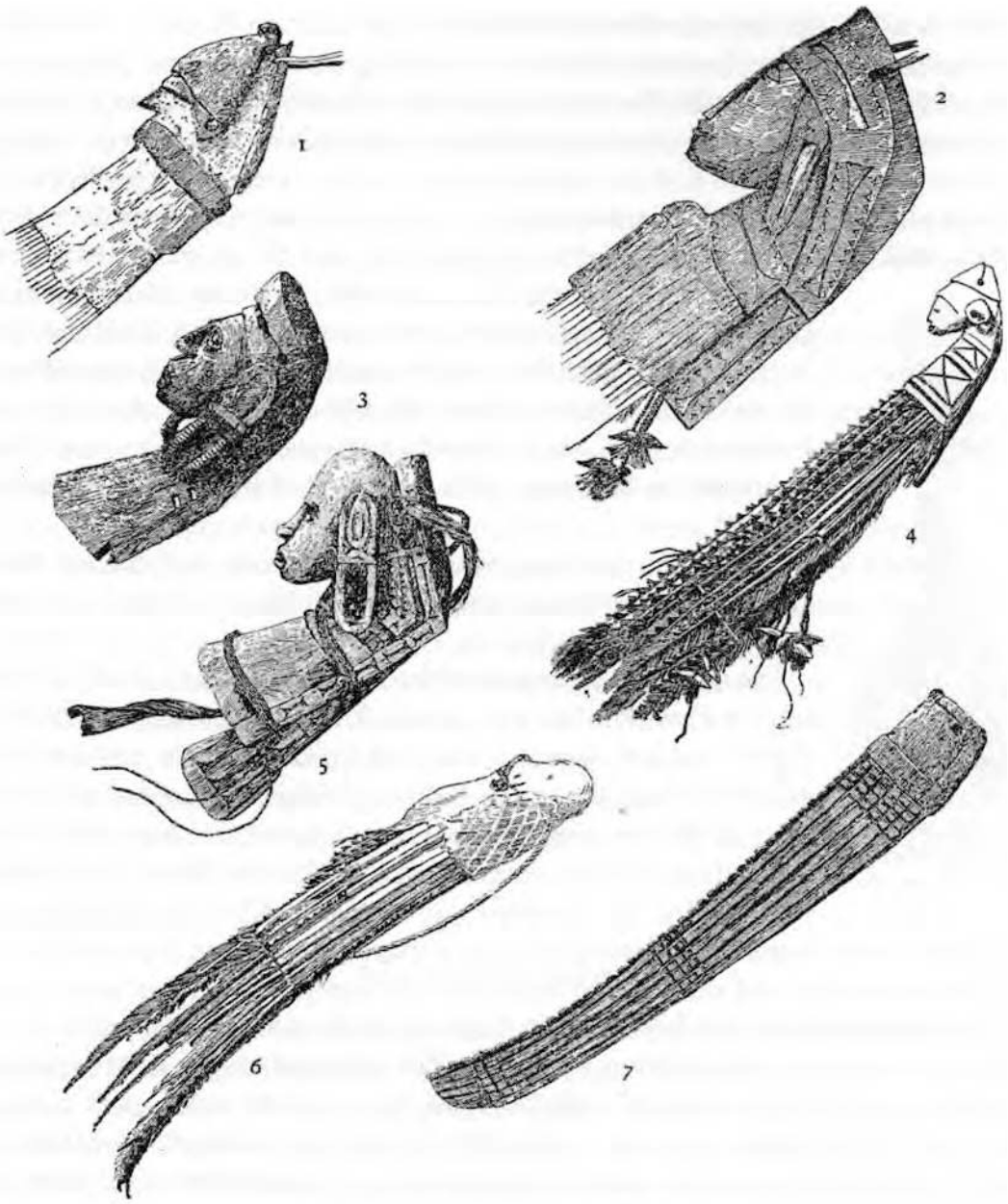

Fig. 54. Neck ornaments ca. 1/4 actual size
1. 1172[1], 2. 2719[1], 3. 861[1], 4. Karlsruhe A 8236, 5. 860$_1$, 6. Karlsruhe A. 6383, 7. 4042[1].

Imitations of the bone in its natural form are made out of wood on Pǐ́tĭlu, with leaf and feather wrapping, Fig. 55.

The bone ornamental pieces simply hang down the back from a neck cord. On the other hand, the imitations with wooden heads are bound round the neck with a short cord, standing out from the body of the wearer almost horizontally or at least obliquely downwards in the neck, as a consequence of the curved form of its reverse side. Together with the feathers they are on average 47 cm long. A Hắŭs man used an elongated plaited pouch with a crown of short plaited cords standing out from the middle and featuring a fringe of these cords above and below, as a sheath for his bone ornament.

Both types of neck ornament with bone or wooden heads are regarded as a fashion statement, and on Pāk they are called *brắngĕrá* or *brắn̆ĕrắ* or, according to Krämer, *láluan*. They

Fig. 55.
Nasal ornament
4043[I]. ½ actual size

are called *wǎgé* or *wǎgeî* on Pĭtĭlu; on Hắŭs *rűnrű* or *wắngaî*; in Sắhă [u] *ākē*[i]; and in Drūgűl *oangé*. Schoede[781] heard it called *wangé* or *potu lamat* (= human bone) on Lămbűtjo and on Pónam *kai*; Thurnwald on Sōri heard *ūāngēi*. As names for this item of jewellery Bühler recorded *ruru* on Hắŭs; *kei* in Rajeu; in Sembrun *namikátas*; in Tungou *drúundru*; in Pătűsī *oánkei*; and in Umbua on Lóu *kéindin*. In Lőnĭu Krämer heard *vánkeî*. The bone is called *huĭn hămắt* on Hắŭs; *lắmăt* in Ndrĭol; and, according to Krämer, *barinamar* in Lőnĭu. The carved wooden head is called *ké* or *rámắt* on Pĭtĭlu; according to Krämer *hámar* on Pāk; according to Bühler *ramat* in Umbua. It follows from these descriptions that the people also relate the wooden imitation of a bone to a deceased individual. [141]

A man on Hắŭs parted with a neck ornament made from a bone, with the comment that his father had worn it for years, but he had now died and hence the bone no longer had any power for the son. In Umbua Bühler was assured that the bones always came from dead relatives and never from enemies.

The effect of the neck ornament is to make its wearer strong, successful in throwing spears, and invulnerable[782]. Probably it also protects him from a *taberan*, as Krämer heard on Pāk.

A man from Pónam wore a neck ornament consisting of a bunch of leaves and associated frigate bird feathers. It could not be determined whether the ornament contained bone. The head of a joint or a cut bone end did not project from the bundle, and it is possible that this was only an imitation, lacking the most important part.

Thilenius[783] illustrates neck ornament items carved out of wood, from the north coast of the main island and the Fedarb group. They represent a human figure, a crocodile head with a turtle, and a rectangle from which extends a connection to a circle enclosed by two arches. They are all decorated with incised carving and painting. Their similarity to the floats of the turtle nets is astonishing[784]. Another item of neck jewellery (*selo*) is a three-sided spindle-shaped body made of *Parinarium* resin with spear-shaped incised patterns. Dovetailed into it are six opposing jointed limbs of a mantis shrimp — the whole thing is probably intended to be a mantis shrimp.

Shell Money Belt

Belts of 10-16 strands of shell money are worn by men as a dance ornament and as a festive ornament. When worn, the fibres strung with *Conus* slivers are fastened at two or four places in front by cross bars formed from knotted cords threaded with plant beads, *Conus* discs or glass beads. Front and reverse sides of the transverse knots are identical. Because of their bright colours they stand out from the belt strands, and occasionally also include a simple striped or rectangular pattern[785] (cf. Plate 4, Figs 3 and 4).

Suspended from the transverse knots are short cords with *Conus* discs or glass beads, terminating in a *Palaquium* shell.

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781 Catalogue of the Schoede Collection, Berlin
782 Meier, 1908. p.203
783 II, 1903. p.131
784 Word-of-mouth, from A. Bühler
785 Eichhorn, 1916. p.265

At the ends of the belt the cords, no longer carrying *Conus* discs, are plaited into 5-12 tassels each, and then merged into a twisted cord [142] with which they tie the belt. Very often the strands of each end are divided into two groups, each of which end in this way. Then the twisted cords of both parts are knotted together a little further on.

Schoede heard a belt like this called *ketjil* on Lămbŭtjo. He was given the same name for the men's dance apron made from *Conus* discs. According to Bühler shell money belts and, more recently, their glass-bead replacements, are called *moi* in Poamatjau and *la* in Pŭě.

Rattan Belt

Narrow strips of rattan are wrapped in tight spiral coils with thin black-dyed strips of rattan; several coils are wound round the hips. The ends of the belt are reshaped into eyelets in such a way that the last piece of the belt, no longer encased in wrapping, is bent back and pushed into the wrappings. They fasten the belt by a cord pulled through these loops, Fig. 56.

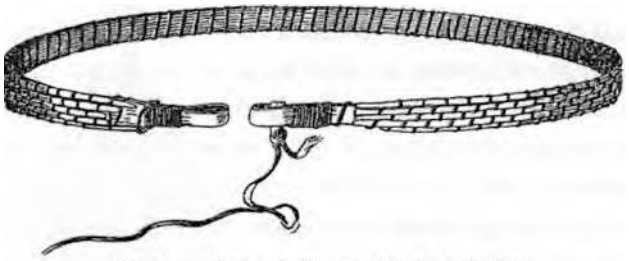

Fig. 56. Rattan belt. 3201[I]. 74 cm long

Other rattan belts are wrapped less densely, and interwoven with yellow rattan-like strips in such a way that the yellow strips run parallel with the actual rattan of the belt, and run alternately over and under the black strips of the wrapping. The yellow and black strips can lie together in pairs, and pairs of strips of the other colour can cross over and under. The reverse side never shows yellow strips, but can be coated with *Parinarium* resin. These belts are 1 – 2.5 cm wide and pass round the hips in only one coil. People can wear 5 to 16[786] of these belts one above the other, with or without interwoven yellow, and then connect them by cross bars of bast fibres so as not to let the uppermost belt slip down, Fig. 57. Other similar belts have a yellow-black diagonal plaiting on the front [143] and the reverse side of the individual belt strands, and on the cross bar consisting of strips of rattan.

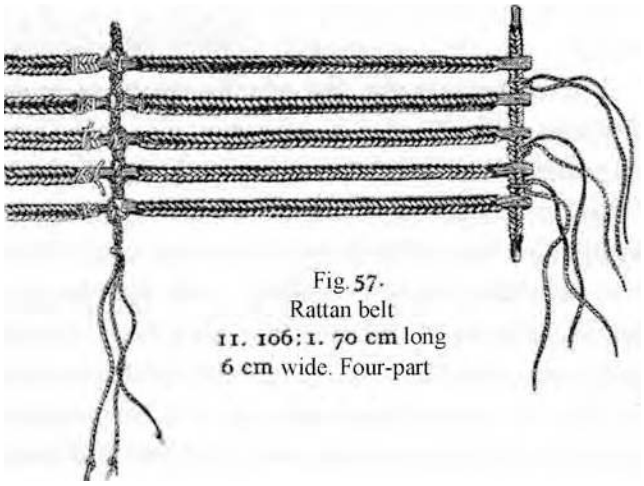

Fig. 57.
Rattan belt
II. 106: I. 70 cm long
6 cm wide. Four-part

These belts are *lănă* on Kŏmŭli[787], in Lálā and on Lămbŭtjo; according to Schoede, *ramol* on Lămbŭtjo; according to Bühler *waribang* on Sabo; in Lesau *noa*, and in Nada *nroi*. In Kyělâûák they are named *bāk* like the men's dance aprons. Men wear them.

Yellow and black plaited strips of rattan are also sewn on the edge of a piece of chip wood about 4 cm wide, and worn as a belt.

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[786] Finsch, 1914. p.420

[787] Thurnwald Collection, Berlin

Black-yellow Plaited Belt

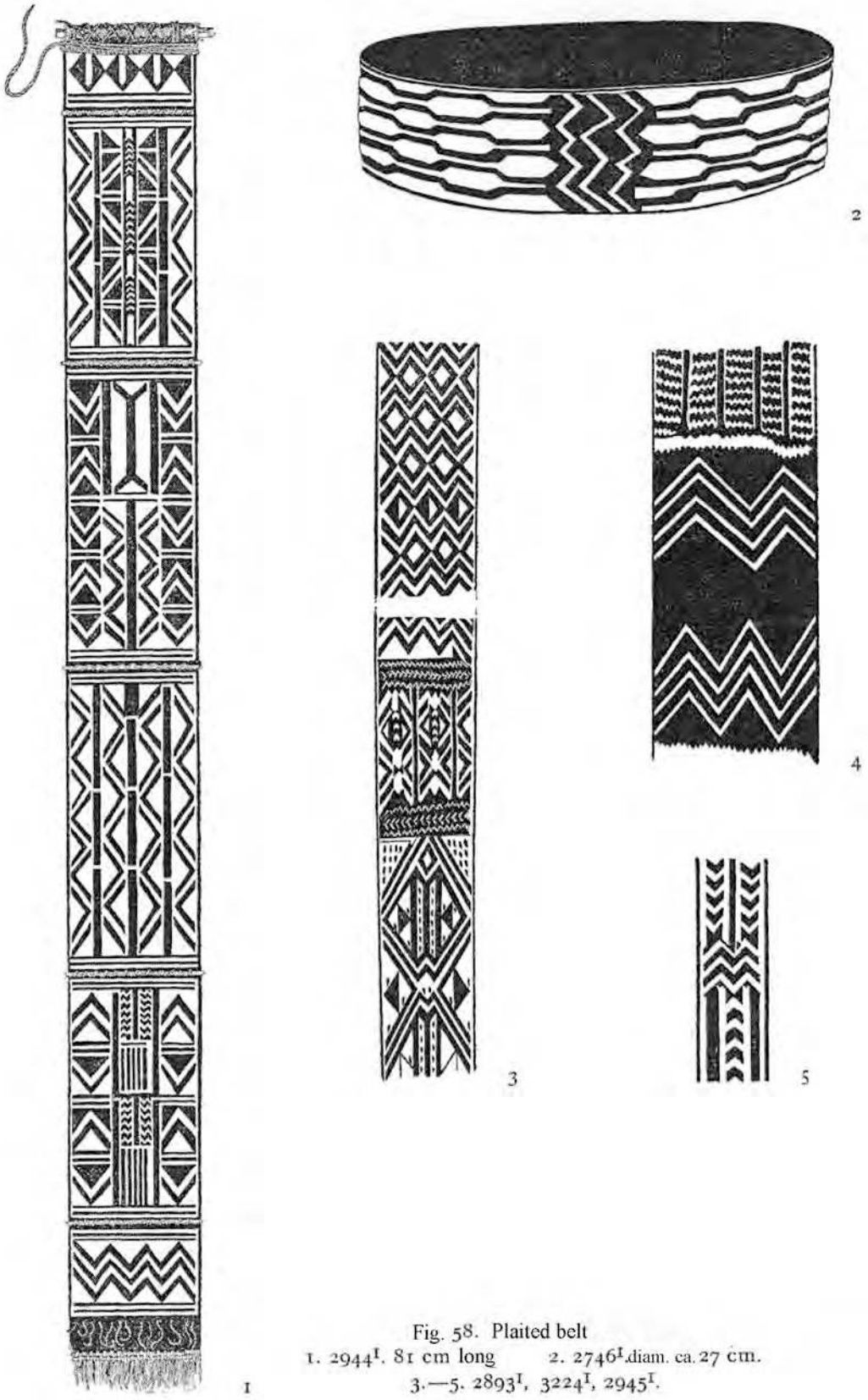

Fig. 58. Plaited belt
1. 2944[I]. 81 cm long 2. 2746[I] diam. ca. 27 cm.
3.—5. 2893[I], 3224[I], 2945[I].

Belts are plaited by the women from blackish-brown and yellow fibres[788] in such a way that the background is brown while the yellow pattern is visible only on the outer side; the underside remains monocolour brown, devoid of pattern.

The material for the brown fibres comes from a species of liana that is called *běribắn* on Sōri (in Gắramaṅ, respectively); on Hắŭs *bắraban*; and on Lămbŭtjo and in Pătŭsī *lắna*[789]. The Gắramaṅ people trade these fibres from the Ŭsĭa͡ĭ in bundles of ten in exchange for fish and other items. The liana is said not to occur in the vicinity of the beach. According to the fineness of the intended task, the liana fibres are torn into coarser or finer, respectively broader and narrower, strips.

The yellow fibres come from an orchid called *hōi* on Sōri*; kŏlabá* on Hắŭs; *ĕ́n druṅól* or *en drugól* in Pătŭsī; and *rŭ́ṅol* on Pĭ́tĭlu[790]. The outer layer is peeled from the stems in strips by the fingernails. starting from one end or from both ends.

The yellow pattern (*tărowan, tăroăn* on Hắŭs; *ĭ́ṅon* in Lŏ́nĭu) is arranged in such a way that it almost completely smothers the front side and from its surface shows the brown of the undercoat in strokes, zig-zag lines, diamonds, angles, triangles and the like, in ever-changing combinations. The main brown lines always run lengthwise, with the direction of the belt.

Most belts have at their ends a fringe extension of the brown, underneath fibres, generally 4-8 cm long, although this may be up to 20 cm long[791]. Between the end of the plaiting and the fringe extension is a little piece of wood, somewhat longer than the width of the belt, sewn on to the outside, with threads running in spirals or in zig-zags. When putting on the belt, crosswise threads are strung as far as the other little end stick, acting as a clasp. Only a few belts are plaited closed, Fig. 58.

[145] A few belts are plaited in such a way that they split open down their length (Plate 7).

Men wear the plaited black-yellow belts over *tapa* aprons round the hips. Some men also bind such narrow belts around their trunk, just below their chest[792]. A few women wear very wide belts also, about 16 cm high, to secure both aprons.

The belts are called *búĕnắ*[793] in Lŏ́nĭu; *pŭ́ĕ́nŭ* or *drĕ́la͡ŭ* on Pĭ́tĭlu; *kundrel* in Drūgŭ́l; *bắraban* on Hắŭs; *bănewan* or *kŏ́lŏvắ* on Pónam[794]; *běribắn* in Gắramaṅ (Sōri); *lắna* in Pătŭsī; and *poenā* on Pāk[248].

Bark Belts

Belts 10–16.5 cm high, made from tree bark, are worn by men as decoration. Their ends are pierced to be able to accept eyelets through which cords are drawn as fastenings. Instead of the eyelets a small network of twisted cords can be fastened at the end, fulfilling the same purpose, or longer bands can form a decorative hanging. Usually the belts are somewhat longer than necessary, in order to extend round the hips, with one end overlapping the other, Fig. 59.

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788 Not “woven” (Vogel, 1911. p.78).
789 On St Matthias *tawále*
790 On St Matthias *ŭaṅa͡ĭ*
791 Finsch, 1914. p.414
792 Vogel, 1911. p.7
793 According to Krämer *buéna*
794 Schoede Collection, Berlin

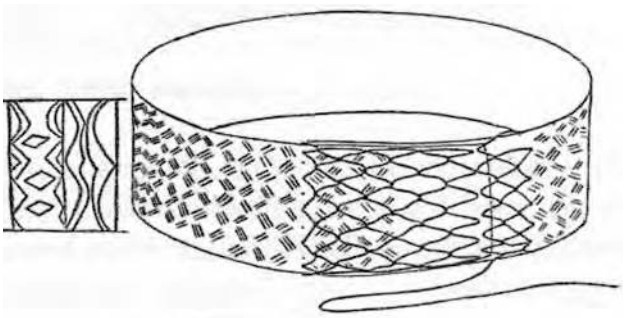

Fig. 59. Bark belt
4067[I]. Length 85 cm, Width ca. 7 cm.

The bark belts are usually decorated with scratched or incised patterns. If they have scratched patterns, they are dyed black and often embellished with several short cords with glass beads. The scratched patterns are mainly short lines arranged as diamonds, or vertical stripes filled in with small diagonal lines, interspersed with similarly filled-in diagonal stripes one above the other. With incised patterns the deeper sections are white, while the raised sections are painted red or black. Among the patterns are *Tridacna* figures, vertical lines with a chessboard pattern or triangular border, diamonds etc. Relatively uncommon is a belt fringe of a pair of short cords of glass beads, or of individual pieces of rectangular finely-meshed net decorated with glass beads (cf. Plate 7, Fig. 3). [146]

In Kyĕlâûák bark belts are called *gŭ̆ĭliṅké* or *kŭ̆ĭliṅké*; on Lămbŭ̆tjo *kuilingēi*[795] or *ramol*[796] like plaited belts; on Pāk *zimzim*[250]; and at Seeadler Harbour *koki*[250].

Women's Plaited Belts

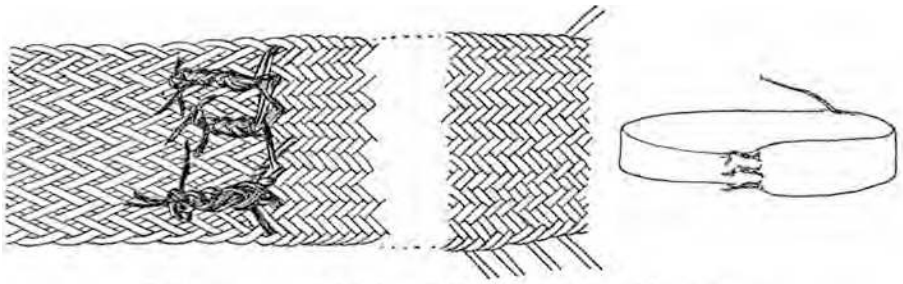

Fig. 60. Unfinished plaited belt 3047[I]. 66 cm across

For fastening the double apron many women wear multiple coils of twisted cords, while others wear a wide plaited belt. Usually such belts are plaited out of firm black material, but sometimes out of softer and finer material in black and natural pale bast colour. The plaiting strips are always crossed diagonally over one another in a simple fashion. So far as two colours can be processed, a simple line pattern is formed, fairly flexible because of the style of plaiting, Fig. 60. Individual belts are coated with a thin layer of *Parinarium* resin. The belts are made *en bloc* and are 8-19 cm wide. Cord bindings inter-woven allow narrower and wider closing. Little girls' belts are correspondingly less wide, although they are otherwise made the same way.

According to Thurnwald the belts are called *lā̆nă*[797] in Păpítălâĭ; according to Bühler *buteio* in Iru; *rana* or *gúlingei* in Pătŭ̆sī; and *bálaban* in Buboi; and according to Schoede the girls' belts are called *metukurrar* on Pāk.

The same type of closed black belts (*kingatang*) with a *Parinarium* coat are also worn covering their breasts by women on Mbŭ̆ke[798], Fig. 61.

Over the monocoloured coarser belts, or also as the sole support for the apron, many women wear finer belts with a yellow and black pattern in the style of [147] men's belts. However,

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795 Thurnwald Collection, Berlin
796 Schoede Collection, Berlin
797 Thurnwald Collection, Berlin
798 According to A. Bühler

the women's belts are wider. Usually the women's colourful belts are plaited closed. Open women's belts with wooden clasps were seen only in Mŭndī in 1908, and by Bühler in Bogai, Buboi, and Lŏnĭu, and on Sabo.

According to Bühler, these black and yellow women's belts are called *banggas* in Tungou; *danat* in Gabou; *drana* in Iringou; *ndroi* or *nroi* in Buboi; *ndroi* in Bogai; *rogam* in Kawoliabb; *no* in Sembrun; *rana* in Pătŭsī; *boema* on Lŏnĭu; and *bäribang* on Sabo.

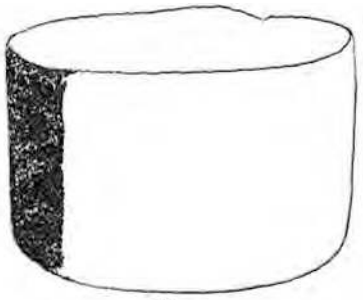

Fig. 61.
Plaited body belt
2731[1]. 72 cm across. 18½ cm high

Other Belts

As a substitute for plaited or bark belts, men wear strips of *tapa* or cotton bound round the hips, over the T-binding with which they are unconnected, and knot them in front. The ends hang down as far as the T-binding or even over it.

On the Sĭsĭ Islands a boy was seen wearing a bast fibre band about three fingers wide, together with green twine, as a belt.

More recently a few men have worn leather belts of European origin, as a substitute for the indigenous belt.

Shell Arm Rings

Flat rings are made from the shell of *Trochus niloticus* and the rim is decorated with a scratched, cross-hatched pattern. The patterns resemble those on pig's tusks, *Tridacna* nose sticks, etc. They are always scratched on fairly shallowly[799], and they stand out black against the white surface only after the ring has been worn for some time, Fig. 62.

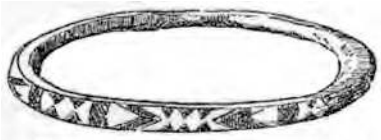

Fig. 62. Bivalve arm ring 846[1].
Diam. 9½ cm.

Generally *Trochus* arm rings do not have a crinkle, although rings with a crinkle were seen on men from Pōa͡m and Pălŭăn. In 1932 Bühler saw crinkled rings in Pătŭsī, Mbŭn͡ai, and Buboi. A man usually wears 1– 4 rings on his upper arm a little above the elbow. Moseley[800] saw as many as 7 - 8 rings on some arms. As far as possible they put the same number of rings on both arms, although one arm may be bare or have fewer rings than the other. In such cases the left arm carries more rings than the right. Only rarely are *Trochus* arm rings worn deliberately higher on the upper arm. As with other upper armbands they then stick leaves and the like into the ring. [148]

On Lămbŭtjo, Móuk[801], Pāk, and in Pătŭsī the rings are called *lăl*[802], but also *tălaĭ* in Pătŭsī or *buliot* according to Bühler. On Pōa͡m they are called *lai*[803]. According to Moseley the name *lan* also occurs on Sōri, and Bühler heard it in Buboi as well. On Pāk *lăl* is also the name for arm rings made from a string of vertebrae of a small shark (*barehīmbéo*).

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799 Not "branded" (Schnee, 1904. p.211)
800 1877. p.400
801 Friederici, 1912. p.228
802 Cf. *elal* according to Rickard on Ndrŭwal (Ray, 1892. p.7)
803 Dempwolff, 1905. p.210

Arm and Leg Bands made from *Conus* discs and Glass Beads

A simple arm or leg ornament is produced by multiple-coils of a strand of shell money round the upper arm just above the elbow, or above the ankle or, more often, just below the knee, inserting the end into the coils. A cord threaded with glass beads, *Coix* seeds etc. may be used instead of a shell-money cord.

Better quality arm and leg bands are made from strands of glass beads — very rarely cords of *Coix* —knotted like macramé, developing into a rectangular surface completely covered in glass beads. Front and reverse sides are identical. Red, white, and blue glass beads are arranged in such a way that diamonds (often several one above the other) at right angles to the edge alternate with intervening triangles or hourglass figures. The border is very often pure white or interspersed with small triangles whose apices point inwards. The pattern is completed by further figures inside the diamonds and triangles. Other bands display 2–4 rows of short oblique lines side by side. They bind the armbands firmly to the upper arm, and the leg bands just below or, more rarely, above the knee, using cords that fray out from both ends of the band. [149] Often only one part of the armband or leg band is decorated with beads – the lateral sections are only plaited from threads, Fig. 63.

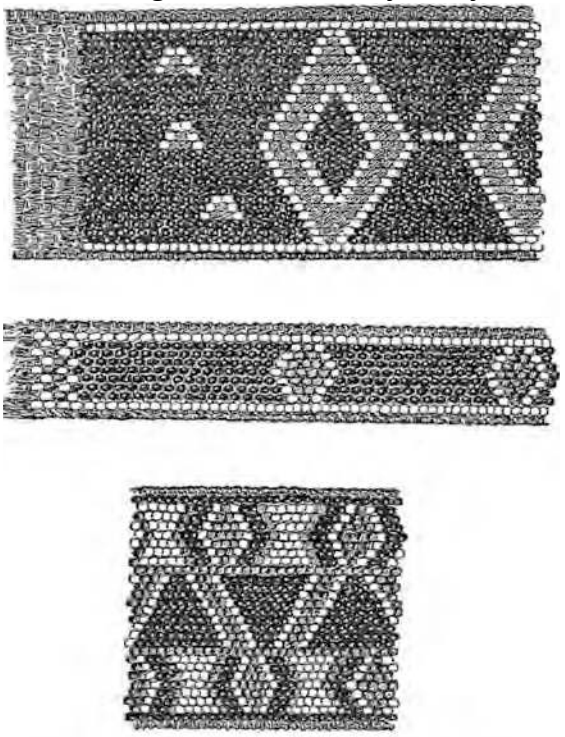

Fig. 63. Armbands made from glass beads 14, 38:29, 4241[I], 3160[I]. ½ actual size

Another type of armband with a glass-bead pattern is plaited in a ring, and sewn with beads threaded on cord. On the reverse side, the glass beads are barely visible through the brown weave of thin bast fibres. On the outer surface, the parts of the network not decorated with beads are coated with *Parinarium* resin. The patterns consist either of diamonds and triangles like the mesh armbands, or strips of glass beads running perpendicularly to the width of the band. Before such an armband is produced, the thickness of the arm of the purchaser is determined, and a matching cylinder is made from small pieces of wood, strips of rattan, and pieces of palm frond sheath casing. The glass beads are attached using an iron wire as a tool[804].

This type of armband can also be preserved within a coat of *Parinarium* resin, then resembling flexible pieces of leather or bark. They decorate these armbands with only a few glass beads in vertical rows, or they arrange a few glass beads above and below, near the rim, completely coated in resin.

Wider, cuff-like armbands, extending to the middle of the forearm, likewise have a base of a ring-shaped mesh of vertical thin wooden chips, or cords that are horizontally interwoven with fine, double-stranded threads[805]. The mesh is coated on the outside and often also on the inside with *Parinarium* resin, and is sometimes worn as a decorative piece without further embellishment. In Pătŭsī Bühler noticed a similar knee band that was made by cutting up a belt. On Hắŭs they name the mesh *kab* or *kap* and the resin coat *ărĭt*. The mesh is never totally

[804] According to A. Bühler

[805] Eichhorn, 1916. pp. 266 *et seq.*

cylindrical but narrows somewhat towards one end [150] to conform better to the forearm. Cords strung with *Conus* discs or glass beads are pinned onto both rims of the mesh with overlapping hem stitches[806]. Cords with *Conus* discs and botanical seeds or glass beads are arranged between the rims in such a way that these cords cross over one another and form a narrow, pierced- or wider-mesh pattern, Fig. 64; Plate 7, Fig 12. Again, there is a tendency toward diamond patterns, usually multiples, one above the other, due to the breadth of the decorative item. Insofar as they work with glass beads in such cuffs, they prefer patterns of red, white, and blue. On Hắŭs glass beads in general are called *bēĭăb*[807]. On the other hand, red glass beads are called *djalaû*; white *pohŭ́*; and blue *mŭrhŭ́*. Bunches of feathers may be added to the glass bead trimming, dangling on short cords of glass beads.

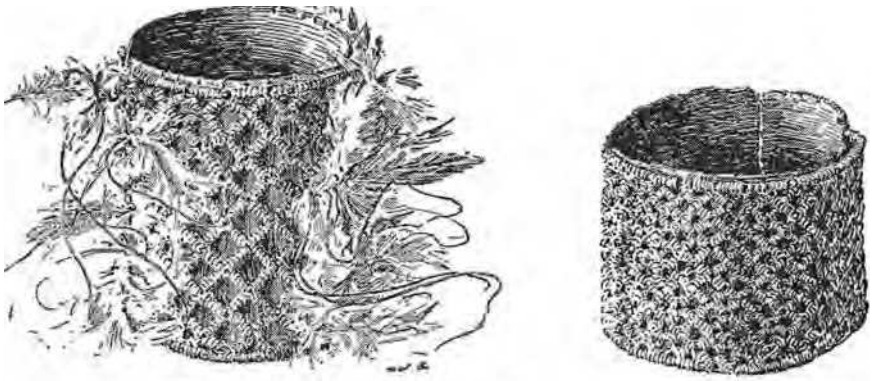

Fig. 64. Cuffs with *Conus* disc attachments
Stuttgart IC. 5730, IC. 9482, Diam. 8—9 cm. Height 7—10 cm.

In Tauī and Pătŭ́sī a simple ring of bark or palm frond sheath may take the place of the mesh base. This ring is studded on the outside with intertwined glass-bead cords[808], (cf. Plate 7, Figs 9 and 10).

Other cuffs, for forearm and above the ankle, are trapezoid open-weave, bound round the arm or leg with cord fastenings. These cuffs never have little pieces of wood stiffening the weave, but consist solely of bast fibres. The glass beads are sewn on the outside, and usually form 3-4 strips running like a ring round the arm or the leg. The mesh is coated with *Parinarium* resin. The inside of the cuff remains free of a resin coat, Fig. 65 and Plate 7, Fig 13.

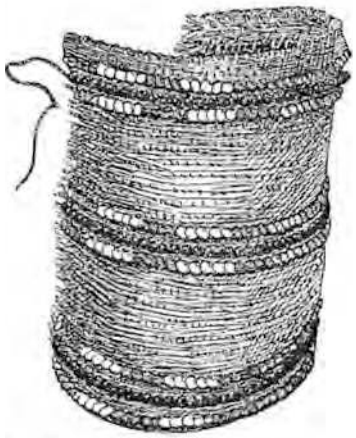

Fig. 65. Plaited cuff with glass beads. E. 3544. 20 cm wide, 9 cm high

According to Thilenius[809], the cuffs are made and worn primarily by the "Usiai", i.e. the Mătăṅkŏ́l and Ŭsĭaî, and are an ornament of warriors. Certainly, they were never seen on boys, but on Pāk older women also wore leg cuffs, so that it cannot be a case of emphasis on ability to bear arms. Leber[810] found the arm cuffs in Ndrabui more richly decorated with glass beads among the women than among the men.

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806 Eichhorn, *loc. cit.*

807 On Sōri, according to Moseley, *bujam*; on Ndrŭ́wal, according to Rickard, *waiap*

808 According to A. Bühler

809 II, 1903. p.138

810 1923. p.202

Nevermann, Admiralty Islands, Plate 7

Decoration, about ¼ actual size

1—3 Belts
4 Pouch with penis shell
5 Neck ornament
6 Woman's headband
7 Hair extension
8—10 Armbands
11 Amulet
12—13 Gauntlets

On Móuk they call the arm and leg cuffs *ŏndro*[811] and in Pătŭsī *mon* or *mol* and in Gă̆ramaṅ *moṅ*, also according to Bühler. Armbands with glass beads are [151] in general called *mŏl*[812] on Pāk; on Lămbŭtjo *mŏl* or *muól*[813]; on Pĭtĭlu *muol*; on Hă̆ŭs *mōă̆l* or *mŏă̆l*; and at Kelaua Harbour *boajáb*, after the glass beads. According to Bühler they are called *móong* on Sabo; in T͡aŭī and on Pónam *mol*; and in Pătŭsī *kolingei* or *mol*. Armbands with *Coix* trimmings are called *wámbada* in Pătŭsī, according to Bühler. Glass-beaded lower-leg bands are called *kokoä* on Hă̆ŭs; and in Kyĕlâŭă̆k *mon*^{d} *rong͡aĭ*; according to Bühler *góehu* in Soheneliu; and according to Krämer *émol* in Lŏnĭu.

Yellow-and-black-plaited Armbands and Knee Bands

Women plait the armbands and knee bands in the same manner as the plaited belts, from the blackish-brown fibres of a liana and the yellow fibres of an orchid. Friederici[814] names "Grass and *Licuala*" as the raw material on Pāk for plaited arm rings. The pattern is yellow against a dark-brown background; it is rarely the other way round. Pure black rings, or brown rings with simple patterns of black fibres, such as Bühler saw in Bogai, are very rare. In Iringou he came across a black armband, (*ndii*), with loose ends, made from plaited rhizomorphs.

Fig. 66. Plaited Armband and a plaiting sample 2021: 05. Width 27 cm.

The manufacturers always brought arm rings to trade, fastening these together in pairs. Occasionally a cord is plaited into the joining point for this purpose[815].

In contrast to the belts, the plaited armbands are never open, but plaited as a ring. The final plaiting site often still shows short brown fibre ends sticking out, Fig. 66, Plate 7, Fig. 8.

Leg bands, worn above the ankle, are always plaited open-ended. Sometimes — for example in Nada, where they are called *bálabam* — they are only plain blackish-brown[816]. Like the belts, the knee bands are open pieces stiffened by sticks, fringed at both ends, and often featuring lengthwise splits. Since they are worn virtually only for dances, they are given a hanging of *Conus* discs or glass bead cords with *Palaquium* shells that clatter and jangle against one another when dancing, Fig. 67. The hanging is fastened in bunches near the upper edge or in vertical rows between the longitudinal slits. On Lămbŭtjo such dance knee bindings, worn just below the [152] back of the knee, are called *lă̆na*[817]. According to Bühler they are called *drána* in Pătŭsī and *dána* in Daptou.

Men and women wear the armbands on the thickest part of their upper arm. They wear only a single band on one or both arms, often accompanied by other arm jewellery made from glass beads. In Lŏnĭu black-yellow arm bands are called *búĕnă̆*; on Pónam[818] *bănewan*; on Sōri and in

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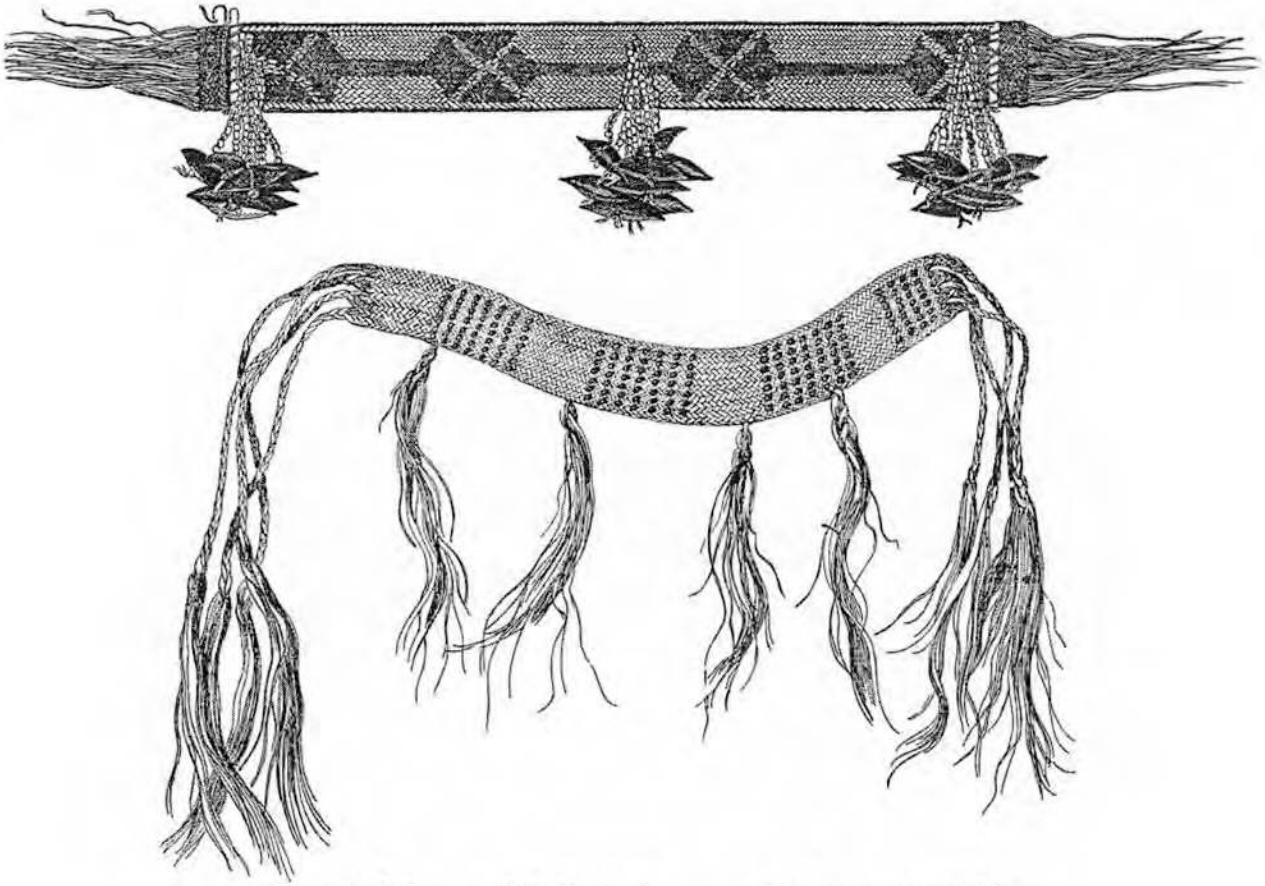
811 Friederici, 1912. p.227
812 Schoede Collection, Berlin
813 Thurnwald Collection, Berlin
814 1912. p.227
815 According to A. Bühler
816 Bühler Collection, Basel
817 Thurnwald Collection, Berlin
818 Schoede Collection, Berlin

Gắramaṅ *năp*[819]; in Pătŭ̊sī *lắna* or, according to Bühler, *rana*; in Kyĕlâûắk *rana* or *buena*; on Pāk *sŭ̊lŭ̊ṅ*[820] or *rana*; and, according to Bühler, in Bogai *nnia*[274], in Buboi *nniä*, *nniā* or *ndroi*, in Nada *nniä*, in Ndrawa *ndri*, and in Sohéneliu *drágana*.

In T͡auī leg bands are plaited out of plain, pale, more pliable material, ending on each side in four plaited cords ending in fibres. Hanging from the lower edge are four tassel-like fringes also ending in fibres. Glass beads grouped in vertical rows are plaited into the weave, Fig. 68. [153]



Figs 67 and 68. Plaited leg bands. 2948[1], 3231[1]. 1/3 actual size

On Lămbŭ̊tjo they also wear narrow armbands consisting of a strip of rattan bent into a circle and, like the rattan belts, braided black and yellow. Like the rattan belts they are called *ramol*[821]. In Mbŭ̊n͡ai the girls wear arm rings (*gombar*) made from a strip of rattan that is wrapped only with leaf strips[822].

Other Arm Rings

Men and women wear arm rings made from tree bark. These differ from the bark belts only in size, but resemble them in the patterning and fastening. Closed bark arm rings are also worn and

819 According to Schoede, *anap* is an anklet on Sōri.
820 In Bogai brown leg bands with a black pattern have the same name
821 Schoede Collection, Berlin
822 According to A. Bühler

are sewn up with a zig-zag stitch. In Lā́lā they are called *pŭtyĭnkḗ*, and among the Mā́nus on Lămbŭ́tjo *kūlĭnkḗ*[i], Fig. 69.

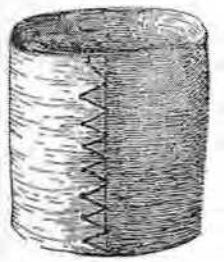


Fig. 69. Arm ring made from tree bark 778[1]. ø 8 cm.

Breast plates of the sago beetle are occasionally strung on threads and worn as armbands, especially by children. In Matawórei Bühler heard these children's armbands called *rútoau*, like an ear ornament made from the same material.

As part of the mourning jewellery in Păpítălâ͡ı̂, armbands about 4.5cm high, plaited from twisted mourning cords, are worn in pairs, bound around the arm with hanging plaited cords, Fig. 70.

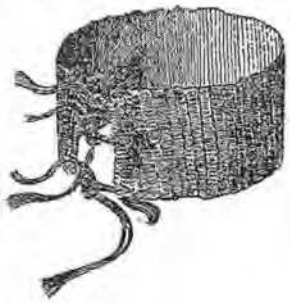


Fig. 70. Mourning armband 600[1]. ø 9 cm.

Decoration of the Armbands

Bunches of grass, fern fronds, and other leaves are stuck into the upper armbands. A favourite decoration is croton leaves, probably because of their colour, but also because of the protective power against evil spirits of the dead (*bĕ́lĭ́t*) ascribed to them. Fragrant plants are also readily worn in armbands. In Gắramaṅ Bühler heard the name *bóelim* for bunches of plants with roots still attached in the armbands, probably ascribed magical effects. In one Pătŭ́sī armband he found a large tassel (*nánkos*) made from grass and plant fibres with eight plaited cords coming off it. The tassel was reminiscent of a small apron made for a girl.

Usually, bunches were tucked into the armbands in such a way that they poked out above it, and fell down over it. Larger bunches often hid almost [154] the entire armband. For that reason a few natives wear those bunches poked into the armband from beneath.

As well as decorative bunches, they also poke sticks of tobacco, clay pipes and the like into the armbands to carry them. Hairpins, with their leafy or feathery ends, kept in their armband, form a decoration at the same time.

Bones in the armband, with or without leaves, are regarded as amulets. Usually these are human, although bones said to be from a bird of prey (in Lŏ́nĭu *a͡ul*; in Pătŭ́sī according to Bühler *bángata*) are worn in such a way that a man can bind them together with leaves as a decoration (on Lămbŭ́tjo *kăta*[823]) in the style of the neck ornament. In Ta͡uī they wear pieces of rib adorned with a rectangular, narrow mesh of glass-beaded cords about 5.5 cm wide, ending in a fibre fringe on their arm.

Finger Rings

Only Giglioli[824] mentions rings on the fingers. According to his report they occur on Tong and Lóu and are made from cross-sections of human limb bones. They are purported to be worn in memory of a victim of cannibalism (??).

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[823] Schoede Collection, Berlin

[824] 1911. p.230

Nevermann, Admiralty Islands, Plate 8

Nos 1—11, 13—14 plaited carry-bags

No. 12 plaited carry-basket, ca. $^{1}/_{10}$ actual size

Carry bags

For the safe-keeping of betel instruments and other needed items the men carry a soft, woven bag over their left shoulder. Its size ranges 10–31 x 8–63 cm, and hanging from the bottom is a series of fringes 18–35 cm long, and even occasionally up to 60 cm long. The bag itself hangs on a carrying band between trunk and arm. In order to separate its contents so that it does not press on the body, it is bound together in the middle by a string so that the contents hang in front and behind the trunk[825]. They prefer to stiffen the side of the bag lying to the back using a stick (for instance, in Păpítălâĭ and on Hắŭs and Pāk) called *bara* on Pāk[826]. This pulls the bag high so that it protrudes backwards and slightly upwards from the shoulder, like a wing. The lower end, that is, the other side of the bag, then hangs about hip height behind the arm. The carrying band of the bag, and the braiding around its opening, is a twisted cord, or a cord plaited out of three parts like a tassel. They like putting a bunch of bast fibre at the point where the two halves of the carry band are knotted together, as a shoulder decoration (cf. Plate III, 3).

[155] Women often carry the bag in the same manner, between arm and body, though never with the wood stiffening, and the carry cord is never laid over the same shoulder below which the bag sits, but always over the right shoulder, so that it passes diagonally across their chest. Many women also carry the bag over the arm rather than under the arm, and many of those who carry it under their arm pull it somewhat to the front, so that it hangs in front of their upper body (cf. Plate 8). Ŭsĭâĭ women in Buboi and Sohéneliu also lay the carry band over their heads and let the bags hang down their backs so that they almost form part of their costume[827].

Net pouches are worn like the bags, although men also like to hang them with the carry cord around their necks with the pouch hanging down over their chest.

The bags and pouches preferably have a hanging of feathers on glass bead cords or bunches of leaves, bones, and sea urchin spines. On Hắŭs it was explained that a particular bunch of leaves (*kâĭ*) on the bag protects the carrier from ghosts during night-time journeys through the bush, Plate 8, Fig. 4. These bunches are also hung on the door of the house, or over the bed at night. Spry[828] illustrates a bag with a hanging of fibre cords distributed over the entire front surface.

Other containers for personal need are small baskets for betel nuts and other odds and ends, Plate 8, Fig.12.

III. Nutrition

Foodstuffs

Vegetable foods are: sago, coconuts, breadfruit, bananas, papaya, sugar cane, taro, yams, sweet potatoes, the potato-like tubers of a climbing plant, *Spondias* fruits (“a small fig” and fern leaves)[829], a “coconut-like” though smaller tree fruit[830], *mándrindr* fruits, the apple-like fruit of the *njat* tree, ginger roots, *Canarium* nuts, pandanus fruit; the pulp of the *Freycinetia* fruit, *ngul* fruit,

825 Thilenius, II, 1903. p.136
826 According to Krämer
827 According to A. Bühler
828 1876. p.246, Fig.31
829 Moseley, 1877. p.402
830 Thilenius II, 1903. p.133

and fruit of the wild mango. One can add maize and wild millet[831] in the interior of the main island.

Animals they eat include pigs, dogs, the common spotted cuscus, pigeons, herons[832] and occasionally also other birds, turtles, crabs, and fish, among them sharks, stingrays, garfish, mackerel, flying fish, and eels. The Mănus said also that the Ŭsĭâî ate snakes[833]. However the only thing that can be said with any certainty is that the Mănus do not eat snakes. Shellfish [156] are also eaten, but not trepang. As for frogs (*tĕn̂aû*), Krämer was expressly told on Pāk that they did not eat them.

Finally, human flesh belongs among the food. Many Mănus and Mătăn̂kŏl however do not enjoy it.

Especially rich in proteins and carbohydrates is sago[834], which is beneficially supplemented by the particularly-fatty coconut oil. In addition, taro roots and, to a lesser extent, bananas and yam tubers cover the carbohydrate requirements, while fish and pork cover protein and fat.

Rice and corned beef have become recognized as food since European contact[835].

Dietary Bans

The totem animal is not killed, nor is it eaten. The totem animal of the marital partner and that of the mother is respected and therefore not eaten, even though its consumption is not forbidden[836].

On Lămbŭtjo breadfruit consumption is forbidden to some people[837].

Pregnant women are not allowed to eat yam roots or taro tubers, and no pork, since people fear that the expected child would otherwise be ugly[838]. There are no food prohibitions for pregnant women among the Ŭsĭâî in Boltzal, Bojang, and Savoi[839]. Before their puberty celebrations, girls are not allowed to eat taro, *ung*-fruit, taro leaf pudding, "*tchutchu*" and "shell fish" for several days[840].

Consumption of stingray is forbidden to the people collecting obsidian from the shafts on Lóu, because people make dagger points from that creature's spine[841].

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831 Leber, 1923. p.202
832 Moseley, 1877. p.403
833 Parkinson, p.376
834 Leber, 1923. p.204
835 Mead, 1931. p.229
836 Thurnwald, 1912. p.441
837 Thurnwald, *loc. cit.*
838 Parkinson, 1907. p.398
839 Leber, 1923. p.265
840 Mead, 1931. p.139
841 Thurnwald, 1910. p.28

Food Gathering

Livestock Raising

Pig farming

Pigs are kept in every village. The raising of pigs flourishes particularly on Pôàm, where the inhabitants trade extensively in pigs with other islands[842]. Pigs are raised solely for their meat, not for the boar's tusks.

To keep the pigs belonging to the inhabitants of different villages and groups of houses separated, those house groups are surrounded by wooden fences on Lóu, Pónam and other islands; and in Pŭĕ on Lóu the [157] space between the fence surrounding the entire village and the fences around individual groups of houses is intended for the pigs.

Other wooden or even stone fences are constructed around the gardens so that the pigs do not play havoc with them. These fences have places where people can climb over but are impassable to pigs.

Pigsties are erected on poles in the pole villages of Lálā and Tâuī. A platform is mounted between the poles, and is enclosed by walls made of horizontal staves layered between vertical staves. In Lŏnĭu the pigsties stand on level ground and are block constructions built of thicker timbers laid one on top of the other. None of the pigsties has a roof, although the animal can be protected from the sun by palm leaves laid over the sty. On Hăŭs in 1908 a little hut was used as a pigsty, while the wives' compartment of the chief's house in Păpítălâî had a special small side door (*mărătšĭp*) for pigs.

In inland villages that have no fenced groups of houses, like Păpítălâî for example, the pigs are allowed to move about freely and become accustomed to being fed in the village. They are called together for feeding by someone blowing on the *Triton* horn[843].

Every person identifies his pigs as his property by their markings[844]. Regardless of this, pig thefts are not uncommon.

In the bush pigs occasionally become wild; these have to be hunted and killed.

Dog Breeding

The dogs of the Admiralty Islands are similar to the terrier and have a brown and white or black and white coat. They are fairly trusting, but also cringing.

Primarily the dogs are bred for their teeth, by the chief's subjects for their lord and master. However in Mŭndī and on Hăŭs people also eat their flesh.

Also, dogs are trained for the chief, for hunting wild pigs.

The dogs are fed with coconut kernels, and they seem to have gradually become so accustomed to this food that they do not touch meat when it is offered.

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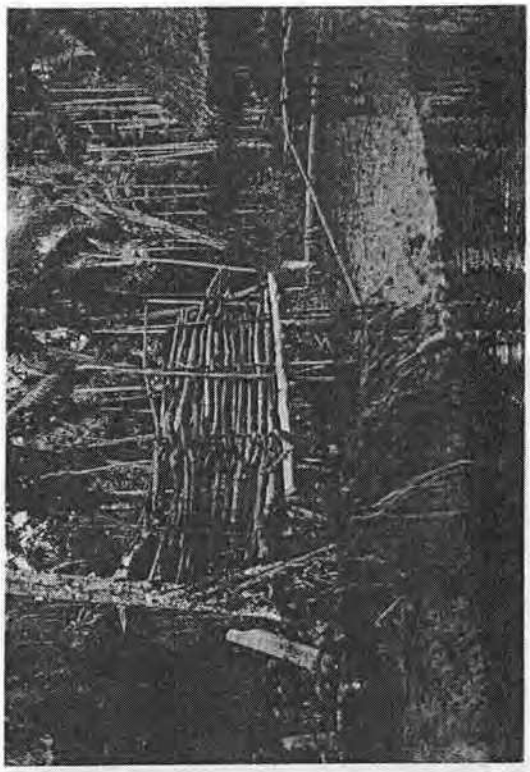
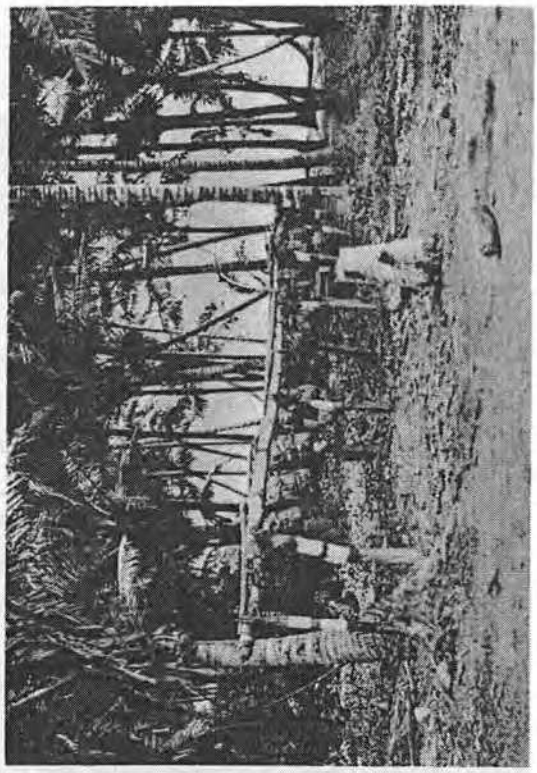
842 Parkinson, 1907. p.392
843 Meier, 1907. p.653
844 Parkinson, 1907. p.398

Nevermann, Admiralty Islands, Plate 9

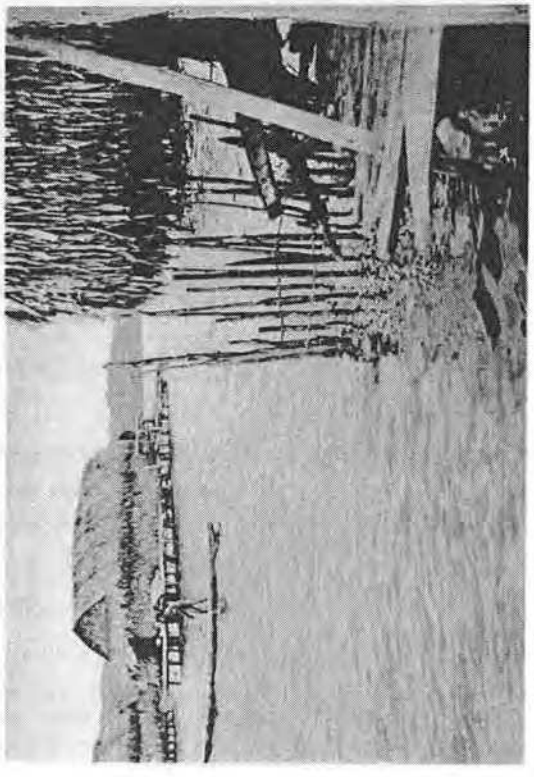


Pigsty on poles, in the river village of Tafii. phot. Vogel



Packets of sago hanging up, on the greater Sisi-Insel. phot. Fülleborn

Usiai with dogs in Këtyé. phot. Fülleborn



Turtle cage, in Lála. phot. Fülleborn

Fowl Breeding

Domestic hens existed in the area around Nares Harbour in Moseley's time, but were so rare that Moseley did not catch sight of a single hen, [158] and was able to establish their presence only through a cock's feather that he saw as a hair decoration[845].

Apart from that hens are rarely seen. According to the Păpítălâî chief Pō Mĺnis' assertions the hen had been brought to several islands by the white people and thus, in addition to the name *manuai* = bird, it also bore the name *manúai e Jap* = bird of the white people[846].

Caterpillar breeding

Caterpillar chrysalises are used as bait for the fishing kites. The caterpillars are kept in net-like raising frames or on certain bushes[847]. Likewise, people appear to acquire the spider webs needed for the same purpose by breeding colonies of spiders[848].

Hunting

They hunt wild pig, possums and pigeons first and foremost. Only men hunt.

Pig hunting is carried out using spears with either a hollow, or a solid shaft, and wooden tips with or without barbs. Pig spears do not differ from the matching battle spears; on Pĺtĭlu they are assigned the special name *tukâî* [849]. Also, spears with obsidian tips are used for pig hunting. According to Parkinson[850] only chiefs go pig hunting, and avail themselves of a pack of trained dogs. Slain pigs are carried home bound to a staff by creepers[851].

Possums are also hunted with spears; people hunt them far more often than pigs. However they also endeavour to catch the creatures alive, and store them in Lálā and on Pāk until their slaughter, hog-tied in special wide baskets with a narrow opening.

Because pigeons are not easily killed using spears, and there are no other weapons for hunting them, hunters catch them by climbing trees and seizing them, or by dislodging their nests[852]. People appear to do the same with other birds such as parrots. Also, a species of *Nycticorax* is killed around Nares Harbour[853].

Eggs of the scrub turkey are collected on Lóu, and stored in special baskets.

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845 Moseley, 1879. pp.478 *et seq.*
846 Meier, 1906. p.480
847 Thilenius, in *Der deutsche Kolonial Lexikon* I, 1920. p.631; Plischke, 1922. p.25
848 Thilenius – Hambruch, in *Der deutsche Kolonial Lexikon* I, 1920. p.15
849 Wood of the shaft *tâûwŭl*
850 1907. p.397
851 Vogel, 1911. p.89
852 Moseley, 1877. p.409
853 Moseley, 1877. p.403

Fishing

Only the Mắnus and the Mătăṅkŏl go sea fishing; the Ŭsĭâî obtain fish from them in exchange for vegetables.

The fish caught are bonito, garfish, mackerel, flying fish, eels, stingrays, sharks and other fish that are known only by their indigenous names, such as *papai*[854]; *e djo*[855] on Lămbŭtjo; and *labot* on Nauna. Equipment used for [159] catching fish are nets and seines; weirs; fish traps; spears; angling hooks; fishing kites; spider's-web frame. Torches assist the Mắnus when night fishing.

The fishing areas of neighbouring villages or smaller islands are rigidly defined. This is particularly true of the Mắnus villages on the south coast of the main island[856], and of the Mătăṅkŏl islands around Nŏru, Sōri and Hắrăṅgăn.

Because certain types of fish show up in greater quantities with the onset of new phases of the moon, the Mắnus keep a watchful eye on the moon, and they recognize when the time is favourable for catching certain species of fish by the position of individual stars[857]. This applies particularly to observing the point in time when numerous spawning fish swim into the lagoons[858].

Women fish only on the reef with hand weirs, purse nets and a type of fishing basket[859]. The men carry out all the other kinds of fishing, and they are also involved in purse seining.

In the interior of the main island, fish and crabs are caught only occasionally in dried-up creeks, and crabs are caught with the aid of weir traps.

Shark fishing

On Pĭtĭlu, Hắŭs, Ăndră, Pónam and Sōri sharks are caught only at a certain time of the year. Hắŭs people reported that this occurred when the northwest wind blew, because then small fish, that served as food for the sharks, were feeding on a certain type of seaweed. According to Parkinson[860], the favourable time for shark fishing is when a moderate wind floats rotting tree trunks which had been washed up by the north-west wind, out to sea. According to this version of events, small fish that stayed around the tree trunks attracted the sharks. Smaller sharks are reportedly caught by hand, but larger ones are caught with shark hooks.

The devices that serve as shark hooks have been described as fruit pluckers by Thilenius[861], and are also used as such, fixed to a long pole[862]. They consist of a piece of wood 20 – 30 cm long, perforated at one end and sometimes also finished with a simple diamond or half-moon-shaped carving. A rough, thick, twisted cord made from strips of vine is pulled through the hole and knotted firmly. Near the other [160] end the wood is thickened like a club, and bored out to take a hook pointing toward the opposite end and formed from a boar's tusk, *Trochus*, *Turbo*, or mother-of-pearl shell. A coating of *Parinarium* resin unites wood and hook, Fig. 71. Usually, the hooks

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854 Parkinson, 1907. p.378
855 Thurnwald, 1913. p.135
856 Parkinson, 1907. p.382
857 Mead, 1930. p.117
858 Parkinson, 1907. pp.377 *et seq.*
859 Mead, 1931. p.37
860 1907. pp.388 *et seq.*
861 II, 1903. p.135
862 Parkinson, 1907. pp.361 *et seq.*

are not decorated any further. Only a few pieces have a four-sided cross-section instead of the normal round one, with painted relief carving on the lateral surfaces. However, those hooks show no signs of use, and certainly bear witness to foreign industry. On Ăndră a pig's lower half-jaw bearing a tusk, with a *Parinarium* resin coating of the holes, was pointed out to Bühler as a shark hook.

Thilenius' objections[863] that the hooks cannot be used to catch sharks start from the premise: that the wood is too short for catching bigger sharks which, when biting, might clip off the hook's line; that the direction of the hook is impractical; and that the bonding material is unsuitable for use in salt water. Even so, the same putty material is used in canoe building; and on Wuwulu[864] and Aua similar types of hooks are actually in use as shark hooks. Furthermore, several hooks on Ṕĭtĭlu and Hā́ŭs in 1908 were expressly identified as shark hooks. Krämer heard on Lóu that the hooks served for catching the *neraiod* fish and were trolled behind the canoe, baited with pieces of fish, attached to a cord (*läl*). However, totally identical hooks on Ṕĭtĭlu, Pónam, and Pāk were again designated as fruit pluckers. Finally, in Sā́hă, that is, a village in the interior that would hardly be concerned with catching sharks, hooks of a similar type were seen in the houses as hanging hooks. The hooks with their cords are extraordinarily well suited to this purpose. Probably not simply one type of use can be ascribed to these hooks — rather they are used according to local custom or according to the need of the moment (as on Ṕĭtĭlu): one minute as a fruit-plucker, then as a shark hook and occasionally even for suspending items.

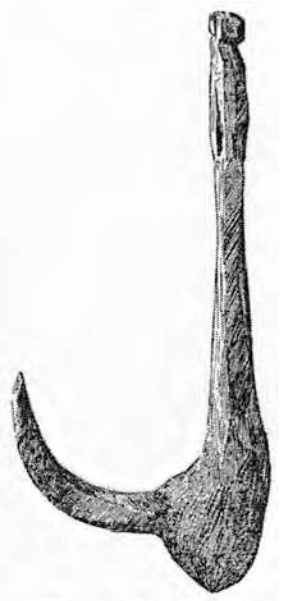

Fig. 71. Shark hook 2824[I]. 23 cm long.

On Ṕĭtĭlu the hooks are called *kŏ́ŭ* or *kŏkaû*; on Hā́ŭs *kaû* (*ko*) or *bäŏă*; on Pónam *kâû*; in Sā́hă *drĕlĕkŏ́*; and on Pāk *gŏ́ᵘ* or *kŏ́ᵘ*. Thurnwald[865] heard fruit-pluckers called *bĭlĭŏ́t* on Ṕĭtĭlu. On Ăndră, the shark hooks made from the half-jaw of a pig, or from wood with a piece of *Trochus*, are called *jája*, according to Bühler. The line of the shark hook is called *hĕligī* on Hā́ŭs; and *läl* on Lóu according to Krämer. The wooden part of the hook is called *bolen* on Lóu, and the hook itself is *lal* when it consists of *Trochus* shell, or *laub* when it is made from *Turbo* shell.

Catching turtles

When the constellation of *Canis Major* is aligned with one flank pointing north and the other still not visible, the turtles begin to lay their [161] eggs in the sand. Particularly large numbers of them seek out the Los Reyes Islands, and at this time the natives set off for the islands to catch turtles[866].

At sea the turtles are caught by men swimming, with a rope attached to a canoe looped around their bodies. If the swimming and diving hunter catches a turtle, he loops his rope around the creature's foot and, by pulling on the rope, signals the occupants of the canoe to reel in the prey[867].

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863 II, 1903. p.284
864 Thilenius, *loc. cit.*
865 Thurnwald Collection, Berlin
866 Parkinson, 1907. pp.377 *et seq.*
867 Meier, 1908. p.196

Nearer the shore they catch the turtles in strong nets whose position is marked by big floats (called *beliau* on Hā́ŭs) in the form of a fish, or in the shape of the floats usually used for smaller fishing nets[868].

In the pole village of Lā́lā captured turtles are kept alive in ponds which are built in the water, formed by a circle of poles stuck into the seabed and surrounded by thick cord, Plate 8, Fig. 3.

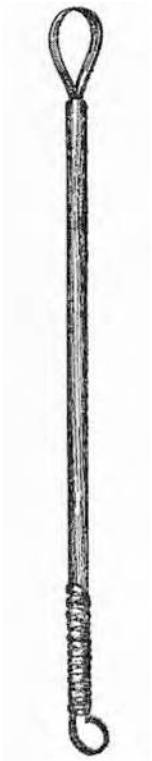

Fig. 72
Snake-catcher
5581,
58 cm long.

"Snake-catcher"

On Pāk a 48 cm long tool consisting of a tube through which a cord passes is said to be used for catching snakes. The cord is wrapped firmly round one end of the tube and is pulled twice through the inside of the tube so that it extends as loops at either end. By pulling on the loop at the wrapped end, the other, bigger, loop can be drawn tight. The tool gives the impression of an eel loop, and is probably also used as such. Snakes, which according to the Mā́nus are eaten only by the Ŭsĭâ̂ī (??)[869], would hardly be caught on Pāk using this, Fig. 72.

Fish-hooks

Fish-hooks consist of a single, barbless piece of *Trochus* shell. These are 5–6 cm long. At the upper end of the longer, slightly-curved end, originally with no indentation, they feature a thick [162] wrapping with a fine, twisted cord and occasionally a coat of *Parinarium* resin on top. At the uppermost end, the actual line leaves the fish-hook as a direct continuation of the cord[870]. In 1908 a notch was added at the upper end of a few *Trochus* hooks, Fig. 73. Moseley[871] considered it unlikely that bait was used on the hooks.

Fig. 73.
Trochus shell
fish hook
6131. Actual size

European iron fish-hooks were not sought-after in Moseley's day because people did not see the advantage of the barb. However, Parkinson[872] found the *Trochus* hooks already replaced by introduced iron hooks. In T͡auī in 1908 iron fish-hooks were fastened to a thin line of twisted fibre cord (*kāb*) passing sideways from its upper end, while the rib of a sago palm frond (*bādjâ̂u*, *bādjó*) served as the fishing rod, Fig. 74. Bent nails or sewing needles were also used as a substitute for iron fish-hooks. On Sabo in 1932 Bühler found a sewing needle alongside a plug of pith and vegetation, fastened to

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868 According to A. Bühler
869 Parkinson, 1907. p.376
870 Spry, 1876. p.248, Figs 8-9; Moseley, 1877, Plate 21, Fig.12; Thilenius, II, 1903. p.288
871 Moseley, 1877. p.406
872 1907. p.362

a thin twisted cord, which in turn hung from a knotted cord of vine strips. The name of this fishing device is *díei*. On Lămbŭtjo thin fishing lines of four twisted threads are called *aî*[873].

Fig. 74. Iron fish hook. 32 12¹ actual size

When angling, usually three men fish together from a canoe (*nril en kou*)[874]. For a lot of their angling they also use a float of the same kind as used in set-netting. On Pĭtĭlu this is called *băhūn* (*bāhūn*).

Fish-hooks seem to be made only very rarely of material other than *Trochus*, despite other material being available, in the form of mother-of-pearl shell and the like[875]. The Stuttgart Museum holds two compound fish-hooks from the Admiralty Islands, one consisting of an oblong piece of *Trochus* with several notches along the edge and a turtleshell hook without barbs bound on, made in 1908; while the other consists of a stick of *Tridacna* with a groove at one end, and a non-barbed *Tridacna* hook at the other end[876], Fig. 75. Foreign influence is highly likely in both specimens. On Hăŭs in 1932 Bühler found a 43 cm long fish-hook made from turtle shell with a large opening at its upper end for the fishing line. [163]

Fig. 75 Composite fish hook Stuttgart IC. 61040. ½ actual size

In Taûī the *Trochus* fish-hooks are called *kaû*. According to Friederici[877] they have the same name on Pălŭăn and Lóu; on Lóu they are also called *kŏŭ* and, on Pāk, *îîaî*. On Ndrŭwal Rickard[878] heard them called *eku*, and in Găramaṅ Bühler heard them called *lang*. Iron fish-hooks are probably also assigned the same name. From their material, *Trochus* hooks on Lămbŭtjo[879] and Pāk[880] are also called *lăl*.

Fishing kites

Garfish (*Belone belone*) and several other fish are caught with the help of fishing kites, which were seen in use on Pĭtĭlu in 1908.

The fishing kites[881] are made from two thin rods bound together into the shape of a broad lance, braced by tying on three cross staves, and covered with a banana leaf, whose midrib is reinforced by a rod pinned on at right angles to the cross staves. The kites are often less than 50 cm long, although they can be as long as 70 cm. A perpendicular rod up to 16 cm long is fastened to the lengthwise rib and the uppermost cross stave. They attach the thin twisted tether cord, 60-80 metres long, to this rod. The 40-50 metre-long tail cord is attached to the extension of the midrib at the other end of the kite. When not in use, they wrap the tether, and often also the tail cord around a 90-100 cm long stick. A protruding piece of branch is tied on to the upper and lower ends of the stick, or it is forked at one end instead. Serrations may be cut around the edges of the banana leaf and leafy pendants can be tied to the cross staves as decoration, Fig. 76 (cf. Plate 10).

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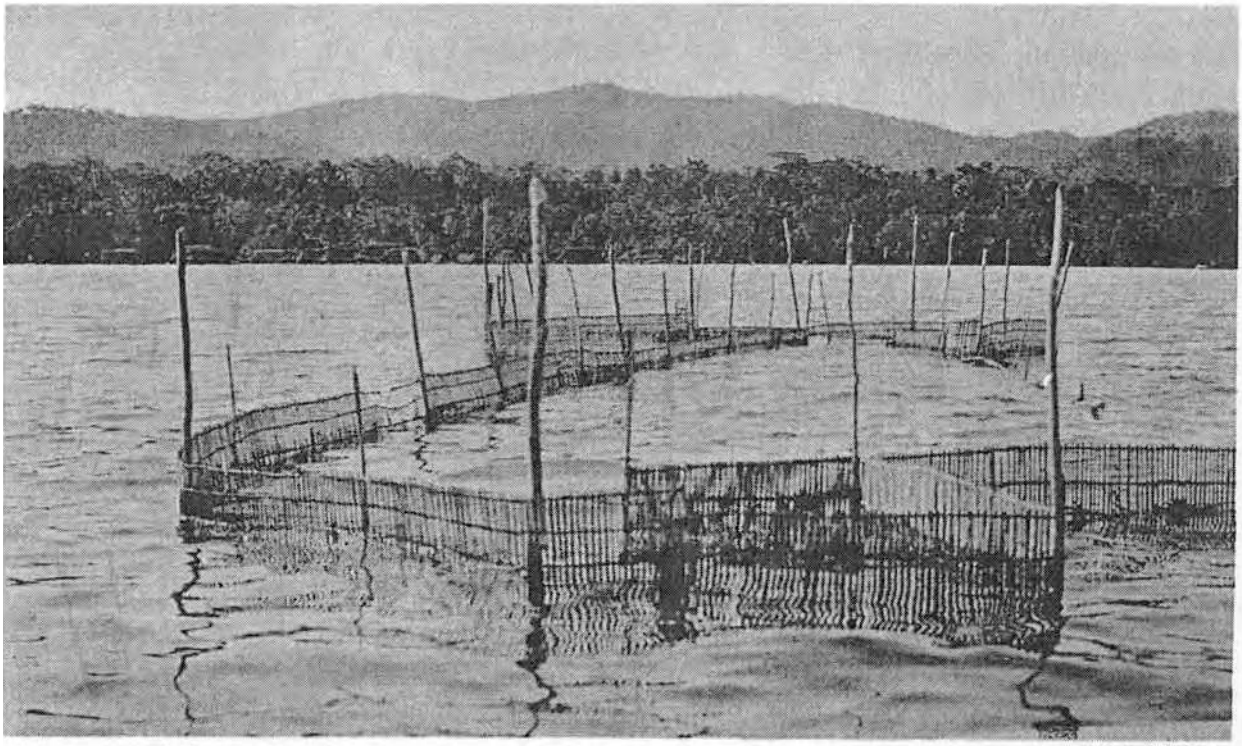
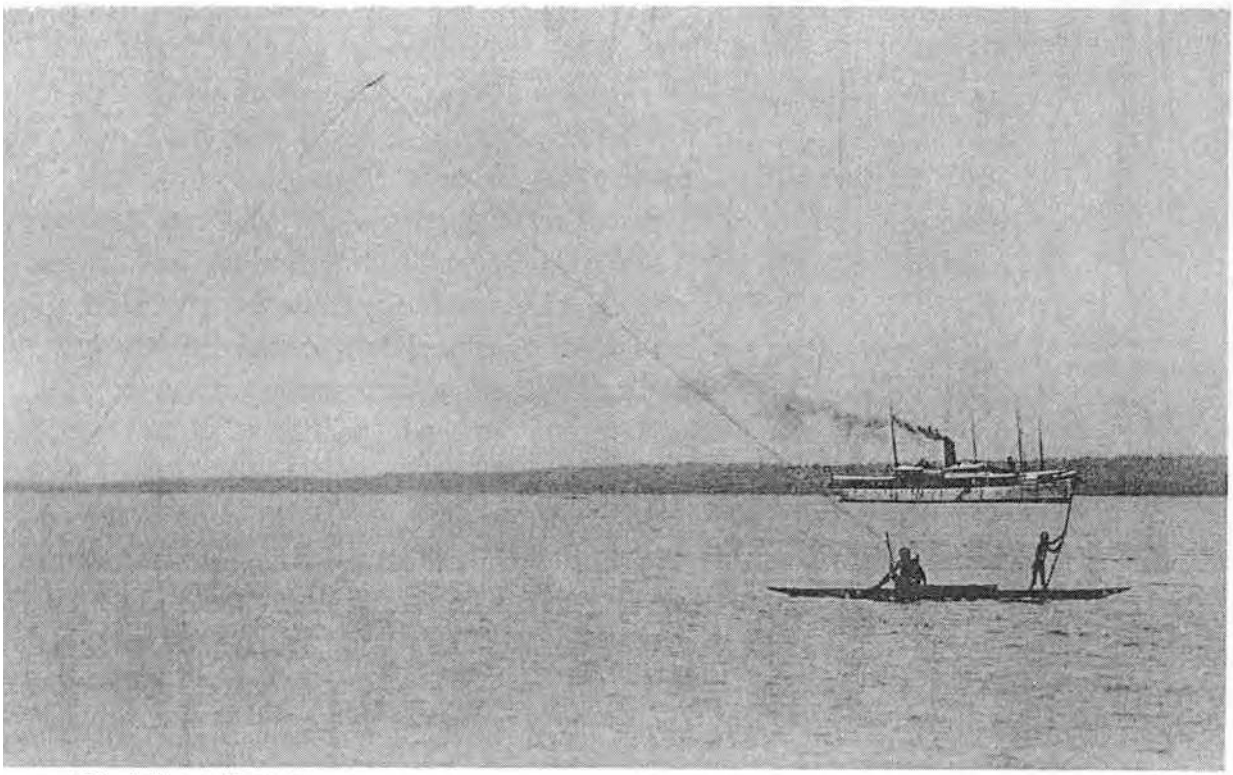
873 Thurnwald Collection, Berlin
874 Parkinson, 1907. p.377
875 Thilenius, II, 1903. pp.287 *et seq.*
876 Cf. Buschan, Ill. *Völkerkunde*, II, 1924. p.99, and Fig.98, Fig. 5-6
877 1912. pp.225 *et seq.*
878 Ray, 1892. p.7
879 Thurnwald Collection, Berlin
880 Schoede Collection, Berlin
881 Plischke, 1922. p.20, and Plate 1, Fig.1



Fish traps near Taũī. phot. Fülleborn



Kite fishing off Pĩtũlu. phot. Vogel

The fishing kite is only allowed to climb from the canoe when it is travelling into the wind. The tether cord is firmly secured to the canoe. The bait, consisting of a ball of spiders' webs or cocoons at the end of the tail cord, stretches over the water during the canoe's passage and attracts predacious fish. One crewman is stationed in the bows, and punts or paddles the canoe while another man crouches in the stern keeping an eye on the kite, making sure that it ascends correctly and can be retrieved when a fish bites.

Schoede heard the fishing kites being called *lodjuan* on Pítĭlu, while Bühler heard them called *loutschuon*. [164]

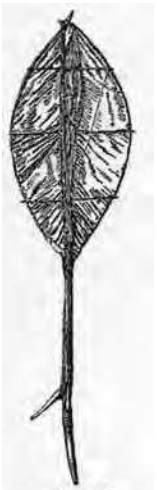


Fig. 76.
Fishing kite
40011.
Stick 96 cm long.
Leaf 24 – 48 cm

Frame net

For catching smaller fish, e.g. for catching *labot*[882] on Nauna, seine nets are used. These are called *kūvă̆n* on Pónam; *kŭbé̆n* on Pítĭlu; *kubé̆n*, *gubé̆n* or *gubé̆n iṅ găló* in T͡auī; *gopoenumat*[883] in Pătŭ́sī; *kūbă̆n* or *kūvă̆n* in Kyĕlâûák; *kūbŭ́'n* in Sáhă; *kubé̆n*[884] on Pāk; *kūbă̆n* in Ndríŏl; and *akuen*[885] on Nauna. They consist of a wooden frame (*labulíĕ* [886] in T͡auī) that encloses two sides of a triangular pouch-like net, while a rigid cord connects the points of the frame and defines the third side of the net.

The net material consists of thin twisted strings of plant fibre. These are knotted in such a way that the knots correspond with the simple sheet bend used by sailors. Rings made from cord fasten them to the wooden frame and its cord, which is thicker than the net cords although similarly twisted. Often, a cord is also stretched along one side of the frame, for hanging the net.

The frame is usually made up of a long straight stick together with a T-shaped branch coming off a stem at right angles. Another section of the stem is retained, forming the upper part of the T, and fastened to the straight part of the frame by cord wrappings. In other cases a short, forked branch forms the handle end of the frame, which is extended by longer, thinner straight pieces of wood bound on by thicker wrappings of cord (Plate 11).

Smaller frame nets are about 38 x 78 cm; bigger nets are 60 x 65 cm; and large frame nets are 48 x 272 cm.

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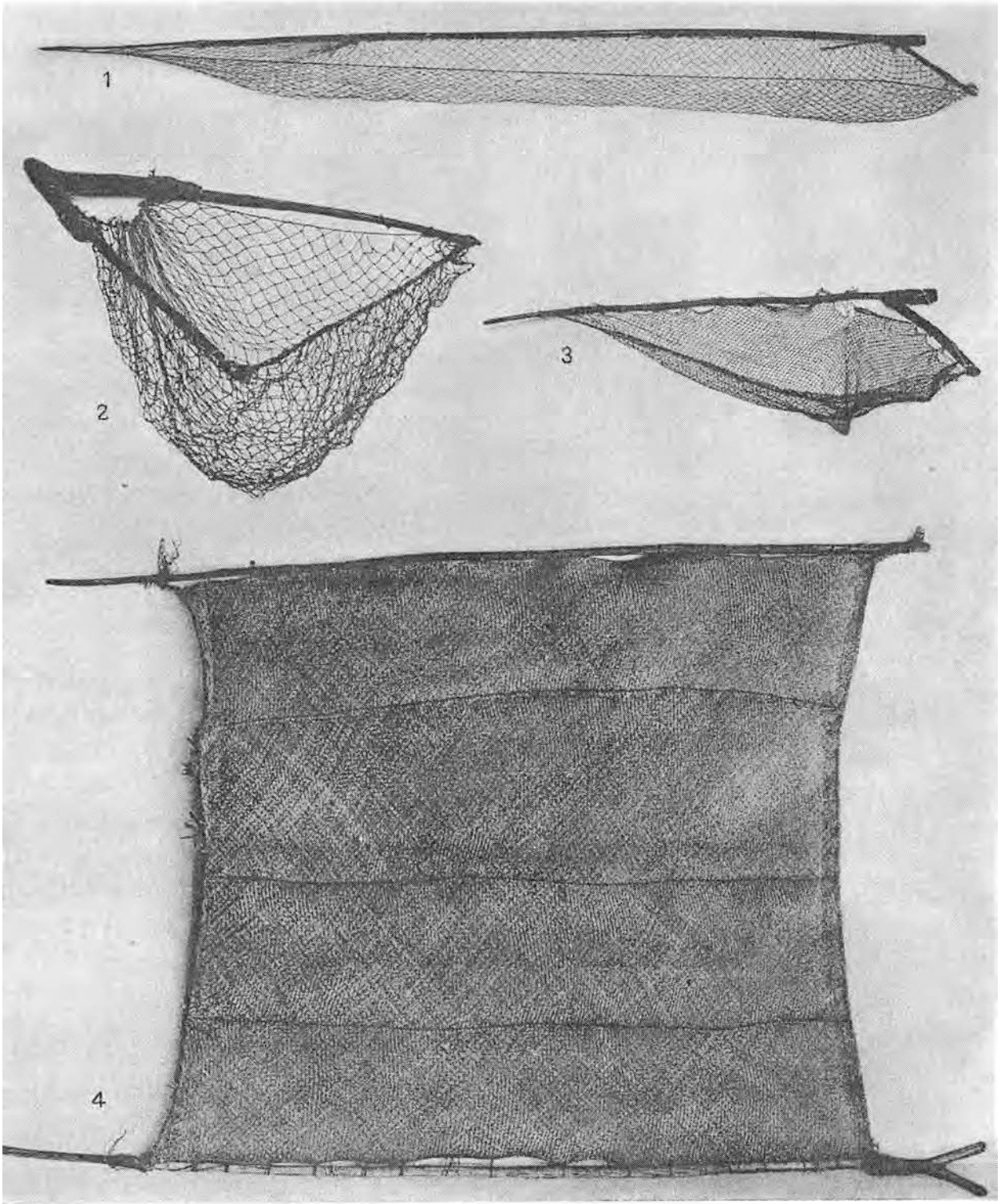
882 Thilenius: presented to Berlin Museum, VI 17417
883 Bühler Collection, Basel
884 Friederici, 1912. p.227
885 Thilenius II, 1903. Plate IX
886 *Rusai* (? = net-holder) on Pāk, according to Krämer

Nevermann, Admiralty Islands, Plate 11



Nets

1. 9398 [1] Large frame-net. Size of the frame 48 cm — 2.72 m
2. 14. 38 : 72 Small frame-net. Size of the frame 60 cm — 65 cm
3. 4003 [1] Small frame-net. Size of the frame 38 cm — 70 cm
4. 2889 [1] Big sail. Size of the mat 3 m — 3 ½ m

Gillnets

Set nets, which are called *kābăt* in Ndrī́ol; *laio* in Gắramaṅ according to Bühler; (*kapet* by the Mắnus, according to Parkinson[1]) are used for catching fish on the high seas from a canoe (*ndril en kapet*). Set nets are produced as a rectangular oblong from the same fibre material, using the same knots as the frame nets, but with a row of stone sinkers fastened to the lower edge, and wooden floats, which are called *ŭmbūa͡ī* in Lắlā, and *lamatáṅabél* in Ta͡uī; and *hámdalae* in Lagou (Lóu) and *báhun* in Lŏ́nĭu, according to Bühler; although in Lŏ́nĭu they are called *nálogai*[2] according to Krämer. They are carved out of wood called *ké* in Ta͡uī, Kyĕla͡ŭắk, and Mĭndrắn often in the shape of fish, turtles, crocodiles, birds, or pierced discs sometimes combined with pierced pyramids, and feature at one end a [165] notch for securing the net cord, Fig. 77. Surprisingly, the decorated floats are brightly painted all over. This may in part only have been done in order to sell them advantageously to the Europeans, but also in order to use them as dance equipment. A few of them however have a regular dark shade that lets us surmise that they have actually been used in the water, painted.

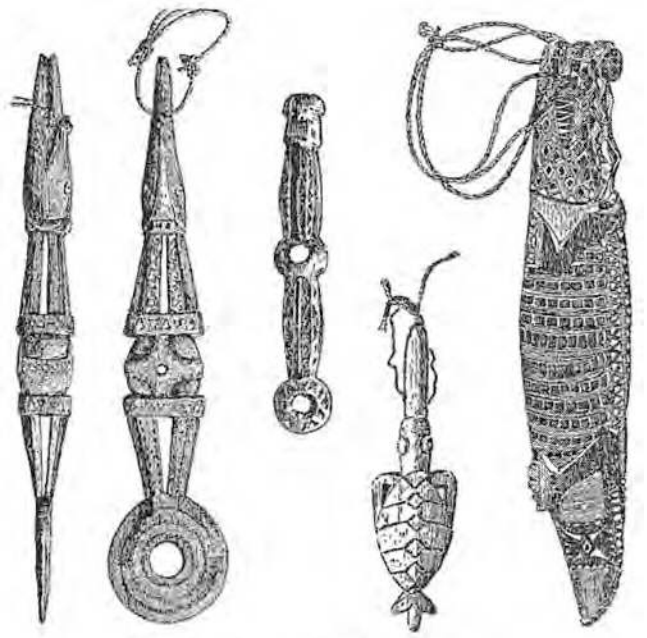


Fig. 77. Carved floats for fishing nets
707[I] 30 cm long, 4046[I] 26 cm long, 3202[I] 24 cm long, 769[I] 45 cm long.

Attached along the long edge of the set net is a thicker cord — usually twisted from strips of liana — so that the net can be pulled together.

For catching smaller fish in Kyĕla͡ŭắk, they use especially narrow-meshed nets (*ĕpŭtū́*). Wide-meshed nets are called *bórŭ* on Pāk. The nets that Friederici[3] called *lā́ŭ* from Pắlŭăn, and *lă* from Lóu are probably set nets.

For stiffening at either end, wide nets have a pole (*hū́* or *hŭhū́* on Pāk) whose length matches the width of the net, which is knotted firmly to both ends of the stick. To let the net dry out after use, it is stretched between these poles on shore.

Other nets are hung out to dry over a series of horizontal beams supported on poles.

A series of poles in Shoal Bay in the area of Wyville Point led Moseley[4] to surmise that the long nets were used as set nets, despite his not finding any settlement in the vicinity. However, a group of coconut palms made him suspect that there had been an earlier settlement, and it is not impossible that what he considered to be net poles, were the remains of an abandoned pole village.

It is more likely that Moseley's speculation that the nets are communal property might be true since in every village there are only a few big nets, and these are stored in the canoe sheds ("temples").

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1 1907. pp.377 *et seq.*

2 *Logai* is a "small animal in white sand" — probably identical to the subterranean animal spirit *kábas*.

3 1912. pp.225 *et seq.*

4 1877. p.405

On the south side of the main island, with the arrival of schools of spawning fish in the lagoon, several canoes drive the fish into a semicircle of “two-man nets”[5]. [166]

Fishing spears

In fairly shallow water, fish are killed with multi-pronged spears. The shaft of the fishing spear consists of a cane, into which are inserted 6 – 9 thin wooden spikes. The binding site is secured by several coils of a strip of rattan. Often a second similar wrapping is added, overlaid with one or more plaited rattan rings. With a greater number of prongs the tips diverge widely since the ends inserted into the shaft are obviously packed tightly together. With a smaller number of prongs, renewed braiding using a rattan-like band is necessary, passing round each individual prong to keep it apart from its neighbour. Usually the prongs are smooth and tapered simply, although they may also feature indentations arranged in groups, as remnants of a barb structure.

In T͡auī the fish spears are called *bŭdű*; on Móuk *mbű́tŭ́t*[6]; on Pāk *nă*[345]; and on Seeadler Harbour *ngam*[7].

Apart from the fish spears with wooden points, they also use spears with several stingray barb tips, and occasionally even some with admittedly-impractical obsidian points, for catching fish[8].

In Kyĕlâûắk and the Mắnus villages of the main island, fish are often also shot with bows (*ĕlălé́*) and arrows.

Catching Fish with Mounted Spider’s Web

In Păpítălâî and Makareng, and on Pĭ́tĭlu, smaller fish and other small sea creatures are caught with frames made from a thin wooden rod bent round with both ends tied together. The frame, about 90 cm long, is thickly coated with spiders’ webs so that its inner surface is completely filled with them, Fig. 78.

The fisherman goes out onto the reef with two of these frames, and immerses a frame in the water alternating his left and right hands. In raising the frame out of the water the creatures are left adhering to the web.

Margaret Mead[9] likewise mentions “spider-web nets” from the south coast of the main island, where boys use them. [167]

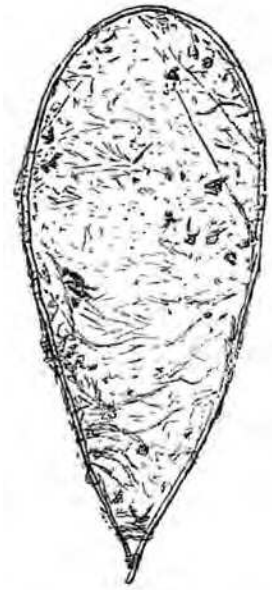

Fig. 78.
Fishing apparatus made from spider's web in a frame 585¹.
92 cm long.

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5 Mead, 1930. p.117
6 Friederici, 1912. pp.227–228
7 Schoede Collection, Berlin
8 Thilenius II, 1903. p.144
9 1931. p.36

Fish Traps

In Păpítălâî and in Tâuī and Pắrā they have fish traps consisting of a great number of bamboo staves bound together by multiple cross-cords into a type of long stick mat or 'louvre'. Longer, thicker poles are inserted at intervals between the staves and pushed into the ground, Fig. 79. The fish traps are set up in shallow water on the reef with their poles standing vertically. The entire trap can be arranged in such a way that it forms a circle with a narrow, funnel-like entrance, or it may be arranged in a rather more complex manner, though always in such a way that the fish find a wide entrance but a narrow exit. The smallest fish traps are a metre high and over four metres long — the bigger traps are much longer. In Păpítălâî fish traps are called *puru*.

Particularly large fish traps were seen on the reef near Tâuī, secured to the reef by long poles, rising a little above the water surface.

Several days after a fish trap has been set up, the fishermen enter it in their canoes, and spear the fish collected within the trap[10].

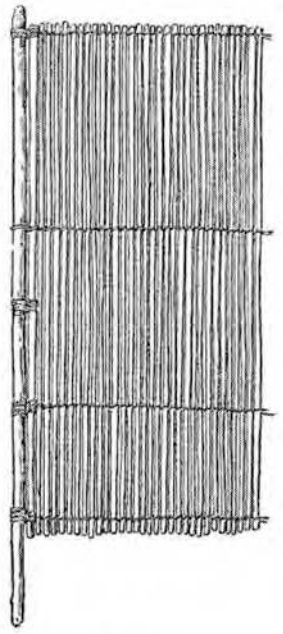

Fig. 79.
Drawing of part of a fish trap
1165[1]. 4.30 m long.

Weirs

Fish weirs are relatively rare. They consist of individual staves, or strips of rattan or bamboo, bound together with rattan or similar material. Either the weirs are shaped like a funnel with a circular cross-section at the opening, a rattan ring, and the staves bound together at the end, but with several of them shortened to leave an opening at the far end; or the weirs are initially cylindrical and run together at the end like a cone; or they have an opening on both sides (cf. Plate 13, Fig. 11, 12, 14, 15). A small funnel of staves, or strips of bamboo, is always inset into the entrance, with its narrow inner opening allowing entry to the fish. Crab weirs of the Ŭsĭâî, (*tasau* in Siara) are conical at the opening, cylindrical in the middle, and closed at the end by *Parinarium* resin[11].

Cylindrical weirs of strips of bamboo or rattan with a continuous tube and two openings, often with a dividing wall inside the tube, possess [168] in Tâuī, a large and a small internal tube door in that dividing wall. Possibly this is intended for the simultaneous capture of both bigger and smaller fish, since the smaller fish, out of fear of the bigger fish that have entered the weir at the same time, will not use the same door as the latter. On Pāk the two doors in the dividing wall are the same size. In Tâuī big bamboo fish weirs are extended by stretched coconut palm leaves.

Bigger weirs are used in the open sea on Pāk and include a float, like the gill nets. The Mắnus of the main island sink them on the reef, weighing them down with stones[12].

On Hắŭs and on the south coast of the main island, small weirs in the form of a funnel-like basket serve as a hand tool for catching fish and crabs. Only young girls use them on Hắŭs. Also,

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[10] Edwards, 1931. p.557
[11] According to A. Bühler
[12] Edwards, 1931. p.557

the “bell-shaped baskets with an opening at the top for the hand”[13] used by women but not by young girls in and around Pā́rā̄, are probably weirs.

Weirs are called *gombu* (laid in the water) in Pătŭ́sī[14] or *ratou* according to Bühler; *mbu* (for hand-use) in Mbŭ́na͡i[15]; *kohé* on Pĭ́tĭlu; *kŏhă̆* (for young girl) on Hā́ŭs; *kohé* on Ăndră[16]; *mbū* on Pónam; *tadau* in Talā́lo[354]; on Pāk (big with a continuous tube) *bū*; and, according to Meier[17] in Păpítălā͡i(??) *kalau*.

Trepang Fishing

Sea cucumbers are not relished by the natives, but are collected for the European traders. Usually the trader hands over a sack to the trepang fishermen to fill. Besides this, on Pāk they use baskets that they have made themselves, called *bagắsus*. (probably from the English ‘bag’). These are plaited at right-angles, somewhat loosely, out of strips of liana, and form a container about 60 cm tall, widened in the middle, and with a firm round lip (cf. Plate 13, Fig. 5).

Stream Fishing

In the interior of the main island fish and crustaceans are caught in smaller streams everywhere by building dams across the stream and bailing out the water. The creatures are stranded on the drained ground, and can be gathered up[18]. Other implements for scooping do not seem to be used in this type of fishing. However, in Sira Bühler also found weirs for catching crustaceans. [169]

Fishing Baskets

On the south coast of the main island the Mắnus women catch fish using “scoop baskets”[19], i.e. probably shallow baskets. For transport and storage of the fish they use big oblong baskets, or round baskets 30 – 35 cm high, stiffened with staves or switches (cf. Plate 13, Fig. 6). In Păpítălā͡i these are called *l̆ŏl̆ŏ*. Oblong fish baskets are called *ăpŏă̆* on Hā́ŭs.

Fishing using Poison

Certain plants, that probably contain saponins are crushed and thrown into still water. The stupefied fish then float to the surface and are gathered up.

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[13] Mead, 1931. p.37
[14] Bühler Collection, Basel
[15] Kölle Collection, Hamburg
[16] Bühler Collection, Basel
[17] 1908. p.656
[18] Meier, 1907. p.658
[19] Mead, 1931. p.37

Agriculture

Gardens

The cultivated food plants are taro, yams, sweet potatoes (*Batatas*), a climbing plant with tuberous fruit, sugar cane, bananas, coconut–, betel–, and sago palms, papaya, breadfruit trees, betel pepper and, in the interior of the main island[20] maize and wild millet.

The Mắnus often have no plantations at all, for their pole village settlements do not offer any such possibility. Among the Mătăṅkŏl on Lóu there are big taro plantations, however among other Mătăṅkŏl there are usually only smaller ones that often barely extend to covering their own needs. The plantations of the Ŭsĭâ͡ĭ are maintained on a larger scale, supplying the vegetable products of the Ŭsĭâ͡ĭ themselves and at the same time their main barter goods with the Mătăṅkŏl and Mắnus.

Parkinson[21] has claimed that the Ŭsĭâ͡ĭ had no permanent settlements at all, but set up their villages wherever they had created a new plantation. The main argument against this is the location of the Ŭsĭâ͡ĭ villages on fortified hills; and no support of any kind has been so far found for Parkinson's assertion. Furthermore, the Ŭsĭâ͡ĭ would always have to remain at the sites of the sago swamps.

The Mătăṅkŏl plantations are generally close by the villages; those of the Ŭsĭâ͡Ĭ, however, are usually situated at the foot of the village hill[22].

For protection against pigs, the gardens are usually provided with wooden fencerows with places for climbing over or, on Pó͡âm, with low stone walls as well. [170]

Demarcation between the individual gardens of different owners is not customary[23], yet the boundaries are respected, even without identification[24]. In the plantations of chiefs, their subjects have to be on the lookout for theft[25]. The owner of a garden is the person who has laid it out, and the subjects are allowed to set up their own gardens as well. The gardens of the defeated enemy are taken only when he surrenders his dwelling with them. Communal use of a garden by several parties occurs only in the case of a few sago swamps[26].

Work in the gardens is the task of women. However the men choose the land first, and clear it. They keep watch while the women are working, to prevent attack and abduction of women by their neighbours[27]. Likewise they accompany the women on the route from the village to the garden and back. In order for the men to be armed for battle, the women carry the loads on these journeys.

In the vicinity of the gardens, when these are far from the villages, they occasionally erect simple shelter huts where they can live during cultivation and harvest times.

They endeavour to forestall uneconomical over-use of the vegetable food stocks by erecting *tabu* signs. At the same time these protect the owner of the palms etc. from thieves.

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[20] Leber, 1923. p.202
[21] 1905. p.238
[22] Thilenius II, 1903. p.135
[23] Labillardière (I, 1796. p.251) concluded, incorrectly, from the presence of fences around the gardens, that they were marking out private property.
[24] Parkinson, 1907. p.397
[25] Parkinson, 1907. p.397
[26] *Deutsches Kolonialblatt*, XX, 1909. p.530
[27] Thilenius II, 1903. p.135

Taro

Besides sago and coconuts, taro belongs among the most important foodstuffs. Thilenius[28] nominates Lóu as one of the principal taro-growing areas. The Ŭsĭáî of the main island carry out extensive taro growing as well, both for their own needs and for trading. Taro is grown on Sori and Hărăṅgăn[29], on Pāk[30] and on other small islands, but only in small quantities that often do not extend to meeting the people's own needs. Nevertheless, nowhere does taro cultivation appear to be totally non-existent.

After the men have cleared the ground, taro growing is the work of the women.

Ordinarily they plant the taro roots in dry ground without fertilisation, yet near Kětyḗ taro gardens were seen in swampland alongside sago palms. [171]

For removing the cuttings of ripe taro roots they use a mother-of-pearl shell of a similar type to that used in the cooking preparation of ripe taro roots (cf. Fig. 102). The cuttings are particularly carefully treated near Doktau and protected by a layer of fine branches. They also try to protect older plants from the sun, using odd trees that have not been cleared[31].

The sole tool used in taro growing, apart from the cutting shells, is a digging stick about 1.50 m long with a wide flat end. In Sáhă it is called *kā́pŏs*, Fig. 80.

The ripe taro roots are brought home from the field in baggy pockets called *a lōb* in Pătŭ́sī, and in Mbŭ́n͡aî, according to Bühler, *kódi*. The Ŭsĭáî and Mătăṅkŏ́l hang these pockets on carrying poles. For transporting several taro roots in T͡aûī, they also use a piece of bamboo that has an internode at one end and is split into many small strips at the other. The individual taro roots are spiked onto the tips of these strips and carried in this manner. Taro spikes are also common on Lămbŭ́tjo, where they are called *pī́e*[32].

Fig. 80.
Taro spade. 639[I].
1.50 m long.

Yams

Yams, which Carteret[33] had already noted as a food crop, are cultivated in the same way as taro roots, but are usually found only in small clumps. In contrast, on Móuk, yam growing is as extensive as the cultivation of taro[34]. At Nares Harbour Moseley[35] did not find any yam cultivation at all. Apart from Móuk, yams are grown also on Pĭ́tĭlu, Pāk, Lóu, Pó͡am, Pắlŭăn, and Lămbŭ́tjo,

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[28] II, 1903. p.134
[29] Moseley, 1877. p.402
[30] *Deutsches Kolonialblatt,* XX, 1909. p.531
[31] Leber, 1923. p.264
[32] Thurnwald Collection, Berlin
[33] Hawkesworth I, 1773. p.384
[34] Thilenius II, 1903. p.134
[35] 1877. p.402

although only in small quantities. They were found on Lóu as far back as the first white trader; these probably came from south-west Melanesia into an area of the Admiralty Islands, though not as far as Nares Harbour[36].

On Pō̂am they distinguish the yam type *main* from the common *suwai*[37].

Sweet Potatoes

Sweet potatoes are grown even less frequently than yams. The Ŭsĭáî of the main island probably hardly bother with *Batatas* cultivation, and Moseley[38] did not see them [172] at Nares Harbour. Thilenius does not mention them at all. However, Webster[39] might well have obtained them on Pāk and Pĭ́tĭlu, and Friederici[40] cites words for them from Pā́lŭăn and Móuk. Leber[41] found big sweet potato plantations near Doktau.

Tubers

On the smaller Pō̂am island Schnee[42] saw extensive plantings of a "potato-like ground tuber" which was trained up wooden sticks as a climber, above-ground. The gardens (*mā́ńăt*, according to Dempwolff[43]) were carefully maintained, and bordered by stone walls, very reminiscent of vineyards.

Webster[44] too records a tuber that he obtained on Pāk and saw many plantings of it. This cannot be taro, sweet potatoes, or yams, since elsewhere he gives these plants names, and expressly says that this was "another root" whose name he had forgotten.

Bananas

The Ŭsĭáî and Mătăńkő̄l grow bananas in small quantities among other plants. They do not play a special role as a food crop.

Also, a few bananas are planted preferably in the vicinity of houses, particularly inside fences.

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36 Thilenius II, 1903. p.114
37 Dempwolff, 1905. p.209
38 *loc. cit.*
39 1898. pp. 305 and 309
40 1912. pp. 225 and 228
41 1923. p.264
42 *Deutsches Kolonialblatt*, XI, 1900. p.331
43 1905. p.209
44 1898. p.305

Sugar Cane

The sugar cane that Moseley[45] saw growing on the islands at Nares Harbour was described as better than that belonging to the residents of Humboldt Bay. Since sugar cane is generally only chewed — they neither cook it as food nor produce an extract from it — its cultivation is limited to just a few plants in each case.

Maize and Millet

In the interior of the main island Leber[46] found maize and wild millet in gardens together with sugar cane or bananas and taro. The two plants are not mentioned on the smaller islands, nor is there any information regarding their use as a foodstuff. [173]

Betel Pepper

The Mătăṅkŏl mainly, and also many Ŭsĭa͡ĭ, plant betel pepper bushes in small numbers, to meet their needs for leaves for chewing. They often appear to use semi-wild betel pepper bushes as well.

Coconut Palms

The coconut palm thrives almost everywhere, apart from a few areas in the interior of the main island; however Leber[47] found the main square in Bojang lined with 15–18 year-old coconut palms. Wherever, like Pāk, the coral lime soil is unsuitable for establishing taro and yam gardens, the coconut palm absolutely thrives[48]. Correspondingly, the daily coconut consumption is very high, and coconuts form the most important foodstuff besides sago. Labillardière[49] found small islands without coconut palms always to be uninhabited.

The coconut palms are planted in a regular fashion. Moseley[50] found “neatly-woven cylindrical fences” around young coconut palms at Nares Harbour. Where space does not cater to bigger plantations, which is particularly the case in Mă̆nus settlements in mangrove swamps, the people establish coconut plantations on small, uninhabited islands[51] or exploit stands already present. Thus the Sĭ́vĭsă people collect coconuts from Lólau[52]; the Mbū́na͡ĭ people on Ndrĭ́wa; and the Móuk people used to travel regularly to Alim where so many wild coconut palms stood that in several places the rest of the vegetation was totally suppressed[53]. Also, the Mă̆nus exploited the

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45 1877. p.402
46 1923. pp. 202 and 264
47 1923. p.262
48 *Deutsches Kolonialblatt,* XI, 1900. p.531
49 I, 1796. p.258
50 1877. p.402
51 Moseley, 1877. p.402
52 Parkinson, 1907. p.384
53 *Deutsches Kolonialblatt,* XI, 1900. p.328

stands of coconut palms on the Purdy Islands. Often on such journeys coconut oil is immediately boiled out of the coconuts on the spot, to ease transport.

On Pāk Klink[54] found that the coconut palms produced well, but the nuts were very small. Copra is not produced willingly for the Europeans, since people trade coconuts more profitably for sago from the Ŭsĭáî. On Lóu however copra is readily added to food, while on most of the other islands coconut oil is preferred[55].

In Drūgŭ́l, harvested coconuts are hung one above the other, on roughly 24 six-metre poles standing side by side in a semicircle in the middle of the village, and are stored in this manner, probably for a feast. Since the nuts seen already had shoots, it is also possible that they were being stored for planting. They store purchased coconuts on poles for feasts as well. [174]

Sago

There are sago palm swamps in many places on the main island, such as Ahus, Boltzal, Kětyḗ and Līīndr͡aû, and on several of the smaller islands such as Pāk. Regular cultivation of the sago palm is often no longer necessary, although stands of sago palm near Kětyḗ gave the impression that the palms had been planted. Beside them stood two open processing sheds.

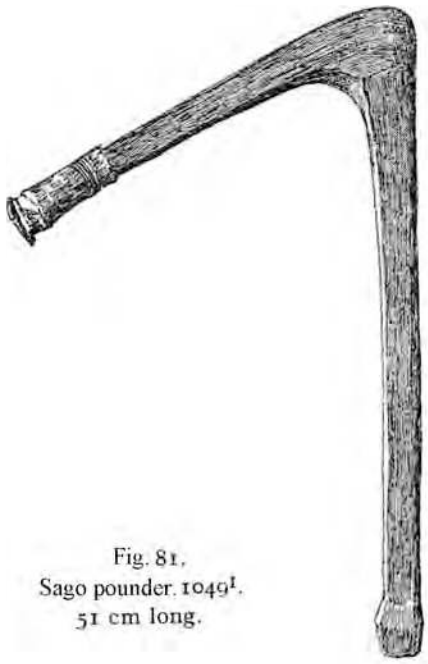

Fig. 81.
Sago pounder. 1049[1].
51 cm long.

Fig. 82.
Sago scraper made from a shell. 14. 38:38.
23 cm long.

For sago preparation, the palm is felled with stone axes, or metal axes today, and a strip of bark is removed once the tree is down. The bark fibre together with the granular pith (*ĕpī́* on Hā́ŭs), is then beaten loose with a sago mallet. The pounder is a knee-shaped piece of wood about 50 cm long, with no decoration apart from a thickening at the end of the handle. Pushed onto the end of the shorter arm, which curves outward from the handle, is a piece of bamboo complete with internode, as a cap. The internode forms the striking surface, and is secured with simple cordage, Fig. 81. The sago pounders are called *ĕkŭ́ăn* in Lā́lă; *kādā́* in Sā́hă; and on Lămbŭ́tjo, in L͡aûes, and in Păpítălaî *kŭ́ăl*, which is the same word in Mbŭ́n͡aî, according to Bühler. He found a special form of sago pounder in Pătŭ́sī. The implement, called *akuall* there, is a bamboo cane that is pulled into an axe form by a two-ply twisted rattan string extending from one end to the other. This tool is also familiar in the neighbouring villages. The beating-out of the sago pith is men's work, as is the felling [175] of the palm. After the beating of the pith, it is further loosened by treading on it while it is still within the bark, in the Kelaua River[56]. In addition to the sago pounder, a sago scraper is also used, to remove the pith

[54] *Deutsches Kolonialblatt*, XX, 1909. p.531
[55] Thilenius, II, 1903. p.135
[56] According to Kölle

from the palm stem. In Păpítălâĭ and on Lămbŭtjo it is likewise called *kūăl*. It consists of a simple sharp-edged clamshell 20 cm or more in length, Fig. 82. In T͡auī a 45-cm-long wooden sago scraper with a decorated handle and a flat, relatively broad main part, was found in use, Fig. 83.

Fig. 83. Sago shaver made of wood. 842[1]. 5 cm long.

The women carry out the further preparation of sago. They lay the pith in a trough, pour water over it and knead it thoroughly. The woman forms the washed-out sago into a cylindrical block about 30 cm high[57]. The prepared sago is then taken home in pouches (in the T͡auī and Pătŭsī area, *a lōb*; in Mbŭn͡aĭ according to Bühler *kódi*), or in baskets (*kúwa* on Bird Island Bay) and stored in them in the house, or on special frames (in Păpítălâĭ *kāĭndrŏt* or *klĭndrŏt*). It remains in this state for some time but then becomes sour).

The sago cylinders come for trade in packages of folded leaves tied several times, and form one of the most important trading items of the Ŭsĭâĭ, Fig.84. Bühler saw the baggy pouch being used on Sabo as a quantity measure for the sale of sago. Islands that produce no sago of their own often buy great quantities of sago packets for impending feasts. For example, on the larger Sĭsī island over a hundred packets bought from Lĭĭndr͡au for a feast were hung on a framework of long poles. The frame consisted of pairs of vertical forked posts decorated with white rings and, as well as short cross-braces, they carried long slats bearing the sago packets.

Fig. 84. Sago cylinder 716[1], 65 cm long.

The natives place very great store on having sufficient sago for food. On Pāk they would rather forgo tobacco than sago[58]. With a supplement of coconut oil, sago forms " an almost ideal tropical food", and Leber[59] ascribes to the sago diet an unrecognizable invigorating effect on the natives.

Betel Palms

A few betel palms are nearly always cultivated in the vicinity of the land villages. Their produce must satisfy the people's own needs, and often for trade as well. [176]

Fruit Trees

Breadfruit trees are planted in the gardens and in the vicinity of villages. Since they are not very numerous, attempts are often made to harvest from outlying breadfruit trees[60], although this is only justifiable when a tree has been planted by themselves or by their ancestors.

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[57] Moseley, 1877. p.402
[58] *Deutsches Kolonialblatt,* XX, 1909. p.531
[59] 1923. p.204
[60] Parkinson, 1907. p.398

Hollrung[61] found wild papayas on the uninhabited Purdy Islands. Once they had been been better cared for, and probably only the Mắnus might be considered the planters of them.

No other fruit trees are deliberately planted, and people are content with exploiting wild trees in the bush. Moseley[62] names a species of *Spondias* and "a small fig" as a wild food source. In addition he mentions "the fertile fronds of a fern" as edible. Carteret[63] saw "a small kind of apple or plum, of a sweetish taste and farinaceous substance" with "a flattish kernel" as a foodstuff.

Food Products

A "coconut-like" but smaller fruit is torn from the trees with special fruit-plucker hooks, according to Thilenius[64]. They fasten hooks on long poles for this purpose. Similar hooks are used also as shark hooks and, more rarely, as hanging hooks in their huts[65].

Further edible fruits from the bush are wild mango and the big fruit and nuts respectively called *ngul* and *bagabak* on Lămbŭtjo[66]. Occasionally they eat pandanus fruit and, more often, canarium nuts. Finally, the apple-like fruit of the *njat* tree, *mándrindr* fruit[67] and ginger roots are edible products of the bush. From the south coast of the main island mention is made of the edible fruit *ung* (= wild mango??) as "eaten by women on ceremonial occasions"[68].

Decorative shrubs

Crotons, dracaena, and cordyline are planted in the villages as decorative shrubs. They universally ascribe to cordyline a protective effect against evil spirits of the dead. For this reason they have a fondness for planting it as close as possible to the entrance of their houses and at graves. They keep the ground around the decorative shrub free of grass and weeds.

In front of the bachelors' house in Pŭĕ Thilenius[69] found an enclosure made from small sticks pushed into the ground close together around a small decorative beet shrub, and between the houses he found crotons and dracaenas. [177]

Supply of Drinking Water

More or less chalky drinking water is available in holes, in many villages. To protect it from pigs, long sticks are pushed into the ground around the water hole, and bound into a fence by two circles of liana rope or the like, Fig. 85. To retrieve the water out of the hole and over the fence, they use a long-handled ladle, which hangs on the fence when not in use.

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61 *Nachrichten über Kaiser-Wilhelmsland*, IV, 1888. p.33
62 1877. p.402
63 Hawkesworth, I, 1773. p.384
64 II, 1903. p.133
65 Cf. p.161
66 Thurnwald, 1913. p.137
67 Parkinson, 1907. p.389
68 Mead, 1931. p.282
69 II, 1903. p.148 and Plate VII

On Hắrắṅgắn which reportedly has no fresh water, seawater is filtered through the sand "into pits dug near their huts"[70].

Fig. 85. Waterhole
After a sketch by H. Vogel.

In other villages, especially in the coastal region of the main island, drinking water is taken from freshwater streams. Since the Ŭsĭấĩ villages are usually located on mountain heights, the women, whose job it is to look after drinking water, often have to travel great distances[71]. They transport the water in containers made from coconut shells, suspended from a carrying pole. The same happens in the mountain settlements of the Mătắṅkŏ̋l on Lóu.

Pắrā, which is half a mile offshore over the water, gets its water from a brackish swamp a further half mile inland. They travel over in canoes, with big containers (probably with *Parinarium* resin baskets)[72].

The water containers consist either of simple coconut shells with the upper part removed, and up to 10–20 of them hung by cords from carrying poles[73], or coconut shells coated with *Parinarium* resin and often also with a bamboo tube neck to the flask. The same containers serve for storing the water in the houses, or people use spherical clay pots, or flask-shaped baskets coated with *Parinarium* resin.

For ladles everywhere, they use half-coconuts with a wooden handle that is often richly decorated. [178]

Ladles

Ladles for water and other fluids are very rarely made just from a coconut shell with a triangular, holed-through piece cut out of one place on the rim, or three intersecting arches with a cut-out ring as a common projection used as a grip, Fig. 86.

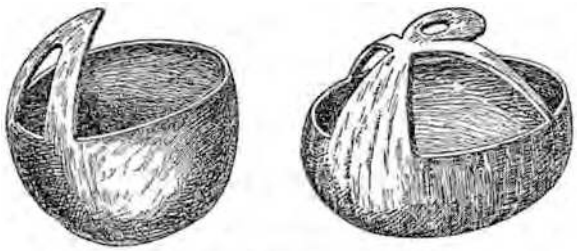

Fig. 86. Ladles made from a coconut shell
1157[I], 12.135:175. ø 12—13 cm.

However, by far the majority of ladles do not consist of a single piece, but are produced from half a coconut that has been pierced twice or several times near the rim and fitted with a wooden handle. This handle rises somewhat obliquely from the coconut shell, to which it is joined by a binding coated with *Parinarium* resin. The part of the handle below the binding is not decorated, and extends into the bottom of the coconut. Since it is firmly seated there, cohesion between shell and handle is doubly ensured. Ladles with one handle supporting two coconuts are very rare.

The shell is usually not decorated. Only a few specimens have a slightly serrated rim, and others a quite irregular relief carving, (probably only on account of selling to the Europeans) consisting of rings of adjoining triangles running round the shell and brightly painted, Fig. 87.

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[70] Festetics de Tolna 1904. p.131
[71] Thilenius, II, 1903. pp. 135 *et seq.*
[72] Mead, *Natural History* 1931. p.72 and Figure, p.74
[73] Thilenius, II, 1903. p.137

The handle, manufactured in Lǒnĭu from the *kĕn* (*kĭn*) wood species, almost always displays carved decoration. Only in shallow bowls with rough rims is this a simple stick, Fig. 88. On Pāk it is called *behān*, and the entire ladle is called *kajaû* on Pāk, Hắŭs and in Gắramaṅ; *boắnjŭ* on Pǐtĭlu; *pŏēbuǐl*[74] in Ndrǐol; according to Krämer, *buniu* on Pāk; according to Kölle *bóĕnju* on Kelaua Bay, and *bél*[75] on Nauna; according to Thurnwald[76] *bulānāi* on Kŏmű̀li; and according to Schoede also *blanei* on Lămbű̀tjo. Thilenius heard it called *buiabuil*. Bühler heard *gájau* on Bipi; in Bogohai, Nada, Aluklugg and Buboi *bóessam*; in Lǒnĭu *kájau*; on Pónam *gágaf*; on Sabo *ájau*; in Lagon and Umbua on Lóu, *pil*; and in Pătű̀sī *kálapeu*[77]. The shell (without the handle) is called *biliu* on Lóu, according to Krämer.

The simplest handles are straight sticks displaying cylindrical, diamond, and conical offset points. Such simple forms are found today generally in the specimens actually in use[78]. [179]

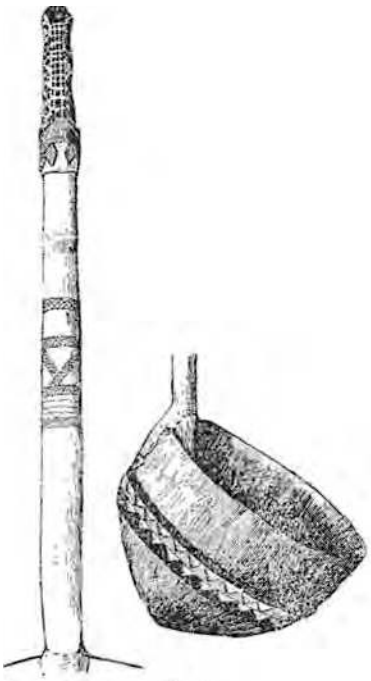

Fig. 87.
Ladle. 2091:05.
1/4 actual size

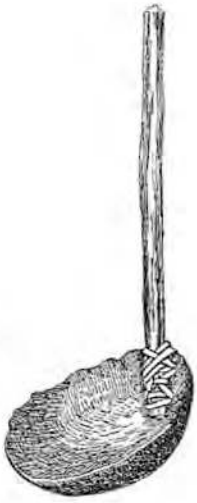

Fig. 88.
Ladle
22. 42:340. 1/4
actual size

Fig. 89.
Ladle handle
14. 2:57.
1/4 actual size

Fig. 90.
Ladle handle
4196I.
1/4 actual size

The cones can also transform into pyramids, and can be decorated on the edges with short incised notches, Fig. 89. The diamond piece is usually added between two short triangles with their apices pointing downward; in turn, the upper triangle supports a shorter diamond with a terminal arc above it. With the triangle above, the longer diamond is easily construed as a fish figure and embellished with painted relief carving, Fig. 90. On Lóu Krämer heard it called *kei* (= wood, i.e. probably the entire handle), and on Pāk, *kabas*.

The diamond and triangular figures are broadened in many ladle handles so that the handle takes on the shape of a board. In most cases the diamonds are then carved in lattice-work. There, vertical, curved or straight lines predominate, although these may be enhanced by horizontal,

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[74] Schoede provides *bōbul* for Lămbű̀tjo
[75] Cf. *pil*-spoon on Poam (Dempwolff, 1903. p.210).
[76] Thurnwald Collection, Berlin
[77] *Kálapeu* with a stylised fish! Thurnwald Collection, Berlin
[78] Bühler Collection, Basel

middle lines so that cross-shaped figures appear within the diamond. In addition, curved lines may appear around the cross, or the cross itself may be rounded. Both diamonds are often similarly decorated in this manner, and even the upper arch can acquire a simple breach. Very often, however, the lower diamond, usually transformed into a lancet figure, differs from the upper, which, together with the attached triangle and arch, changes into a disc or a [180] circle, or transforms completely into a turtle figure, two birds sitting opposite each other, or similar. The triangles and curves often transform into simple, obvious transverse bands, Fig. 91.

In many of the boardlike handles there is a marked tendency to rectilinearity, leading to the handle then becoming a rectangular, or almost rectangular board, with straight, horizontal bands (the middle one able to drop out), and with linear, open-work carving. Vertical lines predominate, although horizontal lines can also occur, giving rise to crosses and right angles. Variations in the marked rectilinearity present further possibilities of a more three-dimensional form where, for example, vertical strips can be shaped into fish, or the border lines into concave curves in which birds sit. In most cases decoration is added as painting and relief carving. If the rectilinearity is heavily retained, and no open-work carving added, then relief carving and painting alone achieve the decorating of the now totally board-like handle. In this case, the transverse bands are always implied, and often [181] even duplicated.

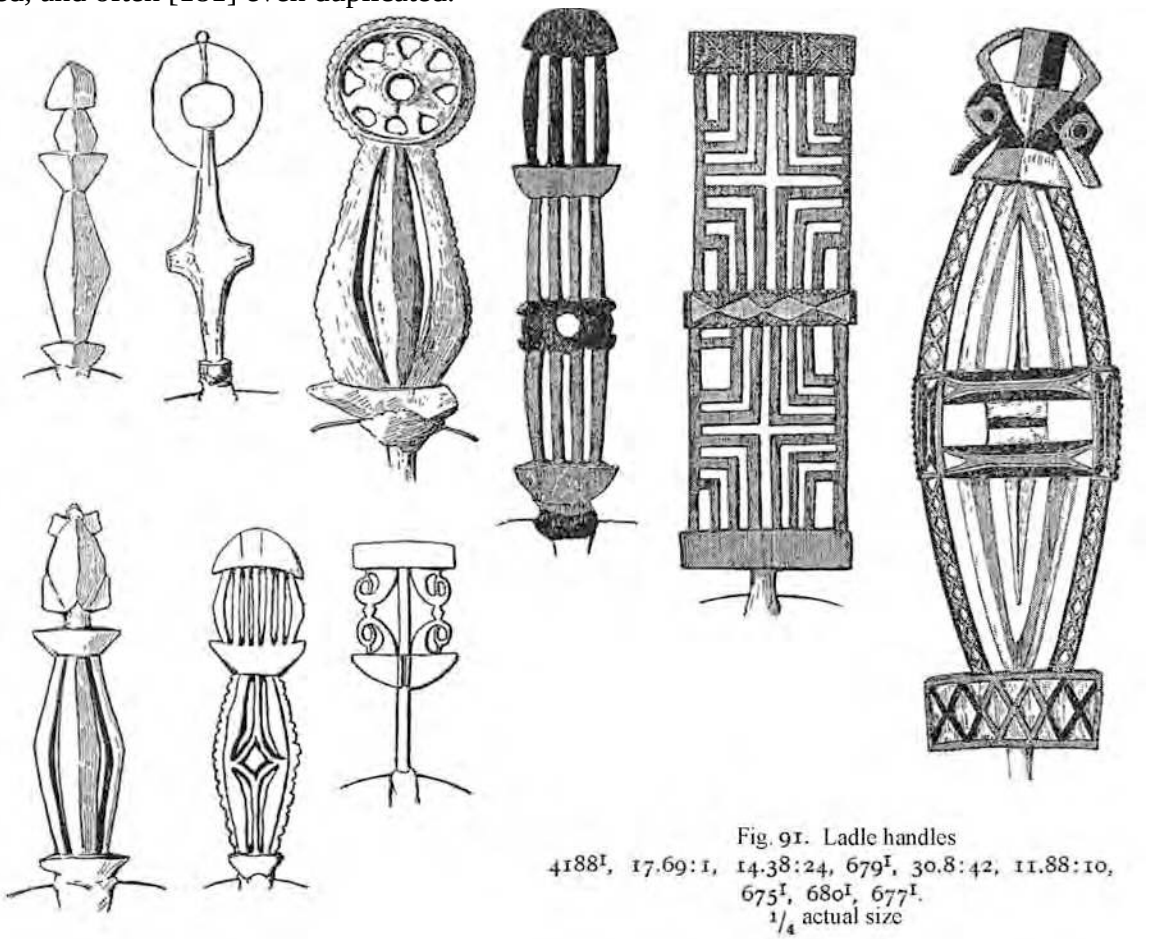

Fig. 91. Ladle handles
4188[I], 17.69:1, 14.38:24, 679[I], 30.8:42, 11.88:10, 675[I], 680[I], 677[I].
1/4 actual size

The main design incorporates groups of four triangles with their points intersecting, with a serrated base — representations of *Tridacna* — or lance-shaped figures that are accompanied at either end, each by two angles opening outward, reminiscent of the representation of a reptile. Probably they represent, like three-dimensional figures on other handles, an iguana (*wā́ri* on Pāk

and Háŭs)[79]. The board-form of the handle can be further reduced to a four-sided, stick-shaped handle with relief carving, but with carving also along the sides. The reverse side of this handle, and board-shaped handles, is decorated using the same technique, although usually with patterns grouped in other ways, Fig. 92, Plate 23, Figs 13-15.

Since the board-shape renders it unsuitable as a handle, people often get round this, when it is carved in open-work, by attaching a cord loop as a handle.

In most cases, the board-shaped handles have their broad side level with the [182] rim of the coconut shell. However, in a few cases these branch off the rim at right angles. Then the rectangular form is no longer strictly adhered to — the little board handle narrows in its upper section and is rounded below. Accordingly, the shape and direction of the vertical slits are altered in the upper part, Fig. 93.

Handles whose broad side leaves the bowl rim at right angles, in many cases have the form of a jagged-edged spiral[80]. Very occasionally it has a hanging of short *Conus* disc cords with *Palaquium* shells[81]. As opposed to the other handles, the spirals are fastened to the outside of the shell, like the handles of wooden bowls. In markedly different specimens from the usual run of board-shaped handles, the spiral appears in multiple repetitions and opposing grouping between two bands. Below the spiral motif the handle is simplified to a manageable stick. Other handles display jagged curves with a more or less stylised figure inside, strongly reminiscent of the handles of wooden bowls.

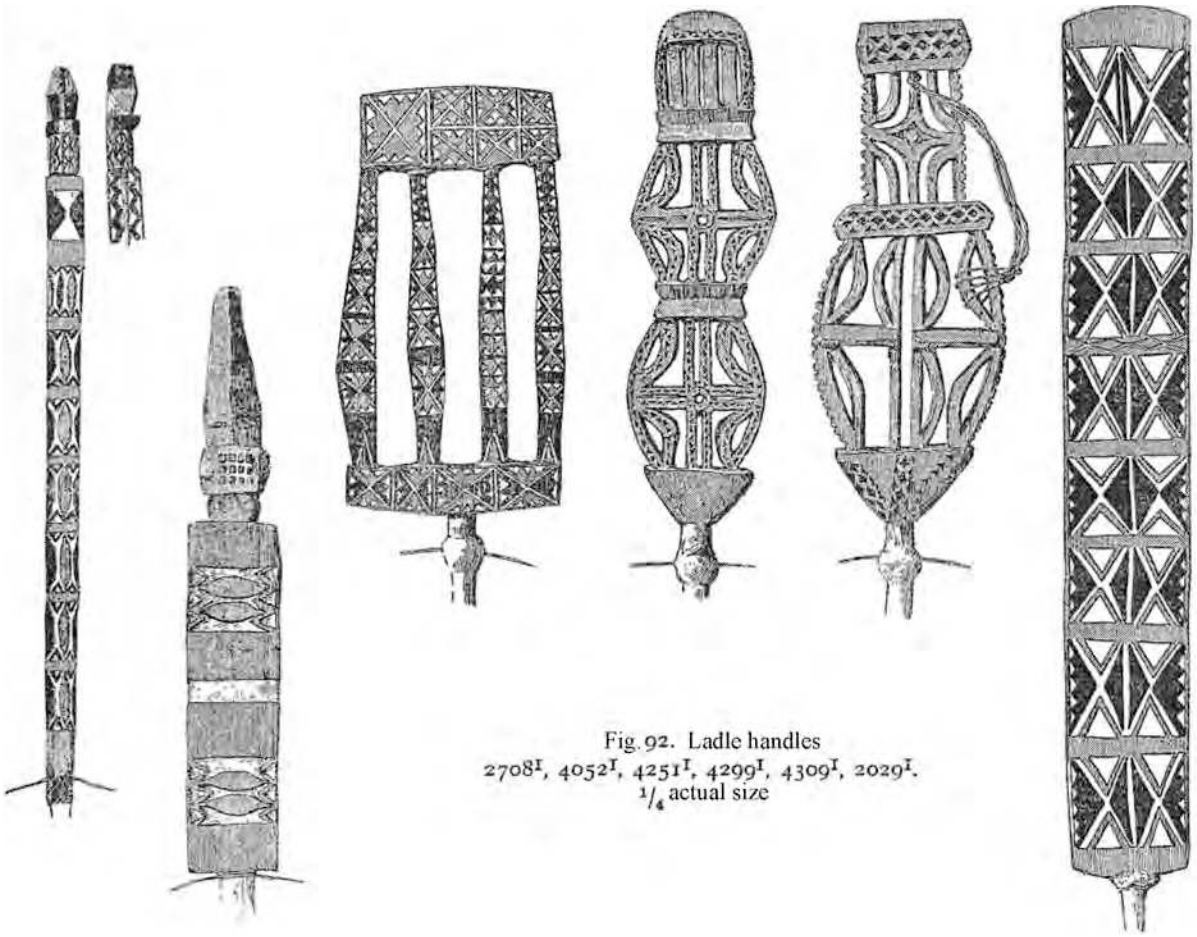

Fig. 92. Ladle handles
2708[I], 4052[I], 4251[I], 4299[I], 4309[I], 2029[I].
1/4 actual size

[79] A three-dimensional representation of a lizard as part of the decoration of a handle, was explained to Krämer on Pāk as *bunrong* (= lizard).

[80] Thilenius, II, 1903. pp.299 *et seq.*; Fig.104

[81] Eichhorn, 1916. p.278 and Fig.56

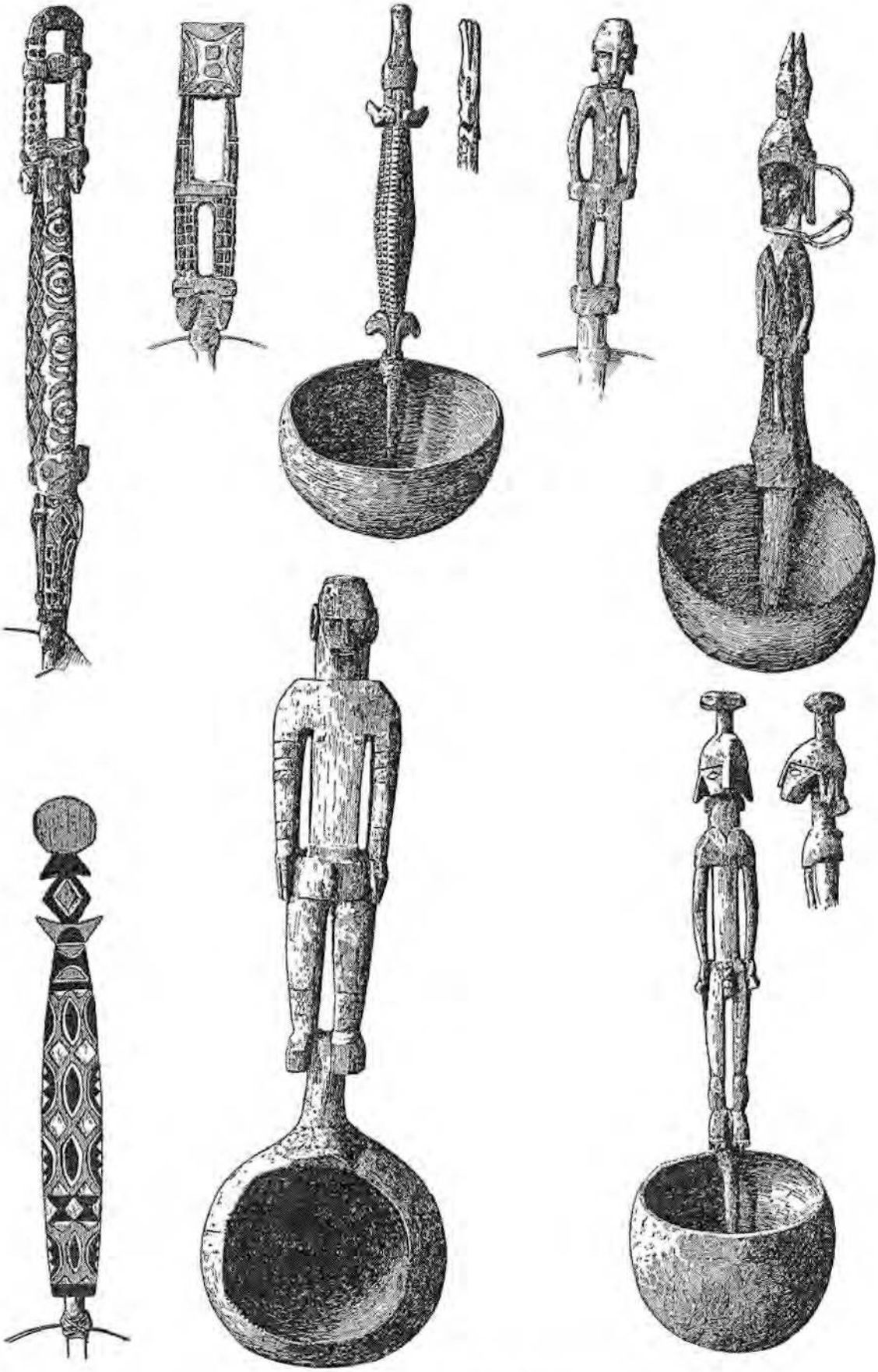

Fig. 94. Ladles and ladle handles
2930[I], 2564[I], 1131[I], 4049[I], 4243[I], 4250[I], 2931[I], E. 2278. $^1/_4$ actual size

A further group of ladle handles shows a three-dimensional design, often with relief carving and painting. Human and animal figures predominate. Fish (on Hắŭs *ű́ri* = shark) are presented with their tailfins upward. Human figures are presented in the same manner as on betel lime spatulas and spears. Particularly common are crocodile figures (on Hắŭs *bóă*), which in odd cases have also been interpreted as iguanas. Either the crocodile is pointing fully upward or downward, and often presented in pairs side by side, or the craftsman restricts himself to a reproduction of its head as the termination of a smooth round handle decorated only with hatched incised bands (cf. Fig.87); or a board-like handle with relief carving. Finally the motif of a crocodile head devouring a man, also a favourite on lime spatulas and spears, can also be achieved. By duplication of the crocodile, an eyelet may be formed from their tails meeting or from a band running over them. As a supplement to other decorations — for example of human figures — there are also pairs of birds, Fig. 94.

Fig.93. Ladle handle 2627[I]. 1/4 actual size

Also, with the three-dimensional handles, a loop of fibres or strips of rattan is often attached, serving either as a handle to protect the painting of the figure, or for fastening the ladle to a longer handle when someone has to collect water from deeper holes. [184] A peculiarity is a ladle made from a carved coconut water container with a handle attached to the outside, now held in the Dresden Museum[82].

As a substitute for a ladle made from a half-coconut, on the Sĺsī Islands they used a ladle that was carved out of a piece of wood with a human figure as the handle. The handle of this piece does not branch off obliquely, as it does elsewhere, but horizontally, like the handle of a pan. Also, a ladle in the Berlin Museum[83], obtained around 1880, has a wooden bowl 21 cm(!) in diameter, and a handle in the form of a fish fastened to it like a bowl handle. The ladle is engraved with rows of triangles but it is not painted.

In 1929 it was customary at feasts to present the guests with a bowl in which the soup was served, and also a ladle[84].

Water Flasks

For storing drinking water and as drinking water containers, they use flasks made from coconut shells. The simplest of these are decorated with relief carving usually featuring arches that are concave downwards as the main pattern. These arches end in spirals on both sides, from which may hang a band or a *Palaquium* tassel, and between which diamonds are sometimes carved out; or they display expansions of the pattern. These patterns are not coloured in, but probably whitewashed in other coconut shells that are decorated in multiple rings of triangles and rectangles[85]. In other shells rings of *Parinarium* resin are painted around the middle or the opening of the nutshell and decorated with relief carving. A few flasks of this type are further decorated with four spots of carved and painted resin, arranged in a cross around the opening. Also, a middle ring carved into the coconut itself may be coloured in, and sometimes even the entire nut is dyed red. A bundle of bast fibre strips, or a piece of wood hanging from a cord pulled through a hole near the edge, serves as a stopper. A trim for fastening a suspension cord may remain in the opening, or a toggle on the inside is twined around the cord, Fig. 95.

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[82] 18867

[83] VI 6418, Finsch Collection

[84] Mead, 1930. p.120, figure

[85] A death's head with crossed bones, shown on a dish in Hamburg (2052:05), goes back to European source material.

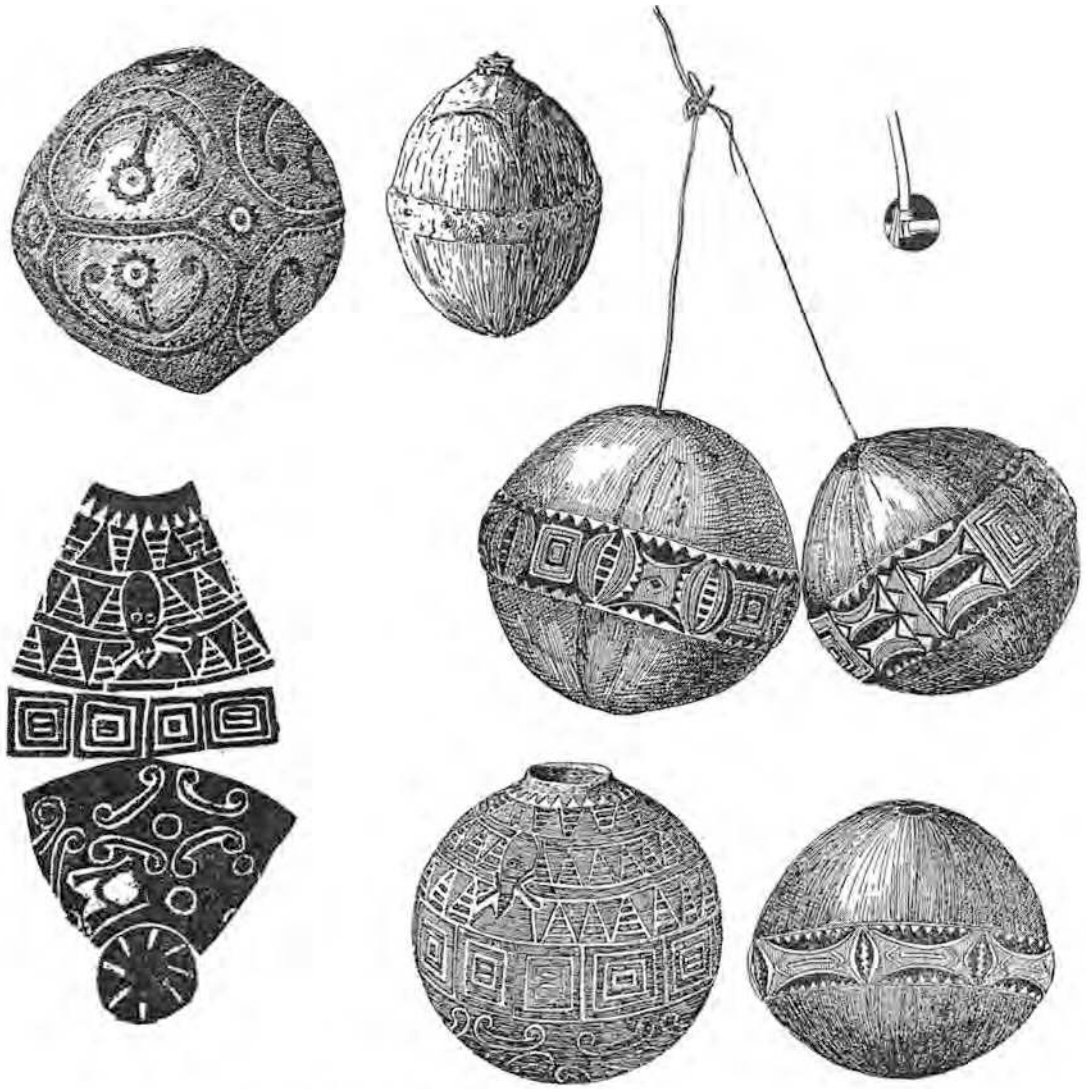

Fig. 95. Water flasks made out of incised coconuts
14. 74:3, 14. 38:66, 2119:05, 2052:05, 2121:05. 1/3 actual size

Better water flasks consist of a coconut shell with a bamboo tube inserted into the upper opening as a neck, or of two rejoined half-coconuts with a bamboo tube. Coconut shell and tube are coated with a thick layer of *Parinarium* resin and are thus assembled as one piece. In most flasks a decoration is carved into the resin [185] coat and then coloured in, or they cover the resin coat in simple coloured lines without carving. The deep patterns often run round the flask in a band, and also run in a straight or curved line from the neck down to the band. The pattern often runs from the neck down over the belly of the flask for a short distance, sometimes representing *Palaquium* pendants. Otherwise people use the usual *Tridacna*, diamond, triangular, and curved patterns. Figurative representations of lizards are also found. Some flasks have only a middle ring and four vertical strips of resin instead of the complete coat of resin. Little *Conus* discs or glass beads are pressed into the strips as a decoration. The surfaces between the [187] resin strips may be painted in two alternating colours. This occasionally happens with the complete resin coating, on which white lines then indicate the resin stripes, Fig. 96, Plate 23, Figs 11 and 12.

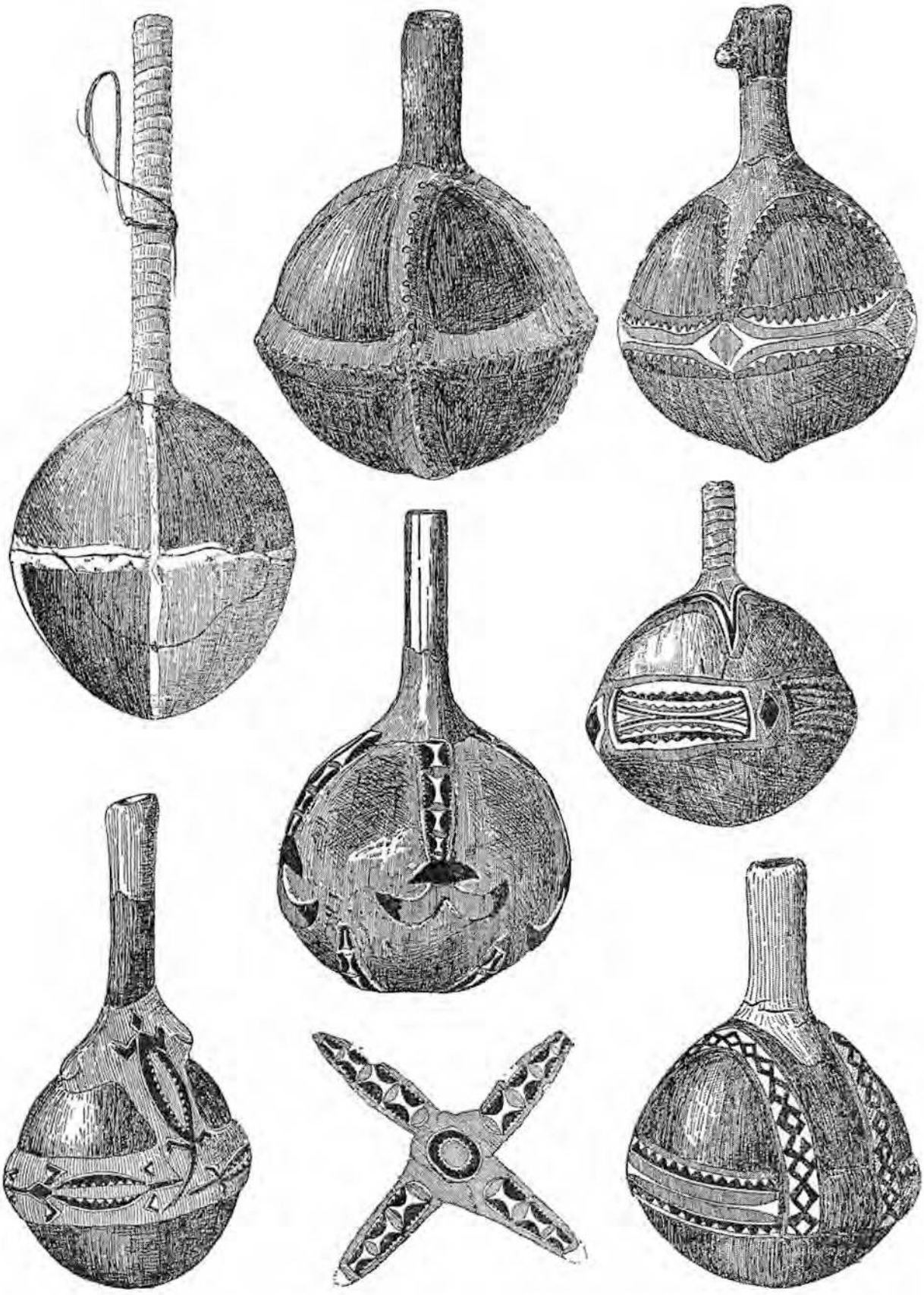

Fig. 96. Water flasks coated with *Parinarium* resin and decorated with ornamental patterns
2662[I], 2778[I], 763[I], E. 3541, 2036:05, 3185[I], 3187[I]. 1/3 actual size

Many flasks have a thickened ring-like patch of *Parinarium* resin around the neck, and many have a spigot at the opening, which probably serves as a spout when pouring water. The fact that the neck opening is cut diagonally allows easy pouring. To enable the flasks to stand upright, people use a plaited ring as a base, or else a foot is fashioned out of the *Parinarium* resin at the start, Fig. 97.

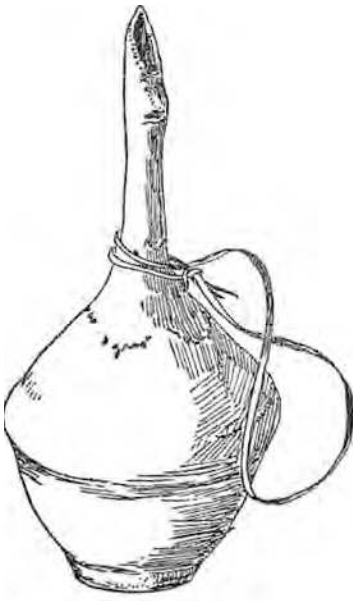

Fig. 97.
Water flask with flask stand
2868[I]. 1/4 actual size

Apart from the flasks made from a coconut shell, fitted with a bamboo tube, and coated with resin, there are also flasks without a bamboo tube, i.e. without a neck. In many cases a small bulge of *Parinarium* resin is laid around their 'neck's, serving as a neck and occasionally shaped into a spout.

Water flasks of coconut shell with or without a neck and with or without a resin coating are called *gugĕ́o* on Pĭ́tĭlu; *gŭnundrĭ́ligĕ́* in T͡auī; pūēkŏ́[86] in Lálā and Ndrĭ́ol; nā́ro on Hā́ŭs; on Kŏmŭ́li *bāukŏ́u*, according to Thurnwald[87]; in Boao (Buáo) *bóa* according to Kölle; and according to Bühler in Mbŭ́n͡ai *boanju* (like the oil jug); and in Lagou on Lóu *poga*.

In addition to these small water flasks they also use bigger water flasks, consisting of plaiting coated with *Parinarium* resin, and looking just like the oil flasks. In T͡auī they are called *mănămūn* or, like the coconut flasks, *gŭnundrĭ́ligĕ́*.

Water Pots

For water containers, they use spherical clay pots with a narrow opening or with two openings of the same or different sizes. The bigger opening is said to serve for pouring into, and the smaller one for drinking[88]. The rim around the opening is either cut straight across or drawn inwards and bent over towards the outside. [188] A bung of banana leaf or wood serves as a seal. The pots can be carried or suspended by a rattan loop pulled through both openings. Since the clay is very porous the water remains cool within the pots for a long time[89], Fig. 98.

Fig. 98.
Clay water pot. 2040:05.
1/2 actual size

[86] *Poiko* on Lămbŭ́tjo, according to Schoede
[87] Thurnwald Collection, Berlin
[88] Schurig, 1930. pp.134 *et seq.*
[89] Parkinson, 1907. pp.356 *et seq.*

Cooking

Fire lighting

Fire is very seldom generated afresh, because they ordinarily store glowing timbers in their houses, in the gardens and on the beach; keep a fire going on canoes during long voyages; and take a glowing piece of wood with them on treks through the bush[90].

They light the fire by ploughing a piece of wood called *nīnis* on Hấŭs; and *darie*[91] in Gắramaṅ according to Bühler, with the bark removed from the upper side. With a second, blunt piece of wood of the same species, called *kaĭắr* (*kăjắr*) on Hấŭs and *narung* in Gắramaṅ, they create a slide-furrow in the longer piece of wood, which is lying on the ground and firmly held by the knees of the worker, and slide the ploughing wood backwards and forwards, faster and faster[92]. While doing this, they watch that the fine quantities of wood dust that are released from the wood and warmed by the rubbing and the pressure, are returned precisely to the same spot, thus forming a small heap of sawdust, Fig. 99. A second man holds up a coconut mat as wind protection. When sufficient heated sawdust has gathered, the wooden plough is laid aside and the wood dust is sheltered by their hands and blown on. They pick it up with a palm leaf, throw dry, grated bast fibres and little pieces of bark on top and continue to blow on it until a tiny flame appears; it is used immediately to ignite sago or palm fronds[93].

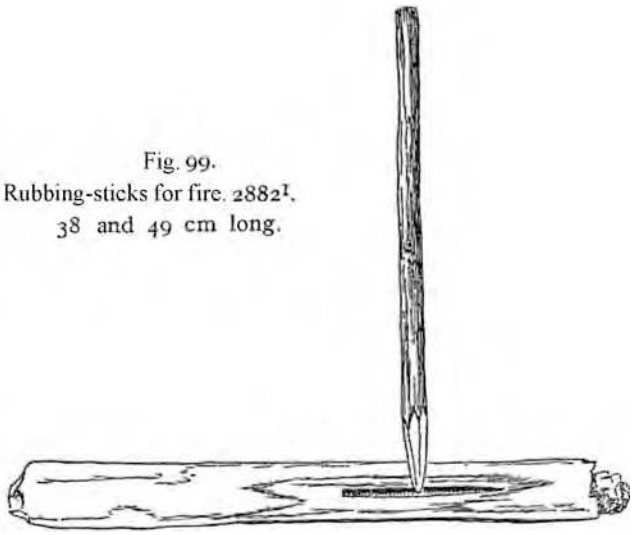

Fig. 99.
Rubbing-sticks for fire. 2882[1].
38 and 49 cm long.

This task takes 30 seconds to a full minute, but can only be performed with strong physical effort and very often fails. [189]

Hearths

Fireplaces are lacking in the young men's houses since food is prepared and delivered to the occupants by the women. Food preparation is women's work in other ways as well, although men can also roast meat or fish on huge open fires outside. Fireplaces are found, in the middle of the room, only in women's and family houses, and, where several families occupy one house, the number of fireplaces corresponds with the number of families. They are called *kə̆yaû* or *kŏ^{u}ă* in Păpítălaî, and *kūkūắ* in Ndrĭol. For firewood, they prefer to use soft, light, dry wood stripped of its bark, called *kēi*[94] on Lămbŭtjo. In Taûī the firewood is called *endrấo*, and on Pắlŭăn *kílin*,

[90] Vogel, 1911. p.110

[91] At the same time, the name of the whole apparatus

[92] People who perform this action, explain it as "*ninismé kaĭắrmé*".

[93] Vogel, 1911. p.111

[94] Thurnwald Collection, Berlin. According to Dempwolff (1905, p.209), on Póam *kei* designates any wood. On Pắlŭăn, according to Walden (Berlin *Vokabular*) *käi* is the word for trees.

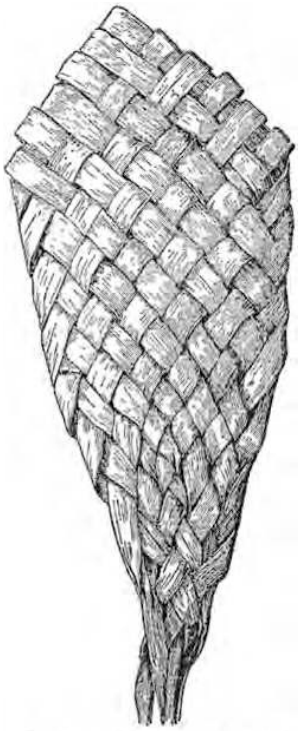

Fig. 100. Fire torch. 687I. 41 cm long.

according to Walden[95]. A fireplace (*kóịaụ̯*) studied by Thurnwald on Lămbŭtjo consisted of four pieces of wood nailed together into a frame, with a potsherd on it. According to Margaret Mead[96], wood ash is piled onto an old mat in the pole buildings of the Mănus. The wooden frame is put on top, with the hearthstones in it. On Pāk Krämer saw oven mouldings (*gu*) in a similar style to those on Luf. Otherwise, they are shallow boxes filled with sand[97].

For extended voyages also, fireplaces are set up in canoes too. In T͡auī they use a type of firebox (*kŭlúa*) with sand, ashes (*a bŭán*) and firewood in the canoes. A potsherd with a layer of leaves inside it, often overlain with stones serves as the firebox there and in other places as well. Thilenius[98] describes the fireplace in a canoe as a circle of fist-sized stones with an ash-covered layer of leaves and glowing pieces of wood on top.

In Drūgŭl firewood is stored in racks against the inside walls of the houses.

For fanning fires on Lóu they use fans about 40 cm long made from a simple woven frond, Fig. 100. In Lagou these are called *gerehib*, according to Bühler. [190]

Pork Preparation

After killing, pigs are laid on a fire of branches and completely covered with dry branches and leaves. They are left there until the bristles have been singed off.

Then the pig is laid on banana leaves on the ground and cut up. Today this is done with an iron knife. The beast is divided less anatomically but almost geometrically. A straight cut is made from the start of the tail as far as the shoulder blade, running horizontally through the hams. Another cut runs over the back transversely over the loins, with another over the ribs to the shoulder blade. Two cuts divide the front legs from the neck and belly, and another cut separates belly and back legs. The entrails are removed, after the anus has been tied. Finally only the head remains, sitting on the rib cage and the anterior spine. It is twisted off the spine, Fig. 101.

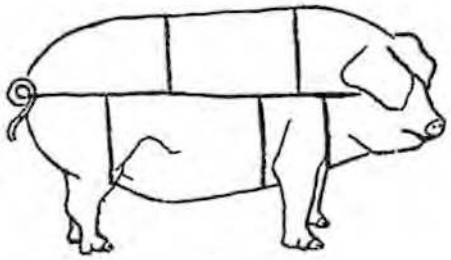

Fig. 101.
Cuts of a pig, when slaughtering.
After a sketch by
Dr. W. Müller.

The individual portions are laid in shells coated with *Parinarium* resin, and then divided up, so that each group of 2-4 men receives a piece of meat.

The recipient wraps the meat in fresh leaves and roasts it between hot stones[99], or he cooks it laid it over a wood fire, turning it several times.

People prefer to eat pork with sago[100].

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95 *Vokabular* in the Berlin Museum
96 Edwards, 1931. p.552
97 Vogel, 1911. p.122
98 II, 1903. pp.159 *et seq.*
99 Vogel, 1911. p.90
100 Moseley, 1877. p.403

If they cook the pieces of meat in clay pots filled with water, they remove the meat with slotted spoons made from a perforated half coconut shell with a wooden handle.

Cooking Possums

If a possum is caught, it is often kept suspended in a basket for a while, before being eaten.

The slaughtered animals, retaining head, legs, and tail, are roasted over a fire after pieces of skin have been removed for making ornaments. When eating, they first of all rip it to pieces with their teeth[101].

Cooking Shellfish

A black mother-of-pearl shell that is called *kă̋dun* in Păpítălâĩ[102] is laid on a fire and roasted while closed. The cooked animal is then taken out of the shell and eaten immediately. [191]

Fish Smoking

On Hă̋ră̋ŋgă̋n fish are smoked in the houses. For this purpose they erect a scaffold about 50 cm high with a rack made from batons. On Hă̋ră̋ŋgă̋n this stands beneath a frame for equipment in the huts. Wood is set alight under the smoking scaffold, and the fish are laid on the rack and covered with potsherds. In this manner mackerel are kept palatable for a long period.

In Ndrĩ̋ol on Lă̋mbŭ̋tjo fish are smoked on these scaffolds, called *pâĩ* there. Parkinson[103] talks of fish being smoked on Pĭ̋tĭ̆lu.

Cooking of Plant Foods

Taro

Taro roots are stripped with mother-of-pearl shell knives and cut up. The shells come from the gold-rimmed or the black-rimmed species *Maleagrina margaritifera*. Only rarely do they retain their natural form. Usually a piece with a blunt, straight edge and a sharp, curved edge is cut out. This piece may also have a small hole at the end for a cord. Occasionally the straight edge may be the blade while the curved edge is blunt. One such shell knife that Bühler obtained in Mbŭ̋nâĩ has three pairs of holes in the curved edge for fastening bead cords with dog or possum teeth. In Nada he was given a taro shell-knife of a different form: consisting of a piece of shell with the hinge and the natural edge, whose sides had been evenly polished. The mother-of-pearl shell is called *anjŏ̋l* on Pāk; *ănŭ̋l* on Hă̋ŭs; in Tägŭb on Lă̋mbŭ̋tjo, *anioṅ*; and, according to Bühler, *tuiniakk* in Pătŭ̋sī and Mbŭ̋nâĩ. The taro shell-knives made from it are called *tšŭ̋*, *tsŭ̋*, *kă̋ntjŭ*, or *kă̋ntšŭ* on Hă̋ŭs; *nyă̋k*

[101] Moseley, 1877. p.403
[102] *Manito* on St Matthias
[103] 1907. p.388

in Sa̋hă; *kunjŭk* on Lămbŭtjo according to Schoede; *tju* on Pāk; and *anjul* on Sōri; and according to Bühler *bugei* in Nada, and *tuiniakk* in Mbŭna͡i and Pătŭsī, Fig. 102.

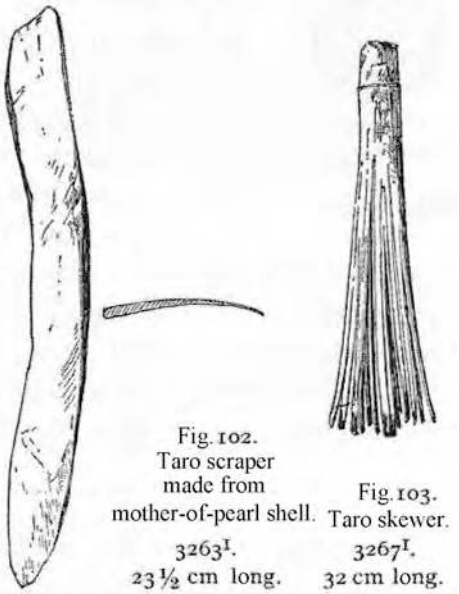

Fig. 102. Taro scraper made from mother-of-pearl shell. 3263I. 23½ cm long.

Fig. 103. Taro skewer. 3267I. 32 cm long.

The peeled taro roots are either roasted or boiled. The Ta͡uī people skewer roasted hot roots on a split bamboo exactly like the taro skewers used to transport taro roots, Fig. 103. Bühler [192] obtained another taro skewer, for testing the cooking tubers, in Pŭě on Lóu. It is 77 cm long, carved out of wood, with a haft that is four-sided in cross-section with an incised pattern and with a knob-like thickening at the end. It is round in cross-section elsewhere, and tapers to a point. This implement is called *bet* in Pŭě. As is the case in Buboi, a kinked bamboo slat can serve as the implement (*rindin*) for seizing hot taro roots.

Fig. 104. Taro pounder. 7581. 28½ cm long.

For producing mash from the taro roots, they are crushed with wooden pounders. The simplest form of taro pounder is a cylindrical piece of wood 20–50 cm long, Fig. 104. Better pounders boast a thicker lower end wider than the haft, and, above the haft another somewhat thickened, knob-shaped end that frequently embodies a diamond or a house beam gable with a bulge, and is occasionally pierced as well. One taro pounder found by Bühler in Sira differs from all the others in that it consists of a curved piece of branch with the haft-end fashioned into a bird's head. According to Bühler the taro pounders are called *pórogai* in Sohéneliu; *bórogai* in Sira; *kédudud* or *kándutut* in Pătŭsī; *kándutut* or *kánturu* in Mbŭna͡i; and *bolen gówui* in Pŭě.

Taro scoops are particularly common in Sau. They are little flat boards with rounded corners and a narrow haft with relief carving or a simple eyelet. Not uncommonly, the haft is bent somewhat to the side. In such a case it can then receive the outline of a bird figure[104].

Coconuts

Coconuts are centre-drilled with a roughly-hewn, semicircular piece from the base of a *Trochus* shell(?) called *haderian* on Sabo, according to Bühler.

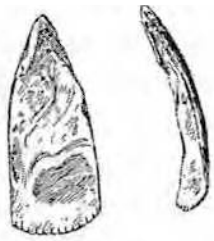

Fig. 105. Coconut scraper made from mother-of-pearl shell. 8063I. 8½ cm long.

For scraping out the coconuts they use mother-of-pearl shells with a serrated rim, called *bointju* in Pătŭsī, according to Bühler; and wooden-handled implements with a piece of clam shell or snail shell bound onto the end with strips of rattan, Fig. 105. According to Bühler, this tool is called *sówon niu* on Sabo. The inside of the coconut is completely broken down with coconut rasps and worked into a flaky mass. The rasps, which are called *drāgŏ́r* in Sa̋hă and *kă̋ndrŏāī* in Ndrĭ́ol, consist of a plank-like piece of wood on two feet. [193] On an extension of one narrow side is a sharp-edged clam shell bound on with rattan strips; or a piece cut out of a clam shell, with teeth on

[104] According to A. Bühler

one side. More recently they have been using an oblong flat piece of iron with a toothed end curving upward instead of the clam, Fig. 106. A woman rubs the coconut with a twisting motion against the iron or the clamshell. The woman kneels on the board of the rasp so as to give the implement a firm footing. By leaving a diamond-shaped projection at the rear end of the board and a peg pointing downwards at the front before the clam shell is attached, the whole device is given a likeness to the shape of a bird or a four-footed animal. Both feet of the rasp are mounted flush into the board by pegs inserted into holes. The lowest part of each leg is widened into a rectangle with its long side on the ground and is decorated with painted relief carving in the usual patterns (particularly groups of four arches or triangles with a serrated or a flat base). The middle portion of the foot is shaped into a diamond. The people are fond of doing this in open-work so that a vertical and a horizontal strip remain, and are both decorated with painted relief carving. In Gabou Bühler found a painted coconut rasp (*laiapp*) carved out of a single piece in the shape of a four-footed animal with bent knees and connecting slats between the feet.

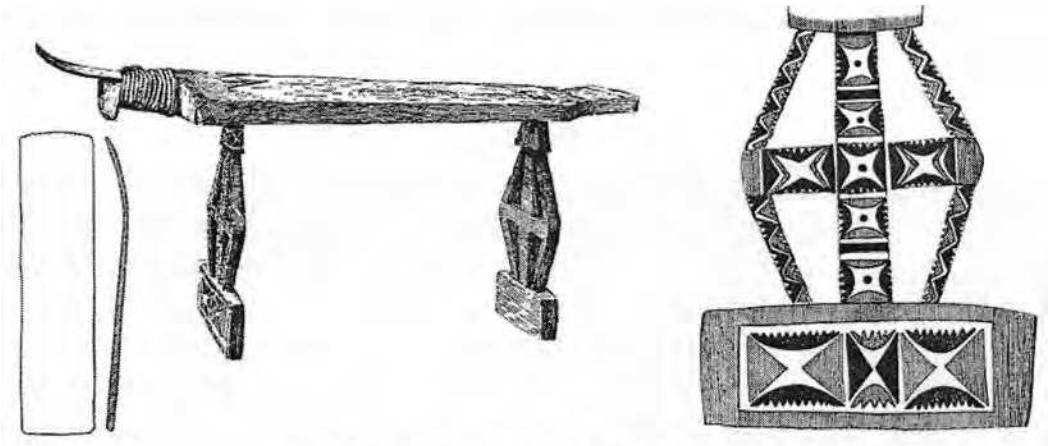

Fig. 106. Coconut rasp. 635[I]. 29 cm high.

The Mǎnus in Pár̄ā also produce “artificial flowers” out of coconut meat, for decoration of festive shells with boiled taro[105]. [194]

Coconut Oil

Coconut oil (*momoniú*[106] on Pāk) is produced out of the liquid of the rasped coconuts; diluted with water and boiled. In preparing the liquid, the coconut shreds are stirred using a simple ladle. One such ladle, which Bühler acquired in Sira, was 58 cm long and was provided with a sickle-shaped segment of coconut shell fastened on with rattan. Its local name was *gássin*. The residue of the squashed coconut shreds is removed with a slotted spoon (*bóessam* in Buboi according to Bühler) consisting of a wooden handle with a carved or hook-shaped end, and a pierced half coconut shell. The finished coconut oil is a pale fluid.

Sago

For the preparation of a dish, a piece is broken off a cylindrical block of sago, softened in water and, if necessary, broken down with the help of a wooden sago scraper, a mother-of-pearl shell, the spine of a ray, or a round river pebble (*bä* in Buboi). In Sau boiled sago is stirred with a

[105] Mead, 1930. p.125 Figure
[106] According to Krämer

long, straight ladle with a wide, flat blade and a solid handle[107]. For flipping over the sago cakes roasted on an open fire they use a tongue-shaped instrument made from an angled bamboo slat, called a *rindin* in Buboi[108].

Dishes

Usually added to the main foods — taro roots, bananas and sago — is coconut oil or, on Lóu, copra[109]. Besides this, sago is readily boiled together with rasped coconut[110]. Margaret Mead[111] distinguishes "a taro and coco-nut oil pudding, cakes of sago and coconut, puddings of taro and grated coco-nut" and mentions in addition: coconut soup; the soup *bulukol* for sick people and women in ceremonial seclusion; the ceremonial pudding *tchutchu*; and taro leaf puddings made as a dish in Pár̄ā and its immediate neighbourhood.

Cooking utensils

For cooking they use spherical clay pots with a wide opening and occasionally, for example on Pāk, they are said to use woven baskets coated with *Parinarium* resin, although it would hardly seem sensible to set a cooking basket on an open fire.

[195] When not in use, the spherical pots are stored with their opening downwards so that they are held firmly and kept dry. When full, they are stood on thick rings plaited from rattan strips, to keep them stable. In Kyělâùák these rings are called *enāt*; in Ndrī̆ol *né^{i}t*; and, according to Bühler, in Pătŭsī *nieit*. Rattan strips are wound in broad spirals around the ring-like centre of the pot rings and horizontal rattan strips are plaited through them in such a way that with each winding of the spiral strip they twine around it once, Fig. 107.

Fig. 107.
Pot ring made from plaited rattan
1156^{I}. ⌀ 33 cm.

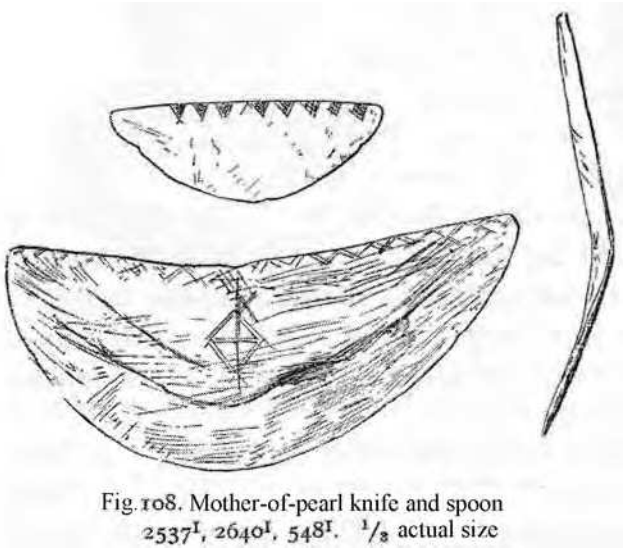

Fig. 108. Mother-of-pearl knife and spoon
2537^{I}, 2640^{I}, 548^{I}. $^{1}/_{3}$ actual size

Eating utensils

As spoons for soft food they use whole pearl oyster shells. Two mother-of-pearl spoons belong together as a pair, and are held in the hand during certain dances by the women of the Ŭsĭâ̄ī[112] (probably of the main island), of the Mătăṅkŏ̄l from Lămbŭ̄tjo and, according to Bühler, also in Mbŭ̄nâ̄ī and Pătŭsī. Spoons and

[107] According to A. Bühler
[108] According to A. Bühler
[109] Thilenius, II, 1903. p.135
[110] Miklucho-Maclay, *Izvestia*, 1878.
[111] 1931. pp. 139, 141, 282
[112] Parkinson, 1907. p.381

knives alike are made of long narrow or wider pieces of a mother-of-pearl shell with a narrow side polished into a cutting edge; half mother-of-pearl shells; and semicircular pieces of mother-of-pearl shell. Sometimes the shell utensils are decorated on the blunt side with a few incised hatch patterns. They often bear the same names as the taro shell-knives, for example, *tuiniakk* in Mbŭn͡aĭ and Pătŭsī, and *aniou* in Alukugg (northwest of the main island)[113]. On Salien shell spoons are called *gulíndrabug* according to Bühler Fig. 108.

Other eating utensils are flat little oblong wooden boards about 15 cm long; similar pieces of turtle shell with rounded angles on Pĭtĭlu; and spoons made from a segment of coconut shell (*bogei*) in Nada[114].

On Ăndră Bühler found an utensil called *gajou* made out of a coconut shell from which only the uppermost part had been removed, with the exception of a triangular peg which served as a grip. It was a spoon, probably intended for liquid food. [196]

Oil Containers

Small quantities of concentrate coconut oil are stored on Sōri and in Gắramaṅ in the shell of a *Cassis* snail. A woven rattan ring is placed around the *Cassis* shell top and bottom, and sometimes even in between. The lower ring is thicker than the others, and serves to help keep the vessel upright, Fig. 109. For filling the container with oil, in Sohéneliu they use a funnel (called *nado*, according to Bühler) made from a half coconut shell and a bamboo tube. They bind the rings with upright rattan cords and fasten a rattan eyelet to the upper one for suspending the oil container. In Sau Miklucho-Maclay[115] saw bamboo tubes used as containers for "coconut butter". The most common oil measurer is a coconut shell. In Buihann it is called *kuru*[116].

Fig. 109. Oil shell. 2920I, 13 cm high.

Plaited oil containers with a coating of *Parinarium* resin, sometimes so thinly applied that you can see the plaiting pattern through it, are far more prevalent. The plaiting consists of horizontal rods, round in cross-section, running in a circle, with finer strips of rattan densely interwoven vertically through the rods in a simple manner. The rods are said to be frond ribs of a particular species of fern[117], or they come from vines. Oil funnels are made the same way, Fig. 110.

Fig. 110. Plaited funnel 1171I. Ø 21 cm.

These plaited oil containers remain totally water-tight, and have the advantage over the clay pots that they are not easily broken, and if they actually do sustain damage they can be repaired by re-plaiting or even by simply applying a new coat of resin.

The height of the oil baskets ranges from 22 cm to 130 cm. A particularly small oil basket in Kětyḗ, in the shape of a bulbous flask, was only 10 cm high, Fig. 111.

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113 According to A. Bühler
114 According to A. Bühler
115 *Izvestia*, 1878
116 According to A. Bühler
117 Parkinson, 1907. p.357

Their shape varies from a simple cylindrical or spherical form among the small or medium-sized baskets; to an amphora or pear shape with a thin neck and a flask-like or broad, outwardly-curved rim; and big bulbous vessels with a narrowed neck and wide rim. Funnel-shaped baskets with a wide brim that narrows increasingly downwards, are also [197] common as oil containers, Fig. 112. Open shell baskets on the other hand serve more as food bowls. Flask-shaped vessels often serve as oil containers, but often as water flasks as well. The odd flask is often roughly painted with simple red and white patterns. Other flasks and bowls are sometimes given a thicker *Parinarium* resin coat at various spots that develop in relief into groups of curves with a dentate base, and into more or less stylised iguana(?) figures, but the coat is not painted. [198]

Fig. 111. Oil flask. 827[I]. 10 cm high. max. diam. 12.5 cm.

Fig. 112. Oil baskets
4056[I]. 41 cm high. 2905[I]. 47 cm high.

The underside of the oil baskets is usually somewhat flattened so that they can stand, or a slightly protruding 'foot' rim is plaited on[118]. Bigger baskets have a plaited rattan ring as a basket stand around the resin-coated foot. From the basket stand wrapped rattan cords (usually as many as four) pass vertically or obliquely like a net up to a second, somewhat thinner rattan ring around the upper, narrow part of the basket. Rattan cords passing outward above this ring are worked into one or two eyelets, with which the oil basket can be hung up in the huts. In Kětyḗ, knotted bands were found around the neck of a flask as a substitute for the cord system, Fig. 113. The foot ring of the oil basket is called *pā́kŭn* in Sā́hă, and *ăréa* or *ăréăra* on Pǐ́tĭlu. The oil baskets, provided that they

[118] Parkinson, *loc. cit.*

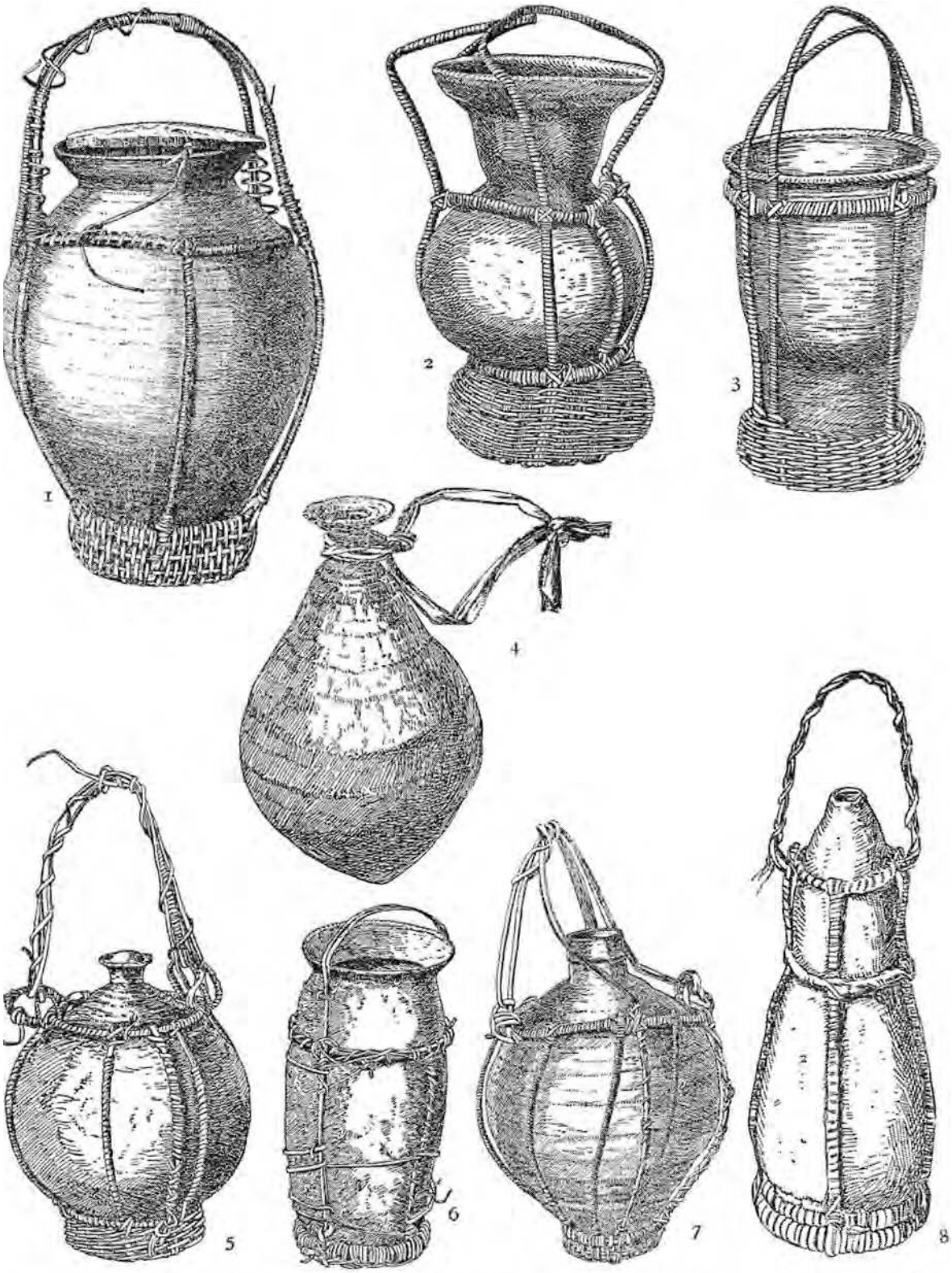

Fig. 113. Oil baskets of different shapes. 2125:05, 2618[I], 2878[I], 814[I], 743[I], 2505[I], 14. 38:57, 816[I]. 1 & 7) = $^1/_{10}$ actual size; 2, 3 & 6) = $^1/_8$ actual size; 4 & 5) = $^1/_6$ actual size; 8) = $^1/_4$ actual size

have a jug or flask shape, are called *kŭ́ru hĭ́legaî* on Hā́ŭs; *kŭ́r* on Pĭ́tĭlu and, according to Kölle, in Boao too; among the Mắnus at Seeadler Harbour *keṅ*[119]; *gŭnundrĭ́ligé́* or *mănămūn* in Tâuī; *kuǰendilingé* or, according to Thurnwald[120] *kuinjudr'likei*, on Lămbŭ́tjo; [199] *xénumon* on Pāk, according to Krämer; and *buăniu* on Lóu, according to Thurnwald. Funnel-shaped oil baskets are called *ṅaṅâū* in Drūgŭ́l; simple, cylindrical,downward-tapering baskets are called *hohonau* on Hā́ ŭs; and oil bowls are called *palĕ́t* in Boao, according to Kölle. Bowl-shaped *Parinarium* baskets used as eating plates are, on the other hand, called *kăinbū* on Pĭ́tĭlu; *pāhaĭs* in Sā́hă; *bolūt* in Tâuī; and on Sōri *ragun* according to Schoede.

Smaller oil baskets 25–30 cm tall, that, according to Bühler are called *puoa* in Meling on Lóu and *boanju* in Pā́rā̄, are given a thicker *Parinarium* resin coating into which patterns are incised and then painted. They invariably have a bulbous form with a narrowed neck and a wide rim, and a wide foot made from a plaited ring or a half coconut shell and coated with *Parinarium* resin. From the bulbous middle section, a coiled rattan strip passes through the resin coat of the rim and forms a hanging eyelet; or alternatively it can be a simple rattan strip starting out beneath the *Parinarium* coat near the rim. The patterns are added in rings, short vertical bands, or other figures such as diagonally-divided circles with jagged edges, lance-shaped figures, *Palaquium* tassels etc, around the thick middle section, and on the outside around the wide opening and, more rarely, around the foot, Fig. 114. [200]

Fig. 114. Oil baskets coated with *Parinarium* resin and decorated. 690[I], 16. 48:7, 691[I], 692[I]. 1/4 actual size

From time to time, to keep the oil pure in bigger baskets, they are given a slightly-curved, plaited lid, coated with *Parinarium* resin (cf. Fig. 113).

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[119] At Seeadler Harbour (probably from the Mătăṅkŏ́l) Schoede heard the name *bombu* for a spherical vessel.

[120] Thurnwald Collection, Berlin

The oil is not only stored in such baskets in the houses themselves, but also transported home in them from the preparation site, or sold in them. That is why baskets are frequently carried along in canoes.

According to information from the Lṓnĭu people, the oil baskets used there are not made in Lṓnĭu but by the "Mătăṅkṓl". However, since the Lṓnĭu people are themselves Mătăṅkṓl, and keep this information secret probably only out of bravado, the only thing to make of this is that the baskets are brought in from outside. According to Thilenius[121] Mbṹke is a production site for "pottery with or without invested plaiting" and so probably for oil baskets as well. However, from the raw material used in the basket-work, Ŭsĭâî, as forest-dwellers would easily be able to obtain the ferns and vines and might therefore be the principal manufacturers.

Food Bowls

Food containers for temporary use are folded from a leaf whose sides are turned up and held firmly in place by a whipstitch. The ends are bent over and wrapped with bast fibre strips. This produces an almost 60 cm long canoe-shaped container which, according to Bühler, is called *pápui* on Pĭtĭlu, Fig. 115.

Fig. 115. Leaf dish. 715[1]. 1/4 actual size

For arranging and serving food, they universally use plaited bowls coated with *Parinarium* resin, or wooden bowls. The *Parinarium* baskets have either a high shape or a shallow form, with a simple or flattened rim, occasionally open-work and also extending into handles. These bowls are called *bolūt* in Tâuī; *pāhaĭs* in Sáhă; *kăinbū* on Pĭtĭlu; *gombosúb* on Kelaua Harbour, according to Kölle; *bandu* on Lămbŭtjo according to Schoede; and *dis* in Gabou, Iru, and Gárung, according to Bühler; *bándris* in Iringou; *pándis* in Pătŭsī; *bándis*, *pandris*, *diss* or *riss* in Mbṹnâi[122]; *bákun* in Tulu; *búkulu* in Buboi; and *báung* in Gắramaṅ. Very often they have a foot as well (*pắkŭn* in Sáhă) and then resemble goblets. The foot too can be open-work. They are prepared using exactly the same technique as for oil baskets, although they are smaller and more decorated. On Pĭtĭlu these basket dishes were described as eating dishes exclusively for women's use, Fig. 116. The decorations of the eating baskets in *Parinarium* resin form a relief band running around the rim and consist of sculpted cross, anchor, oval or lizard(?) figures; an open-work, undulating rim; or short *Conus* discs or glass bead cords hanging down from the rim. Basket dishes similarly plaited, but not coated with *Parinarium* [202] are produced in the interior of the main island, and are used for storing fruit and taro. They do not have a foot, but often a plaited handle or one extruding from the open-work rim. In Pătŭsī the little-basket form is called *kombu*. In the bowl form in Mbṹnâi, they bear the same name as the bowls coated with *Parinarium* resin[123]. Even simpler are shallow bowls of plaited palm frond that are called *pahis* on Pónam and are used for storing fruit[124].

The wooden bowls are either round or oblong, or imitations of animals or clay pots. The Mătăṅkṓl are said to make them[125].

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[121] II, 1903. p.134
[122] According to A. Bühler
[123] According to A. Bühler
[124] According to A. Bühler
[125] Parkinson, 1905. p.238

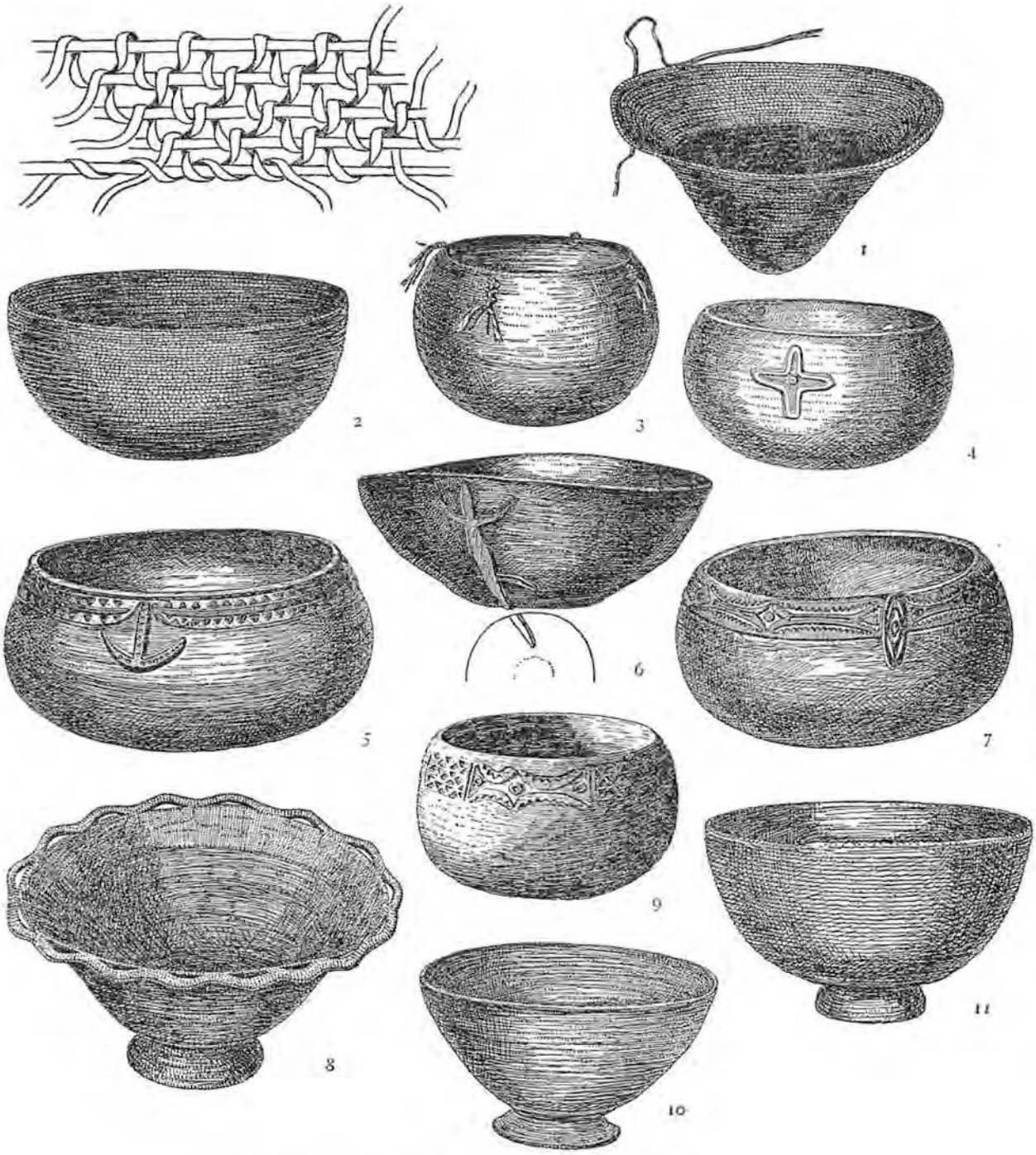

Fig. 116. Basketry bowls of different form and technique

14. 38:60, 626[I], 3115[I], 4023[I], 528[I], 2096[I], 14. 74:2, 14. 74:1, Stuttgart IC. 57288, 12. 135:196, 633[I].
1 & 2) = $^1/_8$ actual size; 3, 5 & 7) = $^1/_6$ actual size; 4, 6 & 8) = $^1/_9$ actual size; 9) = $^1/_5$ actual size;
10) = $^1/_{12}$ actual size; 11) = ½ actual size

The most common form of wooden bowl is round, often oval, and wide. The diameter ranges from 25 cm to 140 cm. The biggest bowls are destined for festive meals. The smaller however, are often intended — especially in the interior of the main island — for suspending in the men's houses, or for tying to the posts of those houses, for storing skulls or small valuables[126]. The bowls rest on four, one-piece, carved, round, oval or, less-commonly, four-sided feet (*kǎn* on Pāk); or they rest on two slightly-projecting carved curves — less commonly elbows — ending in circular surfaces. From time to time small bowls have crossbars between the feet. The inside is never decorated, while only the outside rim bears a band of relief carving, with diamonds between curves with a jagged base, zig-zag lines, rows of rectangles, patterns in a similar style as the bird figures on obsidian spears and other embellishments. Suspended from there on the outside, (which occasionally has a few star-shaped figures and is otherwise smooth), are, at most, a number of hanging strips; *Palaquium* hangings with teeth on them (on Pāk *lémŭi*); lizard(?) figures; or ornamental circles and diamonds, Fig. 117. This ornamentation is not painted.

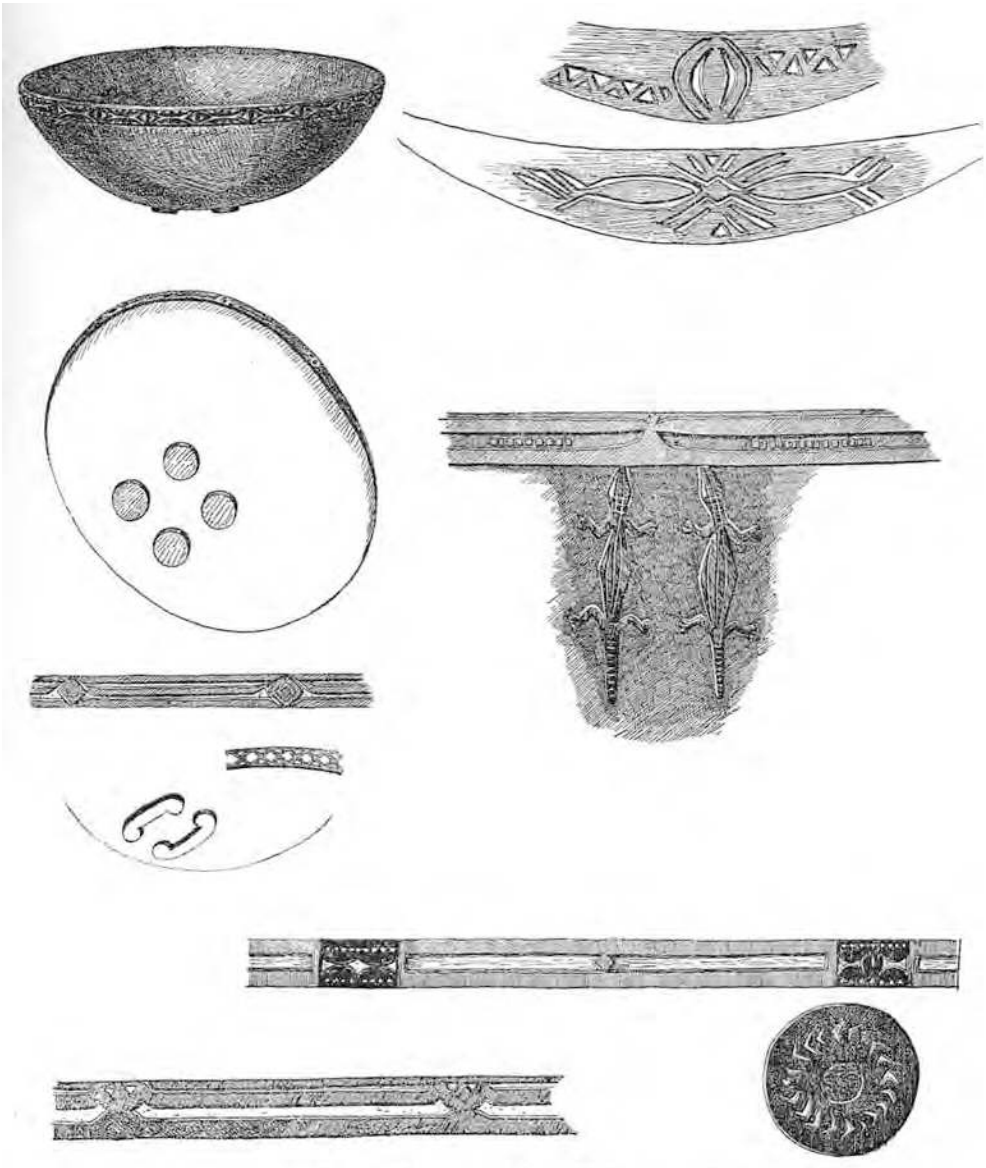

Fig. 117. Wooden bowls: foot styles and decoration
Bowls 14. 38:34, 4029[1]. 1/4 & 1/6 actual size. Decoration of 747[1], 748[1], 837[1], 14. 38:34, 21. 118:4. Feet of 1144[1].

[126] According to A. Bühler

Fig. 118. Wooden bowl: handle and decoration
Bowl 2048:05. 1/8 actual size. Handle of 837[1], 11, 88:18, 856[1], 859. 1/3 and 1/4 actual size

The handles of the bowl are added on two sides, opposite each other and projecting upwards over the rim. They are secured with cords pulled through holes in the rim of the bowl and the lower sections of the handle, and coated with *Parinarium* resin. The handles serve only as decoration since, due to their fastening, they are unsuitable for lifting the bowl[127]. Carved handles are extremely rare. The handles are either shaped into spirals (in Ndrĩol *kŏlŏpĕ́u*; on Pāk *belaman*; on Lóu *balaman*) with a serrated outer rim pierced by triangles and doubled in places and narrowing toward the middle of the bowl. They are occasionally decorated by transverse bands crossed by diagonal lines, or supported by small pierced diamonds, or again the rim presents a decal in the form of a bird; or the handles represent "little men" or four-footed animals that appear out of an arch. The human figures [205] were misconstrued in Ndrĩol as a dog's penis (*pălămūĭn*). However, in other cases where they represented an upright, seated figure with a widely protruding muzzle, arms raised to it, bent up knees and thick stomach, appearing distinctly out of the arch, they were called *drămpănănyĭnăl* ("Tamberan 'long bush")[128] Fig 118. Combinations of man and crocodile, and representations of a man on one handle and a woman on the other handle appear to be of more recent origin[129]. The animal figures are presented usually horizontally on the often outwardly-serrated curve, and convey four-footed creatures: crocodiles, according to Parkinson[130], but probably heavily-stylised possums as well. More rarely, pegs in the form of faces are added to the spiral handles on the very rim towards the interior of the bowl. Otherwise *Conus* disc cords with a clam shell are used, Fig. 119.

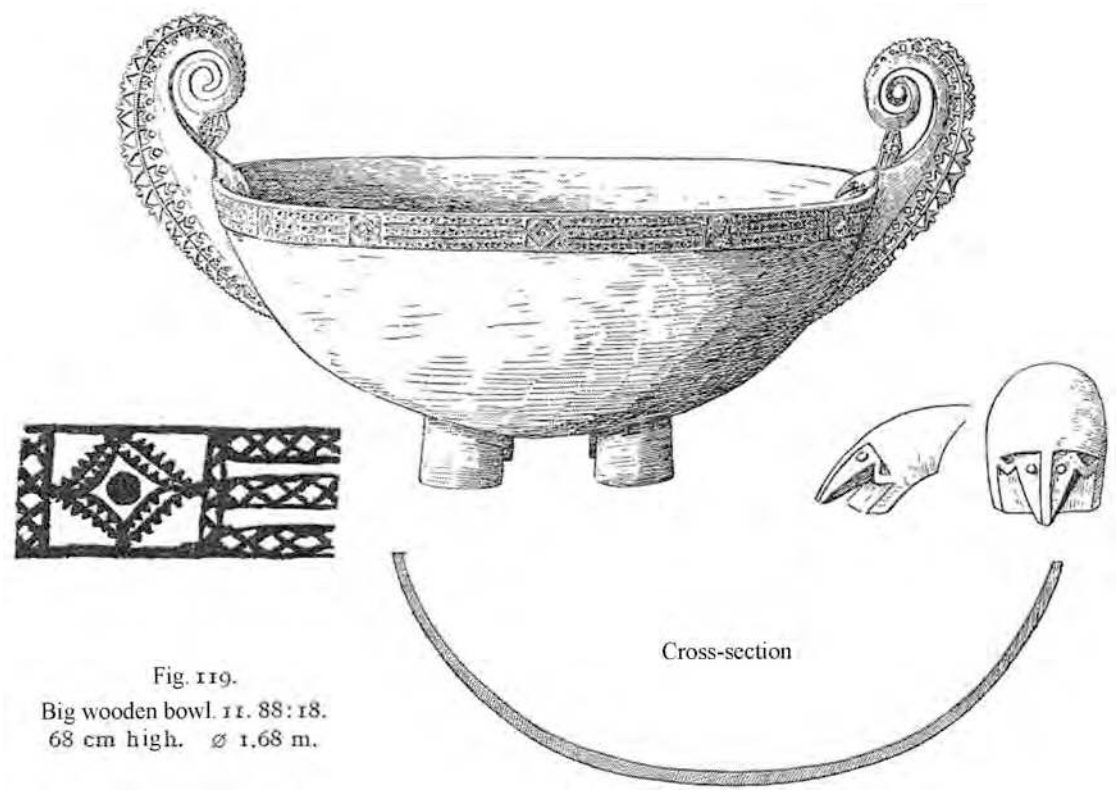

Fig. 119.
Big wooden bowl. 11. 88:18.
68 cm high. ø 1.68 m.

In smaller round or oval bowls the handles are often missing. However, in bigger bowls they are almost always present. Only in two round bowls collected by Schoede on Lămbŭ́tjo is

[127] Parkinson, 1907. p.358
[128] Cf. *tjinal* = "devil"
[129] Bühler Collection, Basel
[130] 1907, p.359

there a one-piece batten, running transversely over the opening and acting as a handle. One of these bowls has two dog's head-shaped pegs on the inside rim as well. Both bowls are pale. A bowl from Lŏnĭu, without a batten, and now in the Basel Museum, also features two dog's heads[131]. Otherwise the bowls are always shiny, black or [206] dark-brown in colour. This would hardly have been the intention, but arises from the constant effects of smoke[132] and coconut oil, and from hand contact. Occasionally they are also painted completely red, and the red darkens because of the smoke. A painted-on pattern was observed only on one handle-less bowl in T͡auī. It consisted of several strokes running from the rim to the feet, with triangles on both sides. Thilenius[133] heard the round bowls called *putuke*. In Lā̆lā they are called *pŭtūkē̆*; in Ndrĭol *bŭtūkē̆* [134]; in Tală̆lo, according to Kölle, *butugé*; in Buao according to Kölle, *kop*; on Pĭtĭlu *bătăkŏ* or *lū̆s*; in Lŏnĭu *lū̆s*; and on Pāk *măn*. According to Bühler, they are called *bódogei* on Móuk; in Iru, Sira, Búihann and Garung *pirou*; on Lóu (Pŭ̆ě and Meling) *kélemui*; on Lămbŭ̆tjo *púrukin* (?); in Roleo *tšíagan* or *dragen*; in Gabou *sibo*; in T͡auī *puddukei*; in *búdukei* or *bádukei*; on Hă̆ŭs *póengei*; and Lŏnĭu *lus*; and on Bipi *bittige* or *pídigei*.

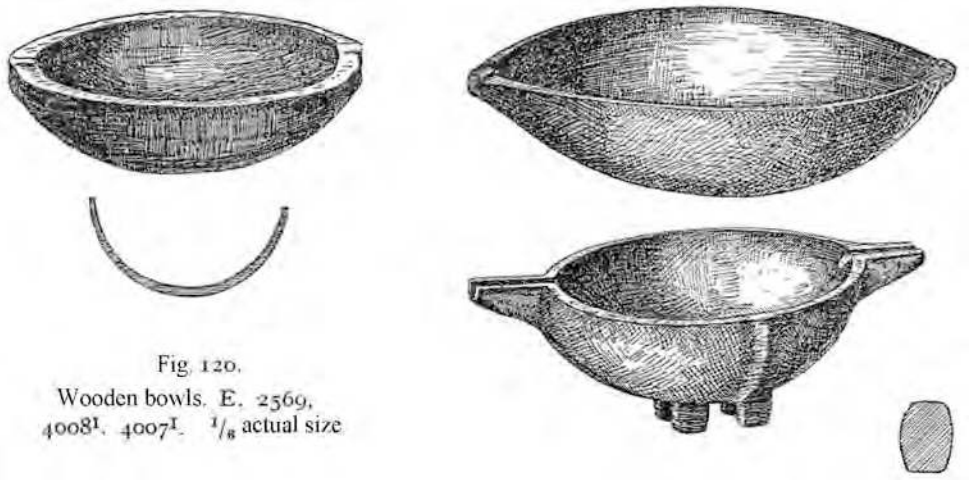

Fig. 120.
Wooden bowls. E. 2569, 4008[1]. 4007[1]. 1/8 actual size

In contrast to the round wooden bowls made from a single piece of tree trunk with the grain running upward, the smaller pointed wooden bowls are cut out in such a way that their grain runs horizontally. They are rather bulbous, with a lance-shaped opening. In a few instances the points are still provided with rudiments of handles that are carved with the bowl out of one piece of wood, and can be transformed into a spout for pouring. Otherwise, the points are rather flattened, sometimes reverting to the circular form, Fig. 120. Only seldom is there a handle for just one side, elongated in one style, while the other handle is missing. Feet are very rarely carved on such bowls. These simple bowls are used as eating bowls, particularly in the interior of the main island where they are found in all sizes[135]. [207] On Hă̆ŭs smaller pointed wooden bowls are called *kă̆nă̆*, *băkă̆na* or *băgă̆na*; in Să̆hă *pūākū̆*; in Kyĕlă͡uă̆k *pălēă̆l*; in Tală̆lo, according to Kölle, *orogĭ̆u*; in Lekum, according to Bühler, *kíegen* or *tšíagan* on Bipi *réakei*; in Buboi *ndékei*; and in Patolokk *bóehengei*.

131 Bühler Collection
132 Strauch, 1892. p.229
133 II, 1903. p.135
134 *Potugé* and *purogĭ̄n* on Lămbŭ̆tjo, according to Schoede
135 According to A. Bühler

Doubled oval, pointed, or round eating bowls made from wood, called *brógen*[136] in Lǒnĭu and *măn*[137] on Pāk are rare. They are used for taro, bananas, sago and the like. Either they are two small, round bowls connected by a board-like or rodlike piece, and frequently fitted with a hanging cord, or they are two small bowls with their points abutting and divided at most by a knob-like piece, Fig. 121. Very occasionally each round bowl has four feet.

Fig. 121. Double bowls, made of wood
Stuttgart. Liste 1247 J. N. 128, 2549[1].
1/6 & 1/4 actual size

On Lóu Thilenius[138] found a wooden pot smoothed on the outside, which was a clear imitation of a clay cooking pot. Small pan-shaped wooden eating bowls about 16 cm high are given a band in relief running round the middle of the bulge as a decoration, Fig. 122. In Roleo, Bühler found a wooden bowl (*drégen*) 29 cm in diameter, obviously a copy of a European plate.

Fig. 122. Wooden pot. E.3925
1/6 actual size

Bowls representing an animal figure are intended for festive occasions. Round, or oval bowls with four somewhat-bent feet or a footpad, have carved, one-piece additions representing the head of a bird, with its tail fashioned from a board with lengthwise slits. Extra wooden projections from the head section right back to the middle represent wings, which open into an open angle and are carved on the edges. They often even take on the shape of a human [208] arm[139], Fig. 123. Strangely enough, there are also bowls in a bird shape with tail and wings but lacking a bird's head. Also found

Fig. 123.
Feasting bowls in bird-form
853[1], Stuttgart IC. 57280. Karlsruhe A. 8329.
1/6, 1/4 and 1/8 actual size

136 According to Krämer
137 *Maan* according to Schoede
138 II, 1903. p.143, Fig.28
139 Parkinson, 1907. p.359, Fig.63

was a duplicated figure with a bird's head and wings on two sides of the bowl. A bowl (*pidigi*) collected by Bühler on Salien was explained to him to be a representation of the *kalou* bird. On Pāk Krämer was given the name of the bird as *kebu*, while in Lǒnĭu the same bird was *karbau*. Other bowls represent turtles. Such animal bowls have four low feet and are not painted, but are decorated with relief carving on the creature's wings, feet, head, and tail.

Bowls in the shape of possums[140], pigs, and dogs (in Mbŭn͡aî *mui*; in Lǒnĭu according to Krämer *ébedo*), are more realistic. Head and tail, with two pairs of true-to-life feet, stand at the ends of an extended oval bowl that forms the animal's body, hollowed out from above. Such bowls are usually painted red, and display rich white, black and red painted relief carving on the front and rear parts of the animal and on the rim of the bowl itself. The animal-shaped bowls carry the same names as the round bowls, thus *pidigei* on Bipi, and *bóegei*[141] in Kogo, Fig. 124.

Fig. 124. Animal bowl 8181. 1/9 actual size

A long, pointed oval bowl from Pǐtĭlu acquired by Bühler [209] in 1932 is quite rare. It virtually resembles a small canoe and is also decorated like that vessel. In the middle of its floor is a hole for draining surplus liquid. The bowl was called *pakou* and was intended for use at "pig feasts".

The wooden bowls in Tˆaūī are protected against theft by having a bunch of leaves laid inside them. These are said to have magical powers, Fig. 125. The bowls are suspended — even those with feet — with the aid of a ring of fibre with four cords or fibrous strips knotted together over the bowl.

Fig. 125.
Wooden bowl, with 'leaf-magic' against theft. 7141.
1/8 actual size

By 1929 the art of producing wooden bowls had deteriorated noticeably; only a few bowls were carved, and these were poorly finished[142].

Meal Times

Food prepared over the fireplaces by the women in the women's or family houses, is preferably placed on the plank beds in the houses so that the dogs cannot disturb the food. Food for the bachelors is cooked in the women's and family houses and taken by the women as far as the door of the bachelors' houses. On Uainkatou Rickard[143] felt that he could state that the men received all their meals from the chief.

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140 *Urotin*, according to Thilenius, (Berlin Museum VI 17461)
141 According to A. Bühler
142 Mead, 1931. p.233
143 Ray, 1892. p.5

For women just after childbirth, girls preparing for celebration of puberty, and for boys and girls during their retreat at the celebration of earlobe perforation, a special fire has to be maintained for food preparation.

It is considered impolite to watch a stranger eating. While he is eating people turn away[144].

They eat out of wooden bowls or *Parinarium* basket bowls.

To carry eating utensils with them as equipment, they put them in a simple little basket made from a single leaf.

Remembrances of Festive Meals

As a memento of past feasts enjoyed, the lower jaws of sacrificed pigs, dogs, and [210] especially possums are stored in the houses of married men and in the bachelors' houses. These are hung on bamboo staves running straight through the roof space in the bachelors' houses[145], while in other houses they simply hang from the roof beams. In Păpítălâi Thurnwald[146] saw great numbers of lower jaws of possums combined with a bast fibre band used as a decorative hanging in the house (*lāuăt*). Pig mandibles (*băsắbu*[147]) and the less-commonly preserved skulls of pigs and turtles are sometimes (for example on Lukús and on Pǐtĭlu), painted red, black, white, and yellow[148], although this may occasionally only be with a view to selling to the Europeans. In Lukús the pig lower jaws are always given a *Parinarium* coating of the lower and front sections, with incised relief patterns, Fig.126. Bühler saw pigs like these in Ndrawa, where they were called *jeha pu*, and among other Ŭsĭâî they were used as hanging hooks for bowls containing ancestral skulls.

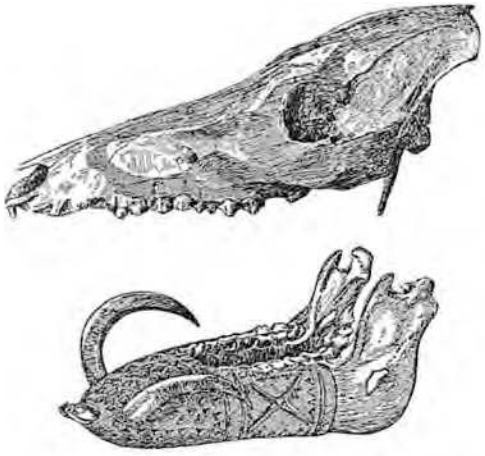

Fig. 126. Painted pig's cranium (3269[I]) and pig's mandible, with a *Parinarium* coat. 4071[I].

Belonging among the stored skeletal remains of mammals and turtles are turtle eggs on threads[149] and, less commonly, the 24 cm long skull of a certain species of fish[150], Fig. 127, as seen in T͡auī.

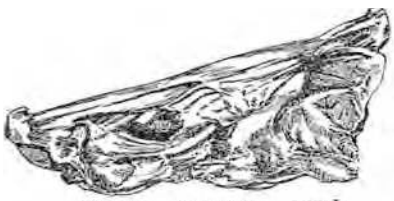

Fig. 127. Fish skull 3270[I].

When they do not actively store pig skulls, they count the number of pigs killed by using small sticks pushed into a bigger stick, which is fastened to the roof beams. Pig counters like these were seen in Mŭndī and on Hắrăn̓găn, Fig. 128. [211]

Fig. 128. Pig 'counter'. After a sketch by H. Vogel.

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144 Miklucho-Maclay, *Izvestia*, 1878

145 Thilenius, II,1903. p.153

146 Thurnwald Collection, Berlin

147 According to Bühler, *passeabu* in Pắrā and Mbŭn͡ai; according to Krämer *kapsambu* in Lŏn̆u.

148 Moseley, 1877. p.415

149 Thilenius, II, 1903. pp. 149 and 153

150 *Mḗro* on St Matthias

IV. Recreation

Betel

In 1767 Carteret[151] observed that the natives chewed betel nuts. Labillardière[152] on the other hand saw only betel lime in calabashes and bamboo containers, and betel pepper leaves, and then only among the chiefs. Nowhere did he notice betel nuts or staining of the teeth from the use of betel. Moseley[153] who found that enjoyment of betel nuts, betel pepper leaves, and lime was popular at Nares Harbour, attempts to explain this contradiction by saying that chewing betel nut as a recreational pastime is probably of quite long standing in the southern islands, but came to the north coast of the main island only after Labillardière's time.

It will be emphasized again and again further on, how heavy is betel nut consumption among men[154]. In 1908 only people in canoes from Wălătjâĭ on Lămbŭtjo were seen without betel lime containers and spatulas, although they still offered betel nuts for sale.

The betel nut, i.e. the fruit of the *Areca* palm is, according to Dempwolff[155], called *bă̆mē* on Pô̂am; according to Moseley on Sōri and according to Kärnbach[156] among the Alim people *mbung*; according to Rickard[157] on Ndrŭ̂wal *bue*; and according to Friederici[158] on Pắlŭăn *pă̆me*; on Lóu *pă̆me*; on Pāk *bă̆mĕ́* (according to Krämer *bemĕ* as well); and on Móuk *ĕmbúe*. The lime, which is burned coral limestone, is called *ṅa* on Hắŭs; according to Dempwolff[159] on Pô̂am *lad*; according to Friederici on Pắlŭăn and Lóu *kŏb*; and on Pāk *iχ*; according to Krämer on Pāk *kánini*; according to Schoede[160] on Pāk *kannané*; on Lămbŭ́tjo *angor*; and on Seeadler Harbour *kambang jang*; and according to Thilenius[161] *nga*. The leaf of *Piper betle* is called *tíŏk* on Pắlŭăn, according to Friederici; and on Pāk *bandyŏ́;* and among the Mắnus *moreta*, according to Parkinson[162].

The men carry lime containers and spatulas tucked in their armpits, or in carry bags that also include the nuts and leaves. Betel nuts are also occasionally carried in unique, plaited little baskets or bags.

Betel Lime Calabashes

The betel lime calabashes consist of the relatively thick, hard shells of an oblong species of cucurbit. They usually have a rounded hour-glass shape at the ends, produced by constricting the middle of the fruit with a broad band during its growth. A [212] small round opening is cut out of the fruit stalk end.

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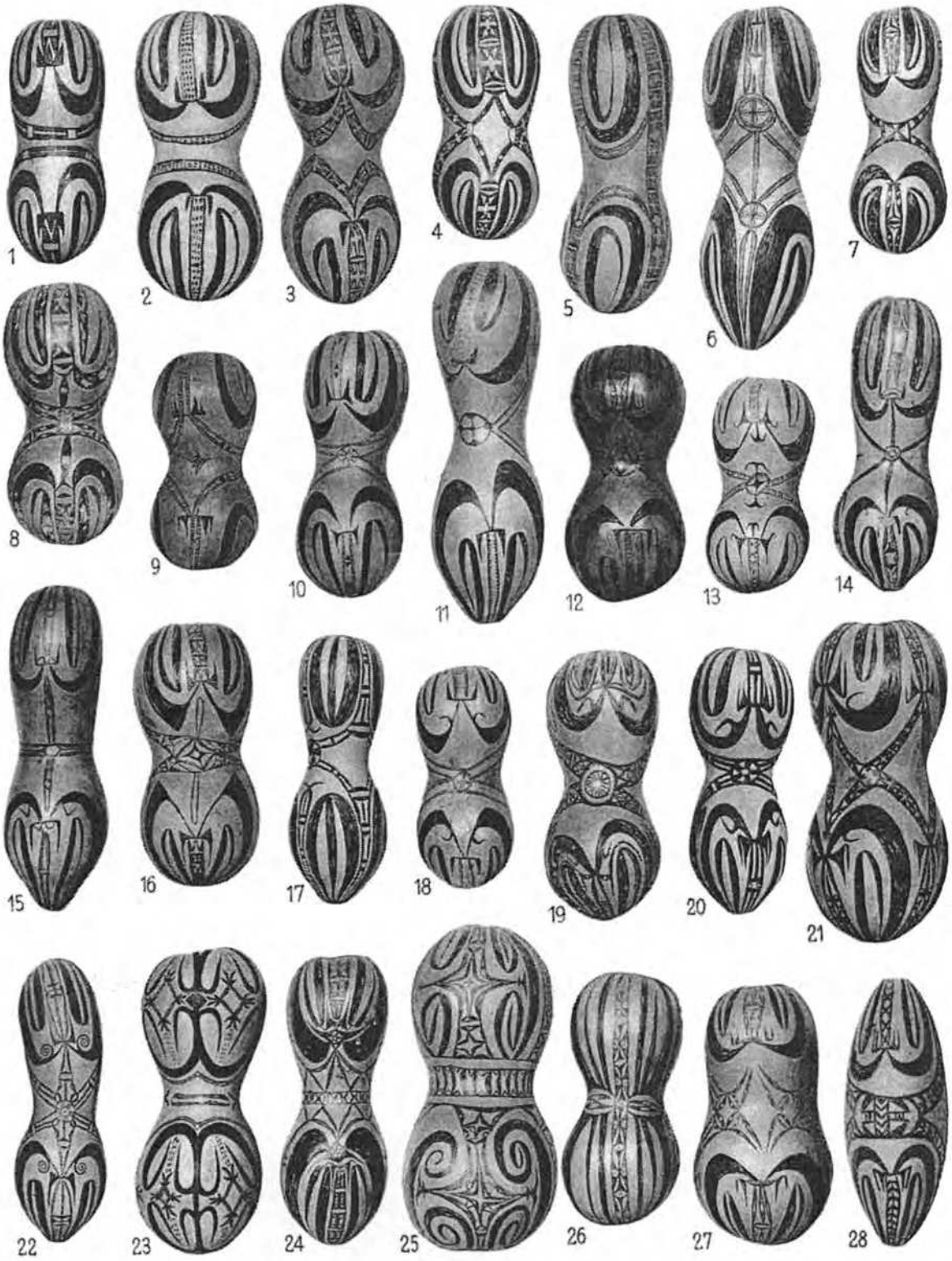
151 Hawkesworth, I, 1773. p.384
152 I, 1796. pp.263 *et seq.*
153 1877. pp.402 and 418
154 Webster 1898. p.302; Schnee 1904. p.162
155 1905. p.209
156 Zöller 1891. p.449
157 Ray 1892. p.7
158 1912. pp. 225–228
159 1905. p.210
160 Schoede Collection, Berlin
161 II, 1903. p.359
162 1907. p.390

Nevermann, Admiralty Islands, Plate 12



Lime calabashes
ca $^1/_6$ actual size

Spindle-shaped calabashes without any constriction are extremely rare. In 1908 only one specimen of this type was seen: among the Mătănkŏl on Lămbŭtjo. In 1932 Bühler saw a flask-shaped calabash in Buboi with branded bands and fish patterns.

Complete betel lime calabashes are decorated with black, burnt-in patterns. The burning (on Pāk *dundun*; in Lŏnĭu *kaî*) is done with a small, glowing piece of wood[163]. Occasionally, wider areas are not blackened by burning, but by painting. Preparation is carried out using bamboo or obsidian knives, though today with metal knives[502]. Patterning of the calabashes by branding is not practised by each individual, but designated villages seem to be involved in it. For example the Pĭtĭlu people said that their calabashes had been patterned by the Ŭsĭaî (probably in Lukús), and Krämer heard on Pāk that the patterned calabashes came from Pĭtĭlu(!) and the main island.

The design is set out in such a way that the main pattern appears symmetrically on the front and reverse sides of the upper part of the calabash and correspondingly reappears in the reverse position on the lower part.

The main pattern, constantly recurring as variations, is a more-or-less broad vertical band, sometimes filled with decorations. Below, it closes off a horizontal line from which a black triangle ascends at either end, the lateral borders at right angles to the horizontal line. These triangles also occur in pairs, or extended lengthwise, or modified into curves. Beneath them, a curve ascends on both sides to the horizontal line, soon broadening and bending upward, careering along the middle band and, curling inwards, turning upward once more. The width decreases markedly in the two final bends.

Between each of these figures is a vertical, decorated band, with the horizontal line bordered by triangles. From this triangle bands pass by, in a curve, beneath the main figure, as far as the other, adjacent figure, or they run only as far as the triangle-line of the main figure.

Where the curves of the upper and lower part of the calabash converge, the calabash is decorated with a circle enclosing a star-shaped figure, at the point of convergence. Also, at the ends of the vertical bands in the neighbouring figures, and within the bands themselves, are found circles that can be altered into rectangles, stars or diamonds. Corresponding figures are freely added in the empty diamond-shaped spaces between the curves in the middle of the calabash. [213]

From the end of the band of the main figure, a lance-figure shaped almost into a band, runs to the opposing main figure of the lower part of the calabash, or, in the original forms, often only as far as the curve passing beneath. It seems to be vestiges of a bird’s head representation. The black curves of the main figure form the bird’s body, and the forked tail of the bird is formed by the triangles of the horizontal line. This interpretation is supported by bird representations on the *Parinarium* resin coat of obsidian spears and daggers, and also by the more naturalistic representation of a frigate bird below the vertical band of the main figure, on some calabashes (Plate 12, Fig. 13). However, it does not apply to all implementations of the main pattern, since this sometimes also carries suggestions of arms or elaboration of the band into a crocodile or lizard figure[164].

The black curves of the main pattern often each extend into a short arc bowing toward the inside of the curve, near the triangle-line. This may develop further, into a spiral. Thus the main figure can finally dissolve into two opposing curves with spiral ends, separated by the vertical band. In other cases the curves dissolve into groups of three lines curving somewhat and changing in width; or the artist merges a pair of opposing curve systems into one, on both the upper and the lower sections of the calabash.

The minor characters can similarly alter significantly and become branches of the main figures over the whole length of the calabash, with or without curves.

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[163] According to Krämer

[164] From the calabashes in the Berlin Collection

Also, the connecting curves under the major and minor features can break away from the latter, forming new star-shaped figures with a decorated centre point in the constricted middle of the calabash.

The circles, rectangles etc. on the bands and between the curves are occasionally given extensions reminiscent of *Palaquium* shells with two teeth inside. Also, the vertical bands of the main figures with this type of extension are occasionally transformed into a modified diamond shape.

Finally, horizontal bands running around the middle of the calabash, and less often the upper and lower part as well, occur as a new pattern, occasionally obliterating the original pattern.

Simple horizontal dashes are common in all bands and, when they are narrow, in the incompletely blackened curved lines as well. In wider bands more complex patterns predominate; these are different on virtually every calabash.

Fig. 129. Coconut outer husk for betel-lime. Stuttgart, List 1144 J. N. 23. 7.7 cm high

Since the calabashes are usually carried in a pouch or clamped between upper arm and [214] body, devices for attaching a carrying cord are hardly necessary. This is very rarely found; it has one end looped around the thin middle section of the calabash, while the other is pulled through a small hole near the opening. On the other hand, this small hole is often used for another cord, which is firmly tied to the betel lime spatula so that it cannot go missing. A calabash stopper is rare, and consists of a piece of tree bark.

Wrapping of the middle portion with strips of reed can also have the purpose of covering and repairing rupture points. Otherwise, breaks are repaired by boring small holes in the calabash wall near the edges of the breech; pulling fibres through the holes; and knotting them. Sometimes these sites are smeared with resin, and cords of glass beads are occasionally tied to the repair fibres as a decorative hanging.

The lime calabashes are called *ā́mā́d* in Lǒnĭu; *ā́p* on Pǐ́tĭlu; *kōb* on Pó͡am[165]; *ā́ṅă* in Pătŭ́sī; *ē* on Pāk and *na*[506] on Lămbŭ́tjo; *kambang* on Seeadler Harbour[166]; and *nguā́*[167] on Nǒru. Thilenius[168] heard them called *engál*. Bühler found them designated as *nga* in Mbŭ́na͡i and Pătŭ́sī, and on Mbŭ́ke and Bipi; in Iru as *nga* or *gédam*; in Lagou on Lóu as *kuŏb*; on Sabo as *kab*; in Buboi as *ā́*; and on Ăndră as *ā*.

The patterns are termed *kamuĕ́t* on Lǒnĭu and the pokerwork as *kaī* (*gaī*). The wood of the betel palm (*bŭ́e*) serves as the tool for the pokerwork, which is also called *kaī*. On Pó͡am the decorations of the calabashes are called *kílerao* and *ṅŏm*[169] and in Pătŭ́sī *kamu͡imu͡i*.

Coconut Shell Betel Lime Containers

A coconut shell about 8 cm high with a large lid more than 4 cm wide may be used as a substitute for a betel lime calabash. A carrying cord is threaded through two holes near the rim of the shell and knotted on top with a loop beyond for carrying; forming a second loop falling down over the side of the container, on which hangs a decorative cord with *Conus* discs and half a

[165] Dempwolff 1905. p.210
[166] Catalogue of the Schoede Collection, Berlin
[167] Thurnwald Collection, Berlin
[168] II, 1903. p.359
[169] Dempwolff *loc. cit.*

Palaquium shell. The name *bunjo*[170] that Krämer heard in Lǒnĭu probably has a direct bearing on just such a container, Fig. 129. [215]

Betel Lime Containers made from Bamboo

As well as calabashes, they also use bamboo containers for storing betel lime, as Labillardière[171] had already seen. These usually consist of a piece of bamboo that is sealed above and below by an internode. The upper internode is pierced in the centre with a small hole in the middle sufficient for inserting the lime spatula, Fig.130. Less common are containers made from a bamboo tube without knots, closed at the lower end by a round wooden disc. Such containers can also be fitted with a cover of a somewhat wider piece of bamboo cane that can similarly be closed by a wooden disc on top. The upper end of the actual container is then reduced slightly in circumference by removing the outermost layer, so that the cover fits better.

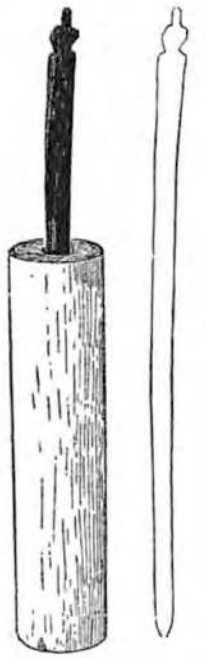

Fig. 130.
Bamboo container for betel lime. 2070:05. 24½ cm high

Decoration of the bamboo betel lime container does not always exist. Usually, however, pokerwork decoration is added to the bamboo. This is called *kaî* in Lǒnĭu, and is closely based on the patterning of the calabashes. In such cases these are primarily the curved lines of the main figure in a simplified style, with or without additions. The length of the bamboo cane often leads to bands being added around the bamboo, inserted between the individual figures and often interpolated by dots or stars. Other patterns consist only of the curved lines going out from the main figures between the bands of the calabashes. Other patterns again are composed of vertical and horizontal lines with diamonds at their intersections, and include rectangles, in which further rectangular figures with various patterns, (*gamŭét* on Pǐtĭlu), of bird or hook motifs and crosses, enclose a diamond. Occasionally the vertical and horizontal lines are widened into hatched bands, and enclose rectangles with lancet-shaped figures combined into diagonal lines. Added to this are naturalistic representations of *Palaquium* tassels, turtle shells, fish, squid etc. Very occasionally there is a patterning of zig-zag lines that run right and then left again, protruding vertically, and kept pale while the intervening space is black. In 1932 great plain black bamboo cans for lime emerged on the islands north of the main island and on Lóu[172], Fig.131. [217]

Compared with betel lime calabashes, bamboo containers are rare. On Pǐtĭlu they are called *aûbaî*, and in Lǒnĭu supposedly *ṅằ* or *kaî*; although *kaî* was said to be the name of the pokerwork. The patterns are called *iṅon* in Lǒnĭu, and *gamŭét* on Pǐtĭlu.

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170 Cf. the names of the ladles, similarly produced from coconut shells
171 I, 1796. p.263
172 Bühler Collection, Basel

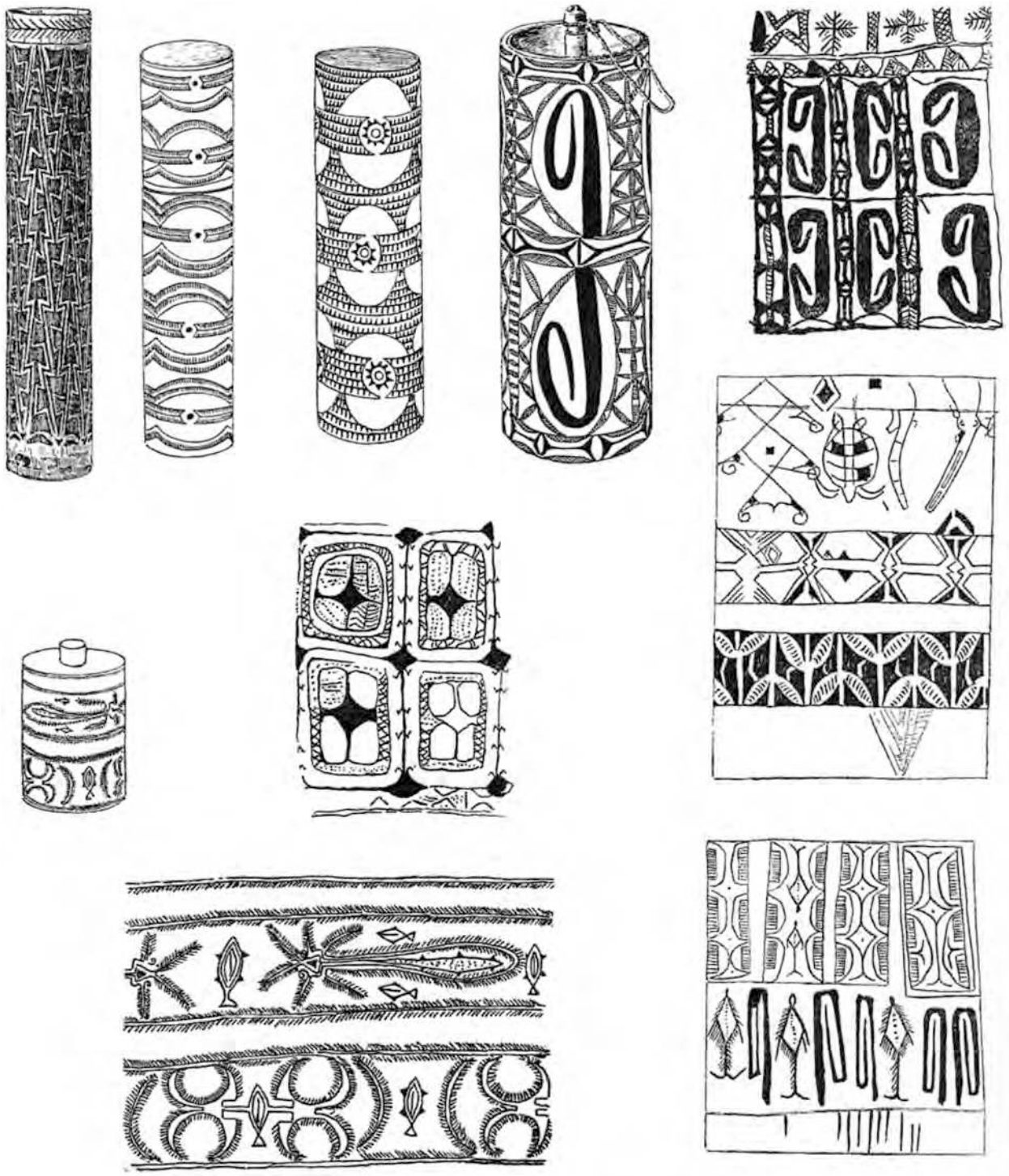

Fig. 131. Betel lime containers made from bamboo, and their decoration
Containers: Karlsruhe A. 8274, 30 cm high. 12. 135:204 19 cm high, 12. 135:206, 18½ cm high. 2246:05, 19½ cm high, E. 1568a, 9 cm high.

Lime Spatula

To fetch lime out of the calabashes and bamboo containers for enjoying with the betel nuts, they use the lime spatula. Simple pointed staves serve to loosen lime that has stuck to the walls of the container. However, for removing the lime from the containers and putting it into the mouth they use a wider spatula that usually simultaneously serves the same purpose as the little stick. The simplest spatulas are flat, narrow little boards narrowing slightly at both sides.

Short, wide lime spatulas with a relatively simply decorated upper end are peculiar to the north-west of the main island; peculiar to the south coast, Lőnĭu, Móuk and other regions, on the other hand, are long, narrow spatulas with richly-decorated and often three-dimensional ends[173]. Krämer learned on Pāk that the latter group of lime spatulas come from Lămbűtjo.

Decorated lime spatulas are far more common than the simple. Their lower end is flat and rounded. In simply-decorated spatulas the upper end can be similarly flat, but they usually adopt a round cross-section, as in the more richly decorated spatulas. A ring-shaped broadening which separates the decorated end from the spatula itself, prevents short spatulas from falling into the lime container.

In many specimens, a fish body or only the rear part with the half-moon-shaped erected tail, also interpreted as forked house posts, sits on the smooth part of the spatula as a simple embellishment. One or two transverse rings can run around the tail attachment for decoration, or a relief carving may follow a stylized representation of the fish bones or vertebral column. Variations of the fish-tail representation show a ring on a pyramid pierced by four perpendicular openings, or a repetition of the three-dimensional transverse rings in which the actual representation of the fish body has gone missing up to the point of a peg-like rudiment of the tail fin.

Possibly related to this is a not-more-clearly-defined figure that begins with a rectangle furnished with two vertical slits, carrying above it a ring on a cylinder tapering downward. The whole thing ends in a thin point with two barbs at different heights.

Painting of the fish body with finer patterns is only rare. A second smaller fish can rise above the painted item. [218]

Fairly often the tip of the spatula is shaped three-dimensionally into a crocodile head arranged with the snout pointing upward. Small relief decoration enhances the eyes, teeth, snout and nostrils of the crocodile.

Another very popular terminal part of the lime spatula is the three-dimensional figure of a man. Frequently it is included with the crocodile head representation in such a way that the human figure stands over the crocodile's snout, or the crocodile engulfs the figure so that its lower part does not need to be represented. However, in combination with the human figure the crocodile can be presented in its entirety, pointing downward. As further three-dimensional carving, a turtle may appear over the crocodile head with its head pointing upwards.

The human figures always show a clear representation of their hairstyle, sometimes the piled up hair as a hemispherical image (on Pāk *gúhei*[174]) but usually the tufted style with the alteration that the tuft does not project backwards but upwards like a cone, ending in a bob. The figures often also show a suggestion of the neck decoration of the warrior and the tattooing, which however cannot be represented very accurately due to the figures' diminutiveness. The figures are presented without any sign of clothing, and are usually male. Oddly enough, however, a few women figures are fashioned with the neck jewellery and hair tuft of the men. However there are also naturalistic women's figures, with mourning paint for example. That the figures represent the

[173] By word of mouth from A. Bühler
[174] According to Krämer

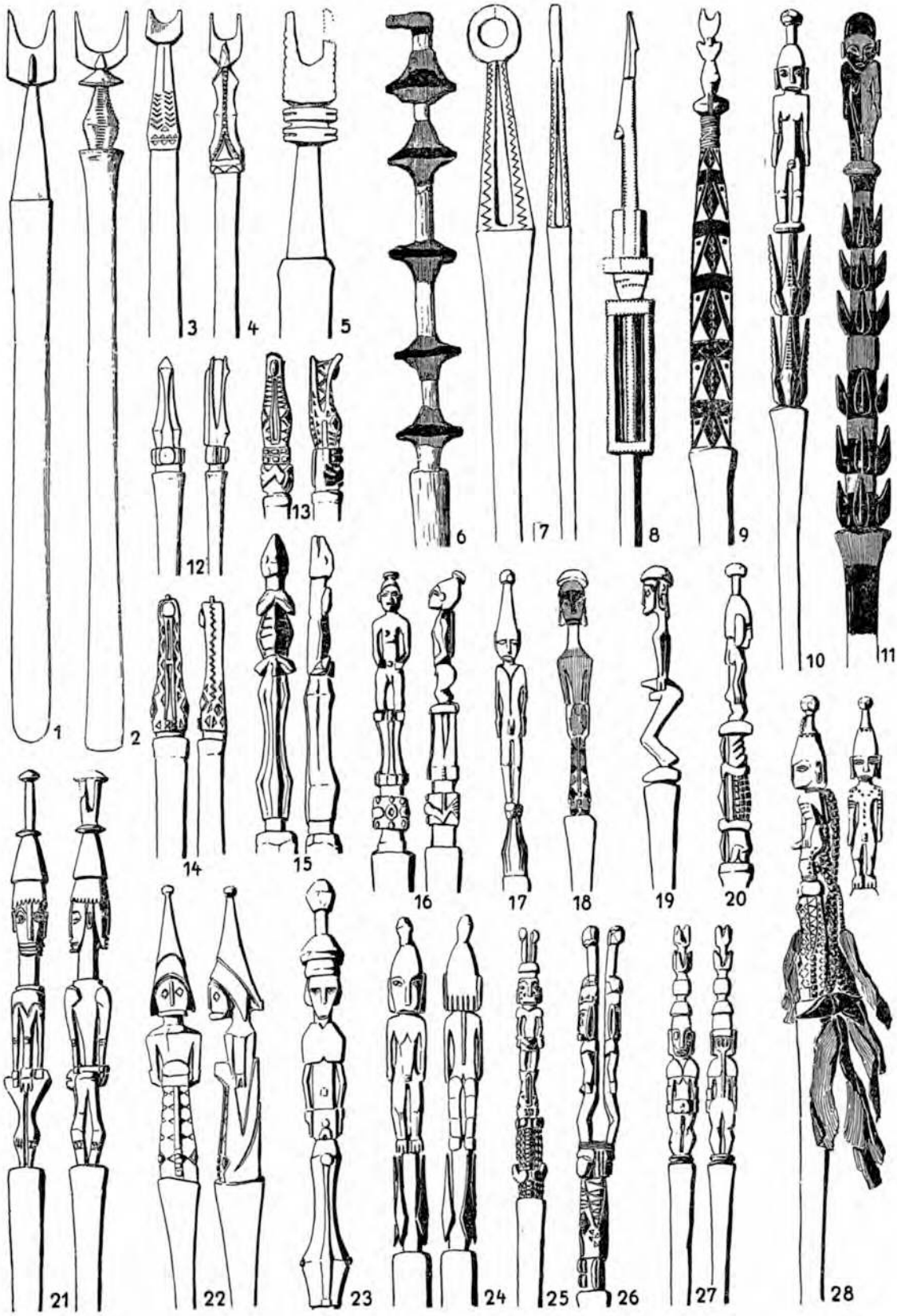

Fig. 132. Kalkspatel. ½ actual size

1. 2967[I]
2. 2965[I]
3. 2968[I]
4. 2666[I]
5. 21. 118:22
6. 2075: 05
7. 2076:05
8. E. 2558.
9. 12. 135:201
10. 554[I]
11. 127:05
12. 2966[I]
13. 12. 135:200
14. 1861:08
15. 4284[I]
16. 2933[I]
17. 14. 38:49
18. 12. 135:203
19. 2936[I]
20. 3110[I]
21. 4286[I]
22. 2964[I]
23. 4281[I]
24. 4317[I]
25. 2934[I]
26. 2932[I]
27. 568[I]
28. 2560[I]

deceased is shown by the fact that in T͡auī they are called *lamắt*, and on Pāk *hamắt* or *hamắr*. The human figure can also be duplicated — two men or, more often, a man and a woman — on the end of the spatula. Both figures then stand back to back, separated by a slit, or the bodies and heads blend into one, while the arms, legs, and faces are still presented in full.

The fish tail motif, restricted to the half-moon-shaped tail fin, occasionally appears singly or doubled over the hair tuft of a human figure. Also, the tail fin — or the house posts — can also occur in conjunction with a crocodile head modified from the fish body. This is especially common in the short, broad lime spatulas of the north-west of the main island[175].

An arrangement of the tail fin in groups of four around the end of the spatula, and a repetition of this motif, two to six times, one above the other, gives the impression of opposing barbs of a spear. A simple tip or a human figure forms the upper end.

Sites on the lime spatulas that have a wrapping with fine cords are always repaired fracture points. However, people never make a spatula out of several pieces. [220]

Fairly rarely, small chains of *Conus* discs or glass beads, with one end of *Palaquium* shells and dog's teeth, feathers or the like are bound to the human figures for decoration.

Painting of the upper part of the spatula is more common but is absent from many well-made older spatulas. Even so, the painting is not an invention of foreign industry, Fig. 132.

The wood for the spatulas comes from various species. Betel palm (in Lṓnĭu *búĕ*) is used in many cases. In T͡auī the tree species *rṓb* or *enrṓb* (*rṓw*, *enrṓw*) was named as the raw material.

The spatulas themselves are called *kám* or *kéăm* in Lṓnĭu; *kendám* on Pǐ́tĭlu; *känham* on Hắŭs; *mădjắ* or *ham*[176] on Pāk; and in T͡auī, according to their human figure, *lamắt*. According to Thilenius[177] they are called *kelām*, according to Schoede *gellam* on Lămbŭ́tjo, and at Seeadler Harbour *keram*; and according to Thurnwald[178] on Po͡am *kalani* and on Nṓru *kalan*. Bühler heard *kelam* in Mbŭ́n͡ai and on Móuk, in Ndrawa *kendram*, on Hắŭs *kenham*, in Pŭ́ĕ on Lóu *kren*, on Bipi and in Salien *cham*, in Sabo *ham*, in Lesau and Buboi *ndram*, and in Drana *kietang*.

Kava

Parkinson[179] saw the kava plant being cultivated in one Mătăńkṓl village on Lóu. The natives called it *ká* and regarded it as something special. They told how the roots were crushed between stones, and the men drank the expressed juice.

Otherwise, kava was not seen anywhere in the Admiralty Islands.

Tobacco

Tobacco was originally unknown to the natives. In the beginning, smoking tobacco even seemed to have been unacceptable to them, and Miklucho-Maclay[180] noted that they avoided it. In

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175 Bühler Collection, Basel
176 According to Krämer
177 II, 1903. p.359
178 Thurnwald Collection, Berlin
179 1907, p.373
180 *Izvestia*, 1878

1892 tobacco was still rejected[181] whereas they already accepted iron, glass beads, and pieces of material. In 1896 Festetics de Tolna[182] found the same situation in the region of Bird Island Bay. In 1897 tobacco was still unfamiliar to the Pāk people, and samples received from Webster were not to their taste[183]. By 1908 tobacco had generally become known through the European traders, and only the inhabitants of Tägŭb and Wăllătjâî on Lămbŭtjo were not seen to be smoking. In 1914 tobacco was adopted as a trading medium in Bolztal as well[184]. In 1929 tobacco had become [221] a virtual currency among the Mănus of the south coast of the main island and, as such, played a role especially in mourning ceremonies[185]. Tobacco pipes are all European clay pipes and occasionally receive a decorative hanging of glass-beaded cords. People readily carry pipe and baccy in their upper armband.

Geophagy - Eating Soil

The natives eat a brick-red mud mass according to Miklucho-Maclay's observations[186]. They chew the loam for a long time before they swallow it. By colour and taste this edible loam is similar to the *ampo*-soil enjoyed by the Javanese. Miklucho-Maclay heard it called *e-pate*.

Romilly[187] found on Lămbŭtjo a red greasy clay said to occur beneath big isolated stones, soaked in water, rolled into long pieces and smoked as a recreation; he compares its taste with bad chocolate.

V. Technology

Woodwork

The most important tool for working with wood is an axe with a knee-shaped wooden handle consisting of a short piece of a tree trunk (for holding the blade) with a section of branch coming off at an acute angle, which is longer, and serves as the hand grip. In more recent examples the end of the handle is shaped into a curve directed backwards, with a four-footed figure or other motifs in the style of the wooden bowl handle; or it is shaped into a crocodile head pointing downward. With simpler axe handles they carve out only a tapering, knoblike thickening, arching backwards, or they are satisfied with a simple offset. The 'knee' section is rounded on the inner surface, and sometimes on the outside as well. Older examples[188] show no decoration at this site; more recent specimens, on the other hand, show carving in the shape of a jagged spiral, a jagged circle divided by diagonals, a raised lizard figure, open-work carving, or similar decoration. In individual specimens the carved places are painted, and the painting may extend over the entire handle, sometimes stretching onto bands around the handgrip. More recent individual specimens also display a straight-line perforation [222] over the blade-holder and many over the handgrip section too. Very rarely, there is a *Conus* disc cord pendant with *Palaquium* shells at the handle as

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181 *Deutsches Kolonialblatt* IV, 1893. p.89
182 1904. p.138
183 Webster 1898. p.302
184 Leber 1923. p.204
185 Mead 1931. p.232
186 *Izvestia* 1878
187 1887. p.115
188 Moseley 1877. Plate 21, Fig.8

well[189], Fig. 133. An axe with a spiral curving backward from the end of the knee, in the Hamburg Museum[190], might possibly not have come from the Admiralty Islands at all, but from Luf, Fig. 134.

The blade-holder is shaped to be a little concave at its outer end, to receive the blade. For the plane blade either one end of the upper surface is completely levelled or a low rim is left on both sides. Blades are secured by simple spiral windings of rattan cord.

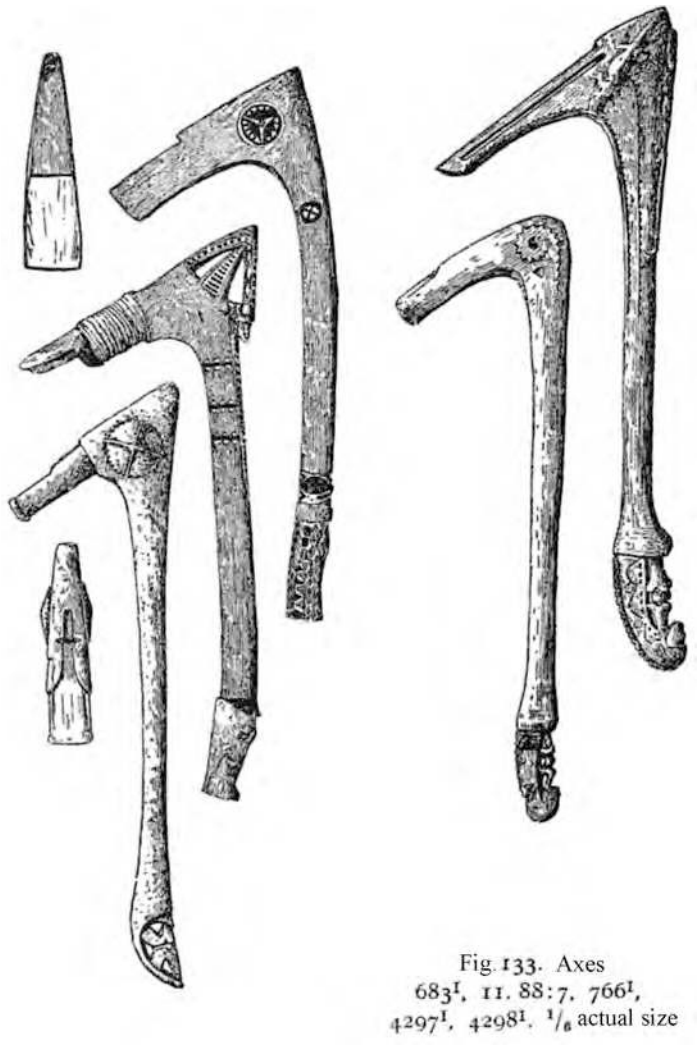

Fig. 133. Axes 683[1], 11. 88:7. 766[1], 4297[1], 4298[1]. 1/6 actual size

Fig. 134. Axe 2226:05. 1/6 actual size

Originally blades consisted of a piece of *Terebra* shell with the thick end cut off and polished, giving rise to a semicircular cutting edge. In Sā hă the blades are partially ground fat one site on an augite-andesite rock roughly 100 metres square. The cutting edge of the blade is always at right angles to the axe handle. Even in Moseley's time *Terebra* blades had become rare and given way to blades of plane iron[191]. In addition to *Terebra* blades, he found also *Tridacna* and *Hippopus* shells prepared for the blades [223] of larger axes, although he did not see them in use. These blades are around 13 cm long and about 7 cm wide at the widest point, near the cutting edge. The width reduces towards the firmly-bound section, so that the blade takes the form of a triangle.

In Sā̆hă a knee-axe was called *sāmă̆l* and its blade *hĕtŏmĕlḗ.* According to Kölle the handle of the axe is called *ta-ssa* in L͡aues, and according to Krämer on Pāk *péndemen*. Moseley[192] heard the axe handle called *samil*[193] on Sōri or Hắrăn̓găn. Rickard heard it called *coloi* on Ndrűwal[194]. According to Thilenius[195] big shell axes are called *kebúebúe* and little axes *endrléi*, and plane iron *móndrigen*. According to

189 Eichhorn 1916. pp.277 *et seq.*
190 2226 : 05
191 Moseley 1877. p.407
192 1877. p.390
193 Cf. *cimmel* in Webster (1898, p.318) and *sāmḗl* = knife on Pō͡am (Dempwolff 1905. p.210)
194 Ray 1892. p.7
195 II, 1908. p.359

Dempwolff[196] the shell axes are called *pobenao* on Pó͡am. Bühler heard *samasariau* on Sabo; *samendralei* in Lesau; and *ndralei* in Buboi for the axe; in Lagou on Lóu *bala mumass*; in Iru *gókou*; and on Pónam *gániareu* for *Terebra* blades. An axe with a strap iron blade was indicated to him in Iru as *galliu*.

Even less common than the axes with transverse blades of shell were, even during Moseley's time, axes with lengthwise stone blades. The stone blades resemble the *Tridacna* and *Hippopus* blades in shape, but consist of a "hard volcanic rock"[197] of a dark-green shade, and their narrow part is inset[198] into the club-like thickened part of a straight wooden handle without additional binding or with a double wooden lining bound together[199]. These are reminiscent of axes from Kaniet and the war axes[200] furnished with an obsidian blade perhaps occasionally used also as tools. Moseley found only one single axe of this sort being used. Such axes were seen only at Nares Habour, i.e. on Sōri or Hǎrăn̆găn.

Fig. 135. File with fish skin. 661I, 45 cm long

Stone blades of the same material (*roccia dioritica nerastra*[201]) are also fastened to the knee-shaped axes instead of *Terebra* blades[202]. Bühler found blades of pale-grey stone in Pónam and in Buboi. According to Schoede the stone blades are called *pat* on Pāk; according to Bühler *pal* in Mbu̍͡nai and Pătu̍sī, *saleiau* in Iru, *gájann* in Buboi, and *haran* on Hă̍ŭs and Pónam.

More recently, iron axe blades which, according to Thilenius[203], are called *kwineli* and according to Dempwolff[204] *kămăndág* on Pó͡am, are being used as working tools; however people prefer to use plane iron on knee-shaped axe handles. [224]

The axes are used for the rough hewing of house beams, canoe parts, wooden figures, bowls etc. Finer woodworking is carried out using obsidian flakes. On Uainkatou Webster[205] observed the repair of a broken-off foot of an animal-shaped wooden bowl with "an obsidian knife" and a bit of clam-shell. A piece of wood was cut out of a pole; the end was coated with "some charcoal" (*Parinarium* resin?) and cut long enough to match the break point precisely. The new leg was fastened to the bowl with several small pegs. This task took an entire afternoon.

Woodwork projects are polished with pieces of wood or chunks of the fibrous husk of a coconut covered by ray- or shark skin, then with scattered fine sand that people rub with broken-off pieces of shell and big, dry leaves from the breadfruit tree[206], and with pumice[207], which the Lŏ̍nĭu people find locally on their beaches[208].

Other files consist of a piece of wood about 30 cm long covered with the raw skin of a ray or shark up to the section serving as a handle, Fig.135. According to Strauch[209] the ray-barb daggers are not weapons, but serve as files.

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196 1905. p.209
197 Moseley 1877. p.407
198 Moseley 1877. Plate 20, Figs 11–12
199 Strauch 1892. p.229 and Plate V, Fig.2 = Berlin Museum VI 11520, Nareshafen
200 Thilenius II, 1903. pp.285 *et seq.*
201 Giglioli 1911. p.232
202 Parkinson 1907. p.356
203 II, 1903. p.126
204 1905. p.210
205 1898. p.312
206 Miklucho-Maclay, *Izvestia* 1878
207 Miklucho-Maclay 1886. No. 141
208 1892. p.229
209 According to A. Bühler

For woodworking they also use a 7.5 cm long stone chisel, the obsidian knife, an obsidian awl and a drill. The drill was not noticed in 1908; it was seen for the first time by Bühler in Pătűsī and Buboi. It consists of a cane which today bears a wire point secured by bast and linen, and is provided with a cross-stick, and a further stick painted red and white holding a 12 cm diameter turtle shell flywheel, or half a coconut shell. In Pătűsī the drill is called *búbimbul*, and in Buboi *ménemen*. Several pieces of wood are combined by boring holes, pulling cords through the holes, and coating with a mass of *Parinarium* resin. Also, cracks in wooden bowls are repaired with the aid of a binding pulled through a hole and coated with *Parinarium* resin.

European iron tools[210] have, since the first contact with the Europeans, been adopted in preference; plane-iron knives, nails and needles are particularly sought-after. Reportedly, (according to Romilly[211]), Lămbűtjo people even wanted to give children away in exchange for iron tools. [225]

The Mătănkől are said to be better wood carvers than the rest of the natives; this however applies only to Lămbűtjo, Lóu, and Pāk, while the Mătănkől of Pĺtĭlu and the Mắnus of the main island frequently buy wood carvings from the neighbouring Ŭsĭā͡ī. An important reason for this is that more and better wood is available to the Ŭsĭā͡ī in the bush than to the island and coastal dwellers.

Parinarium resin

The fruit of *Parinarium laurinum* yields a resinous gum that is used for the manufacture of combs, pan pipes, spears, daggers, water flasks, oil jugs, and other water-tight plaiting, and for caulking canoe seams. The kernel of the *Parinarium* nut is pulverized on coral lime and mixed with betel saliva or with finely-chewed betel nuts and applied as a pulp. They hang coated baskets and such like up to dry[212]. Half dried *Parinarium* resin layers can easily be incised with relief patterns that are then painted red, white, and black.

The *Parinarium* resin is called *ărĭt* or *erĭt* on Pĺtĭlu; *ārĭt* in Păpítălā͡ī; *élĺt* or *arĭt* on Hắŭs; *ălĭt* on Pónam, and, according to Dempwolff[213] *yănŭn*[214] on Pŏ͡am.

Rope and Cord Manufacture

Fine cords for nets, handlines, necklaces, shell money etc. are twisted from the fibrous outer layer of a plant whose fibres are also used for making net cord on the Gazelle Peninsula[215]. This is the creeper *Menis permaceae*[216], which is called *pátankab* on Lămbűtjo according to Thurnwald. There the fibres are called *kāp*; on Pāk *kāb*; and in Tă͡uī *kāb* or *ă̆ ká̆b*[217]; the bast bundles where they originate are *kuilitón* on Lămbűtjo.

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210 Thilenius II 1903. pp.125 *et seq.*
211 1887. p.113
212 Parkinson 1907. p.357
213 1905. p.210
214 Cf. *azitt* on Buka and Bougainville, and *ariht* on Luf (according to Hellwig)
215 Parkinson 1907. p.362
216 Thurnwald Collection, Berlin
217 Also, Miklucho-Maclay (1886, No. 139) heard *kap*.

For thicker cords and rope they twist several cords together. Plaited cords occur only as edging braid and carrying cords for pockets and baskets. On the other hand, thicker ropes are never plaited.

As binding material for house and canoe sections they use rattan strips or strips of a creeper called *sŭ́rŭ* in Gắramaṅ. From underground roots it winds its way up trees. [226]

Net Manufacture

Fig. 136. Net needle 705[1]. 72 cm long

They use only one technique for making nets. One fibre forms a loop and another fibre is laid behind it; both ends of this fibre are led in front of the loop and the ends are crossed over; the end on top is passed through the loop. The whole thing is then firmly tightened. The procedure resembles that used by sailors in forming a “simple sheet rope hitch”. Knitted pouches are produced by the same process, but with thicker cords and smaller mesh, and with coloured horizontal stripes or coloured diagonals and zig-zag lines of special fibres.

The working tool is a 72 cm long net needle consisting of a thin piece of wood with a tapered end and a cord wrapping between each end and the middle. A wrapping, that may be coated with *Parinarium* resin, likewise secures an arch of a narrow strip of rattan enclosing the tip of this side, Fig. 136. Such net needles are called, according to Bühler *máteiki* or *máteiti* in Mbū́na͡i̯, and *siu* on Sabo. The threads are called *sójenn* on Sabo.

Net needles of the customary oceanic form with pincer-shaped ends and H-shaped cross-section in the middle are similarly made, but seem to be fairly uncommon. To keep the mesh uniform in size they use a mesh-measurer of bamboo or hardwood (*abb* on Sabo).

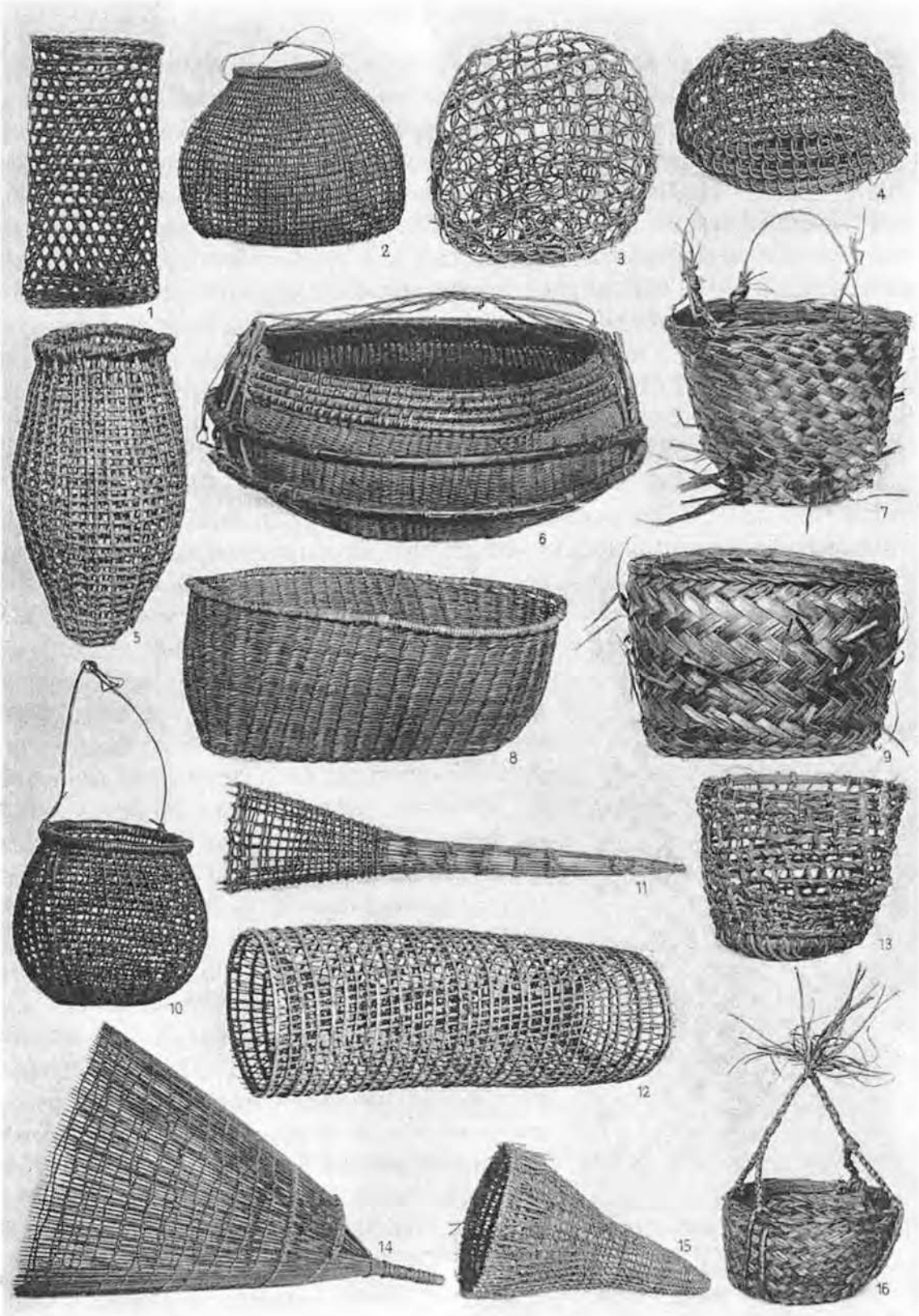
The net threads are always twisted, and consist of *kāb* fibres, The knots are called *abubŭ́r* on Pāk.

Basket Weaving

Women do most of the plaiting, from leaf or fibre strips in a simple diagonal weave, so that the individual strips cross at right angles. This process is performed for carrying sacks, baskets, sail matting, firebrands and belts. Wide strips of leaf provide the material for sails, and coconut palm fronds for individual baskets and sacks. Carry sacks of coconut fronds are called *kḗm* in Kyĕlá͡uá̯k, and *kŭn* in Lŏ́nĭu, and baskets of the same material in Ta͡uī *a kălá́*. For carry-sacks they use a finer, more flexible material that is called *bá́* in Lŏ́nĭu. Finsch[218] suspects that it is hibiscus fibre but this

[218] 1914. p.239

Nevermann, Admiralty Islands, Plate 13



Baskets (1—10, 13, 16) and fish traps (11, 12, 14, 15)

5 : Trepang basket; 6 and 8 : fish baskets

No. 1 & 16 baskets ca. $^1/_7$ actual size No. 2 & 10 baskets No. 11 trap No. 14 fish basket ca. $^1/_{13}$ actual size
No. 3, 4, 7, 9, 13 baskets No. 5 Trepang baskets No. 6 Fish basket ca. $^1/_{10}$ actual size

suspicion is not totally supported. According to Schoede[219], on Pāk they use the fibres called "*gab*" (more accurately *kāb*), throughout for preparing cords and nets, and as the material for plaited sacks. [227] According to this, we are dealing with the fibres of *Menis permaceae*. Krämer specifies *aur* bast fibre as the material for sacks on Pāk. Inasmuch as the sacks are decorated, they are given darker red-brown or reddish stripes forming diagonals, angles, zig-zag stripes etc. Less commonly the sacks are painted. Their lower edge almost always has a long fringe, formed from the left-over ends of the plaited threads. Such sacks on Pāk are called *ahiún* or, according to Friederici[220], *hĭn* and according to Krämer *dŭōb*, in Lŏnĭu *dŏb*, *drŏb* or *mŏhŏ*; according to Schoede at Seeadler Harbour *lop*, on Hăŭs *hoa̯b*; in Pătŭsī and Kyĕla̯ŭăk *e͡in* (according to Bühler *aĭn*); at Kelaua Bay according to Kölle *chein* or *ērŏ*; on Nŏru according to Thurnwald *āïn*; and on Lămbŭtjo according to Schoede *ein*. According to Bühler they are called *góhai* in Nada, *ndobb* in Sohéneliu, and *góhe͡i* in Buboi. Thilenius heard carry sacks for men called *ekuhu*[221] among the Mănus, and little carry sacks *koti* or *ain*[222]. The less-common sack made in the same manner from pandanus leaf strips is called *soss* on Salien according to Bühler; in Lŏnĭu *kun* and (with fringes on three sides in the Ninigo style) in Tulu *kumun* (cf. Plate 8). Ten to fourteen plaited cords are fastened around the opening of bags for taro and sago.

Baskets and bowls are often plaited from coconut palm fronds in such a way that the ribs of the frond form the rim of the basket. Occasionally the individual fronds are split three or four times at a short distance from the rib. The ends of the plaiting strips that come together from all sides on the floor of the basket are then plaited together with their opposing strip. In small, palm-frond baskets for earth dyes, simple fruit bowls[223] called *pahis* on Pónam, and the like, they do not bother doing that, and let the ends of the fronds hang down freely from the bottom of the basket. Carry bags of coconut frond weave have these free leaf-ends as a fringe. Bags made from coconut frond weave are called *koi* on Salien and the same type of little basket is called *búlibuil*[224] on Sabo. Baskets of a stiffer material that also serves for women's kilts are made using the same technique. In Pătŭsī they are called *bă̄ndris*, on Hăŭs [228] *bă̄rin*, in Să̄hă *lō̲lŏ*, and on Bipi, according to Bühler, *ridus*. They receive a simple or a flattened edge and can be shallow or high.

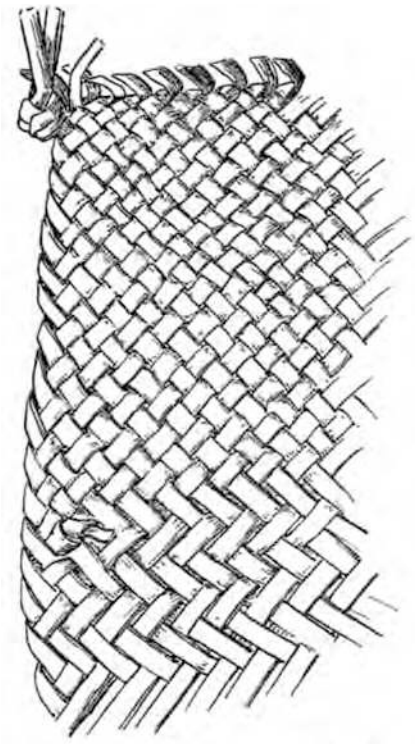


Fig. 137. Sail mat 2891[t]. 4.20 m long, 70—84 cm wide

With the mat sails, both ends of one strip cross over one another; however, in the centre each pair of strips crosses another, Fig.137.

More uncommon than diagonal plaiting are those where the woven strips are vertical or horizontal and cross alternately over and under. This is the case in the baskets called *andro* in Gắramaṅ[225].

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219 Catalogue of the Schoede Collection
220 1912. p.227
221 II, 1903. p.136
222 Berlin Museum VI 17464 and 17466
223 According to A. Bühler
224 According to A. Bühler
225 According to A. Bühler

The patterned yellow-black belts, and the arm and leg bands are plaited from brown creeper fibres using the same technique. Yellow orchid fibres are interwoven into the plaiting in such a way that they appear only on the outside. Usually one strip of a group springs over two others. If the width of the belt is not adhered to during plaiting, then, when they come across a wider and a narrower end piece, they interweave the surplus plaiting strips of the wider piece into several small braids leaving the girdle, (cf. Plate 7, Figs 1 and 2).

Rattan belts are often plaited-over in the same technique, but usually wrapped with black strips which are then crossed alternately over and under by yellow strips running parallel with the rattan.

The second style of the Admiralty Islands consists of laying strips of rattan or a similar material at right angles, or obliquely, on a horizontal spiral formed by one strip, and then wrapping the cross-over points for binding both strips, with a loop of a continuous thinner strip[226]. Apart from baskets of various sizes — sometimes with a cover — (in Bogai *kalo* according to Bühler), this type of plaiting is used also in fish traps (cf. Plate 13, Figs 12 and 13). In the latter, the spiral may be totally or partially replaced by individual rings. This technique is typical of the north-west of the main island, but not common elsewhere[227]. It corresponds with the *kŏlŏmŏ̋šŏ* baskets from St Matthias and the plaiting of the Baining. In Sā́hă little baskets of this type (*ăhĭ́n*) are used as betel nut containers.

Less common is the interlacing of a horizontal spiral with strips that incline obliquely to right and left[228]. Baskets woven in this style, with their three groups of plaiting strips, are reminiscent of tubular weaving (cf. Plate 13, Fig. 1).

The basic weave of the oil and water containers coated with *Parinarium* resin consists of horizontal rods of fern frond ribs or of lianas. Every pair of rods lying over one another is united by a narrow strip split from a rod[229], beginning behind the upper rod, running over it and passing from its front side to the rear side of the lower rod, in order to run around the latter [229] and again pass from the front to the rear side of the upper rod again. The strips that hold the next rods run once through each winding of the strip[230] (cf. Plate 13, Fig. 2).

A particular type of plaiting that is especially common on Pāk is called *bŭ̋lul* on Pĭ́tĭlu. They use it to make women's baskets (in Pătŭ̋sī according to Bühler *kombu*), and possum cages from lianas. They bend each horizontal strip downwards into a loop and let the neighbouring loops run through them, so that all loops in a series are united into a chain[231]. In the same way, they let the loops of the strips lying above run through all the ready-made loops. Occasionally they reinforce the series of loops, using individual horizontal or vertical strips of liana (cf. Plate 13, Figs 3 and 4).

Finally, fish baskets also have a particular type of weave. With them — usually long, and a few wide, baskets —curves of pliant rods or rattan run in arcs from one edge, across the floor to the other. Between these vertical switches, they plait thinner strips alternately over and under in thick layers. The rim is formed from a spirally-wrapped switch, or one plaited on with strips of rattan, that may be reinforced by other switches. The handgrip is formed by a cross beam or by a cord (cf. Plate 13, Fig. 8).

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[226] VI Ca δ of J. Lehmann's schema
[227] According to A. Bühler
[228] IV Aaα of J. Lehmann's schema
[229] According to A. Bühler
[230] II Bbα of J. Lehmann's schema
[231] V Aa of J. Lehmann's schema

Pandanus Leaf Sewing

Pandanus leaves called *tsa͡û*, *tso*, *tša͡û* or *tšo* on Háŭs, and on Pāk *ménomai*[232], are used for making rain capes and sleeping mats, and on Pāk also they use *aum* leaves as well. Four leaf strips of similar width are laid one on top of the other and sewn through on one side with thin thread. Then the two outer strips are bent round in the opposite direction; two new leaf strips are laid on top of them; sewn together with the ends of the bent-over strips which are bent over in turn, and the process is continued until a long mat is formed (cf. Fig. 137). The seams are covered by the edges of the leaf strips. The narrow sides of the mat, parallel with the leaf strips, receive no further sewing. Over the long sides they lay a long narrow leaf strip near the edge of the mat and firmly sew it on with both cross-stitching and zig-zag stitching. The strip itself is not perforated in this process, but the punctures go to the sides of it, through the mat itself. Sleeping mats — on Pāk rain mats as well — are often given bunches of bast fibre as decoration, sewn firmly to the edges.

Rain hoods are folded out of a mat, and the two [230] parts of a narrow side, lying one on top of the other, are sewn together with cross stitches. Beforehand, they may lay small leaf strips with sharply cut ends parallel with the long side, over the selvage, and tack these down with a simple stitch.

Perpendicularly to the leaf strips, further strips of this kind may be sewn on as decoration, running across the width of a leaf strip. Their stitches coincide with the usual leaf strip stitches, and are not visible. Another type of decoration consists of stitching threads in diamond patterns through individual strips at either end and also in the middle, and also applying branding in dotted lines (cf. Fig. 6). Like the sleeping mats, many rain hoods are also given a bunch of bast fibre as decoration at the selvage and along the folds.

Tapered flying fox bones, fitted with an eyelet, and called *nunu* on Sabo, serve as sewing needles. The sewing thread is not pulled directly through the eyelet but is knotted onto a piece of cord already pulled through it. Other, turtleshell, needles serve on Háŭs as a tool for sewing sails[233]).

Roofing Tools

On Lóu the leaves for making roof tiles are folded around a stick, and then the parts of the leaves lying on top of one another are pierced with a ray barb on a wooden handle. This tool fully is identified with the ray barb daggers[234]. A wooden pin is then pushed through the holes in the leaves to secure them.

Another tool likewise probably used as an awl when roof covering, is a 24 cm long piece of wood with a hole in the middle, where the wood is 2.5 cm wide, tapering off towards either end[235].

Instead of fastening the leaves with pins, which seems to be uncommon, in all places in 1908 leaves were seen fastened to the roof tile stick by sewing.

Tapa Production

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232 According to Krämer
233 Bühler Collection, Basel
234 Thilenius II, 1903. pp.151 *et seq.*
235 Berlin Museum VI 18274

A loose, raw-fibred brown *tapa* is obtained from the bast fibre of trunk, branches and aerial roots of *Ficus indica*[236]. For the men's T-binding and the rain shirts they use sections of bast fibre that are stripped like a tube from the wood[237]. However, for dance aprons and the like, pieces of bast fibre are cut off. The bast fibre is only dried, not watered and hammered. [231]

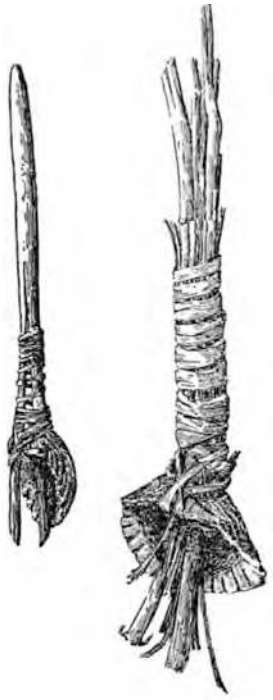

Fig. 138.
Tapa beaters 544[I], 1158[I].
29 and 32 cm long

White *tapa* like that seen by Moseley at Nares Harbour, comes from *Ficus prolixa* and is vastly less common. It consists of unsplit bast strips that have been pulled off trees, laid together, and carefully felted[238]. For beating this *tapa* they use a tool 22 – 23 cm long, consisting of a forked stick or a bundle of strands held together by rattan onto which they push a fluted *Venus* shell. This shell has been pierced once or twice in its hinge region. Shell and stick are firmly bound together by lashing with strips of bast fibre. On Pāk this tool is called *pobonnai* according to Schoede; in Buboi *sánjibu* according to Bühler, Fig. 138.

Among the Mănus of the south coast of the main island *tapa* is also prepared from *Artocarpus* bast fibre, beaten with a piece of wood. This produces material of quite poor quality, which dissatisfies the Mănus themselves, because of its low resistance. For this reason they hardly produce *tapa* today but buy European cotton material instead[239].

Cotton material has markedly suppressed *tapa* elsewhere as well, although it is still produced by the rest of the natives for daily and festive wear.

Tapa is usually left naturally-coloured, although occasionally it is dyed red or painted with simple red and black linear patterns.

According to comments by Păpítălâi people, *tapa* production is the task of men from beginning to end.

Production of Shell Money

Shell money is prepared on Ăndră, Sōri — now on Sabo — and Pónam. To a lesser extent shell money is also made on Hărăṅgăn and in Păpítălâi. There the process was first made known by Sōri women[240]. According to Thurnwald[241] shell money is also produced on Pĭtĭlu. The most important production sites are Sōri and Pónam. From Sōri come smaller shell money discs, and from Pónam larger shell money discs.

They designate the shell money on Pónam, Hăŭs and Pāk as *sa͡ul*, or on [232] the south-east islands (also on Pāk) as *sol*[242]; in Lŏnĭu as sa͡un; on Lóu as *sabun*[243]; among the Sōri people in Gărama̍n, and in Pătŭsī, T͡auī, and Kyĕla͡uăk however as *luluaī;* and on Lóu in places as *loloa*[583].

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[236] Thilenius II, 1903. p.137
[237] Moseley 1877. p.397; Thilenius II, 1903. p.138
[238] Thilenius II, 1903. p.138
[239] Mead 1931. pp. 233 *et seq.*
[240] Parkinson 1907. p.380
[241] 1910. p.29
[242] Thilenius II, 1903. p.360
[243] According to Krämer

On Lămbŭtjo it is called *šori*[244] or *alakei*[245]. Chinnery[246] heard it called *subi*(?) on Pāk. Also, the expression *tambu* was heard on Pāk as the designation for shell money, although that probably comes from the Gazelle Peninsula. The designation *pĕ́ri* that Kölle heard on Kelaua Bay for shell money might relate not to the money, but to its origin from Pā́rā̄ (= Peri). In 1932 Bühler in Mbŭ nai̯ established *ludun* and *soui* as the name of the money, and on the north coast of the main island, especially among Sōri people, *sauung*.

The base ends of cone shells (*Conus*) exclusively provide the raw material for shell money. The discs produced from them are always white. Like the cords of shell money, on Pónam the *Conus* shells in the various stages of their manufacture are called *sau̯l*[247]. On the other hand, in Kyĕlau̯ŭ́k they are called *bruŭ́djŏkób*. Other than white *Conus* discs Giglioli[248], who obtained shell money from Pắlŭăn, mentions "*con molte conchiglie di una* Cypraea *piccola, violetta, frammista a poche C. moneta*" [a few coins of currency mixed with many shells of a small, violet *Cypraea* — translator]. A shell money necklace in the Stuttgart Museum[249] features *Spondylus* discs, possibly revealing connections with New Hanover.

Preparation of shell money is the task of women although the men — at least on Pónam — are able to help them.

The collected *Conus* shells are first laid out to dry on rectangular or pointed oval boards with overhanging edges[250], placed in the sun. On Pónam these boards are called *reri*[251]. Then, with a suitable broken piece of a larger mother-of-pearl shell, they strike off the base of the *Conus* from its wall housing. The bases are placed on a little board (*kai*[252] on Pónam) and the cusps of the spirals are ground off on a flat, volcanic stone that has been soaked with water from a half coconut shell[253]. Several of the *Conus* bases are now pressed into the lower side of a cylindrical, soft, pulp wood so that the irregularly-sized lower rim parts of the *Conus* base project, and can be ground down in a similar manner on a polishing stone, (*pat* on Pónam). The roughly-polished bases are now pressed into another pulp wood[254] and ground down again on the polishing stone so that their flat sides become completely smooth[255]. The polished pieces, pressed deeply into the pulp wood, are removed, using a pointed stick, (today with a piece of wire bound to it[256]. [233] On Pónam, right up to the point of use, they keep the little shell discs in a purse (*kolik*)[257].

Since the *Conus* base has a hole in the spiral, it is not necessary to pierce the shell discs. These are strung on a strip of rattan (on Pónam *sūlŭ́n*; according to Schoede *solun*) which is sufficiently thick that they sit firmly on it. These strips are secured to a board, parallel lengthwise,

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244 Schoede Collection, Berlin
245 Thurnwald Collection, Berlin
246 p.58
247 Eichhorn 1916. p.257
248 *loc. cit.*
249 L. N. 1247, Krämer Collection
250 Eichhorn 1916. p.258, Figs 2–3
251 Catalogue of the Schoede Collection, Berlin
252 Or *pai*?
253 Eichhorn 1916. pp. 258 *et seq.*
254 The Ponam name *mpat* that Eichhorn gives for this is based on confusion with the polishing stone (*pat*).
255 Eichhorn 1916. pp. 259 *et seq.*
256 By word of mouth from A. Bühler
257 Catalogue of the Schoede Collection, Berlin

by two cross-bands[258]. Any unevenness on the edge of the discs is now also ground off with smaller polishing stones[259].

Finally the discs are strung on a double strand of bast fibre cord. A few discs of coconut shell are interleaved between the *Conus* discs to form a black pattern in the white chain or, instead of the coconut shell discs, they string European glass beads for the same purpose[260]. According to Schoede the glass beads are trademarks for low value[261]. For storing smaller quantities of shell money they use small oblong diagonally-plaited purses[262].

The *Conus* discs are not threaded exclusively for shell money but also for the production of necklaces, belts, ear ornaments, arm and leg cuffs, dance aprons, and decorations of magic- and utility articles.

Processing of Teeth

Human and animal teeth that are intended for stringing on chains are perforated using a drill. On Pĺtĭlu the drill is *mă̆lmă̆l*, and on Pāk according to Schoede *malanal*. It consists of a stick of betel palm (on Pĺtĭlu *buaĭ*) with a round wooden disc (on Pĺtĭlu *kŭr* = *Parinarium* basket) pushed onto the lower end. The disc is fastened to the stick above and below by several narrow bands of fibre, and is sometimes plaited over, itself. The top of the stick is given a circular notch, wrapped with a thin cord extending on both sides and wound round the ends of a cross stick in the same manner. The tip consisted originally of madreporic [234] corals or ray spines, but for a long time it has been exclusively iron, usually a needle, firmly secured to the lower end of the stick by a thin cord or by the fibre bands extending beneath the wooden disc, Fig. 139. The borer is caused to revolve by letting the cords of the cross-piece run spirally round the stick and then gently moving the cross-piece up and down.

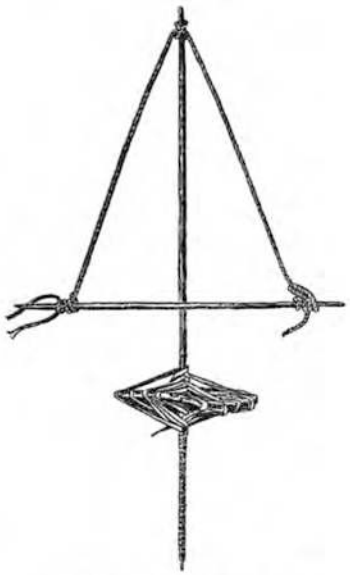

Fig. 139. Drill borer 2622[1]. 52 cm high

Extraction and Processing of Obsidian

Obsidian is found on Lóu, Pôam[263], and Móuk. The sites belong to certain villages and their chiefs, and, according to Thilenius[264], the right to extract obsidian is restricted to the chief and his sons. On Lóu, from Thurnwald's information[265], only a few inhabitants of the village of Kamalaniáng(??) are allowed to split obsidian. The consumption of stingrays from whose spine daggers are made, is forbidden to them.

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258 According to Bühler
259 Eichhorn 1916. p.260
260 Schneider 1905. pp. 58 *et seq.*; Finsch 1914. p.58
261 Eichhorn 1916. pp. 260 *et seq.*
262 According to A. Bühler
263 Not Pónam, as Finsch (1914, p.252) says.
264 Finsch 1914. p.252
265 1910. p.28

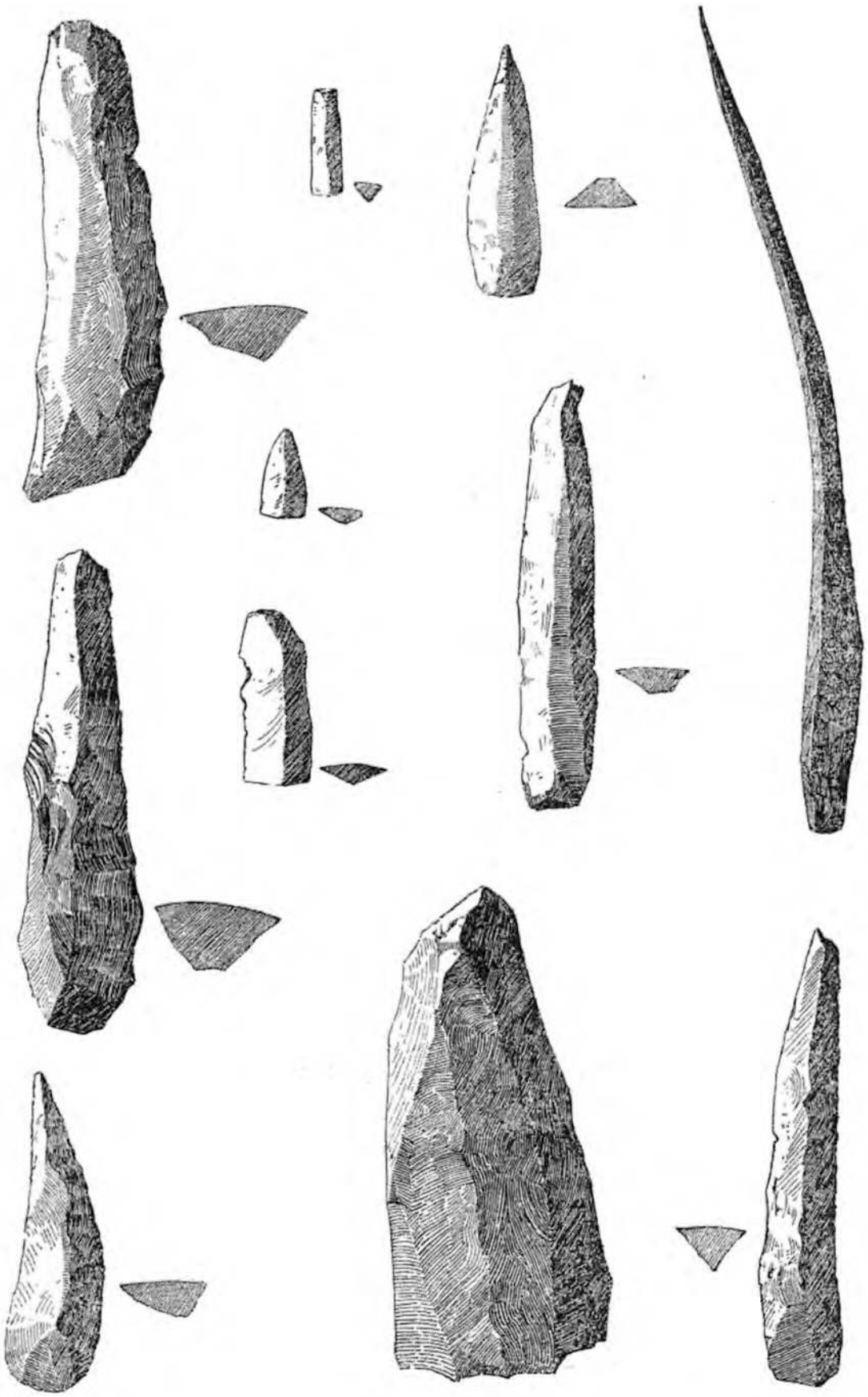

Fig. 140. Obsidian cores and tools Linden-Museum Stuttgart. 1/4 actual size

Obsidian comes to light sporadically but in many places it is of lesser quality and it is therefore obtained on Lóu and on the other islands to some extent as well, from deeply-dug shafts[266]. There, it is fractured, by the light of torches[267]. The miners remain in the shaft for three to four days, splitting obsidian[268].

The art of producing obsidian spear tips is not restricted to the source location since obsidian is dealt with in blocks and in that manner reaches Sōri[269], for example. Thus in Lőnĭu and Bűbi in 1876 the production of spearheads did not appear to be totally secret and Miklucho-Maclay's ignorance of obsidian processing there even aroused hilarity. He watched a man lie the block of obsidian on the sole of his left foot in such a way that the smooth, wide surface was on top. The block was then gently struck with the flat side of a *Cypraea* shell, and at the second or third blow several splinters flew off. According to the force behind the ever-gentle blow, and which side of the block the worker selected, he was able at will to obtain slivers of various shapes. In this manner a spearhead was produced from broad and narrower slivers[270].

Later, only one lone blade-maker was found on Pó̂am by Parkinson[271], and in two villages on Lóu he was directed to a man in a neighbouring village. In 1908 nobody in Pűě on Lóu was able to make spearheads out of obsidian, and the people referred to an older man who lived a long way from Pűě, who would know how. [236]

The processing of obsidian into spearheads and the manufacture of obsidian spears is usually commercially driven, and only specific men or individual families are occupied in this[272]. The technique is kept secret from other natives.

Essentially the important thing in blade production is to be able to judge skilfully the direction in which the slivers break off the obsidian block. The only working tool is a stone[273]. According to Schnee and Parkinson it is used to deliver short gentle taps on the block held firmly in the left hand, whereupon, according to Parkinson[274] the intended slivers fly off the opposite side of the block. With further gentle taps the slivers are shaped into finished spearheads.

Parkinson's information is expanded by H. Klink's annotations. Klink observed that the triangular form for the spearhead was indented into one side of the obsidian block with a shell or a hard, sharp stone. Then the block was flipped over and the worker tapped along a straight line on the opposite side, precisely in the middle of the triangle chiselled into the previous side. Then the block was heated over hot stones and thrown into the water. It was lifted out, allowed to cool, and struck on the side where the line was tapped. At that the spearhead flew off the block.

By splitting off a nucleus the obsidian blades are given a triangular or diamond-shaped cross-section whose longest side always corresponds with the fracture point, Fig. 140.

Apart from spearheads, dagger points, and blades of the so-called battle axes, people process obsidian also into smaller, more-easily produced tools like carving tools, shaving knives and the like. Besides a big flat scraper made from obsidian, in the bush in 1932 Bühler found a big hook made from obsidian with a rattan eyelet, near Soheneliu; in form and size it resembled a shark hook.

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266 Parkinson 1905. p.238
267 Finsch *loc. cit.*
268 Thurnwald *loc. cit*.
269 Parkinson 1907. p.390
270 Miklucho-Maclay, *Izvestia*, 1878
271 1907. p.373
272 Thilenius II, 1903. pp. 143 *et seq.*
273 Schnee 1904. pp. 203 *et seq.*
274 1905. p.238; 1907. p.373

When a replacement cannot be made, shattered obsidian blades are repaired with the help of *Parinarium* resin and bast fibres. The broken pieces are held together; both are coated with a fine layer of resin and the cords are firmly wrapped over them into a broad band. This repair is also made with only bast fibres, without resin.

Pottery

Pottery sites are Háŭs, Mbŭke, Tjápale, and Lálā. Pottery was introduced into Tjápale from Mbŭke[275], but does not appear to have achieved any level of significance. The pottery of the Lálā people [237] originates also from Mbŭke, and was brought in by emigrants who left Mbŭke shortly before 1908 and settled in Lálā[276].

The potters from Háŭs obtain clay from the opposite part of the main island without involvement with the Ŭsĭáî from Drūgŭl. The clay deposits on Mbŭke yield the material for Lálā and probably also for Tjápale. The clay is dried, pulverised and made into a slurry by women, formed into great spheres or clumps, and stored for use[277].

Further preparation is also women's work.

On Háŭs the paddle technique is used in pottery. The woman potter has the yellow-grey clay (*kŭr*) beside her in a wooden bowl, a little coconut bowl of water, and, as handcraft tools, a roundish flat black stone (*pāt*), a bamboo cane (*kārŭ́*), a flat, board-like piece of wood (*kābắp*) and a second tapered little board (*hansé́n*) which serves only for moistening the mass of clay, Fig. 141. A lump of clay is moistened on a board and shaped into a regular ball. The potter makes a depression in the clay ball with her thumb and enlarges it by pressing inside and out with both hands. This makes the walls rise. Then the clay shape is laid on a plaited ring wrapped in broad leaves, which in turn stands on a small mat, Fig. 142. The ring is made of palm leaves and bast fibre. Together with the pot it works as a spherical joint. On its own it forms the joint socket while the pot, moveable in all directions but nevertheless resting securely, is the head of the joint[278]. The round stone is now introduced through the opening of the pot and, by internal pressure, enlarges the circumference of the vessel. At the same time it provides resistance to the flat board which moistens and strikes the wall from the outside. The bamboo cane also serves for tapping from the outside. During this task, the pot is slowly turned on the plaited ring. Thus all parts of the wall become equally thin. Finally, the opening is drawn-in with the fingers [238] and the rim, which has been carved out of the sold mass, is curved outward, and cut evenly with a shell or a bamboo sliver. Decoration is only occasionally incised around the neck of the clay vessel with a little piece of wood. The decoration consists of: double

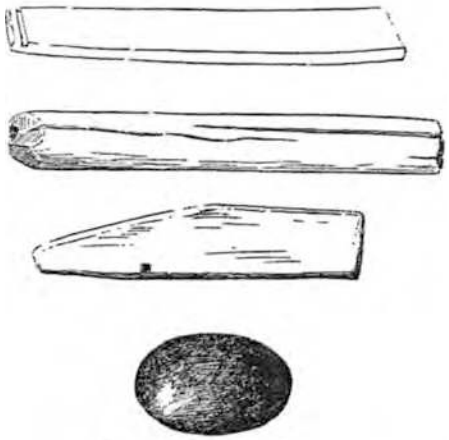


Fig. 141. Pottery tools
619[I]a, b, 618[I], 761[I]. 1/3 actual size

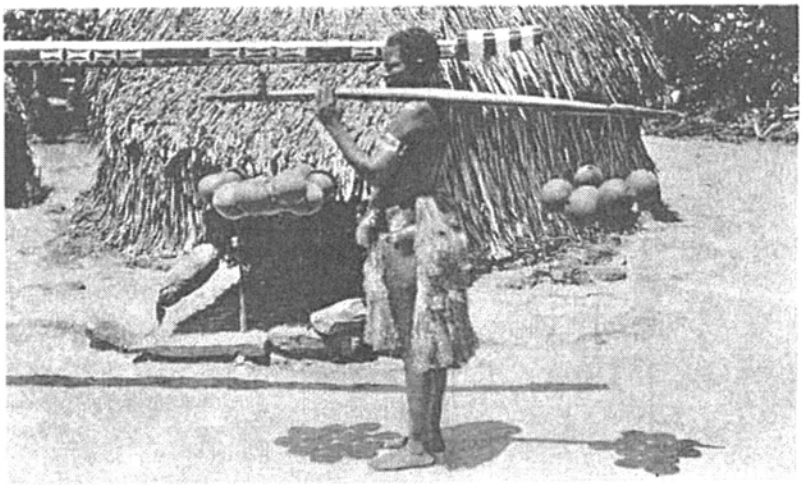
Fig. 142. Pot stand 617[I].
diam. 33 cm.

[275] Parkinson 1907. p.383

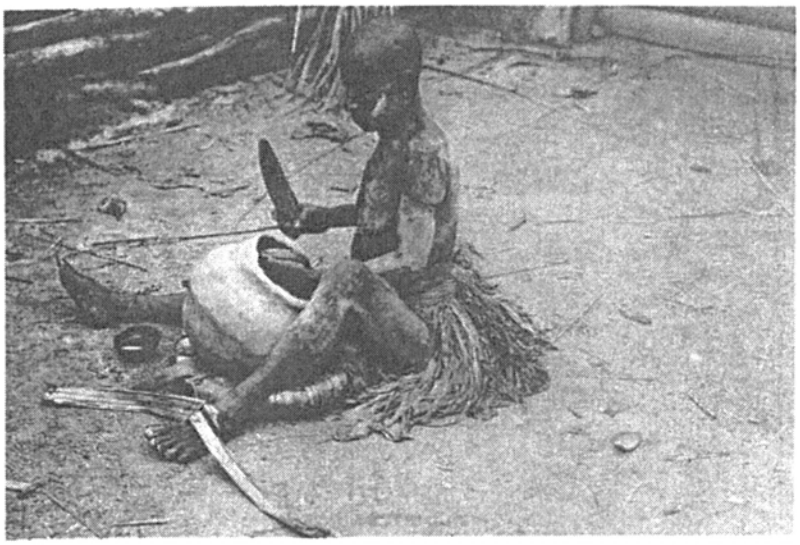
[276] Around 1929 Mbŭke was the pottery centre once more, and pottery was given up in Lálā.

[277] Parkinson 1907. p.357

[278] Vogel 1911. pp. 92 *et seq.*; Schurig 1930. pp. 83 *et seq.*



Woman with carrying pole in Pūĕ on Lóu. phot. Fülleborn



Woman potter on Háŭs. phot. Fülleborn

Woman potter on Háŭs. phot. Fülleborn

lines of short strokes that form a mesh or a diamond-shaped pattern; dots around the neck; and short indentations around the opening, Fig.143.

Fig. 143. Clay pot 1139¹. 28 cm high

The coil method that Parkinson[279] describes differs totally from this technique. The floor of the vessel is formed from a piece of clay beaten flat. Around it are laid coils of clay that the potter hammers out with a flat, spatula-like piece of wood while the left hand is held against the inside wall of the vessel as resistance. With this procedure a few simple lines are incised with the fingernail only every now and then, as decoration. This coil technique is used probably in making deep, open bowls without a constricted opening[280].

The rest of the vessels have a spherical shape and an opening with a slightly constricted rim curving outwards. In cooking pots the opening is fairly wide, while in water pots it is quite narrow. Most water pots have a precisely-cut rim around the opening. Water pots with two openings whose rims are evenly cut, or curved and constricted are quite common. Both openings may be the same size, or a bigger opening serves for pouring in and a smaller for drinking[281].

Less common are pots with two simply curved handles[282]; "amphora-like" pots of oblong form tapering downward; and spherical water pots with two narrow, flask-like openings. The clay ware with plaited inlays, mentioned by Thilenius[283], might be baskets with a *Parinarium* resin coating: not actual clay ware. According to Margaret Mead[284] the pots from Hắŭs are pale, while those from Mbű́ke are dark.

The simple cooking pots are called *ku* on Pāk[285] and *kű* on Nő́ru; on Lămbű́tjo *kahol* or *kū*; on Pồam *kūi*[286]; and according to Bühler on Hắŭs *bogo* or *kur* — *kur* designates only pots with big openings — and on Mbű́ke *bondang*; the amphora-like pots are called *körmŏn* on Pāk. Water pots with two openings are called *kan* on Lămbű́tjo according to Schoede; and on Pāk *jabūn* or *jabūṅ*, and according to Bühler in Pătű́sī *boentang*. [239]

Apart from scratched decorations, the clay vessels have no ornamentation of any kind. Miklucho-Maclay[287] is the only person who declared the pots "manifoldly decorated". He regarded the decoration as imitations of the tattoo patterns. However, other observers, such as Moseley and Parkinson, saw little or no incised decoration. Usually these were limited to a few straight, zig-zag, or wavy lines.

How the firing is done, was not observed. Glazing is always absent.

When in use, the spherical pots are placed on a plaited ring, called *nyāt* in Păpítălâ̂ı. Otherwise they are stored in the house on a freestanding framework or on a rack below the roof, with their openings downward. In Lắlā, as many as 80-85 pots were piled up in this manner, under the roof of every house, ready for shipment.

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279 1907. p.357
280 Schurig 1930. p.122
281 Schurig 1930. pp. 134 *et seq.*
282 Moseley 1877. p.406
283 II, 1903. p.143
284 1931. p.223
285 Friederici 1912. p.266
286 Dempwolff 1905. p.210
287 Finsch 1882. p.577

The pots from Hấŭs are sold to the inhabitants of the north coast of the main island and their offshore islands, and reach as far away as Pāk. Strangely enough the Pĭtĭlu people, according to Parkinson[288] buy their pots, but from the Mánus i.e. through the mediation of Mbűnai̯ out of Mbűke or Lálā. Purchasers of the pots in Lálā are the inhabitants of Mbűnai̯, Ndrūbiū, and Pătűsī. Also, in Ndrĭol on Lămbűtjo pots were obtained from Mbűke and later from Lálā. Actually however the marketing area of the Mbűke and Lálā pots is much greater than emerges from these individual statements by the natives. Thus Leber[289] found in Boltzal pots that could only have come from Lálā. By direct sale or intermediate trade the pots from Hấŭs and Lálā turned up in almost every village and on every island. Lálā appears to have the main quota, and to have even greater importance than Hấŭs. Recently again Mbűke has displaced Lálā[290].

Evidence that pottery has remained the same for over 150 years comes from Carteret's observation that in a captured outrigger canoe in 1767 he found "two large earthen pots, shaped somewhat like a jug, with a wide mouth, but without handles"[291].

An innovation is the use of clay in the production of dog and human figures in the style of the old wooden figures. This goes back to the suggestion of a missionary and began in Makareng. By 1932 this new clay moulding had also become popular in Lőnĭu and Păpítălai̯[292]. The modelled grey clay is only dried, not fired.

Dyes

The most important colours are red and black. The red is a dense red iron ore that occurs on Lóu, Móuk and the main island[293]. On Hấŭs [240] there are two types of red earth colour, called *mbŭhűr* (*bŭhűr*) and *wā́lāb*, that are both traded from Drūgűl**.** *Mbŭhűr* is said to be found not only in the mountains of the main island but in the plains as well. The *wā́lāb* type is much less common and is found in various places in the bush on the main island. The people of Hấŭs, who buy both dyes from the Ŭsĭai̯ of Drūgűl, would give away only a small sample of *wā́lāb* for three sticks of tobacco, while *mbŭhűr* was much cheaper. The red coloured earth (*bot*) that is used on Pónam is said to come from Lehowa[294] (?) On Pāk they call the red coloured earth *pao*, and on Lămbűtjo[295] *batúlama*.

On Hấŭs yellow earth colour is also designated as *mbŭhűr*, which is found at various places on the main island, Sấhă among others. Red and yellow earth colour is uplifted as clumps in a folded, wrapped leaf; in a [241] plaited bag; or in a half-coconut shell, Fig. 144.

Drūgűl people likewise trade the black dye to Hấŭs. Allegedly the Ŭsĭai̯ find it on Mount Hĭlenhau̯ (=Hidlé?) or on Mount Bűli (?; *mbűli* = mountain!) and dig it out. The dye called *sambŭár* (*támbŭár*) on Hấŭs is said to exist in big pieces (*nábúen*) and in large quantities (*sambuaĭ lŏgon*) in the mountains. The dye (*sombui*) comes to Sōri by mediation of the Ŭsĭai̯ from Sau

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288 1907. p.389
289 1923. p.202
290 According to A. Bühler
291 Hawkesworth, I, 1773. p.384
292 According to A. Bühler
293 Thilenius 1900. p.202
294 Catalogue of the Schoede Collection, Berlin
295 Thurnwald 1913. p.12

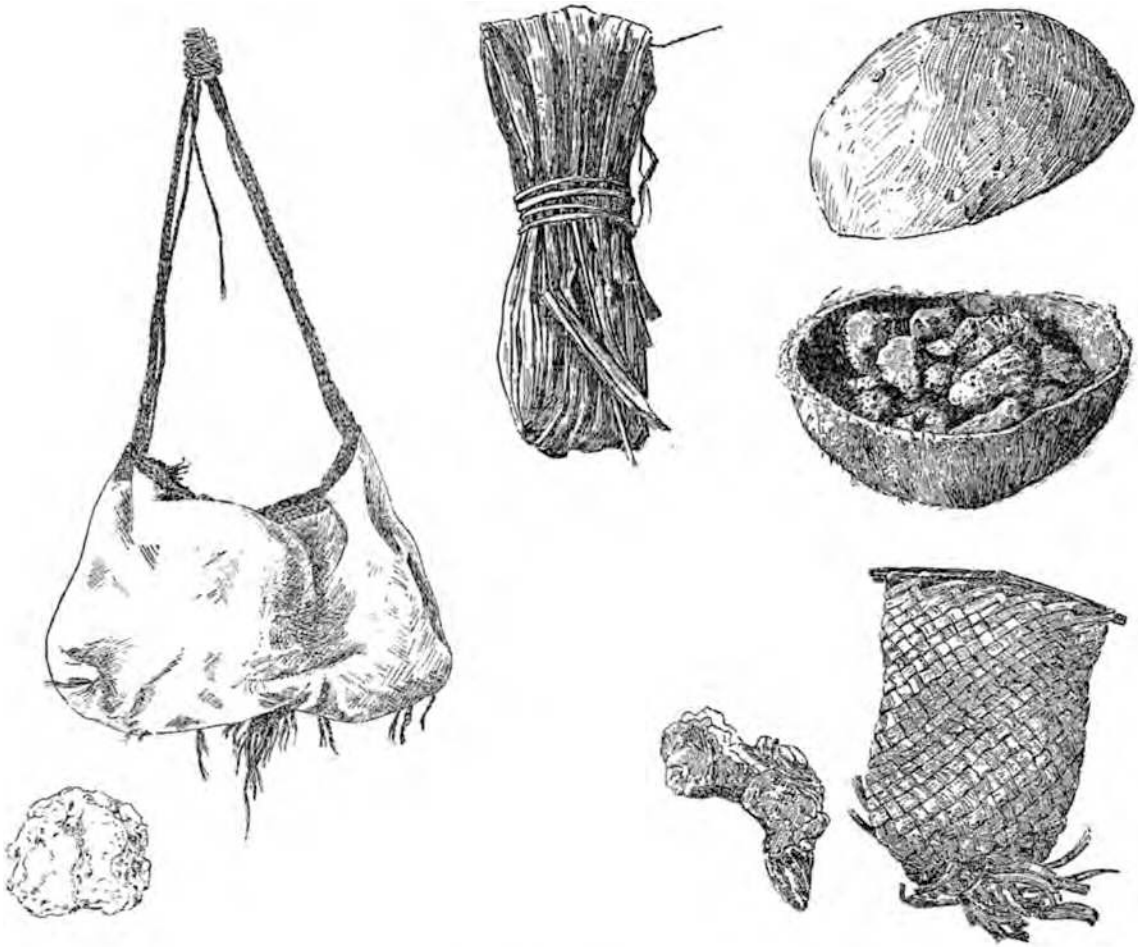

Fig. 144. Earth dyes

2835[I], Bag containing red earth $^1/_4$ actual size
2834[I], Bundle containing red earth $^1/_3$ actual size
4215[I], A lump of red earth $^1/_2$ actual size
2838[I], Coconut shell containing red earth $^1/_3$ actual size
2848[I], Bag containing yellow earth $^1/_6$ actual size

(Ndritenbat[296]). Stony lumps are said to be found in the interior of Ăndră; these are crushed and used at Seeadler Harbour as black dye (*tomboa*)[297]. This dye is also evident in small quantities on Lóu. It is pyrolusite[298]. At Nares Harbour Moseley[299] heard it called by the same name as iron: *laban*. The crushed dye is stored in narrow bamboo canes. A simple thin spatula serves to extract it, Fig. 145.

Fig. 145. Bamboo cane with black earth. 2896[I]. $^1/_2$ actual size

White colour is produced by lime. For body painting during mourning periods on Pítĭlu they use a greenish-white dye of unknown origin.

Green and blue dyestuffs are unknown. European washing-blue (*soambuan*[300]) is very seldom used.

296 Catalogue of the Schoede Collection, Berlin
297 Catalogue of the Schoede Collection, Berlin
298 Thilenius *loc. cit.*
299 1877. p.406
300 Thilenius II, 1903. p.126

Foreign Industry

Whether the canoe model that Moseley discovered in the huts at Nares Harbour had been produced specifically for foreign sale he was unable to ascertain. However it is highly probable that it was a toy canoe. Not long after the beginning of the period of exploration, i.e. in the seventies, distinct efforts began, on the part of the natives, to produce items uniquely for sale to the Europeans; this increased significantly in the nineties. By 1902 foreign industry had already become so extensive that the quality of the items suffered under it. Hahl[301] speaks of defective presentation of items offered by the Sōri people, and a "breakdown of vested productivity through the influence of European wares".

Mainly, foreign industry extends to wood-carving and items with a decorative *Parinarium* coat. Apart from bowls, [242] ladles etc., weapons were the ethnic wares especially sought-after by foreigners, and were decorated just to please them[302]. In many cases however, the items show no significant degradation of the old style, but often demonstrate, through over-rich embellishment, e.g. painting of net floats and bowl ladles — at the very least inappropriate in water — that they are no longer unadulterated, common tools. Similarly, skulls are painted in order to flog them off more advantageously.

Occasionally they also make items that have no useful value, just for foreigners. For example, in 1908 a 31 cm painted carving that represented two crocodiles or iguanas (*wārī́*) was offered by a Pǐ́tĭlu man who, when questioned as to their purpose, gave the answer "White man he like him, kanaka he make him." (Plate XXIII).

VI. The House

House Types

According to their shape the houses are either pole buildings with a rectangular floor plan or buildings on the ground with rectangular, oval, or circular floor plans. According to their purpose they are family houses, bachelors' houses, chief's- canoe-, drum-, equipment-, women's- and children's houses. Often both aspects play a role, through the manner in which the natives subdivide the houses. Chief's and bachelors' houses and, among the Mătănkŏ́l the canoe shed as well, are not uncommonly used jointly. For example, in Wălŭ́n on Pāk the chief's house is simultaneously the bachelors' house, Fig. 146; in Pā́kĕ́răn on Pǐ́tĭlu the chief's [243] house is also bachelors' house and canoe house; and on Pónam the bachelors' house is also the canoe house. In Mŭ́ndī, Păpítălâī, and Pŭ́ĕ on the other hand, the bachelors' houses are separate from the chiefs' houses. However the bachelors' house in Mŭ́ndī serves simultaneously as drum house and as canoe-builder's house.

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[301] *Deutsches Kolonialblatt* XV, 1904. p.617

[302] Cf. the bowls in Mead 1930. pp. 120, 123, and 129

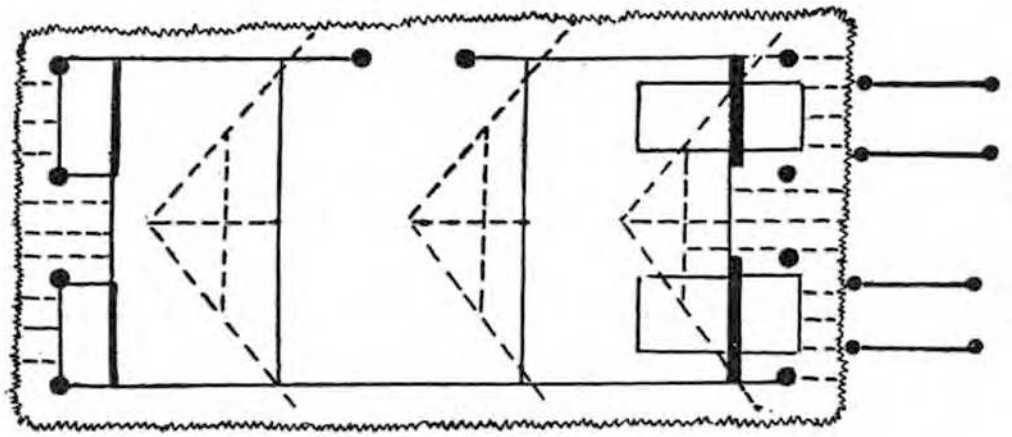

Fig. 146. Plan view of the chief's house on Pak. After a sketch by H. Vogel.

The bachelors' houses in Păpítălâî, in Tăṅ, and on Pónam are called *kāmăl*; on Móuk *kămăl*[303]; on Pāk lŭχ[304], *lō*[305], or *lūdyŭn*; on Pălŭăn *lŭi*[306]; on Pôàm *loi*[307]; and in Pŭĕ on Lóu *líŏl*[308], *lundrianu*[309], or *lĭŭr*. On Pónam they differentiate the smaller bachelors' house *păhŏl* that also serves as a canoe shed and is barely more than a simple roof, from *kāmăl*. In Păpítălâî *kāmăl* also designates the men's room of the chief's house, which is separated from the women's room, (*ᵘŭm*), by a wall. The whole house has no name, Fig. 147.

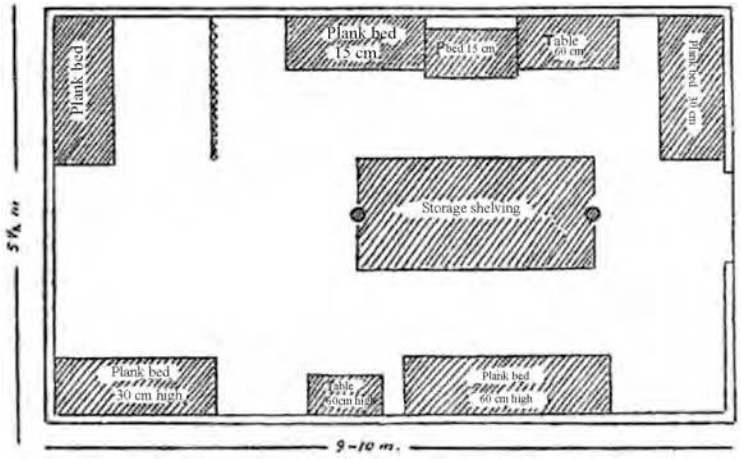

Fig. 147. Plan view of a women's house in Păpítălâî. After sketches by H. Vogel.

Family houses in Păpítălâî are called *ᵘŭm*; on Lóu, Pāk, Móuk, Pôàm, and Pălŭăn *ŭm* (on Pāk also *vum*[310]); on Hăŭs *ătsĭâû*; in Drūgŭl *ăsēū*; and on Pónam *ŭmbără*[311]. On Ndrŭwal Rickard[312] heard

303 Friederici, 1912. p.228
304 Friederici, 1912. p.226. According to Chinnery (p.54) *lu*
305 According to Krämer
306 Walden Vocabulary, in the Berlin Museum
307 Dempwolff, 1905. p.210
308 Friederici 1912. p.225
309 Thilenius II, 1903. p.132
310 According to Krämer

pole buildings that were probably family houses, called *eum*. In Sấhă *ŭm* is the general designation for both land-based houses and pole houses, whereas on Hấŭs *ŭm* or *sŭs* are oval, land-based houses. On Hấŭs they designate widow's huts as *pānhŏ́l*[313] and on Pónam children's houses as *părắ*, whereas *pără* on Hấŭs again designates rectangular, verandah houses. In Drūgŭ́l they differentiate the *ŭmăndrắs* as rectangular houses, from the *ᵘmdrâu* oval houses. Pole buildings are called *rī́rū* in Drūgŭ́l; *bătắ* in Păpítălâī; and on Pāk *bălᵉhắl* (according to Krämer, *balahal*); while in Păpítălâī *pălĕhắl* designates only the platform of pole houses. On Pónam a big round building, *sūvălắt*, is regarded as a special type of house.

Religious houses and temples, that Moseley[314] saw on Sōri and Hắrăṅgăn, and Romilly[315] saw on Lămbŭ́tjo, might have been chief's houses and bachelors' houses. [244]

The Basic Framework of the Houses

Although the differences in house forms of the Admiralty Islands appear at first glance to be very great, all house forms go back to the same basic construction. The oval- or even virtually round houses are erected in the same manner as the rectangular houses, differing only in the configuration of the overhanging roofs on the gable ends. In the oval house these gable projections are moved out as far as the roof and correspondingly they have undergone a minor alteration, so that they have taken on the shape "of a universal ball joint halved by a vertical cut". Thus in order that the space below them be filled out by elongation of the hut wall, an apparently oval house[316] has arisen out of the rectangular house, which can be altered by rounding of the original straight long walls into an actual oval house, (as was seen in one case in Drūgŭ́l); or can become a type of round house by shortening of the rounded side walls: on Pónam, in Bojang, and in Savoi. Also, in the rectangular house new forms can arise through enlargement of the gable porch and through filling out of the space below it. The pole building differs from the rectangular house solely by its poles and its platform.

Fig. 148. Men's house roof spar binding, Păpítălâī.

The ridge pole with its support posts, the sole part of the house framework that directly bears the roof, forms the basis of house. Its support posts are either simply stuck into the ground or rest on a crossbeam parallel with the gable side. The earth post construction is customary in Sấhă, Gắramaṅ, and on Hấŭs, and is less common in Drūgŭ́l. The crossbeam construction is typical of all the pole buildings, and in the land-based houses in Păpítălâī, Drūgŭ́l**,** and Mŭ́ndī; on Pĭ́tĭlu, Pónam, Pāk, and Lóu; in Ndrī́ol on Lămbŭ́tjo, and is less common than the earth post construction on Hấŭs. Both methods of construction may be combined in one house in such a way that the gable ends have the crossbeam construction while the middle of the house has the earth post construction[317]. The long walls rest on two rows of posts, each carrying a stringer. On the stringer lie the ends of the cross beams that

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311 A composite of *ŭm* and *pără*?
312 Ray, 1892. p.7
313 Cf. *pắhŏl* on Ponam as the name for small canoe shelter-roofs
314 1877. p.414
315 1887. p.116
316 Friederici, 1912. p.77
317 Thilenius II, 190. pp.150 *et seq.*

New youths' house in Púě on Lóu, with *singsing* beams phot. Fülleborn

Dwellings in Púě with *singsing* beams phot. Fülleborn

carry the ridgepole posts. Firmly bound to these stringers, in both construction methods, are the roof ribs which with a slight rounding extend as far as the ridge pole, so that the ends of two ribs always meet there.

The connection of two parts is almost always by binding with rattan or vine cords, Fig. 148. Only the ridgepole [245] bearers, which stand on crossbeams, are inset into these. The posts, which carry a beam, are cut more or less into a fork at the upper end. With these also, binding is done with cords.

Wall and Roof Cladding

Fastened to the roof ribs are thin horizontal staves 80–90 cm apart, bound with rattan; further thin staves are fastened perpendicularly on top. People usually use wood or the perpendicular staves; however on Hấŭs and Pónam they use bamboo (on Hấŭs *mbŭ́*). In Sấhă on the other hand bamboo would never be used for this purpose.

Brick-like pieces of sago palm leaf are bound onto this latticework. This is generally done with rattan; however in Păpítălâ͡ı they use fibres of a species of vine (*ŏasé͡ū*). The leaf tiles are produced by folding sago palm leaves around a stave (that later forms the upper, stiff part of the leaf brick) in such a way that the ends of the leaf again come to lie on top of each other. Immediately below the stick the two halves of the leaf are stitched together, and to the neighbouring leaves by sewing with threads of split rattan. On Lóu, instead of sewing, Thilenius[318] saw small wooden pins that were stuck through the leaves or leaf strips, underneath the one metre long leaf-brick stick. This task is said to be performed with a dagger-like tool: a ray's barb with a wooden handle.

Often, a beam-like piece assembled from several thick palm frond ribs or a lighter thin timber is laid on the roof covering, above and parallel with the ridge pole, and firmly bound down. However on Pónam and in Mŭ́ndī it is further secured by short timbers that are inserted into the upper part of the roof latticework in such a way that they cross over one another above the ridge protector. In Mŭ́ndī and on the Sĭ́sī Islands, even three such ridge protector pieces are found side by side. Usually these ridge protectors are covered by leaf work and are barely visible. However in Ndrĭ́ol they protrude a considerable distance at both gable ends.

The indigenous names for the parts of the roof covering are:

	Perpendicular staves	Horizontal staves	Leaf tiles	Stave in leaf tiles	Sewing	Binding of roof staves & leaf tiles
Păpítălâ͡ı:	*āgŭ́s*	*lās*	*la͡ūnābĭ́*[319]	*dră*	*năn*	*ŏasé͡ū*
Hấŭs:	*kắskăs*	*lắs*	*ŭm*	*ndră*	*năn*	*ᵘăyắ*
Drūgŭ́l:	*kăskắs*	*lắs*	*um*	*ndră*	*panâ͡ı*	*sa͡ūsâ͡ū*
Pónam:	*kăs*	*lắs*	*ŭm*	*ŏhắ*	*păn̆ă*	*păra͡ūắl*
Sấhă:	*kăr^{e}kắr*		*um*	*ōdắ*	*mŏn̆ŏmoi*	*sūlŭ́n*
Sōri (Gắramaṅ)		*lắ*	*ắ*		*bấnâ͡ı*	
Pŭ́ĕ on Lóu:	*kăkăsĭ́*	*kăṅíŭp*	*kăt*	*hr̲ăp*	*pana*	*ᵘărᵘắr*
Pŭ́ĕ (n. Thilenius[320])	*rakas*	*eles*				

[318] II, 1903. p.151

[319] The names relate to the sago palm leaf material

	Perpendicular staves	Horizontal staves	Leaf tiles	Stave in leaf tiles	Sewing	Binding of roof staves & leaf tiles
Păpítălâ̂ĭ:	*āgű̆s*	*lās*	*la͡ûnābĭ́*[321]	*dră*	*nă̆n*	*ŏasé̋ū*
Ndrĭ́ol:	*ndrākắs*	*lă̆s*	*la͡ûnắt*[659]	*nă̆n*	*nyāmĭ́n*	
Kyĕlá͡ûắk:	*rākắs*	*lă̆s*	*ĕ ắk*	*ĕ rắ* (*ĕ lắ*)	*ĕnă̆m*	*ᵘắyắ*

The whole roof is called *kāt*[322] on Pó͡am.

The cladding of verandahs, gable parts and walls is done similarly with leaf tiles that are firmly fastened to a latticework. On the Sĭ́sī Islands and, according to Moseley's[323] observation, earlier on Hắrăṅgăn as well, instead of leaf cladding on the walls there appears cladding of pieces of wood layered between two rows of poles. In 1908 in Ndrĭ́ol a man had clad the lower half of his walls in this manner while leaf tiles were attached above.

The gable wall of the bachelors' house in Pű̆ĕ on Lóu is clad with boards below but on the long walls, up to half-height, it has the usual wall construction (*sŏl*^{b}*vă̆*) with a leaf tile covering.

To protect the roof covering against the wind, in Păpítălâ̂ĭ, Lắlā, and Kyĕlá͡ûắk, on Bird Island Bay and on Lóu, two crossed diagonal rods are firmly bound underneath it on the side most exposed to the wind, for stiffening; at the same time they safeguard the roof ribs from sinking to the side. In Pű̆ĕ on Lóu they are called *šīnămbő̆t*; in Kyĕlá͡ûắk *lămătắn*; and Păpítălâ̂ĭ *kăţărē̆ă* or *mḅű̆lēī*.

On Pĭ́tĭlu they strengthen the roof against the rain by a charm. This consists of bunches of leaves (*la͡ûda͡û)* that they hang up inside on the roof frame.

Houses built on the Ground

The rectangular house in Păpítălâ̂ĭ rests on two rows, each of three poles (*ndō*). Each of them bears a stringer (*lōbōhāndő̆)* that lies parallel with the side walls of the house. On the stringer rest the ends of three crossbeams (*sōhắl*), parallel with the gable wall, located approximately at a man's height. Inset into the middle of each crossbeam is a short pole (*lĭmū kărắṅ*). On the notched tips of these three poles rests the thick ridgepole [247] (*pŏrŏmḅŭṅé̋*), Fig. 149. The main bracing of the side walls (*kālītšő̆*^{u}) consists of five thinner poles each (*ká̋nū*), on which are five ribs for the roof. The joining of both parts is arranged in such a way that the opposing ends are somewhat tapered and, in addition, the lower poles are cut to form a recess recess on which the lower end of the rib can rest. The whole thing is bound firmly with vines.

The gable walls of the chief's and men's houses consist of the upper perpendicular gable triangle (*ḅūṅĭ́*) and a projecting rectangular "verandah roof" (*pāĭntšŏ*) whose upper bend is marked by a beam (*ndrū*). The lower bend (*pātyő̆, pătyő̆, pătő̆, ndrū*) is, at the same time, the upper border of the door opening. Both *ndrū* are connected by four poles (*ká̋nū*) that give support to the

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320 II, 1903. p.151
321 The names relate to the sago palm leaf material
322 Dempwolff, 1905. p.210
323 1877. p.403

House on Sîsî. phot. Fülleborn

Canoe sheds on Hâŭs. phot. Fülleborn

verandah roof. The chief's house presents a peculiarity — a partition wall (*ndrĭndrĭ́t*, *drĭndrĭ́t*) that divides it into a men's section (*kāmắl*) and a women's section (*ᵘŭ́m*).

On Hā̆ŭs the ridgepole (*pŏrŏ́mbŭṅḗ*) is supported usually by two poles (*nhū*) standing on the ground. The crossbeam method of construction is rare there and is called *bŭl* = moon. The roof ribs (*ka̋́nū*) are undressed timber, rather irregularly shaped, and 6–15 cm thick. As in Păpítălâî, they are firmly bound to the ridge and the stringers (*būrūvā̆gŏ*), but they do not continue down to the ground via corresponding extensions, but are replaced below the stringers by bars (*sŏ́rŭm*) in the side wall. Rectangular houses have a projecting roof, supported by ribs (*ka̋́nū*), on the gable side. Otherwise, the construction of both these and the oval houses is the same.

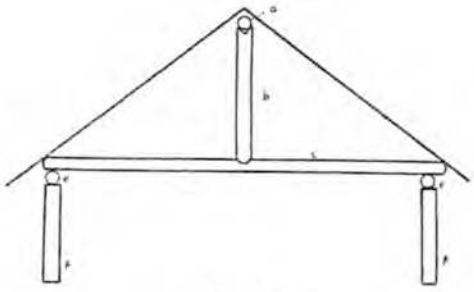

Fig. 149.
House construction according to Dr. W. Müller.

Fig. 150. Roof gable of the chief's house in Drūgŭl.
After a sketch by H. Vogel.

In oval houses in Drūgŭ́l two stringers (*bŭrŭnắn*) lie on two short poles (*nrū*) on each cross side; in turn two crossbeams (*drălắs*) rest on the stringers. On each of the crossbeams stands a vertical support post (*rū*) for the ridgepole (*kĕĕmbŭṅĭ́*). Only in a razed feasting house that was almost round was there a ridge beam support pole standing on the ground. The chief's house has a gable, in whose upper triangle is a filling of a rectangular board with a rectangular, window-like cut-out in the [248] middle and a lower extension board on either side. The ridgepole projects over the middle board somewhat beyond the gable, Fig. 150. In 1908 some twelve poles about three metres high were seen in a circle around a thick seven-metre pole with circular decoration — the remains of a feast house.

On Pónam, in rectangular houses to round houses, the construction is again that of Păpítălâî, with support posts (*hū*) of the ridgepole (*būṅḗ*) on crossbeams (*sōhắl*). The *sōhắl* lie on two stringers (*kăbḗūă*) which in turn rest on support poles (*hū*) about a metre high. The roof ribs (*ka̋́ū*) continue downward into battens (*drŭ́nă*) in the long walls.

In Sā̆hă the support beams (*drū*) again reach down to the ground. From the ridge pole three cross beams (*drlắs*) hang on rattan loops in the middle of the house; firmly bound sideways to the roof ribs (*ka̋́nū*). Two of them pass very closely by the insides of the support beams without being fastened to them. The third divides the room in the middle. All three are situated at a height of two metres, in a house 3.75 metres high. They serve as bearers of a one-metre-wide rack running along each long wall. Horizontal support beams (*trī*), 50–70 cm apart, bear the roof. The first support beams rest on lateral support posts (*kāsa͡u*), Fig. 151.

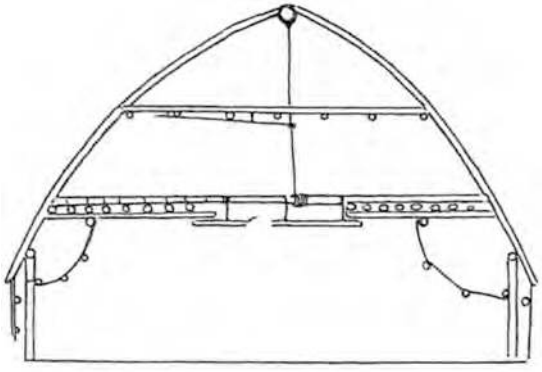

Fig. 151. A cross-section of a house in Sā̆hă.
After sketches by H. Vogel.

Village street in Lŏnĭu. phot. Fülleborn

Village of Ndrĭol. phot. Fülleborn

In the oval houses on Hắrăṅgăn Moseley[324] saw two ridge pole bearers standing on the ground, and a peculiar type of house wall construction: layered out of logs between vertical rows of poles while roof and gable were clad with “grass and cocoanut-leaves”, i.e. with leaf tiles. Inside many houses the floor dropped down about a foot, so that when entering the house people had to go down a step at the door. The bad construction parts[325] mentioned by Moseley were also noticed on Hắrăṅgăn in 1908. Bowed and unprepared beams had often been used there. Quite generally the huts gave the impression that they were less carefully constructed, and many lacked the front gable wall.

The log construction of the long walls described by Moseley on Hắrăṅgăn is also common on houses only 2.25–3 metre high on both the [249] Sĺsī Islands. The logs (*kaû*) were similarly layered between two rows of poles (*pűhŭ*^{k}).

Moseley[326] did not see this type of construction on Sōri, but instead the common leaf tile cladding of the oval houses seen elsewhere. The houses of the Sōri settlement in Gắramaṅ rest on two middle posts (*dū*), two gable arches (*aûŭb*), the ridgepole (*daṅbuṅiṅ*, *taṅabuṅiṅ*), the roof and wall ribs (*baraműsi*), eight side posts (*dű*) and four stringers (*dăbeaû*). Mostly the lower parts of the gable walls are not clad but have extensions (*sŭlű̆g*) from a lathe framework that initially carries the cladding.

On Pĺtĭlu crossbeam construction is customary. A few rectangular houses have on the gable sides either a projecting rectangular shelter roof over the door or an elaboration of this roof by cladding the space below it into a verandah. The gable sides of the oval houses are clad in the same manner, Fig. 152.

The house construction in Műndī is the same. There too there are large clad verandahs on rectangular houses. The rear gable wall of the men’s house on the Pĕlĕmắ hill in Műndī is completely open above and on the left side.

In Bűbi the houses on the ground have only projecting roofs without cladding beneath, on the gable sides.

In Pűe on Lóu Thilenius[327] saw the crossbeam construction on the gable walls in the rectangular men’s house, recorded also by Parkinson[328], and in a second oval men’s house; however, ridgepole bearers were standing on the ground in the middle of the house. The crossbeam did not rest on the ends of the stringers, but was fastened at either end to the roof ribs and was supported in the middle by a board that rose obliquely up to it from the stringer. The crossbeam is called *embrul* according to Thilenius, therefore bearing a name that corresponds with the *bŭl* from Hắŭs. However, in 1908, in a more recent men’s house, the name *kāvē̆nū* was heard for it. Elsewhere too the names for the construction parts bear little agreement with those heard by Thilenius.

	Hamburg Expedition	Thilenius
Ridge pole:	*lắmū kărắṅ*	*embruai*
Support poles of the ridge pole:	*tūtűr*	*kandriol, bandjo*
Stringer:	*părălắt*	*kalitjo*
Support posts of the stringer:	*kắmbắt*	*endru*
Roof ribs:	*ṅűŭp*	*kao*

[324] 1877. p.403
[325] 1877. p.404
[326] 1877. p.403
[327] II, 1903. pp.150 *et seq.*, Plates 7, 8 and 11
[328] 1907. Plate 23

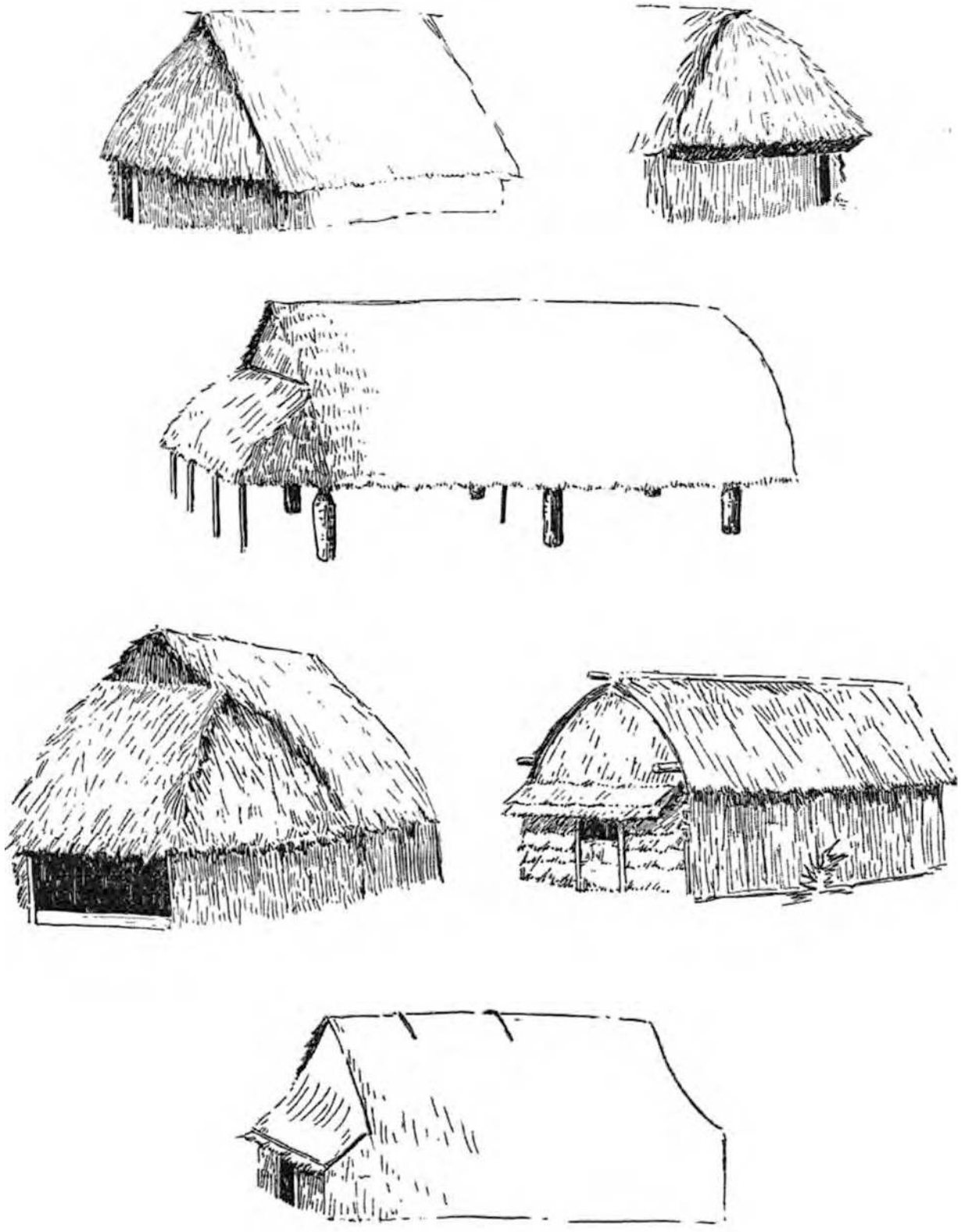

Fig. 152. Pitilu house styles. After sketches by H. Vogel.

Houses on Pónam. phot. Fülleborn

Drum sheds in Púě on Lóu. phot. Fülleborn

The men's house that existed in 1908 no longer had ridge pole supports going up from the ground, but only those on the crossbeams. In the upper gable walls it incorporated vertical battens (*pŏt*) for securing the cladding. [251]

Also the porch was simpler than that seen by Thilenius, resting on the projecting ends of the stringer and supported only by simple, freestanding poles. In contrast with other verandahs it extended right round the house. On the other hand, in 1908, on the upper half all round the walls versatile "awnings" were a surprise: covered with leaf tiles, that you could fold up and hold in place with battens pushed into the ground to make an opening. Also, all the smaller oval houses have such an awning over the door. Since these awnings did not exist at the time of Parkinson's visit to Pűě, they must have been introduced between 1904 and 1908. The old men's house was about 40 m long, 12 m wide, and 8 m high up to the ridge pole[329].

On Pǻlŭăn Friederici[330] saw greatly-extended gable roofs too long to support themselves that had become the roof of an open porch. The ends of the porch were supported by battens, so that they differed from the awnings in Pűě only in not being able to fold down.

In Wălűn on Pāk the oval dwellings and the rectangular chief's house, Fig.153, measuring 16 x 7 metres with a good four metres in height, are of crossbeam construction. In both, oval and rectangular, two stringers rest on rows of side posts; on these in turn are three crossbeams, and on these stand the three bearers of the ridge pole. In the oval house the roof ribs do not come into contact with the stringer, which, as a consequence of the bending of the long walls, is quite far removed from the latter in its middle section, but the roof ribs are bound by other horizontal beams at the height of the stringers. Below these, they continue as wall posts. One particular rib extends on the gable side from the ridgepole as far as the horizontal upper door beams which are supported by two doorposts. In the rectangular house, a further small crossbeam is attached on the gable sides over the crossbeams; it forms the upper offset position of the porch. The porch, mainly formed from vertical battens, and with its lower horizontal edge beam, is borne by four free-standing support posts in front of the door, with no cladding between. [252]

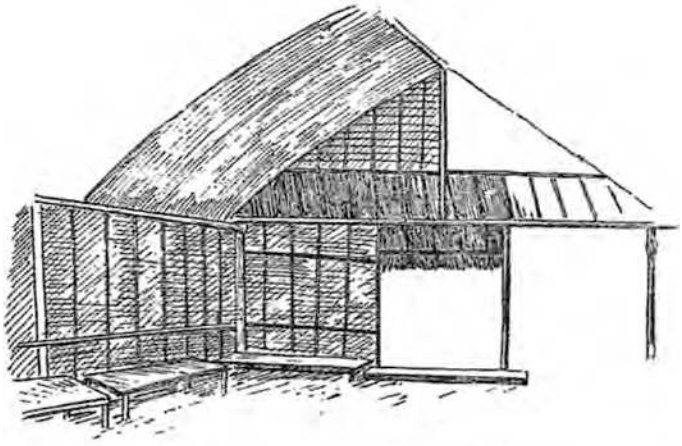

Fig. 153. Chief's house on Pāk.
After a sketch by H. Vogel.

In Ndrĭol on Lămbŭtjo the support posts (*kăndrĕdrĭŭ́l*) of the ridgepole (*kŭ́yŭn ḅŏlŏmḅŭṅé́*) stand on the ground. On two rows of smaller posts (*păs*) rest the two stringers (*tyōsǻ́l*) on which again crossbeams (*bŭl*) lie; these have no connection with the ridge pole supports. The ribs (*kǻ́ū*) of the roof continue over the stringers down the wall as battens (*păs*). The houses are rectangular and all have a clad verandah. Among the Mătănkŏ́l of Pătăndrŏ́, Tsălăṅgŭ́p and the neighbouring villages, the oval building predominates; this might however have the same construction. Short gable posts used in house construction are called *ndrū* on Lămbŭ́tjo according to Thurnwald[331].

In the interior of the main island the biggest building in Boltzal is a round house with a wall barely two metres high, a low entrance and a conical roof resting on few support beams; it covers

329 Parkinson, 1907. p.364
330 1912. p.78
331 Berlin Museum VI 17621

an area twelve metres in diameter[332]. In both Bojang and Savoi there is a similar building in each. In Bojang its floor is stamped clay. The larger dwelling houses in Bojang have a conical roof while the smaller houses are elongated[333].

The bachelors' house in Ndrabui is a rectangular building. On each long side, a long, narrow gangway-like sleeping room is separated off from the middle room; it can be reached from the middle room only on the gable sides[334].

Pole Houses

The poles for pole houses over the water are bored into the ground by heavy labour: a rope is laid in a simple loop around each vertical pole; each end of the rope is fastened to a canoe. By pulling the rope to and fro from both canoes they bore the pole slowly into the ground using the drilling principle.

For pole buildings on land, the poles are dug into the ground exactly like the posts for houses standing on the ground.

The pole buildings in Păpítălâî rest on two rows each of 5–6 poles, with a notched upper part, each of which carries a stringer (*lōwŏhāndō*). Crossbars (*pără mbŭlŭmbŭl*) are laid 70–80 cm apart over the stringers to form the floor (*pără*) and are firmly bound with vine cords; thin, somewhat rickety little boards of palm wood are laid side by side on these. Laid over the crossbars in the middle of the house, parallel with the long walls, is a four-sided, 35–50 cm thick, hewn tree trunk (*pălĭtyŏl*), 18 metres long; recessed into it are the support posts (*lămū kărắn*) of the ridgepole. The actual floor ends under the two-metre-long verandah, and is replaced by a raised platform that [253] contains the rectangular door opening which is accessible from a second, lower, platform (*pălĕhắl*) somewhat at mid-height, with a step (*ndĕl, dĕl*). The roof built on ribs is reinforced by diagonal bars (*kăṭărḗă, mḥūlēī*) from the ridge end to the middle of the roof on the floor, so that the ribs do not slant to the sides. In all aspects the gable walls and verandahs resemble those of the houses built on the ground.

In Mĭndrűn, support posts (*lamu karắn*) for the ridgepole (*bărắmbuṅḗ*) likewise stand on the middle stringer (*bắtityól*) of the platform. One of the crossbeams (*kắlaû*) carried by the house poles crosses a support post and is joined to it by binding at the point of contact. However, this is true only for the gable sides; in the interior of the house the ridgepole bearers stand on the crossbeams. These interior crossbeams rest either on the house poles or directly on thinner posts that arch up from the platform and carry a stringer, on which the crossbeams initially rest. At the height of the crossbeams, the roof ribs start. Only on the gable sides do they begin at the platform, at the end of their crossbeams. Above the crossbeams of the roof construction there are further crossbeams (*embŭl*) between the roof ribs, for an implement platform.

An alternative construction on Bird Island Bay has about six ridgepole bearers that stand in the water between the house poles, and lead through the platform. Roughly at mid-height between ridgepole and platform, a beam is attached to the ridgepole bearers, parallel with the ridgepole. The actual house poles reach only to the platform and support it, but are not involved with the house frame above the platform. On the other hand, the ribs begin at the two outer stringers of the platform. Diagonal rods reinforce the lower part of the roof.

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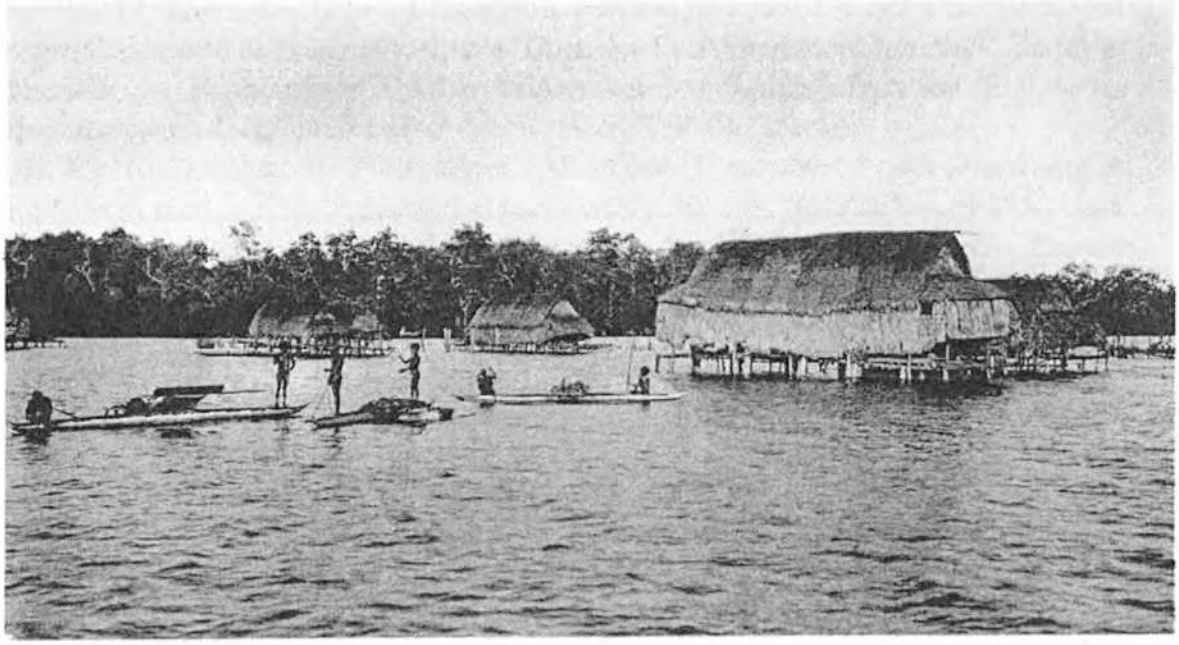
[332] Leber, 1923. p.202
[333] Leber, 1923. pp. 262 *et seq.*
[334] Leber, 1923. pp. 201 *et seq.*

Framework of a pole building near Bird Island Bay phot. Sarfert



Pole village of Tâûī. phot. Fülleborn

In Kyĕlâûắk the ridgepoles (*pŏrŏmbŭṅé*), two of which are attached one above the other, rest on support posts (*lắmū kărắṅ*) that rest on crossbeams (*kālâû*) or on the stringer (*pătītyŏ́l*) in the middle of the platform. This type of construction thus resembles that of Mĭndrŭ́n. The platform rests on stringers (*būkēkētyŏ́*) that are covered with transverse poles. There too, above the actual crossbeams, between the roof ribs (*kắŭ*), is a tool platform created by wider crossbeams (*ĕ mbŭ́l*). The fore platforms and verandahs (*kălibắp*) are built as in Păpítălâî.

Built exactly the same, are the pole houses in Mbŭ́nâî, (from where the inhabitants of Kyĕlâûắk came), and in Tâûī[335], Pắrā[336], and Lắlā. On the other hand, they are also familiar with the construction style of Bird Island Bay. Margaret Mead[337] gives 30–50 feet long and about one third of that width, as the average size of the pole buildings of the Mắnus. There too we again come across the verandah- and fore-platform arrangement of Păpítălâî. In [254] one house that stood in the sea off the river village, another, lower, platform was seen on its own poles, in front of the front platform that began right at the second pair of house poles. On the other hand, a house in the river village had only a beam suspended by ropes, to ease climbing up, instead of a front platform. In Mbŭ́nâî and Lắlā, verandahs and any cladding of the gable sides are missing on the bachelors' houses, although front platforms exist. Otherwise, every house has a verandah, whose shape varies from a simple porch to a clad front structure with its own two poles in the water. The Lắlā verandah doors carry a moveable awning, like the houses built on the ground in Pŭ́ĕ on Lóu. Margaret Mead in Pắrā found the interior of the houses divided by mat walls into individual sections for relatives, who are not allowed to see one another[338]. Connection with the land is made by jetties, which consist of stringers over crossbeams carried by pairs of poles.

In Lōkŭ́l on Lămbŭ́tjo the building style is that of Bird Island Bay, with ridgepole bearers standing in the water and a stringer connecting them. There too the house poles carry only the platform.

Rickard[339] mentions houses on Uainkatou rising eight feet over the water on poles that are "driven into the rock". One of the houses had 30–40 poles, and was 50–60 feet long, 20 feet wide, and 10 feet high. It had a large opening on each gable side. The platform, made from "the thick outer shell of a palm" was accessible by a stair from the lower front platform.

The pole houses built over land on Pónam, Pāk, Pĭ́tĭlu, in Bŭ́bi, Mŭ́ndi etc., never have ridgepole bearers that begin right on the ground; their ridgepole bearers stand on crossbeams — corresponding with the predominant style of houses built directly on the ground. On Pāk, according to Krämer, the ridgepole bearers are called *rumuan*; the platform, like the whole house, *balehal*; the interior posts *dubin*; the round posts *kala*; and the round bars *hololа*. In Mŭ́ndi the crossbeam of the roof frame coincides with that of the platform, while on Pónam and in most other pole houses on land the platform lies under the crossbeam. The pole houses on land are accessible by a stair that begins under the house or verandah and leads to an opening in the platform. For protection against rats, round discs of wood, often with relief carving and painting, are pushed onto the house poles[340].

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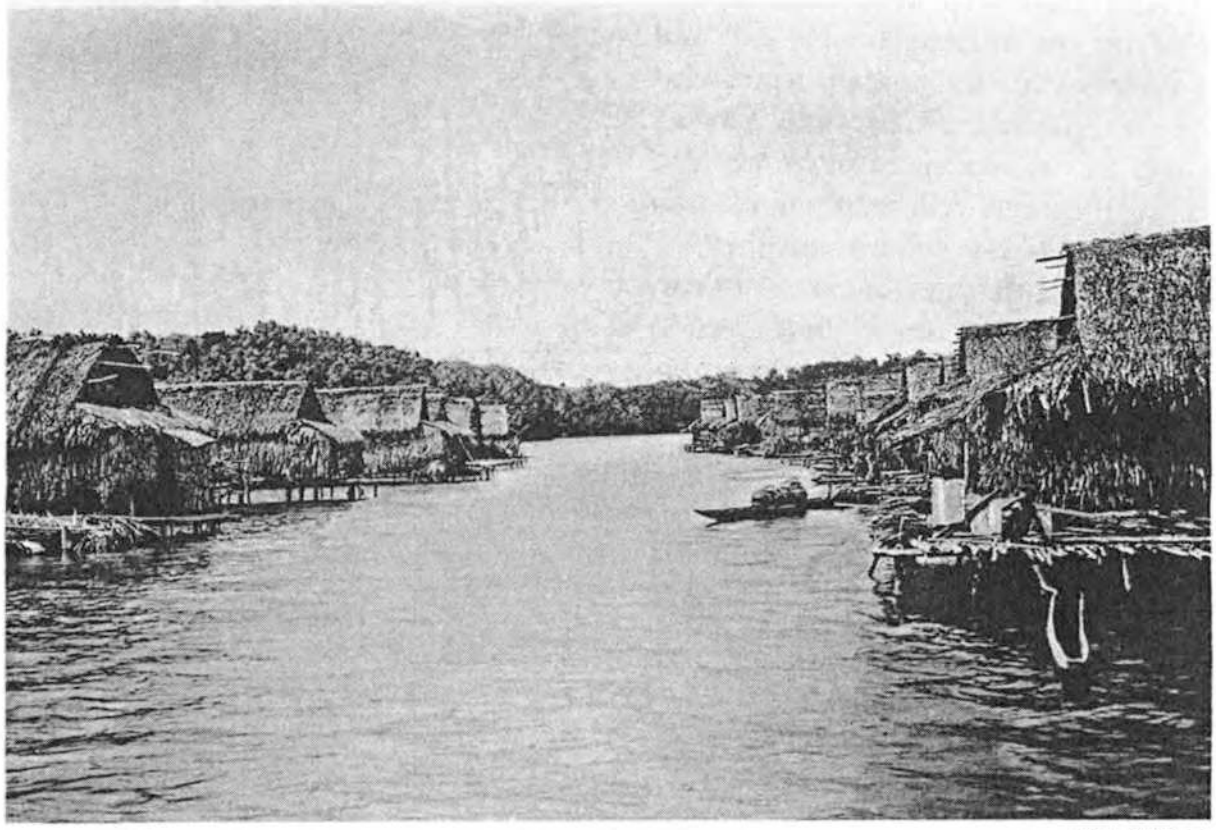
335 Vogel, 1911. pp. 121 *et seq.*
336 Edwards, 1931. Figure. pp. 552 *et seq.*
337 Edwards, 1931. p.552
338 Edwards, 1931. p.552
339 Ray, 1892. p.5
340 Miklucho-Maclay *Izvestia* 1878

Pole village of Taûī. phot. Fülleborn



Pole village of Lálā. phot. Fülleborn

In Ndrabui Leber[341] saw a pole house for the wives of the chief "with a substructure over two metres high whose posts are clad on the outside with plaited leaf-work." The main platform was elevated near the gable ends. [255]

Doors and Windows

The door openings of houses built on the ground are of rectangular and oval shape, and in pole houses they are usually on the gable side and, in fact, in the centre when the house has ridgepole bearers on crossbeams, and to the side when it has ridgepole bearers rising from the ground.

In family houses, pole houses, and chief's houses in Păpítălaî they distinguish men's doors (*tšăṅā́* or *tšăṅā́ măsărăn*) which women are not allowed to use, and women's doors (*tšăṅā́ kārūt*). The bachelors' house has only men's doors. The house of the chief Pō Mĭ́nis, divided by a cross-wall into a men's section (*kāmắl*) and a women's section (*ᵘŭm*), has, in addition to the women's door on the gable side, a side door (*tšăṅā́ drăgŏrŏ́n*) for women and a smaller side door (*mărătšĭ́p*) that serves as an entrance for the pigs into the women's section. In front of the doorstep (*tyăn* or *tšăm*) at each main door is a big, hewn beam as a sitting sill (*nḍa͡ū*), Fig. 154. A pair of windows (*tĭp*, *tyĭp*) is found on the gable sides over the verandahs.

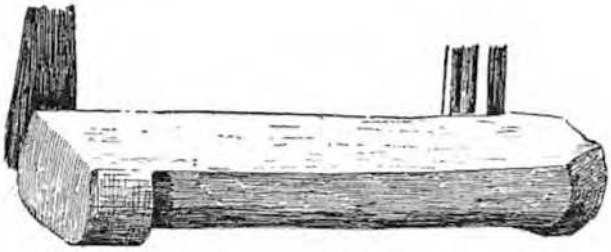


Fig. 154. House doorsill *cum* seat. Mūndi. After a sketch by H. Vogel.

On Hā́ŭs, among the doors (*asăṅā́*) they differentiate doors that lead into the bush (*kārūt*) and sea doors (*măsărăn*). The place in front of the door is called *lā́gēū* or *lā́kēū*. The sills (*kăntsā́ṅă*), serving sometimes as a seat, always lie in pairs side by side behind the doorposts (*nhū*). Horizontal beams (*sā́lĕp*) between the doorposts, below the horizontal door beam (*kēĭ́mărăntšā́ṅă*), form the door itself. These beams are fastened to a vertical bar (*nă̆* or *būhūtsĭ́e*). Also on Hā́ŭs, there are more secure door fasteners of horizontal beams reinforced by three vertical bars.

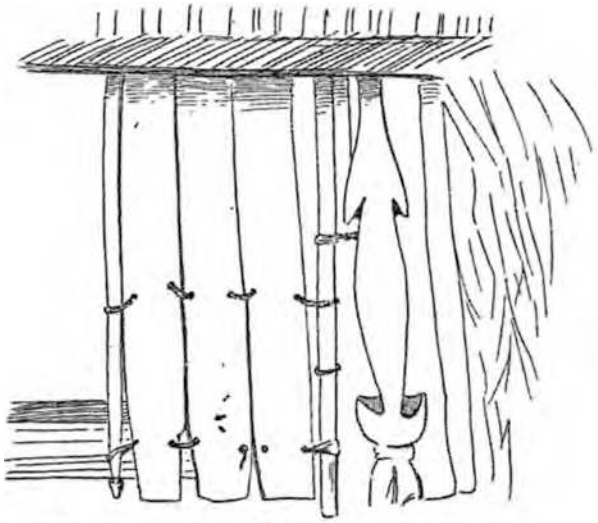


Fig. 155. Right half of the door of the house in Drūgŭl. After a sketch by H. Vogel.

In Drūgŭl each house has only one door (*pŏnkḗū*), with a doorstep (*pĕrĕlĭ́*), door posts (*nrū*), and a crossbeam (*bŭ́ă mărăṅkā́ᵘŏ*) above. [256]

Their doorposts are often incised, and, among other things, have the shape of a fish, or a carved crocodile head, Fig. 155. On the doorposts, or on a vertical beam attached on either side, are two or three vertical boards that are sometimes painted; often there is a further beam attached in such a way that between both rows of boards the actual door opening stays open. The boards are bound together with one another, and with the

[341] 1923. p.202

beams, by cords passing through holes drilled in the boards. There too, horizontal bars (*drăndrā́k*) on a vertical bar (*pătu^{c}ā̆s*) provide the door closure.

On Pónam the doors (*sănă̆ip*) of the ground-level family houses are arranged alternately. On the front gable side there are two doors (*pūēhâu*) that serve men and women equally, and on the rear gable wall is a third door (*kā́ū*). On the oval men's houses, in addition to a door in each of the gable walls there is a door (*sanay mĭnĭhĭ́n*) in one of the long sides. In front of the doorstep (*lăyă̆n*) rise the doorposts (*hūĕvā́hâu*), which carry a crossbeam (*kâī mărăvā́hâu*). Horizontal pieces of wood laid over the doorstep form the door closure.

In Sā́hă there are doors (*pūhĕlé̆ū*) in both gable ends. A beam (s*ūhĭ́k*) borders them above. There is no doorstep, but the doors lead out onto a firmly-stamped clay platform (*pūnĭ́k*) in front of the house, which is decorated with shell inlays (*pūēlŭ́k*). The door itself is formed by a board with a hook extending from the side, hooking into an eyelet on a doorpost, Fig. 156.

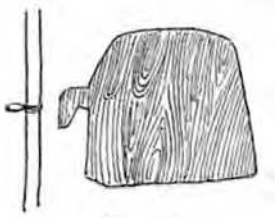


Fig. 156.
Door of a house in Sáhā.
(see Fig. 150)
After a sketch by
H. Vogel.

On Hắrăn̆gă̆n, there is a low door on one or both gable ends[342]. Often however the entire front gable wall is completely open.

On the Sĭ́sī Islands the door is attached laterally on the front gable wall. In place of a door sill they have five or six pieces of wood layered between two pairs of thin poles, corresponding with the building style of the house walls, acting as a sill. A plaited mat of palm fronds with perpendicular bars added to the edges for stiffening serves as a door closer. The bachelors' house on greater Sĭ́sī Island has, in addition to a door on the gable side, a wide door on the long side turned away from the bush.

The same style of doorstep construction of several pieces of wood is found in Mŭ́ndī, although in other houses there is also a doorstep made from a horizontal hewn block of wood lying in front of the door posts and serving at the same time as a bench seat.

On Pĭ́tĭlu the doors have a doorstep consisting of pieces of wood behind the door posts, or of a single thick beam that in some cases is painted with triangles, [257] in the same position. This beam can however be altered into a type of bench seat by logs laid underneath at either end, and it is then placed in front of the door posts. They close the doors with horizontal palm frond ribs held together by two perpendicular ribs. As well as a simple gable-side door, the oval canoe shed has a second door that occupies almost the entire gable side and forms a convenient canoe outlet.

Again, in Bŭ́bi and Lŏ́nĭu, in ground-level houses a simple bench seat in front of the door is customary as a doorstep. In the bachelors' houses there is a wide sea door and a narrower land door[343].

In Kĕtyĕ́ about three pieces of wood layered between the doorposts and vertical bars in front, form the doorstep.

In Daptou in 1932 Bühler saw on both right and left on the men's house, a bright round wooden disk with a round hole in the middle, resembling a rat protection disc, mounted as the frame of a peephole. These discs were called *possuai*.

On Lóu in Pŭ́ĕ they distinguish men's doors (*mārānŭ́m*) and women's doors (*pūlēsŭ́^{k}*). The doorstep consists of a beam in front of or behind the doorposts or even between them, or of two parallel beams before and behind the posts. In front of each door is a small rectangular place surrounded by larger stones. Horizontal bamboo staves form the actual door (*kărăḿ*). A swing-up awning covered with leaf tiles is found on each door. In contrast to the oval houses, which have

342 Moseley, 1877. p.403
343 Miklucho-Maclay, *Izvestia* 1878

only one door on the gable side, the bachelors' house has a door (*kŭlūnŭ́m*) in each of its four walls. Awnings run round the entire length of the walls, turning the upper part of the walls into a long row of windows when they are raised.

On Pāk bench seat doorsteps are universal. The doors (*panum*[344]) bordered by two posts (*do*[345]) are always found on the gable side. The projecting roof above them is called *tódjo*[346]. The bachelors' house and larger dwelling houses have, besides the main door, a second door on the rear gable side. The pole buildings have a right of way (*dámuan*), consisting of a few raised boards[1229] on the ground in front of the door.

On Pó͡am only one door (*kŏlŏn dsăl*[347]) is customary for each house.

In the Mătănkŏ́l settlements around Pătăndrŏ́ on Lămbŭ́tjo bench seats or layered pieces of wood form the doorstep, and horizontal palm frond stalks firmly bound to two vertical staves form the actual door. In Ndrī́ol a similar door closer and a doorstep (*kă̆nkătắm*) about 40 cm high [258] of pieces of wood or two beams, one on top of the other, are customary. They distinguish a front and side door (*pŏ̆ĕmpălăkḗū*) and a back door (*kūīnŭ́m kătăm*).

As doors, the pole buildings have a rectangular opening in the raised platform over a lower fore-platform on the gable side. There, window openings also act as doors, except that unlike the bachelors' houses in Mbŭ́n͡ai and Lā́lā, absolutely any type of gable wall cladding is missing. The manhole can at times be closed by a type of hatch[348]. In Lā́lā awnings are found once more in front of the windows. Side windows are found most often in T͡auī, and are often only an interruption of the leaf tile cladding of the long walls or in the verandahs immediately over the floor of the platform, with a surround of staves. However, in the river village of T͡auī a window was seen in the long wall of a house near the verandah, with an awning that could be tilted up with the aid of a stave placed between it and the window frame, Fig. 157. In Lŏ́nĭu one pole house, in addition to the lower manhole present in all pole houses, had a big opening in the closed verandah, and another big window under the roof of the unclad verandah.

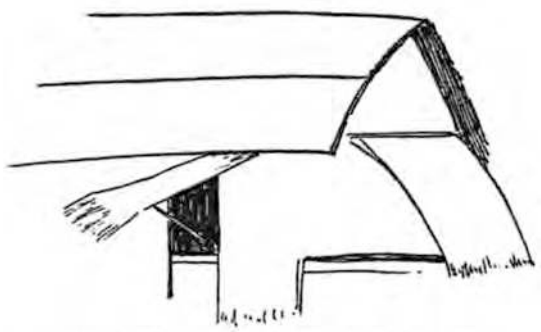


Fig. 157. Window, in the river-village of Taûī. After a sketch by H. Vogel.

Margaret Mead[349] found a difference between men's and women's doors in several pole buildings in Pā́rā̄. The significance of this arrangement became apparent when for example the son-in-law enters the house through one door at the same time as the mother-in-law, whom he must not meet, leaves the house through another door.

Stairs

They reach pole houses in the water via one or two platforms on the gable side, located in front of the house and somewhat lower than the floor. A stairway leads from there to the doorway

344 According to Krämer
345 According to Krämer
346 Dempwolff, 1905. p.210
347 Dempwolff, 1905. p.210
348 Miklucho-Maclay, *Izvestia* 1878
349 *Natural History*, 1931. p.70

on the main platform. On one house in the river village of T͡aūī a forward platform was missing, and with it the stairs, and, to enable climbing up to the house, a beam was suspended horizontally from two rope loops, providing a rung, Fig. 158.

Fig. 158.
Step up to a house in the river; lacking a platform
After a sketch by H. Vogel.

On pole houses ashore a similar stairway leads from a tree trunk to the door opening. It is positioned at a slight angle and provided with 3–5 notches or [259] projections, to some extent duplicated one above the other, as rungs. Simple stairs are only notched, round tree trunks; on the other hand, better steps are four-sided, painted red, and augmented by painted relief carving. Furthermore, their upper end bears decorations such as a curve where, as in many bowl handles, there is the stylized figure of a four-footed animal, with a bird figure sitting on the actual end; or a three-dimensional figure of a man in war costume, carved from the same piece of wood; a woman's figure with a child on her shoulders; or just a carved human head. Occasionally there is another three-dimensional figure on the reverse side, in the shape of a crocodile crawling upwards. On Hắrăŋgăn the stairs are called *bunioṅ* and in Păpítălâî *ndĕl* or *dĕl*. Occasionally stairs like these are also used on pole buildings over the water. However, the Mắnus do not make them themselves, and we were expressly told in Lắlā that the carvers were Ŭsĭâî, Fig 159, (cf. Plate 23, Fig.2).

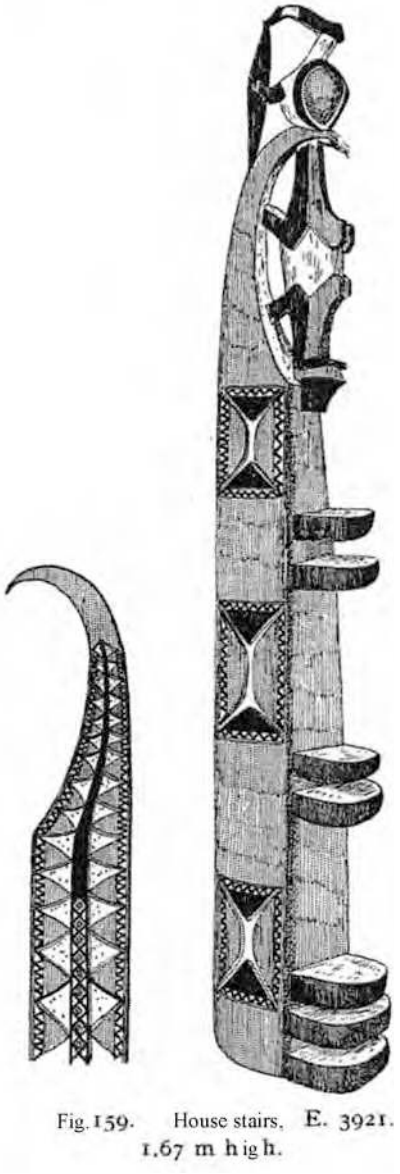


Fig. 159. House stairs, E. 3921. 1,67 m high.

In the odd stairway an individual human tooth is inlaid[350].

Stairs in ground-level houses are rare, and only in Sắhă was a portable ladder (*drắl*) seen, leading up to a trestle (*kắbā*) on the side walls in the house.

Tree Houses

Tree houses were said to have been found by the *Planet* in Lukús 1908. However, repeated ground searches of the area and its hinterland revealed no evidence. Therefore the report of the *Planet* crew could be based on an error. [260]

Children's Houses

On Pónam, between the pole building and the ground-level houses stood a small house designated as *părắ*; it consisted of a simple roof without walls and was said to be intended for a little girl.

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350 G. Umlauff Collection, Hamburg

Among the houses on Pǐtĭlu was a small house little more than one metre high that was built hemispherically out of staves and was perfunctorily covered with palm fronds.

Store Houses and Shelving

Simple storage frames on Lóu, in Ndrĭol, on Hắŭs etc., are built out of four forked posts pushed into the ground with long lengths of wood on every pair of them and a layer of cross pieces over the lengthwise staves. The platform is roughly at a man's height. On Hắŭs a second, lower frame was mounted on separate posts.

The frameworks on Pāk and Lóu and in other villages transformed into storage sheds by the erection of a long forked post in front of the middle of both narrow sides, supporting a ridge pole. The roof over it is supported at each of the four corners by a few longer posts. In such storage sheds, resembling almost a pole building, they store drums and other wooden tools, (cf. Plate 18) while the simple platforms without a roof are intended for the storage of foodstuffs, mats, etc.

A variation of the simple framework was seen on the larger Sǐsī Island. On pairs of forked posts with cross beams lay long stringers with sago packets hanging from them. However there was no platform.

Even simpler, in Drūgŭl coconuts were stored hanging on poles.

Pens

Pens are built only for pigs. In Lŏnĭu they are erected out of thick, round wooden beams, shaped slightly concave at the ends, in the log cabin building style, and then laid over one another in such a way that the ends of the beams cross over, and appear with the concave parts on top of one another. The lowermost beams are held in position by small pegs pushed into the ground out in front of them. Through the log cabin construction method it comes about that a gap appears between every two beams on the same side, through which the people can observe the animal in its stall. A roof is missing, however to protect the pig from the sun, palm leaves are quickly produced, and laid over the uppermost beams. [261]

In 1908 on Hắŭs a little house two metres long and about a man's height, perfunctorily covered with leaves, with a low entrance on each of the gable sides, was used as a pig pen.

In the pole villages of Lắlā and T͡auī, the pig pens are erected on poles that carry a platform, with walls on top, consisting of little pieces of wood stacked between the upper ends of the poles, and somewhat thinner additional poles, crossing over one another in the log cabin style on the roof of the pen. Since considerably thinner pieces of wood are used for the walls than in Lŏnĭu, the gaps between them are also smaller. The roof is missing, but can be constructed from palm leaves as in Lŏnĭu.

In Lắlā turtles are kept in the water in small enclosures built from poles pushed into the ground in a circle and linked with a thick cord.

Bridges for Bodily Functions

In Bojang, Boltzal, and Savoi in the interior of the main island, Leber[351] came across a structure, secluded from the houses, that was not seen anywhere else. It was explained as a special site for the performance of bodily functions. At one precipitous part of the ground a narrow bamboo jetty, widening towards the end, is built out over the slope and fitted with a handgrip at the end.

House Decoration

The most splendidly decorated building in the Admiralty Islands was the bachelors' house in Pűě on Lóu[352] described by Thilenius[353]; in 1908 it no longer existed. Above its verandah roof, in the gable triangle, it bore "a type of plaster" that was painted with black diamonds surrounded by red lines on a white background, and was covered with a lattice work of staves.

The doorposts carried a carved human face, and the ridgepole bearers and long wall posts had the shape of a fish whose tail fin soared upwards. There was an additional painted relief on the lower part near the ridgepole bearers. The roof ribs also carried reliefs in the form of crocodiles, birds, daggers, iron axes etc. In addition the bachelors had pig and possum skulls, turtle eggs, etc. hanging on horizontal bamboo rods.

A house interior decoration, animal skulls, is fixed to the roof poles or on a hanging platform; also in the simple houses of married men. That decoration serves as a memento of festive meals. Instead of pig skulls [262] a perpendicular rod can appear out of a house beam where they stick a little piece of wood for every decorated pig. Furthermore, in an interior decoration in Műndī there served, in a chief's house, rattan loops strung with pig's teeth, hanging down from a roof beam, and, after the death of the owner, the loops hung alone as a house decoration.

Fig. 160. Doorposts 1134[1]. 39 cm high.

Moseley[354] found the doorposts of bachelors' houses ("temples") at Nares Harbour carved out as male and female figures; and in the house of the Păpítălâî chief Pō Sĭṅ, destroyed in 1900 Schnee[355] found ridge pole bearers "which turned into the artistically carved head of a crocodile". Other ridgepole bearers of this house presented a human figure, with a crocodile turned downward, above it.

Leber[356] found the round house in Savoi decorated with rich red-on-white painted carved ornaments frequently representing the iguana.

In Drūgűl in 1908 doorposts were found in a house in the shape of a fish with the tail fin pointing upward on a short cylindrical section, and others with a bulging middle section, with downward-pointing pegs above it on similar upwardly-pointing pegs, or a disc on a thickened foot piece, Fig. 160.

Also, the stairs of the pole buildings show figurative decoration.

To go with the three-dimensional design of the decorative posts there is almost always painting, and usually relief carving as well. Kölle in Boao heard *u-ā́ti* as the name of a carved house post.

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351 1923. pp. 203 and 265
352 Cf. also Parkinson, 1907. Plate 23
353 II, 1903. pp. 149–153
354 1877. p.404
355 1904. p.202
356 1923. p.264

On Hắrắṅgắn Moseley[357] saw a skull “having an ornament in the nose” fastened with a rod pushed through holes in the temporal bone, on the gable of a house, above the door.

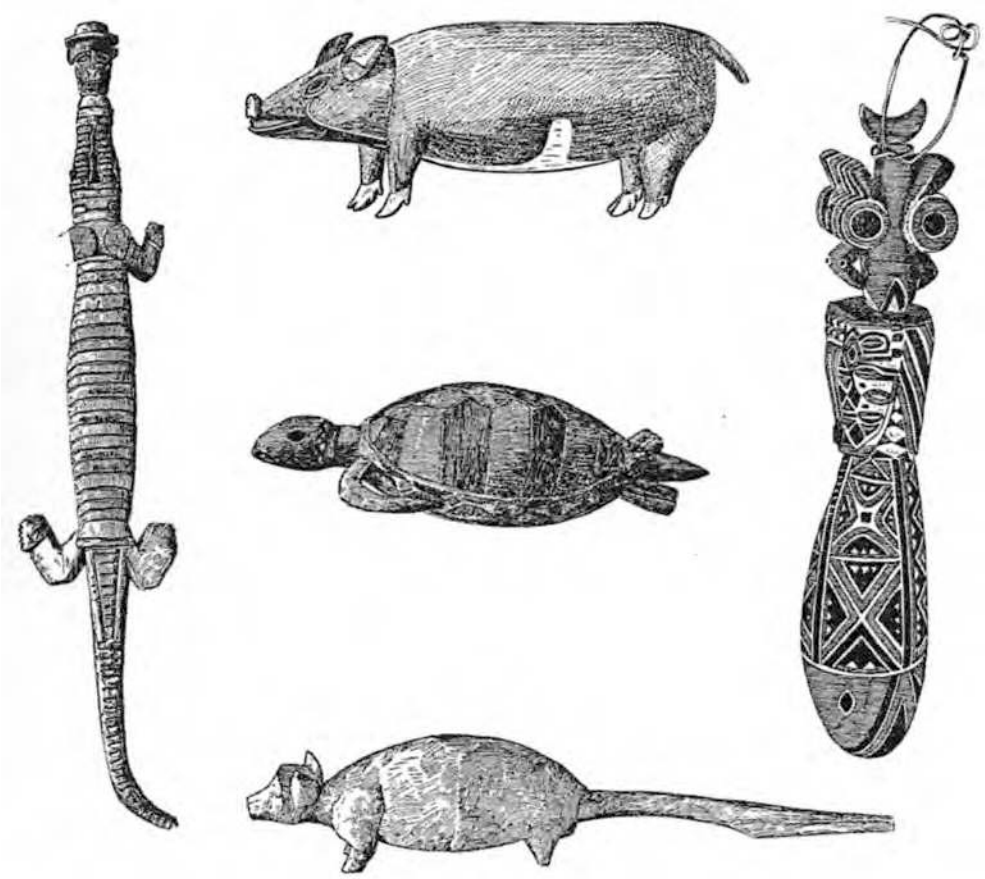

Fig. 161. Carvings

3330[I], Crocodile. 64 cm long — E. 3528, Pig. 82 cm long
Stuttgart IC. 2746, Turtle. 30 cm long — E. 3529, Rat? 49 cm long
11. 88:16, Fish and Bird. 34 cm long

At feasts in T͡aûī, carved figures over 1½ m. long representing a crocodile (*bŭaî*), are fixed upright to the gable (cf. Plate 23, Fig.18). After the feast they lose their value. Other naturalistic carvings, in the form of pigs, possums, turtles etc., usually with relief decoration and painting, likewise serve in T͡aûī and in other villages, particularly those villages on the south coast of the main island, as house decoration for feasts. For example, in Kyělâûắk in 1908, a crocodile figure with a human head in its jaws was found as a “dance carving”, Fig. 161. Also, in Iringou Bühler discovered a flat, painted bird figure (*driji*) on the front roof of the men’s house and, hanging on the front roof of a house in Drabu, a round, perforated painted wooden disc (*kiei*). Further house decoration in Lắlā, on Pāk, and in other villages are wooden “wind vanes” made out of a trapezoid board (on Pāk *bálahan*) from whose narrow [263] side a narrow extension branches off, with a bird sitting on its widened end; for example, a hen (on Pāk *guhắ*), or a bird of prey holding a turtle or similar in its talons. In addition a quadruped animal shape may appear on the narrow side. The wind vanes are carved in relief and painted, and are fixed in such a way that the extension with the bird figure projects horizontally, Fig. 162. According to the people of Pāk, these are made on

[357] 1877. p.415

Lămbŭtjo[358]. *Amphipera* shells on the gable serve as decoration on several bachelors' houses [264] (in Bŭbi among others[359]). Among the Mănus in Pā́rā̄ and its surrounds, it is a prerogative of the chief's family to mount them on their house[360] (cf. Plate 23, Fig. 3).

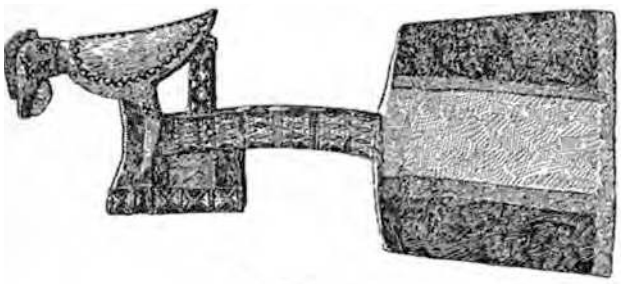

Fig. 162. Weather vane
Stuttgart List 1247 J. N. 167. 63 cm long.

Finally, among the house decorations you have to include the rat protection boards on the storage frames, which form a pierced wooden disc and is often carved in relief and sometimes openwork as well, and painted white, black, and especially red. Several rat protection boards further display carved extensions in the form of a pair of birds. In Dapton in 1932 Bühler saw just such a bright disc (*possuai*) on the right and another on the left of the men's house, affixed as the frame of a peep hole.

Partitioned Areas in the House for Widows

On Lămbŭtjo[361] and on Bird Island Bay people build a cell-like, partitioned area for widows in the house; it has an open entrance and a fireplace.

Shelving in the Houses

Space in the family houses and women's houses is often greatly narrowed because of a shelf standing in the middle. In the house of the chief's son on Hắrăn̓găn the shelves were 2.25 m. long and 1.50 m. wide, while the entire house was 3.0 m. high. It had two half-landings, 1.25 m. and 2.0 m. high, and under it stood a further shelf for smoking fish. The platform-like shelve are fixed to the ridgepole bearer posts, and serve for storing foodstuffs and tools[362].

Fig. 163. Three-shelf storage unit. Păpítălā̂ī.
After a sketch by H. Vogel.

In Păpítălā̂ī and on Pāk there are even three-storeyed storage shelves on the ridgepole bearers, Fig. 163. They are secured at the top, and in Păpítălā̂ī they are protected against rats from above, by oval or round, to some extent carved and painted, boards. Each platform rests on a short crossbeam fixed to the post; the ends of the beam connect long pieces of wood. [265] The long pieces of wood in turn have two crossbeam connections under them, and above them further lengthwise sticks are laid as the platform. The four corners of

358 After Krämer
359 Miklucho-Maclay, *Izvestia*, 1878
360 Mead, 1931. p.226
361 Thurnwald, 1910. p.132
362 Moseley, 1877. p.403

each platform are connected by a cord with those of the next, and, between the middle and lower platform, pieces of timber or boards are inserted one above the other in loops of the cord on the narrow side, as a sidewall.

On such shelving in the women's houses in Pűě, on Lóu, Thilenius[363] saw "pots of every size, baskets, water containers, and plaiting projects in process, such as baskets, pouches, aprons". Foodstuffs that were probably destined for the next meal were stored on the ground. Also, in Boltzal Leber[364] found a "stand for pottery".

In the men's houses the shelves are much smaller, and are usually replaced by shelving hanging down from the roof beams, or at least supplemented by it. They are similarly bound together by cross staves and lengthwise staves and carry the men's needs, for example betel instruments, carry bags, but, above all, spears[365]. In Păpítălâî such hanging frames are called *kāĭndrŏ́t* or *paî*, and in Tăǹ *klindrot*. In Păpítălâî a frame for sago is also called *kāĭndrŏ́t*. On Pāk, according to Krämer, shelves above the door are called *bára* and those on the side walls are called *banebi*.

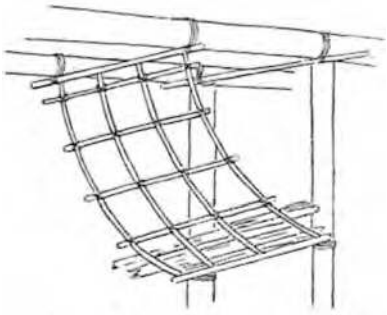

Fig. 164. Rack for storing firewood
After a sketch by H. Vogel

A simple hanging frame in Műndī consisted of two lengths of wood that were bound together at one end by a crossbeam. Loops were attached at the two cross-over points that hung down from the roof beam. The two free ends of the lengths of wood were, on the other hand, simply stuck between the roof poles so that they hung horizontally.

A special kind of shelving is found in Drūgűl and Sā́hă. In Drūgűl a pole is firmly bound horizontally on any two cross beams of the house construction and on two wall posts, parallel with the long side. Both poles connect four curved pieces of wood that in turn are united by three wooden cross pieces into a type of fodder rack in which firewood is stored, Fig. 164. In Sā́hă a longer rack (*kā́bā̄*), constructed in the same manner, extends to the two long walls; it is used for storing pots, bowls, spears, etc. It is erected with a moveable ladder (*drăl*). Smaller rack-like frames, like the fodder racks in Drūgűl, are called *nŏkŏ́*. In addition there are hooks (*drĕlĕkŏ́*) suspended on cords from the roof beams, used for hanging baskets, pouches, and other items. Instead of hooks, the Ndrawa people [266] and other Ŭsĭâî use the lower jaws of pigs with big tusks and a *Parinarium* resin coating for hanging baskets of skulls[366].

Finally, in Sā́hă clay pots are stored with their opening downwards on a rack made from three transverse poles with five lengthwise poles on top, secured one metre below the roof beam.

Platforms made from lengthwise staves and cross staves in the roof space at a man's height are particularly common in pole buildings in Mĭndrűn, Kyĕlâûā́k, Pā́rā̄[367] and other villages on the south coast of the main island, and on Takúmal[368] and Uainkatou[369] and serve for storing all sorts of equipment and weapons. In Lā́lā clay pots intended for export are stacked on them. Occasionally however, several such platforms are fixed one above the other.

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363 II, 1903. p.148
364 1923. p.202
365 Thilenius, II, 1903. p.149
366 According to A. Bühler
367 Edwards, 1931. p.552, Fig.
368 Schnee, 1904. p.163
369 According to Krämer

Often weapons and equipment are hung on posts and ribs of the roof without any other contrivances[370]. This is true especially for the decorated wooden bowls in which the Ŭsĭâî of the main island store skulls and small valuables. These bowls are also secured to the posts of the men's houses there[371].

Fig. 165. Hanging apparatus 637[I]. diam. 35 — 41 cm.

In Sā́hă smaller utensils are stored on a shelf consisting of a ring about 35–41 cm in diameter, interlaced with strips of bast fibre crossing at right angles; the ring hangs on two arches held in place higher up by a second ring, and wrapped by a hanging cord at their point of crossing over, Fig. 165. Similar shelves with three consolidated hanging cords above, are called *kabubū* on Pāk[372].

Fig. 166. Hanging device, after a sketch by H. Vogel.

In order to hang pots and baskets on the horizontal beams of the house structure, in Boltzal they make use of a hanging of coconut fibre strings near the fireplace[373]; and on Hā́ŭs they use a contraption made of two rattan rings [267] fitted with four vertical cords all knotted together above and below the rings. A strong, rectangular piece of a sago palm frond sheath is fixed above the whole apparatus as anti-rat protection; the hanging cord passes through this, Fig. 166.

Similar rattan loops in Mŭ́ndī are intended for the dogs' teeth of wealthier people to be strung onto them. They consist of either only two loops knotted together or they have an additional rattan ring.

Beds and Stretchers

In the dwelling houses beds and stretchers and other similar low, table-like structures stand against the long walls and cross walls. Usually they are placed with their long side against the wall, although in odd cases, as was seen in Drūgŭ́l, it can be the shorter side touching the wall. The arrangement of beds and stretchers on the walls is often determined by the presence of a storage shelf in the middle of the house; although it is also common when the shelving is not there.

Table-like frames that were seen on Pāk under the verandah roof in front of the chief's house and on the ground beneath pole buildings on Pĭ́tĭlu, form a special type. They are built of four forked posts pushed into the ground, supporting crossbeams on which, in turn, rest long parallel beams, forming the table's top or sometimes also a seat.

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370 Moseley, 1877. p.403
371 Ray, 1892. p.5
372 According to A. Bühler
373 Leber, 1923. p.202

The widest type of beds and stretchers is artistically made. Four beams, rectangular in cross-section, form a frame around the surface. Both shorter cross beams carry, as decoration soaring above the frame, a three-dimensional carving in the shape of a crocodile head or dog's head at either end and, shortly before this, a hole for a board-like peg at the end of the long beams. At this point, a perpendicular hole is bored through the cross beams, also going through the corresponding part of the longer [268] beam peg, and receiving the upper part of one of the four feet of the bed. Other beds have corresponding board-like pegs at the crossbeam ends, passing into holes in the long beams. In such cases, the sculpted decorations are fixed at the ends of the long beams and likewise represent crocodile or dog's heads, or crocodiles standing on the ends of the beams, or the head and torso of a human figure is carved at one end of a beam with the lower part of the body at the other end. Occasionally both ends of the beam are sculpted as human head and torso, Fig. 167.

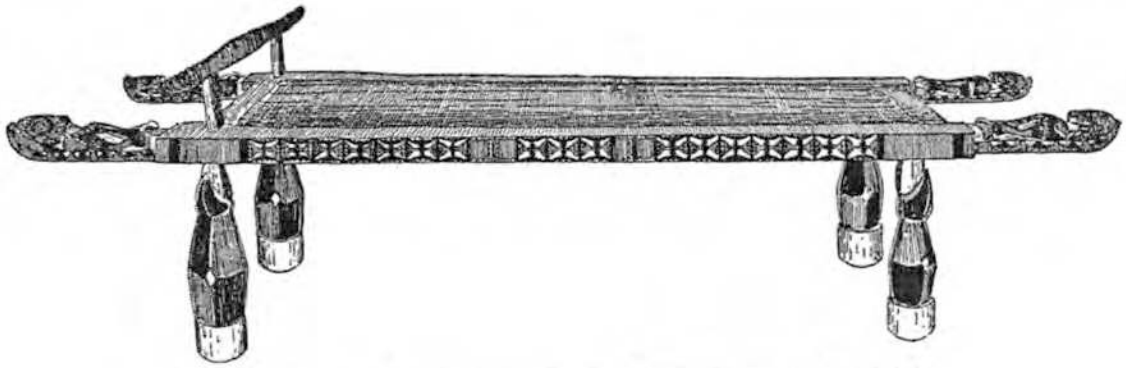

Fig. 167. Bedstead. 2784[I]. 2,12 m long, ca. 42 cm high.

With a simple stretcher the three-dimensional supplementary decoration can fall by the wayside. In both bed and stretcher types there is a wide board in the middle of the frame, which almost totally fills it. On the narrow, transverse side there are always board-like dowels that fit into slots of the crossbeam in the centre. In Păpítălâi, as a substitute for the board, an entire layer of staves was seen resting on several cross staves; their ends rested in indentations in the long beams. The board is always painted red, and red paint also forms the basis of the decoration on the frame and the feet, although the outsides of the frame beams are further decorated with black, white, and red painted relief carving. On Hắŭs cruciform figures between vertical strokes and horizontal, serrated curves were called *a͡ŭnŭrĭ́* and similarly, framed star-figures *tắroắn* (= to draw, to carve). The sculpted dog's head representation on the end of the beam was described there as *mŭắ* (dog) and a human figure as *hắmắ* (dead person).

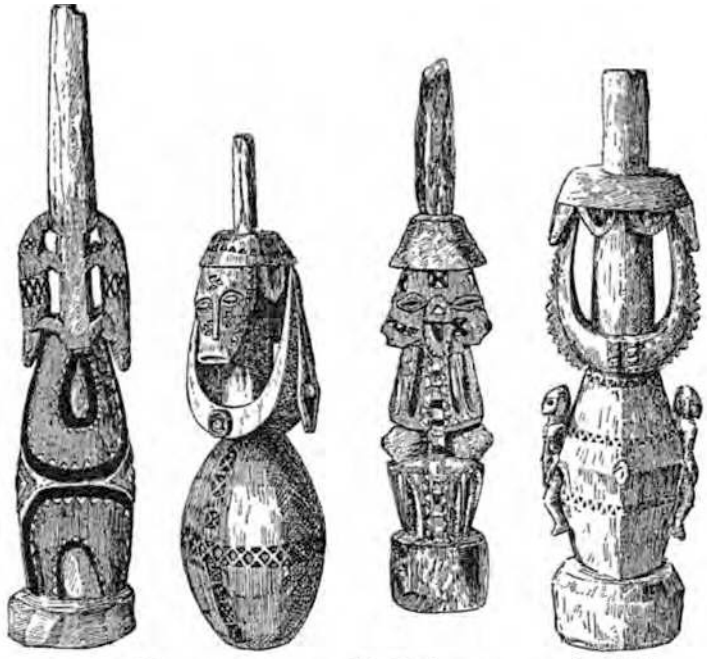

Fig. 168. Bed legs. 4216[I], 669[I], 12. 135:278, 667[I]. 1/4 actual size

The feet of these beds and stretchers consist of a massive piece of wood that forms a low wide cylinder below; and immediately rises above as a cylinder and then becomes gradually thinner like a flask, then thickens again and carries a separate peg on top. Other forms are derived from this simplest

form, representing: the shape of a fish with the tail fin pointing upwards, above the cylindrical lower part; one or two [269] men back-to-back; a combination of the human and fish motif with a half-human figure or a man's head above the fish; small human figures alongside the fish body; a fish with multiple tail fins and, occasionally, human faces between them; or two opposing birds or crocodiles on the upper, thin part of the foot, Fig. 168. The lower part of the foot can develop into the representation of a thick, fish body. Like the other parts of the bed, the feet are additionally decorated with painted relief carving. In Boltzal Leber[374] found bed feet "that at first glance gave the impression of workmanship on a lathe", and whose spherical surfaces were reminiscent "of forms from the rural turning art common among us in the seventeenth century".

On Hắŭs the beds are called *ăkḗa͡û* or *kắa͡û*; in Păpítălaî *kéa͡û*; in Sắhă and on Ndrĭ́ol *kā́a͡u;* on Pāk *păr* or, according to Krämer, *bar*; in Pŭ̋ě on Lóu *păt*; and on Pắlŭăn according to Walden[375] *pắt*. *Kắa͡û* is also used to designate a stool-shaped banquette on Hắŭs, while other banquettes are called *pārĕlắ*; in Păpítălaî and Ndrĭ́ol *pătăpắt*; and in Pŭ̋ě *kănĕmpắt*. The wood for the board and the frame is likewise designated as *kắa͡û*, or as *nhŭ́r* on Hắŭs; however, the wood for the feet is called *nắt*. In Ndrĭ́ol the bed feet are called *kắ kắn*; and, according to Bühler in Iru, *kaka* and in Mbŭ̋na͡i *kengejau*.

Fig. 169. Stretchers
4292[I], 40 cm long, 20 cm high.
2620[I], 65 cm long, 20 cm high.

The heights of the beds and stretchers range, according to the age of the user, between 15 cm and 90 cm. Most often the heights are 30–50 cm. The width usually amounts to one metre. In general, the length suffices only for the head and trunk, but not for the legs of an adult[376]. In reclining therefore, the knees are drawn up.

Many stretchers are used for sitting, or also as dining tables. Since the dogs, and probably the pigs as well, crowd around the served-up food, the raised board offers good protection from their intrusions, Fig. 169. [270]

Many beds are also given a neck support, which is fastened at one end onto the extended pegs projecting over the frame beams of both feet at that end. This is done by inserting the peg extensions into two holes on the underside of the neck support. The neck supports have a rectangular cross-section but somewhat rounded edges, and are decorated at both ends with three-dimensional crocodile or dog's heads. Otherwise, carved at both ends, is an ornament reminiscent of a longish-oval canoe prow wrought in open-work and furnished inside with carved-out spirals and horizontal and vertical bars. In addition to this is painted-out relief carving, the background parts of which are painted red. Other neck supports were seen in Păpítălaî, consisting of a round piece of wood with feet of protruding branches, put on the bed. In Lắlā, the neck supports are likewise not connected to the bed and consist of a 14–17 cm high and, on average, 30–35 cm long,

374 1923. p.202
375 Vocabulary, in the Berlin Museum
376 Leber, *loc. cit.*

wooden board with an inverse-T-shaped foot and a widened, concave upper section. The borders of foot and upper piece can be given painted relief carving as a decoration. Also, the foot may be duplicated. On the sides of big head rests, up to 85 cm long, extensions can be carved out, reminiscent of roughly-carved crocodile heads, Fig. 170. In Mbűnaî Bühler even found a neck support in the shape of a dog (*mui*). On the other hand, another consisted of a softwood block, rectangular beneath and rounded on top, with a simple, painted relief ledge around the lower edge. On Hắŭs neck supports are called *kĭlīlŭ́n* or *kălilúṅ*; on Pĭ́tŭlu *kjéă* or *kăjaû*; in Lálā *ūlūlŭ́ṅi*; in Ndrĭ́ol *hūlūlŭ́ṅ*; on Pāk, according to Krämer *úlulung*; in Mbűnaî, according to Bühler, *ululuṅ* or *buruluṅ*; and on Pắlŭăn, according to Walden *néűl*.

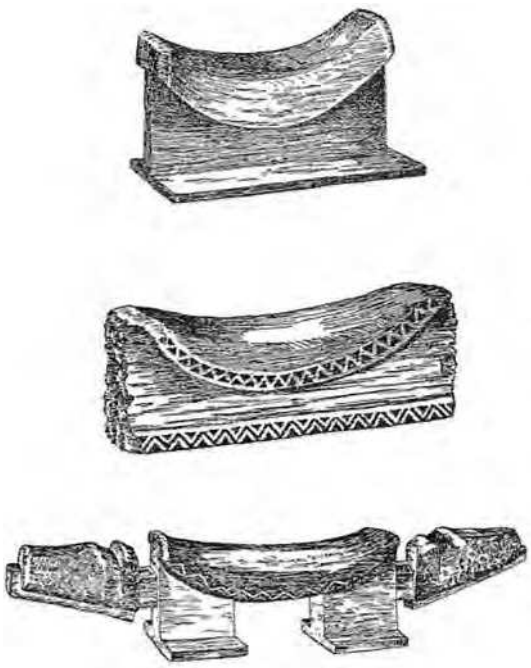

Fig. 170. Headrests
745[I], 29 cm long. 748[I], 35 cm long,
744[I], 85.5 cm long.

Sleeping mats, (called *mŏdyăl* in Ndrĭ́ol, and on Pāk, according to Krämer *do*), for the beds are sewn together from strips of *Pandanus* leaf, and decorated on the long sides with attached bunches of bast fibre, Fig. 171. A halved bamboo cane is laid on the lower transverse side of the bed as foot or knee support.

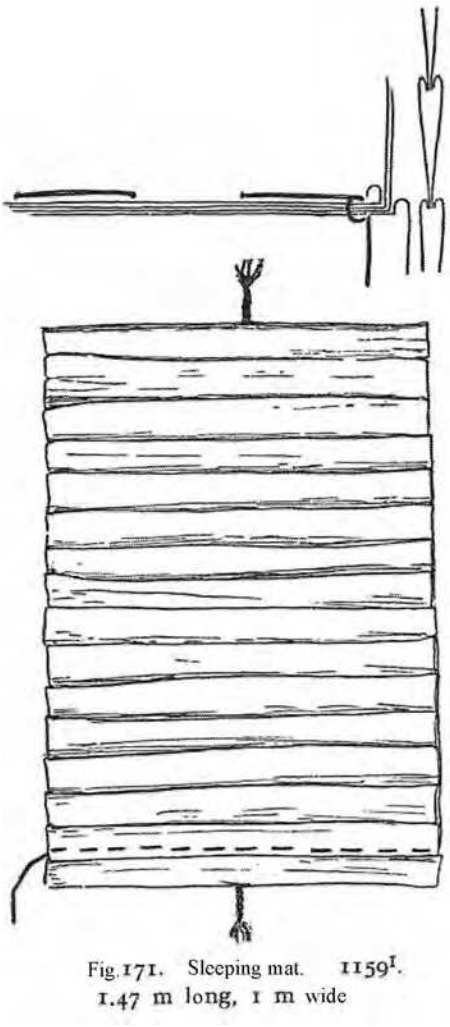

Fig. 171. Sleeping mat. 1159[I].
1.47 m long, 1 m wide

Finally, yet another bunch of leaves (on Hắŭs *kaî*) belongs with the beds. It usually hangs on the door; however, before the person goes to sleep they take it from its place and hang it over the bed in order to keep evil spirits away from the sleeper.

Occasion-ally they avoid both feet of a bed that is adjacent to the wall of the house, and fasten the bed frame to the wall on this side with cords. This was seen in the bachelors' house in Păpítălaî in 1908. To prevent both feet from sliding, a rod held with pegs was secured to the ground in front of them. Moseley[377] saw [271] no other beds at all, at Nares Harbour. In Sắhă several stretchers (saû) were fastened to the house wall in similar manner in 1908, and the other side hung by cords from the roof beam.

In the interior of the main island, especially in Kawa and Bojang, Leber[378] found beds of a different kind to the coastal region. These were built out of a frame of sago palm leaf ribs, overlaid with "split stems of the betel palm or younger leaf ribs of the sago palm laid one over another".

[377] 1877. p.403
[378] 1923. pp. 204 and 262

With a width of one metre, their length is quite ample for an adult. Besides the beds, there are sleeping places on the hard-packed mud floor that are covered with “a layer of springy mats” to accommodate extra guests. [272]

VII. The Village

Village Plan

Pole Villages in the Water

Pole villages are set up only by the Mănus, while the Mătănkŏl live probably in the odd pole building but otherwise occupy houses at ground level. The pole villages of the Mănus are commonly based on small islands, or built along the beach, or extend out onto the reef. The pole villages are exposed to the sea, although pole villages occur also in mangrove swamps or on the banks of small rivers. In bigger villages, the houses are laid out in rows or combined into smaller groups of houses in which there is always clear evidence of an effort to achieve a layout in a straight line. The breakdown of the village into two or more settlement groups is observed among the pole villages as often as among the land-based villages.

The pole village of Lālā at the eastern end of Malai Bay consists of two groups of houses, about a kilometre apart. The houses are laid out in regular rows, so that their gable sides stand in a line. Only the bachelors’ house is built apart from the rest of the houses. There are 20–30 houses in each of the two parts of the village.

T͡auī (Ndrŭwal) too has two parts to its village, one of which lies on the seashore and the other on both banks of a small river. In the sea village the houses are somewhat irregularly arranged, and form groups of 2–3 houses organized in a straight line or at right angles. One group of houses is connected directly with the shore by a simple, tree bridge.

Părā has 43 houses in two main rows, one smaller row, and scattered nearby. In 1929 one house stood empty, one was the bachelors’ house, and one served the children of the *kalat* clan as a play area, since they did not have a small island available as a playground like the children of other clans[379]. Two of the artificial small islands in Părā serve also as a dance floor[380]. In 1929 another pole building, erected by the administration for white visitors[381], had joined the houses of the village.

Pătŭsī and Masaval are constructed on an extensive reef plate in the water, and back onto small islands[382].

Mbŭn͡aì consists of only a few pole houses constructed in two rows in the water off the mangrove coast. The short water street between the rows, against which the gable sides of the huts abut, is closed at either end by one or two huts lying at right angles to the other huts. [273]

In 1926 Dalálou had seen about 20 pole buildings in a row curving round to the west, towards the land, about 20 m offshore in water about half a metre. deep[383].

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379 Mead, 1931. pp.246–249, and p.271
380 Mead, *Natural History*, 1931. p.69
381 Mead, *Natural History*, 1931. p.68, and figure on p.62
382 *Deutsches Kolonialblatt*, XIX, 1908. p.624

The few pole houses of Bĕ́ka stand on the reef, the two in Mĭndrŭ̂n off a mangrove beach, and the three pole houses of Tirr abut onto the small island of Dra͡uŭ lies in a narrow arm of the sea opening into Bird Island Bay, at whose mouth Kyĕla͡ŭ́k and Brŭ̂na͡ĭ stand in the water. All pole villages in this area are only small, and are basically only hamlets.

In Lōkŭ́l, lying off the wooded coast of Lămbŭ́tjo, an attempt had been made to form two rows out of the few houses. Through small irregularities and varying positioning of the gable sides however, a somewhat irregularly constructed village came into being.

Beach- and Bush Villages at Ground Level

The village of Lŏ́nĭu has 72 houses, arranged in 3 regular rows. Fifty-three of them are pole houses standing on land; nineteen are houses at ground level standing in the very front row, nearer to the beach than the first pole houses in the second and third rows, as the former serve as canoe sheds and fishing shacks. At the same time they serve as bachelors' houses.

In the neighbouring village of Bŭ́bi Miklucho-Maclay[384] found three bachelors' houses on level ground with a rectangular floor plan; otherwise, there were only pole houses on the beach which did not conceal a belt of shoreline forest as on the Maclay coast. In 1908 rectangular houses were also seen there on level ground and rectangular pole houses over land.

Păpítăla͡ĭ is a land village on both sides of a small southerly indentation of Seeadler Harbour but also possesses two pole houses (*bătắ)* in the water. On the main site, about 150 m from shore, stands the house in which the chief Pō Mĭ́nis lived, and to the left of it two family houses (*ᵘŭ́m*) stand in the bush, and to the right, somewhat closer to the beach, two men's houses (*kāmắl*). Several dwellings are said to be hidden near the creek, rather than located at the main site. In the village of Tă̆ń, belonging to Păpítăla͡ĭ, all houses, including the men's house, are oval in shape and built on level ground. There is also a canoe builder's yard. Tă̆ń was previously a beach village, whereas Păpítăla͡ĭ, according to Parkinson[385], stood on the reef, and thus probably only had pole houses. Since the Păpítăla͡ĭ people consider themselves Mắnus, this statement merits confidence.

The village on the island of Pĭ́tĭlu breaks down into the following groups of houses: Bŏ́rĭtŏ, Da͡uer, Lŭ́hŭ, and Tūrūlé. The houses are for the most part built at ground [274] level, and are rectangular or oval, although on Pĭ́tĭlu several pole houses also stand on land. The canoe sheds are laid out rectangularly at ground level. The canoe shed is also the men's house in Bŏ́rĭtŏ, whereas in Pắkĕ́răn it is also the dwelling of the chief and his wife(?).

On Hắŭs, in both parts of the village — Pĕ́lūăhắ and Ra͡ĭ — there are only oval houses (*ŭm*, *sŭs*) or rectangular houses (*pără*) at ground level. They serve as family houses (*ătsĭ́a͡ū*), widows' houses (*pānhŏ́l*), or canoe sheds. The numerous canoe sheds there all have an oval ground plan, and are used also as men's houses and bachelors' houses.

On Ă̆ndră Miklucho-Maclay[386] saw rectangular family houses dispersed across the entire island, and larger "communal houses" with a somewhat more oval floor plan, but no pole buildings. He saw small, fenced-in yards in front of the family houses, or fences that extended between the front walls of adjacent houses. The fences were installed because of pigs.

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383 According to Krämer
384 *Izvestia*, 1878.
385 1907. p.387
386 *loc. cit.*

On Pónam too a network of fences is laid out among the houses. Some of the houses are completely surrounded by fences; in others the fences abut only the front borders, so that these houses are exposed to the street while the fence forms a yard behind the house. The family houses (*ŭmbắră*) are mostly pole houses on land, although there are also ground-level houses for families. A few high rectangular family houses had been built after the style of the copra sheds of the trader Komini. Up until 1907 a circular feasting house (*sŭvălắt*) stood in the village. Oval houses (*kāmắl*) or small shelters (*pāhő́l*) serve as canoe sheds and men's houses.

In the recently laid out village of Gắramaṅ in 1908 the Sōri people had cleared the bush in places for house construction, and rectangular ground-level houses (*ű́m*) were built singly or in linear groups of 2–3 in the clearings. They laid out small gardens of taro and bananas and a few gourds close to the house sites. In Moseley's[387] time Hắră̆ṅgă̆n had about 22 houses consolidated into a village, and about 8 dispersed. Earlier on, the villages on Hắră̆ṅgă̆n and Sōri had been surrounded by palisade fences, a double ring in places[388].

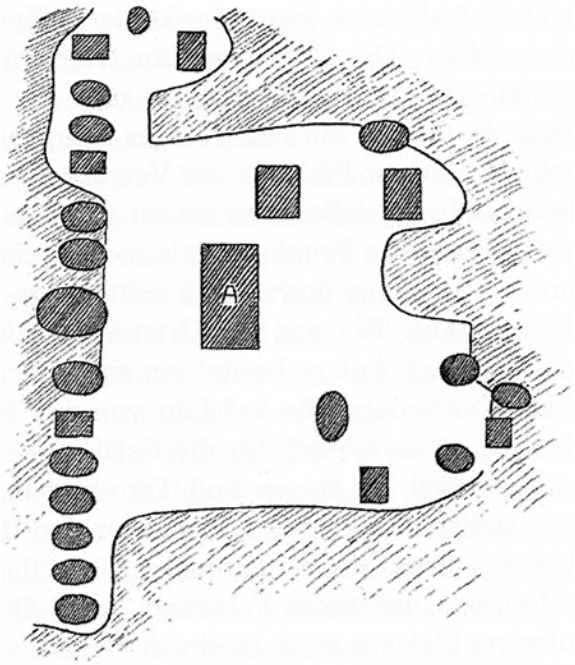

Fig. 172. Village plan of Pāk. A. Chief's house
After a sketch by H. Vogel

The village of Wălű́n on Pāk consists of two parts, of which the western is the more important. It is about ten minutes away from the beach[389]. The chief's house (*lūdyű́n*), a rectangular ground-level building, forms the centre point of West-Wălű́n on an open site with only one other, somewhat smaller, house on it. Oval houses (*dran*) surround the site, and rectangular pole houses (*bălᵉhắl*) together form a straight line on one side of the site; on the other sides they are, however, less precisely erected. Apart from the chief's house in West-Wălű́n there are 24 houses, of which 17 have an oval ground plan and 7 [275] a rectangular ground plan. The houses back immediately onto the bush, with numerous fruit trees, Fig. 172. In Moχără there were six sections of the village in 1925[390], each with their own "ceremonial houses" and other houses to distinguish them. Each part of the village took its name from the "ceremonial house".

New-Ndrĭ́ol, which was established as a land village on Lămbű́tjo by the Mắnus, had 15 very untidily built huts in 1908 and two widows' partitions. The village was laid out in such a way that the gable sides of the huts face each other in two straight lines, and border a street-like open space in the bush.

Of the Mătănkő́l settlements, on Lămbű́tjo: Pătăndrő́ has eleven; Tšălăṅgű́p three; Pětěkű́ī four; and Pŭra͡u nine ground-level, oval houses without a clear plan of village layout. Pŭra͡u is torn into two sections, with three and six houses respectively, about half an hour apart.

On the Sĭ́sī Islands there does not appear to have been any village plan either. However, the ground-level rectangular houses in the two island villages are situated on smoothed sites in the

387 1877. p.397
388 Seidel, 1894. p.24
389 According to Krämer
390 Chinnery, pp.54 and 56

bush. The bachelors' house on the larger Sĺsī Island is located in a corner of the site and backs onto the edge of the forest.

Mountain Villages

The village of Pűě ("Lo-mandrian") in the interior of the island is located at 150 metres altitude, (according to Thilenius[391], 200 metres) and consists of several groups of 8–18 dwellings. The individual sections of the village are not far from one another and even bump into each other in places, although they are separated from one another by fences — evidently for keeping the pigs that belong to the individual groups together. A further fence, backing directly onto the forest, encloses the entire village. Between it and the fences around the sections of the village there is space for a few coconut and betel palms, bananas, and for pigs[392]. The oval, ground-level family houses (*ŭm*) are 3–4 metres apart, and are arranged in an ellipse around an open site. Their doors and gable sides are all directed towards the centre of the space. [276] The rectangular bachelors' house (*lĭ̄ŭr*) stands at a focal point of the ellipse. The space in front of it contains the dance columns and beams. The main part of the village comprises 17 family houses and a bachelors' house; and at one end of the ellipse is a rectangular chief's house. Behind the bachelors' house stands a small pole building used as a storehouse. The entire section of the village is laid out in such a way that the bachelors' house is emphasized, and, when in 1908 the magnificent building, photographed by Parkinson[393] no longer existed, the bachelors' house still revealed its presence above all other houses through its location, size, and type of construction. Another section of the village ("Lo-lien", i.e. Little-Lóu, according to Thilenius) with a similar layout, has a simpler, oval bachelors' house[394].

The village layout achieved on Lóu by the Mătănkŏ̋l recurs on the main island as typical of the Ŭsĭâî. Thus Kětyĕ́ is located on a hill about 50 metres high, with taro and sago palms planted at the foot. The approach to the steep hill village is additionally secured against attack by pallisade poles thrust into the ground in front of the gardens, while beyond the taro fields it leads to a steep rock wall against which a thick tree trunk leans at an angle of 30°. People have to climb up it. Beyond, a deep fissure in the coral limestone is bridged by a beam, and a type of primitive gate. However, apart from this, the actual entrance to the village lacks any fortifications. The village itself consists of a few huts of oval construction and several pole houses, and is situated on top of the hill.

The effort of securing the village against attack crops up clearly again in Lĭĭndr͡au. New Lĭĭndr͡au, re-established in 1908 on the site of the abandoned settlement of Lĭĭndr͡au, was laid out on three hilltops connected by a ridge, protected in the rear by a solid palisade fence about three metres high and mantraps, and deforested up to 100 metres in front of it[395].

Sā́hă lies three kilometres further into the interior opposite Pónam, on a hill about 150 metres high, and occupies a considerable area, since its huts are situated in small groups, widely separated by forest. Access is by long stretches through watercourses, in order to obliterate tracks. Besides elongated ground-level family houses (*ŭm*) in the village, there are also pole houses (*ŭm*)

391 II, 1903. pp.147 *et seq.*
392 Thilenius, *loc. cit.*
393 1907. Plate 23
394 Thilenius II, 1903. pp.149 *et seq.* and Plate VIII
395 *Deutsches Kolonialblatt*, XIX, 1908. p.854

and a round house. A high rock close to the village serves as a natural fortress, to which they withdraw in time of danger[396].

Also, the neighbouring Nŏn is a hill village of the Ŭsĭâî.

Among the Ŭsĭâî of the main island, opposite Ăndră, Miklucho-Maclay[397] saw a hilltop village with a path leading to it through fenced gardens. The path opened onto an open space surrounded by houses; [277] some distance away lay other open spaces of the same type, connected by paths. There were oval houses or even almost round houses everywhere, but no pole buildings. A larger oval house served as a men's house, and smaller houses as drum houses. This village cannot have been very far from the coast. Given the changes that the settlements of the Admiralty Islanders have undergone, it is not possible to identify Miklucho-Maclay's village with one of the present-day villages, but it is likely that it was a Drūgŭ́l village.

The present-day Drūgŭ́l lies on a hill about 1.5 km inland, opposite Hắŭs. On the shore is a shelter hut from which a path, twice crossing streams bridged by tree trunks, leads to the hill village at an altitude of 50 metres. The hilltop forms a high plateau with many swampy places where several pole buildings stand. The rest of Drūgŭ́l's houses are at ground-level and lie quite far apart along a path. Among them is a round hut and the remains of poles suggest an earlier round, feasting house. In addition, in 1908 about 24 poles about six metres high with hanging coconuts were positioned in a semicircle.

In Savoi a high ridge, visible from a distance, holds the round main house and chief's house, the women's house, and a few huts belonging to them. A ten-metre wide path, forty metres long, leads from the main house to the drum house. Scattered around the hill are shelter huts near the gardens, with an easy route back to the main house. The village is protected by the natural rocky landscape, by mantraps and pitfalls on level ground, and a ditch one and a half metres wide and four metres deep[398].

The layout of Bojang is the same in principle. There too the round, main building forms the centre point. It stands on a round floor fringed with coconut palms. In front of it, and somewhat to the right, is the drum house. A street ten metres wide and 170 metres long leads from the low hill of the main house down to a group of smaller elongated houses on level ground and to bigger, conical-roofed houses[399].

Kawa is protected by a fifteen-metre-deep ditch, pitfalls, and mantraps, and consists of two village sections on a knoll. One of them has about ten houses laid out at various angles to the path, while the other has bigger, finer houses, and is the seat of the chief[400].

Boltzal has about twenty houses along a wide street, at the end of which stands the round, main house with the drum house nearby. The eastern edge of the village falls away steeply[401].

Ndrabui has two parts of the village on a range of hills. One has fourteen houses [278] with outbuildings around the substantial, long, main house. The other part of the village has only unprepossessing houses, and is one kilometre away. Besides round houses and several long buildings on ground-level, there are also a few rectangular pole houses. A wide strip of bamboo with pitfalls protects the village[402].

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396 Vogel, 1911. p.96
397 *Izvestia*, 1878
398 Leber, 1923. p.263
399 Leber, 1923. p.262
400 Leber, 1923. p.204
401 Leber, 1923. pp.202 *et seq.*
402 Leber, 1923. pp.201 *et seq.*

Mű́ndī is located at an altitude of 100–220 metres over several hills, the first of which apparently does not have a name, or is considered part of the second, which is called Pělěmā́. The third hill is called Mű́ndī, like the village. The houses are fairly scattered, and there is no plan to the village. Besides ground-level houses, there are also pole houses. On Pělěmā́ stands a men's house that is, at the same time, a drum house and a canoe-building site, built on the ground.

The village of Ndrauo in the interior of Lő́nĭu is also located on a hill, with fifteen huts[403].

In Woréi, which lies on a knoll in the interior of the western side of Pătű́sī Bay, Kölle[404] found a pole building, among other houses. In the neighbouring Boā́ð the men's house is situated at the entrance to the village, as the first house.

Decoration of the Festive Site

In Pű́ě on Lóu in 1908 numerous "Singsing" beams (*egédjo*[405]) were mounted around a part of the open space of the village in front of the bachelors' house and the adjacent dwelling houses. Each beam rested on two forked posts at a man's height, pushed into the ground. The beams, which in places had considerable length, were worked on four sides, furnished at the ends with a tapered thickening that jutted obliquely upwards; a crocodile head was carved on one beam in front of the bachelors' house, (cf. Plate 15). Otherwise the ends were painted with red and white broad, vertical lines. The sides of the beams carried, between simple red-painted sections, other sections decorated with over-painted relief carving. The patterns, whose indented parts were white-limed, showed two red horizontal semicircles, rounded sides opposed, with between them vertical lines or lance-shaped figures in black. Odd beams carried an additional line of triangles beneath these. The posts themselves were not decorated, although in one instance they and the beam had a hanging of *Amphiperas* shells. These beams are reminiscent of long frameworks of pairs of forked posts with short cross-connections and long stringers, on which packets of sago were hung for a feast on the greater Sĭ́sī Island.

Originally the dance beams, on which at special feasts a man danced, appear to have been restricted to Lóu, yet in 1906 Krämer saw [279] dance beams (*tinel*) on Pāk and discovered that they were also familiar to the Ŭsĭā̂ as *étinan*. In 1932 Bühler found the dance beams, which were often hung with *Amphiperas* shells and carved out at the ends as a crocodile, or a human figure, or as a head, in almost every village, e.g. in Undrau near Mataworei, and in Pătű́sī, where they were called *kinan*. The dance beams are reportedly used for displaying skulls[406] at feasts for the dead, although people also use them for dancing.

Previously, instead of the "Singsing" beam in Pű́ě, a single spindle-shaped pole with a chiselled ring bulge above and below it, and with an upper end shaped like a fish tail, stood to the side in front of the bachelors' house and marked the place around which the dances were performed[407].

In addition, a few decorative shrubs adorned the village square.

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403 *Deutsches Kolonialblatt*, XX, 1909. p.896
404 *Bemerkungen zu Berlin* VIII B. pp.6390 *et seq*.
405 According to Krämer
406 Parkinson, 1907. p.405
407 Thilenius II, 1903. p.148 and Plate VII

Fences

The taro plantations and other gardens are enclosed by fences, for protection from pigs. Fences are also erected around individual houses or whole village groups for the same reason. Usually the fences consist of pairs of staves pushed into the ground; pieces of wood or sago palm leaf ribs are layered between them. With higher fences they bind the two staves of each pair several times with bast fibre cords to prevent the layered pieces of wood pulling apart. The fences are kept a little lower in odd places to enable the possibility of stepping over them. Fences of this type are called *kaûkaû* on Pǎlŭăn; *kóko* on Lóu; *kŏ* on Pāk; and on Móuk (where they are probably named after the staves) *é‿ndru*[408].

On Póam the tuber gardens are even more carefully bordered with stone walls, reminiscent of vineyards[409].

Palisade-like fences are set up around the villages by a few Ŭsĭaî of the main island as protection against hostile enemy attacks. In old Lĩĩndraû the palisade posts reached a height of three metres above the ground[410].

A palisade fence had been erected by the Ŭsĭaî of Kětyé, on both sides of the path leading from Mbűnaì, as protection against attack. [280]

VIII. Communication and Trade

Paths

Paths connect the bush villages to one another and with the beach, where the village of Pűě on Lóu has a separate landing place. Also, paths run between the individual houses and groups of houses of the mountain settlements and from the houses to the gardens.

Ordinarily the paths are only crudely laid out. Only one section of the path that runs from Mbűnaì to Kětyé has split sago palm stems laid over a swampy stretch before Kětyé[411]. Fences are added to both sides of the path for protection from enemies, just in front of the village. Apart from that, the path leads through very swampy places and mangroves that people can pass only by leaping rapidly from one aerial root to the next[412].

In Műndī and Pűě, to spare themselves the effort of constructing a path, and at the same time to hide their tracks, they use a watercourse or stretches of a stream as a path to the village.

Apparently as a “guide or signpost in the trackless bush”, at Sabumo Leber[413] found carved representations of a lizard crawling up tree trunks and evidently coloured with betel sap; a Lóu man explained that this was a totem sign.

For journeys through the bush at night, the Hắŭs people carry a bunch of leaves (*kaî*) in their carry-bags as protection from spirits.

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408 Friederici, 1912. pp. 225–228
409 *Deutsches Kolonialblatt*, XI, 1900. p.331
410 *Deutsches Kolonialblatt*, XIX, 1908. p.854
411 Vogel, 1911. p.125
412 Vogel, 1911. pp.124 *et seq.*
413 1923. p.203

Stilts

In the reef settlements of the Mǎnus villages on the south coast of the main island Bühler found stilts being used for going from one house to another in shallow water. The stilts, called *kei* (= wood) consist of a long, undecorated pole with a short cross piece bound on in such a way that it forms a right angle. Its free end is in turn provided with a cord that is firmly bound to the main pole a little above the protruding foothold.

Bridges

Above the river village of Tau͡ī, a bridge has been constructed over the stream, close by the mouth of a fairly large tributary, (cf. Plate 21). It consists of a tree trunk lying horizontally on four poles driven into the riverbed. [281] These poles are distributed at equal distances across the breadth of the river. The tree trunk serving as the footbridge is three metres above the water, so that canoes with a platform superstructure can pass through[414]. Thinner poles, set into the water near the bridge piles, rise a little above the tree trunk and their upper ends are connected by a liana cord that serves as a banister. Beams sloping from the ground to both ends of the tree trunk act as the bridge approach, supported even better by a further vertical pole at the ends of the tree trunk. A path running eastwards from this bridge leads through a mangrove stream. Bridges are formed more simply there, from tree trunks laid transversely over the mangrove roots[415]. Watercourses near Drūgűl are also bridged only by tree trunks.

On the path from Mbűna͡ì to Kětyḗ, shortly before the latter village, a deep crack in the coral limestone is bridged by a beam[416]. Before reaching that point, the climbing of a steep rock wall is made easy by laying a thick tree trunk against it at an angle of 50°.

In the pole village over the sea at Tau͡ī a group of houses is connected with the shore by a long narrow tree bridge[417]. Also, narrow catwalks are laid between adjacent houses.

Carrying Poles

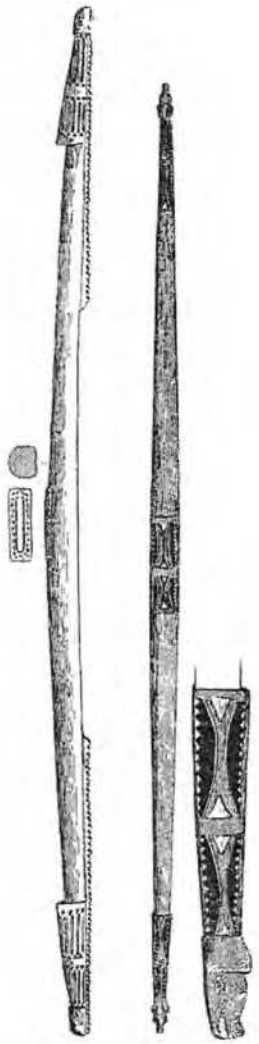

Fig. 173. Carrying poles for women. 673[1], 671[1]. 1.62 m & 1.50 m long

The women of Lóu transport loads on carrying poles measuring 1½ m. or a little longer. The carrying poles are roundish lengths of wood, flattened on one side and tapering towards either end. The ends have a chiselled notch, diminishing in their diameter, which is initially greater than that of the pole, so that they end virtually in a point. They are embellished with relief carving, often with an additional small, carved head of a dog or the like. The middle of the pole has further relief carving and painting on its upper surface. On the underside of the tip of

414 *Deutsches Kolonialblatt*, XIX, 1908. p.856
415 *Deutsches Kolonialblatt, loc. cit.*
416 Designated “supple trees” (Vogel, 1911. p.125)
417 Vogel, 1911. p.120

the pole and adjacent to it, there may also be three-dimensionally carved jagged lines. The women on Pálŭăn also use similar poles[418], Fig.173. [282]

The carrying poles are laid over one shoulder, so that the tips project fore and aft. The front half is steadied by hand. Over the notch between the tip and middle section, they hang several coconut water flasks and the like. The woman's head may carry an additional load.

In Ahus Thilenius[419] found flat carrying poles with only one end decorated, but with multiple serrations. The serrations could take cords for water flasks and bags of taro. Yet, on Pítĭlu in 1908, poles of the same type were expressly designated as women's clubs. However, this does not exclude women's clubs from serving also as carrying poles.

Otherwise, generally, the women carry loads e.g. big baskets, on their heads.

Canoes

Mostly, navigation in the Admiralty Islands is carried out by the Mánus and the Mătănkŏl who, with one sole exception, know only one type of canoe, varying only in minor detail and in size. The Ŭsĭâî of Pálŭăn and the north coast of the main island also use canoes of the Mánus and Mătănkŏl type. However, according to Margaret Mead the canoes of the Pálŭăn people are built on Pálŭăn by the Mánus of Móuk and are regarded by the latter as being half their property[420]. Of the Ŭsĭâî from the highlands around Ndrówa in the north-west of Bird Island Bay[421] on the other hand, it is reported that they have more primitive canoes than the Mánus and Mătănkŏl.

On the Tâuī River, besides canoes of the usual type there are occasionally simple dugout canoes without an outrigger used by the Mánus, and propelled by a long pole (cf. Plate 21). These are always small vessels, similar at both bow and stern, very slightly curved, without ornamentation. They do not go to sea. The Mánus children on the south coast of the main island use similar, smaller canoes with paddles, in some places[422].

All other canoes are outrigger canoes. A hollowed-out tree trunk forms the basic pattern, prepared in Păpítălâî from *pēī* wood and hardened in the fire. Bow and stern consist of separate pieces. Only off Ponam were canoes seen whose bow and stern were carved with the body, in one piece.

Bow and stern are the same, even though Friederici[423] has investigated different names for them. Hunter[424] illustrates canoes with upwardly-curved bow and stern, as observed later by Labillairdière[425] and, to a lesser extent, in Móuk canoes by [283] Friederici[426]. On the other hand, Moseley[427] declares the form of the canoe as Polynesian, and emphasises that bow and stern lie lower than the middle section. Also, this form, with the middle of the dugout higher than the ends and a "reverse spring" of the canoe, was observed again and again, later. The only exceptions were the Móuk canoes seen by Friederici.

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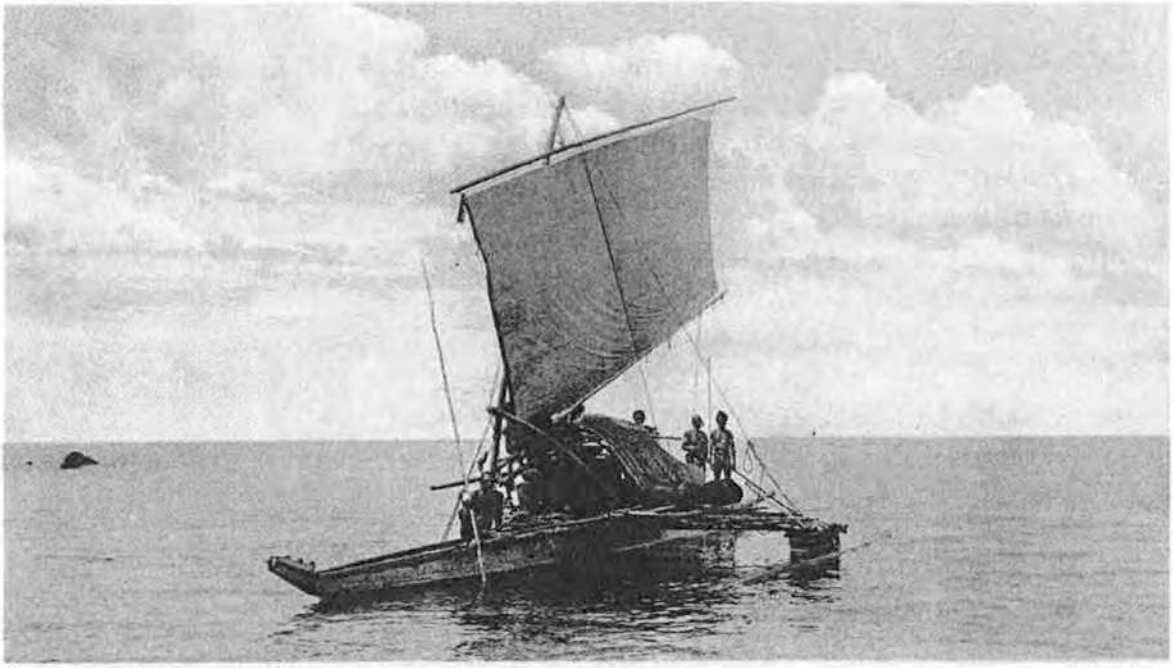
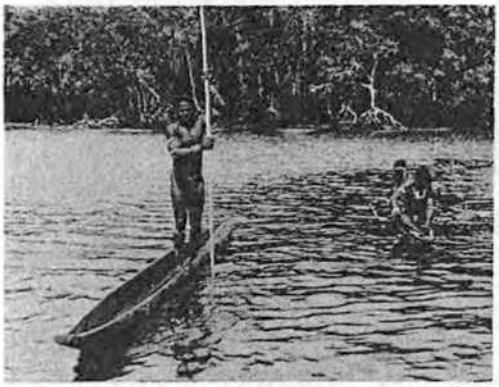
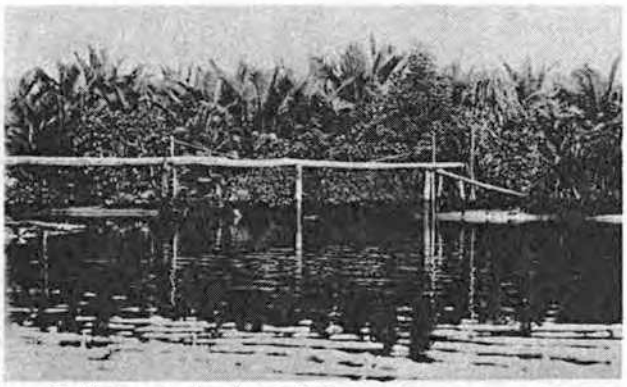
418 Mead, 1930. p.127 figure
419 II, 1903. pp.136 *et seq.* and Plate IX
420 Mead, 1930. p.120
421 *Deutsches Kolonialblatt*, XIX, 1908. p.623
422 Mead, 1931. Figure on p.24
423 1912. pp. 225–228
424 Hawkesworth, 1773. Plate
425 *Atlas*, 1796. Plate 2
426 1912. p.272
427 1877. p.404



Sailing canoe phot. Sarfert



Dugout on the river at Tauī. phot. Vogel



Bridge across the river at Tauī. phot. Vogel

Canoe-building in Tăn, Păpitălāi. phot. Fülleborn

The bow and stern sections of the canoes seen by Hunter and Moseley were decorated with *Amphiperas* shells suspended from strings. Also, in 1908 this canoe decoration was seen on side ledges of the canoe prow, on carved sections sometimes provided with a carved row of crenellations on the top side. The clam shells are pierced at both ends and fastened vertically side by side with rattan cords between two horizontal bars. A cord can also replace the lower stave, Fig. 174. As the sole decoration, apart from the shells, Moseley[428] mentions "a simple carved ridge or two". Seen from the *Alacrity*, apart from the decoration with "*Cowry* shells"(!) at bow and stern on the "upper part" of the canoe, was a white stripe "that is coated with a chalky mortar (*chunam*) prepared from shells"[429]. In 1908 in all island villages, the predominant decoration of prow and stern was carved crocodile heads that were sometimes painted, as Thilenius[430] first mentions. These are found in most of the canoe models and prows that have reached museums since the turn of the century. Besides crocodile-head carvings, variations of these` were also seen in 1908, while a horizontal human figure with a small turtle on its head was seen only near Lóu [284] Fig. 175. Carved and painted prow decorations, comprising board-like, flat, open-work of vertical bars, crosses, and spirals passing into a thickened curve, with a small, seated human figure or bird figures and the like on the upper side or standing on a wider lower part with a carved pair of birds (on Pāk *dúren* = *Charadrius*[431]) at the tip, found in older museum pieces, were seen only on one Mănus canoe in Bird Island Bay (whose crew designated the piece as *sāgéŏ* or *sāgĕ́*), and on one Lămbŭ́tjo canoe. Thurnwald[432] saw them again in 1907 near Lămbŭ́tjo. They were called *djā́kei* there, Fig. 176.

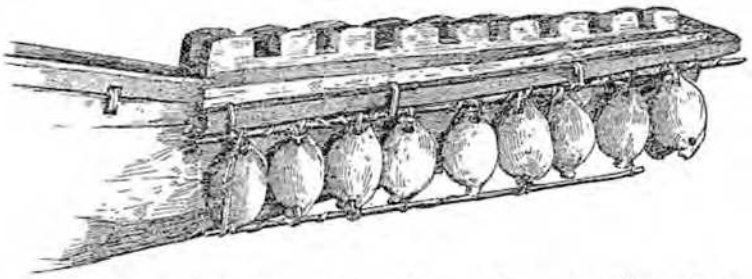


Fig. 174. Canoe prow. Linden Museum Stuttgart. 1/8 actual size

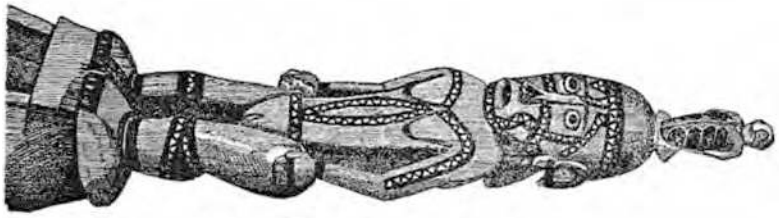


Fig. 175a. Figure. 49 cm long.

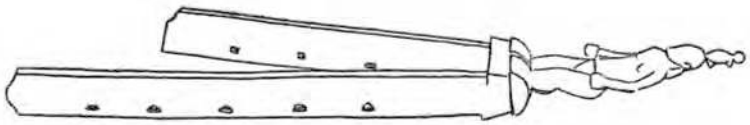


Fig. 175. Canoe prow 665[1], ca. 1/12 actual size

People bind the prow- and stern pieces with the body of the dugout using rattan cords pulled through holes in the canoe's hull and in the extensions of both pieces, and caulk them with a putty of *Parinarium* resin. They also smear the joints the same way with the same material. According to Thilenius[433] the *Parinarium* nut resin is obtained by rubbing the nuts with pieces of coral and applying it in a mixture with wood splinters; it hardens in 20–30 minutes.

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428 1877. p.404; 1879. p.466
429 A. de H. 1876. p.216
430 II, 1903. p.155 and Fig.29
431 According to Krämer
432 Collection in the Berlin Museum
433 II, 1903. pp.158 *et seq*.

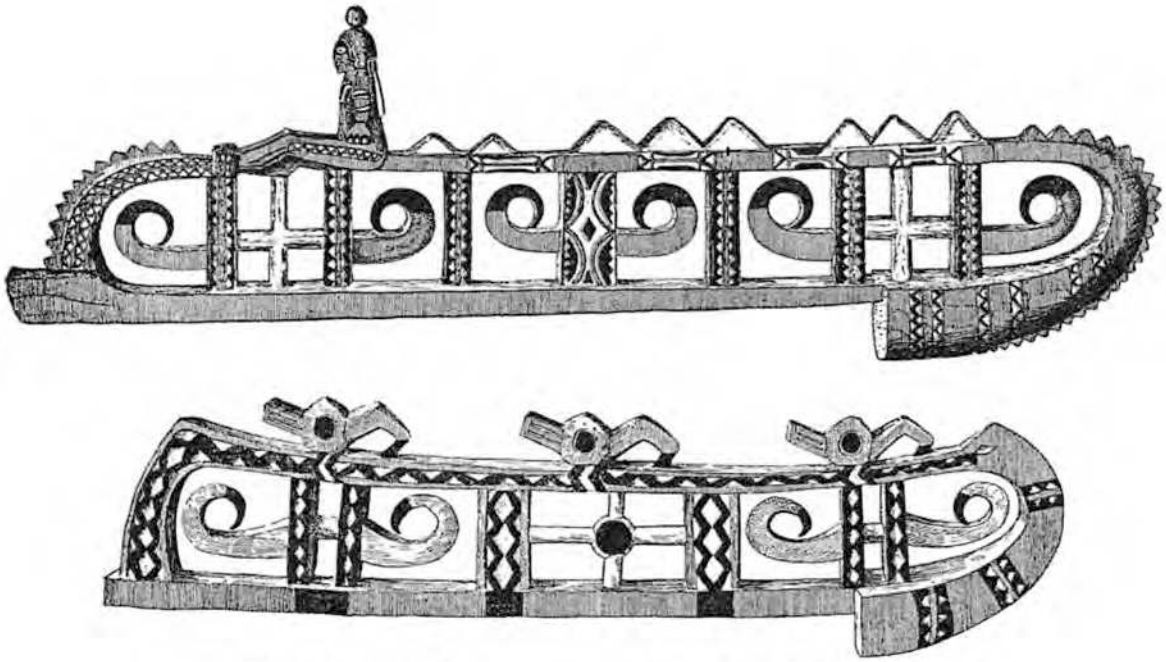

Fig. 176. Canoe prow. 863[I]. 75 cm long. Stuttgart, L. N. 1247. 62½ cm long.

In order to protect the canoe which, given the low position of the prow, is particularly exposed to driving waves, on Hắŭs a curved protective roof made from the broad flat ends of palm frond stems[434] [285] is bound onto the canoe behind the prow carving, Fig. 177. In Pǐtĭlu one such wave protector was seen made from a flat wooden board, Fig. 178.

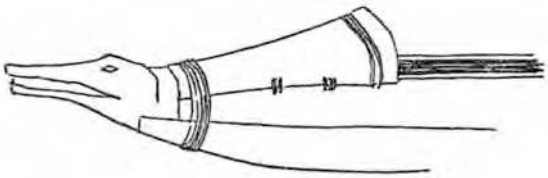

Fig. 177. Wave shield
After a sketch by H. Vogel

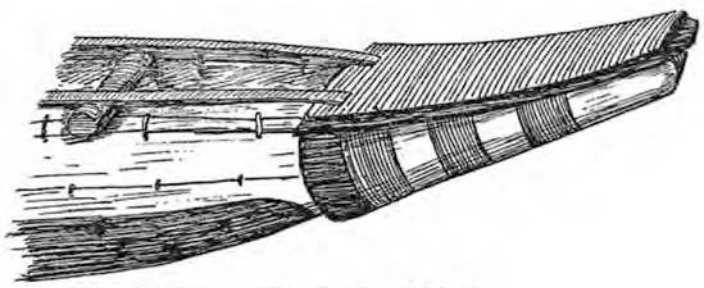

Fig. 178. Canoe. After a sketch by H. Vogel

A plank is stitched onto each side of the dugout and caulked; a gunwale may lie on each of them, usually made not from one piece but three pieces on each side, with the middle piece being a little higher than the other two. The Hắ ŭs and Păpítălâî canoes are constructed in this manner, while in Pónam the gunwale is bound directly onto the dugout. These planks are the real cause of the "reverse offset" of the canoe.

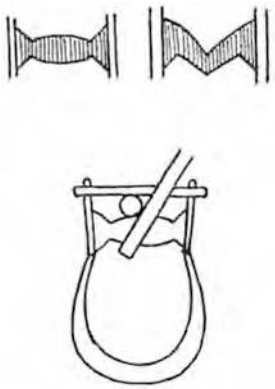

Fig. 179.
Reinforcing for the canoe hull
After a sketch by H. Vogel

To separate the planks set onto the dugout, pegs with broad bases are inserted between them, Fig. 179. In addition, the lower edge of the middle gunwale piece (according to Thilenius the uppermost plank) is

434 Vogel, 1911. p.84

embellished with incisions through which the thwarts are pushed, with their ends protruding a little on both sides. The thwarts are found in that part of the canoe lying immediately in front of or behind the outrigger poles, Fig. 180.

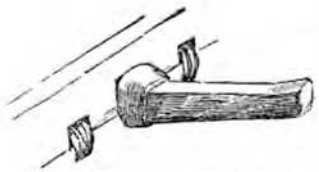

Fig. 180. Canoe thwart
Linden Museum Stuttgart.
1/6 actual size

The outrigger beam is, like the dugout, hardened in the fire, roughly tapered at both ends, and is curved slightly upwards. It is kept flat on top and round underneath[435]. Bowed outrigger beams were never seen. Six to twenty pieces of wood are driven into the upper surface of each outrigger pole in such a way that they form two groups which cross over each other. In the upper angle of these wooden crosses is laid a stave or, on Hấŭs and Pónam, a timber provided with two short angular processes, [286] and firmly bound, so as to maintain the open angle. The end of the outrigger pole is firmly bound on top of it, Fig. 181.

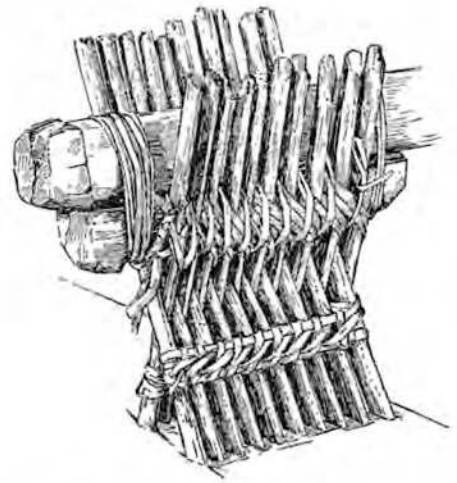

Fig. 181. Outrigger supports
Linden Museum Stuttgart. 1/4 actual size

The number of outrigger poles is three to five, although four is the general rule. Like the thwarts, they are fastened to the body of the canoe[436]. In front of them and behind them is a thwart elongated towards the outrigger side, whose ends are connected by a bound-on cross stave that is also bound to the outrigger poles. Besides this, even more bound cross staves go over the outrigger poles and elongated thwarts, one at least over the outrigger poles to prevent them from moving against one another. Two further timbers over the outrigger poles and elongated thwarts are found directly above the attached planks and the gunwale respectively, and thus contribute to the fastening of the thwarts. *Amphiperas* decoration was seen on outrigger poles in Păpítălâî.

Planks or staves are laid upon the part of the outrigger grating bordered by the elongated thwarts, forming a platform. A second sloping platform is mounted on the opposite side, with two or even three supports slanting upwards and bound by rattan to the extended thwarts close to the plank wall opposite the outrigger. The planks are firmly secured over these supports by stitching. The terminal end of the supports, not covered by boards, forms a fork. In the dugout a round piece of wood is bound firmly under the thwarts and over the plank supports, as a counterpoise for the platform supports. Labillardière[437] describes this platform as a “counter-balance that never enters the water”, and Redlich[438] “a kind of fighting-stage”.

From the fork of each platform support, a pole passes in a curve as far as the outrigger poles, which it meets at the level of the cross stave at the end of the extended thwarts. There it is bound firmly. The two curves form the basic framework of a house awning that is covered with sago palm leaves on the side facing the outrigger. According to Thilenius[439] the awning often does not cover a part of the platform on the outrigger grating, but is sometimes closed over the outer platform under which a further platform [287] hangs from the support forks, and can be secured to the canoe hull by timbers tied on to the plank wall. In Lŏ́nĭu in 1908 a canoe was even seen in use

[435] Thilenius, II, 1903. p.156
[436] Thilenius, II, 1903. p.155
[437] I, 1796. p.266; c. Friederici, 1912. p.243
[438] 1874. p.32
[439] II, 1903. p.157

having only the platform laid with planks. Hunter's illustration[440] that shows only one platform over the dugout on the side opposite the outrigger, appears, on the other hand, only to be badly drawn.

Canoe propulsion is achieved with long poles, paddles, or sails. Surprisingly, poles are used a lot in canoes both with and without sails, even though these are limited to shallow water. Among paddles, they distinguish smaller, one-piece items with a tapering blade or — at least according to Moseley's drawing[441] — produced with a straight or tapered handle; and bigger paddles almost two metres long, two-part with a pentagonal or almost shield-shaped blade connected with the handle by stitching, and sometimes displaying red, black, and white painting, Fig. 182. Labillardière[442] depicts one such paddle, but with smaller dimensions.

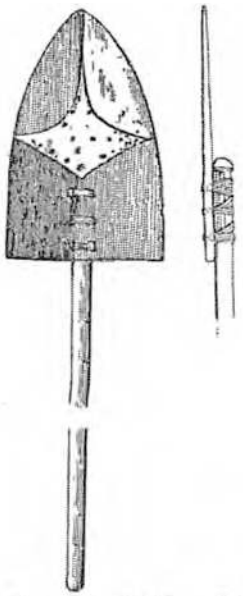

Fig. 182. Paddle 567[I]. 1.90 m long.

[288] On Pĭtĭlu in 1932 Bühler came upon a similar though smaller-bladed paddle, rounded beneath, used as a boy's paddle. The smaller paddles are often carved with stylized birds, or painted with simple patterns, especially on the upper end of the blade, Fig. 183. The bigger, compound paddles are like oars and, when they are very big they are used as steering rudders; the small pointed paddles however are plied in the usual paddling fashion of the South Seas. However, Thilenius[443] and the Hamburg Expedition also saw paddles with a pointed blade being used as steering rudders. One such 1.92 cm long paddle in the Stuttgart Museum features a narrow extension of the blade, carved in relief into stylized zig-zag figures of snakes or crocodiles(?) and a crocodile head as the end of the handle, Fig. 184. The basic paddles that Thilenius saw only in very small canoes were seen much more often in 1908. In order to use the paddles as oars, admittedly in a different manner to that of the Europeans[444], the oars are inserted into woven rattan rowlocks on a stick running along the gunwale on the side opposite the outrigger; according to Thilenius however, it is on the outrigger side. In Tau͡ī, *ṅat-* (*ĕṅát-*) wood serves as the raw material for smaller paddles. A short paddle with a shorter and wider blade and a crutch grip,

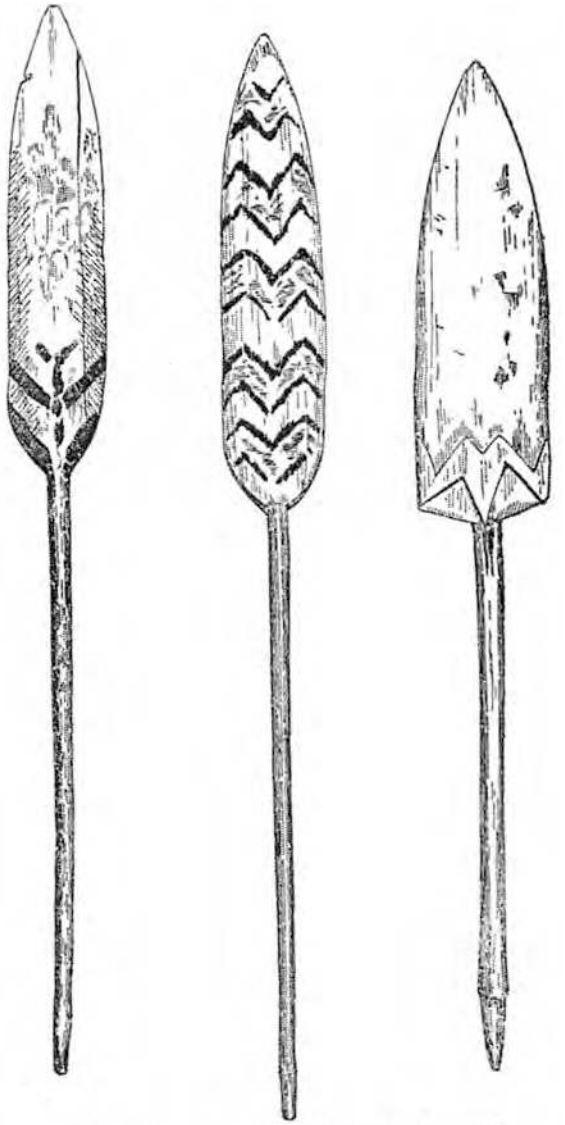

Fig. 183. Paddles 4084[I], 2695[I], 4185[I]. 1/9 actual size

[440] Hawkesworth, 1773. Plate
[441] 1877. Plate 22, Fig.7
[442] 1796. *Atlas*, Plate 3
[443] II, 1903. p.157
[444] Thilenius, II, 1903. pp.157 *et seq.*; Labillardière, I, 1796. p.267

which is in the Hamburg Museum with the label “Admiralty Islands” might have originated in the small islands south of Bougainville and been imported, Fig. 185.

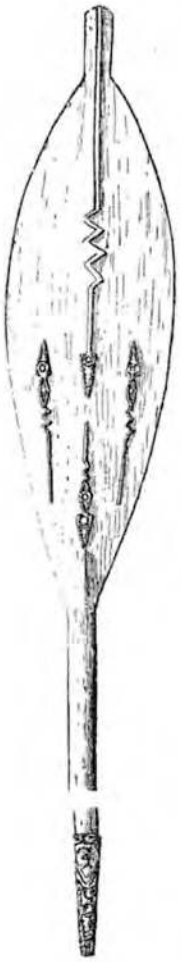

Fig. 184. Paddle Stuttgart, Linden Museum. 1/5 actual size

Sailing canoes are far less common than paddling canoes, and carry one or, if they are bigger vessels, two masts, each with a rectangular sail. The mast finds support at a thwart in front of the platform. Thilenius saw elongated thwarts whose end within the canoe hull was shaped into a ring for the foot of the mast. In order to support the mast, a pole from the outrigger platform, with a fork at the end, is placed against it in such a way that the fork surrounds the mast[445]. Instead of the forked pole, a simple pole can also be used, united with the mast by wrapping round with cords. [289] Four ropes, two of which run from the head of the mast to the outrigger platform or the outrigger staves, and two to the thwarts, serve as stays and hold the mast, so that it takes on a position tending a little towards the outrigger and simultaneously a little towards the stern. The masthead usually features an opening for a rope for hoisting the sail, but it can also bear a fork[446] through which the halyard runs. It is formed from a piece of wood with the lower, non-forked part opened and hollowed out from one side. They push the head of the mast into this hollow, wrap the fork and mast in rattan, and often coat the whole thing with *Parinarium* putty. Instead of this, individual mast forks have only two long dowels, securely bound and coated in the same manner. The fork piece is almost always incised — for example, so that the fork endings represent crocodiles; however usually the part below is incised — and frequently also painted or coated with *Parinarium* resin, in which patterns are incised, Fig. 186. Masts without fork ends are provided with a vertical groove in which is laid a piece of wood ending below in a hook, secured to the mast with a wrapping of cord. The hook then serves as the mast fork, Fig. 187. On Lămbŭtjo Thurnwald saw a swivelling, horizontal piece of wood at the masthead; it served as a weather vane, and was hung with *Amphiperas* shells (*mănа*) on strings[447]. A similar weather vane, although fastened on a horizontal pole of the outrigger harness, was obtained in 1908 in the pole village of Mĭndrŭn. With the arrival of wind, the shells begin to twist and clatter. At Seeadler Harbour there is also a mast ornament made out of a half, roughly-carved coconut shell, that hangs down from the masthead on a chain of plaited tubular rings[448]. [290] In the rigging of a vessel from Lŏnĭu Miklucho-Macklay saw bunches of hair from the slain crew of a schooner out of Yap[449].

Fig. 185. Paddle E. 2559. 1/9 actual size

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445 Moseley, 1877. p.404; 1879. p.466

446 Thilenius, II, 1903. pp.158 *et seq.*; Edge-Partington, III, Plate 45; on Pāk *dánga* according to Krämer

447 Berlin Museum, Thurnwald Collection

448 Dresden Museum 34820

449 *Izvestia*, 1878

When it is not in use, the sail has its place on the fork ends of the outer platform supports, and lies there rolled up; in rainy weather it is covered in a mat sewn out of pandanus leaf strips (on Pāk *do*[450]), that resembles a sleeping mat. It is rectangular, and is put together out of about four diagonally-plaited leaf mats with horizontally-running seams, and bordered on both of the longer sides by a round piece of wood (the yard and cross tree) fastened with wrappings of string (cf. Plate 11, Fig. 4). The twisted halyard is never exactly in the middle, but fastened to the yard at two thirds or two fifths of the total length of the yard, so that the sail hangs slightly obliquely[451]. The rope ends each divide into five plaited cords ending in tufts. A thin twisted rope, about one metre long, is plaited into the middle section of the rope in such a way that a length hangs down from it, Fig. 188. Thilenius[452] noticed that the cross tree always had a forked end abutting the mast, even though a fork tip was present on the mast; but not elsewhere, and that the mast– and tree forks consisted of different woods. Usually the cross tree is totally empty. It is positioned roughly at head-height for men standing on the platform and, (as Moseley[453] stresses), the lower end of the sail never reaches the canoe. From the ends of the longer parts of the yard and tree, sheet ropes extend to the platform or to the prow. Labillardière[454] watched natives making a slow journey with wind astern because they did not hoist the sail but rigged a sail boom about 1½ metres high leaving the rest of the sail lying unused in the canoe. A bunch of bast fibre on the upper boom serves probably to identify the wind direction[455].

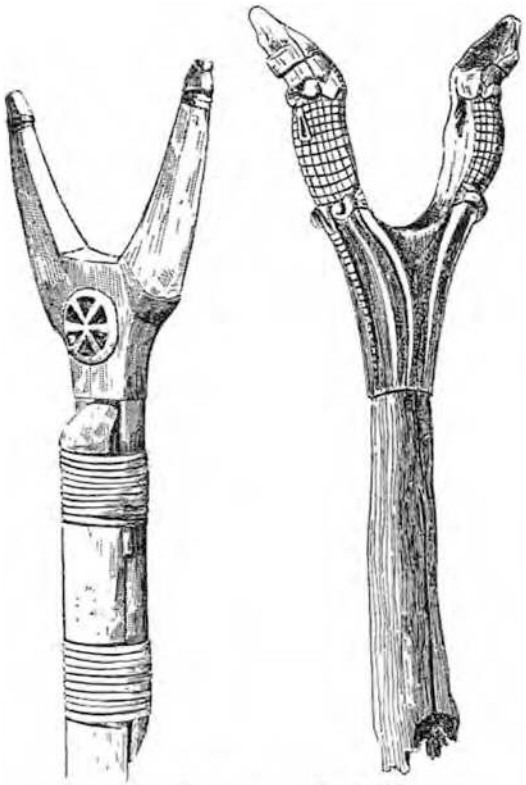

Fig. 186. Mast forks Linden Museum, Stuttgart. 7881. 1/5 actual size

Fig. 187. Masthead with hook Linden Museum Stuttgart. 1/8 actual size

Fig. 188. Sail sheet 3152 I. 1/3 actual size

[450] According to Krämer
[451] Labillardière, I, 1796. p.267
[452] II, 1903. p.158
[453] 1877, p.405; 1879, p.467
[454] *loc. cit.*
[455] Vogel, 1911. p.86

Finally, among canoe tackle, in addition to ballast stones[456], is a bailer for bailing out water shipped by the dugout canoe. The bailers are made of wood, in the Polynesian style, thereby resembling a diagonally- [291] divided box or a coal shovel with the handgrip turned inwards. The handle is often carved in the shape of a penis or a bat's body[457], or ends in a dog's head, Fig.189. Edge-Partington[458] illustrates a place for spears(?) in a canoe, but these were never seen anywhere. The T͡auī people often hung up a basket (*kṓmbu*) plaited from a species of liana (*mănămūn*) for storage of calabashes and other items in the canoe.

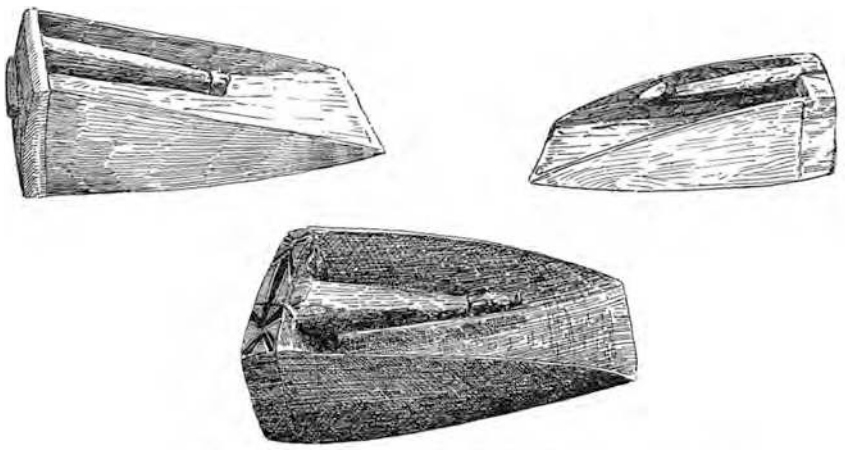

Fig. 189. Bailers. Linden Museum Stuttgart. 41671. 1/3 actual size

The whole outrigger canoe bears the same name as the basic dugout. In Păpítălaî it is called *ndrṓl* with a second name *ndōắl*; in Kyĕlaûắk *ĕ ndrṓl*; on Hắŭs and Pónam *hŏl*; among the Sṓri people of Gắramaṅ *doṅ*; and in Wălṹn on Pāk *kắl*. Moseley[459] heard *doan* on Hắrăṅgăn; Rickard[460] *landrol* on Ndrṹwal. Thilenius[461] heard *endról* on Móuk. Friederici[462] on Móuk also heard *ĕndrṓl*; on Pắlŭăn and Lóu *kĕl*; and on Pāk *kĕl* or *gĕl*. Krämer on Lóu and Pāk heard *gel* and in Lṓnŭ *endrol*; Zöller[463] on Alim heard *ekan*; Dempwolff[464] on Pó͡am heard *kĕl*; and Kölle[465] in Talalo heard *nrṓu*.

For the other parts of the canoe the following names were recorded by Müller in Păpítălaî and Kyĕlaûắk and on Hắŭs and Pónam, and by Hellwig among the Sṓri people of Gắramaṅ and in Wălṹn on Pāk[466]: [292]

Păpítălaî	Kyĕlaûắk	Hắŭs	Pónam	Sōri	Pāk

456 Thilenius, II, 1903. p.159
457 Vogel, 1911. p.86
458 III, 45
459 1877, p.390
460 Ray, 1892. p.7
461 II, 1903. p.155
462 1912. pp.225–28
463 1892. p.454
464 1905, p.210
465 Berlin Museum VI 34055
466 Cf. the word lists from Móuk in Thilenius (II, 1903, p.358) and from Móuk, Pāk, Lóu, and Pắlŭăn in Friedrici (1912. pp.225–228)

Prow, stern	*ṅon dắl*	*ĕmŏndrŏ́l*	*kābắ*	*părēbū́*	*barabúi*	*nŏn*
Decorative attachments on bow and stern[467]			*gŏlobā́u* *mḅū́ă* (crocodile)			*kalebéu*
Amphiperas ornament[468]	*manắ*		*mā́nā*			
Planks in the dugout	*lā́hă̆t*	*ĕndrī́ū*	*lāhă̆t*	*pŏm*	*lā́bĕ*	
Gunwale	*părắ*	*pārā*	*pārắ*	*pā́hăy*	*dărḗ*	*dĕ́de*
Rattan stitching on the planks	*ŏăsḗū*			*sū́lŭm*		
Parinarium putty	*ārĭt*		*ḗlīt*	*ălĭt*		
Braces to keep the planks separated	*kătŭ*				*atu, atua*	*búiod*[469]
Thwarts[470]	*ḅŭmḅūlâu*	*pŭtŭmbŭl*	*bŭrŭmḅŭ́t*	*bŭrŭmbŭt*	*bŭ́rumbŭ*	*marebur*
Elongated thwarts	*kă̆pḗhâu*		*bŭrŭmḅŭ́t*			
Outrigger (float)	*tăm, tyăm*	*ĕtyắm*	*căm*	*săm*	*săm*	*k'am*
Outrigger poles	*kâĭắt, kâĭắtχ*	*ĕkĕtyắty*	*kī́ĕc*	*kī́ĕs*	*ī́ĕ*	*kâĭjákĭ*
Cross staves on the out-rigger beams[471]	*pūlīắ*	*pūlī́ă*	*pūlīắ*	*ăyḗ*[i]	*jăbḗ, jăwḗ*	*bóă,bṓχ*
Spreader of the cross timbers	*săhḗi*		*sebe*	*kâĭ*		
Rattan binding of the cross timbers					*šúru*	
Crossbars over	Păpítălâĭ	Kyĕlâŭắk	Hắŭs	Pónam	Sōri	Pāk

[467] On Lămbŭ́tjo, according to Schoede, *buei* (crocodile) or *kalupo*; in Pătŭ́sī *kălabĕâû*, according to Thilenius (Berlin Collection); among the Mắnus *kalopeo*

[468] In Pĭ́tĭlu *mắna*, carved edges = *kéjă* or *kā́jâû*

[469] According to Krämer

[470] On Lămbŭ́tjo *mbā́b*, according to Thurnwald (collection in the Berlin Museum)

[471] In Pătŭ́sī *pulīa*, according to Kölle

the outrigger poles	*ītâi*	*pā́rā*	*nṓnŏ*	*bā́*	
Platform	*kâitχălắp* *kắtălắp*	*tsā́lĕp*	*kā́văt* *kāvā́*	*bā́hŏá*	*kĕ́dĭlĕb*
Oblique platform supports	*kâitχălắp* *kắtălắp*				*puliū* *kĕ́dĕlĕb*
Buffer for the platform supports	*ḍūlūātălắp*				
Storm shelter	*[u]ŭm*				
Mast	*pătămpălḗ* *kawalḗ[i]*	*kămbắlē*	*kắvēlē*	*kambărḗ*	
Step for the mast	*māk*				
Sail[472]		*bắlē*	*bắlē*		
Eye rod for paddles		*mŏā́k*			
Little paddle[473]		*pŏs*	*pŏs*		
Big paddle (composite)[474]		*pā́haû*	*yā́yaû*	*bā́baû*	*hā́ŭ,hâu* *kŭli*
Steering paddle					
Bailer[475]		*kŏr[e]ŏ* *kŏrṓ*	*hā́tŏ*		*káio*[5476]

In addition, Krämer recorded the following names in Lṓnĭu: prow, stern = *munrol* or *amonron*; decorative attachments on prow and stern = *djagei*; binding of the prow and stern decorative attachments = *lagei*; planks on the dugout = (*en*)*dru*; gunwale = *bára*; rattan stitching on the planks = *wõséu*; *Parinarium* putty = *garid*; lengthened thwarts = *budunbud*; outrigger = *édjam*; outrigger poles = *kádjadj*; cross staves on the outrigger beams = *bulia*; crossbars over the outrigger poles = *gúnulung*; horizontal platform = *borendjam*; slanting platform = *gegédju*; forked slanting platform supports = *bádan gegédju*; mast = *kadámbalei*; mast fork = *bádan*; mast support = *rasus*; sail = *balei*; yard = *djil*; tree = *edjanga*; hauling rope = *sóran*; sheet = *kasādei*; upper sheet = *ulumúm*; luff stay = *badinyam*; fore- and aft stay = *bálandron*. On Lóu he heard: outrigger = *sam*; outrigger poles = *kiel*; cross staves on the outrigger beams = *boeb*; *Parinarium* putty = *garid*. [294]

The size of the canoe is subject to considerable variation. A “small canoe” that Carteret[477] measured had a length of 50 feet, i.e. 15 metres. However, this was quoted as a measurement only

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472 On Pôàm *pălŏ*, (Dempwolff, 1905. p.210)

473 In Tâuī *a bṓs* or *bóăs*, in Lā́lā̄ *bóăsala*, in Pĭ́tĭlu *bṓăs*; according to Schoede, *bos* on Lămbŭ́tjo

474 According to Moseley (1877, p.390) *baban* on Hărăṅgăn; according to Dempwolff (1905, p.210) *pâô* on Pôàm; according to Bühler *poss* on Pĭ́tĭlu

475 On Pĭ́tĭlu *lŭ́lŏ* or *lŭlŏ*; according to Schoede *kana* on Lămbŭ́tjo, *akanja* according to Thilenius

476 According to Krämer

477 Hawkesworth, I, 1773. p.384

for bigger canoes elsewhere[478], while medium-sized canoes measure eight metres[479], and somewhat bigger 10–12 metres[480]. Big canoes with sails, travelling as far as the Purdy Islands, seldom measure more than 13 metres. The length of the outrigger beams range between a third and three quarters of the length of the dugout, although usually it is two thirds of the length. Smaller canoes had room for 2–3 men, medium-sized for 6–7 men, and very big[481] for 10–15 men. Robertson[482] reckons that the biggest could even carry 40–50 men. During the voyage the crew are busy paddling or rowing, steering, and managing the sail sheets fore and aft of the platform, as well as the platform facing the outrigger. On that platform, although more often on the outer platform, they stow equipment, trade items, and food[483]. Labillardière[484] observed that the coxswain sometimes stayed on the outer- but more often on the inner platform, and Moseley[485] even regarded the platform as a place of honour for chiefs. However, since the chiefs do not bother with paddling, and command the canoe on the voyage, the platform is also their allotted position.

During the voyage the outrigger is located more often on the starboard side than to port, although often enough on the port side. Thus no kind of rule appears to exist[486]. Canoes of the same size, in totally similar nautical conditions, can have the outrigger set up on opposite sides. Only in dedicated sailing canoes does the outrigger always seem to be located on the leeward side. According to Krämer's observations, the outrigger likewise is usually sited to leeward. They do not sail with less than half a wind[487].

Carteret[488] had already established "that the people had a fire on board, with one of their pots on it, in which they were boiling their provision". This fire, which Labillardière and Moseley do not mention, was seen by Robertson[489] in all canoes from Lămbŭ́tjo. In canoes that had undertaken longer voyages, Thilenius[490] saw, on the outer platform, a circle of fist-sized stones with a layer of leaves on top, containing ash in which lay glowing pieces of wood. In 1908 canoes were seen with a wood fire burning in a potsherd or on a leaf layer occupied by sand and stones, in the stern. [295]

After the voyage the canoes of the pole-house residents are pulled under the houses and moored. They unstep the mast and sail, and store them in the house[491]. The beach-dwellers pull their canoes ashore. In Păpítălâ̂ they usually remove the outrigger beams with the cross-staves and the outrigger poles on dry land. In Pĭ́tĭlu they leave the outrigger on the canoe, but when it rests on a steeply-sloping bank they lay the outrigger on two forked posts driven into the lower part of the bank, so that the whole canoe lies horizontally. On Hắŭs they protect the canoe from the sun by laying sago palm leaves (*păněpĭ́*) over it and, besides the sail, they also remove the mast and take both into the house, where they lay them on a framework of poles. Real boat sheds with an oval

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478 A. de H., 1876. p.216
479 Thilenius, II, 1903. p.155
480 Moseley, 1877. pp.404 *et seq.*; Labillardière, II, 1796. p.266
481 Moseley, 1877. p.405; *id.* 1879, p.467; Friederici, 1912. p.272
482 1888. p.58
483 Moseley, 1877. p.404; 1879. p.466
484 II, 1796. p.266
485 1877, p.405; 1879, p.467
486 Friederici, 1912. p.272
487 Vogel, 1911. p.86
488 Hawkesworth I, 1773. p.384
489 1876. p.56
490 II, 1903. pp.159 *et seq.*
491 Vogel, 1911. p.122

floor plan are found among the Mătăṅkŏl of the islands to the north of the main island (Hắŭs and Pĭtĭlu).

Canoe-building is professionally carried out only by individuals. For example in 1908 the man Nŭn was the sole canoe-builder in Bŏrĭtŏ (Pĭtĭlu), and the man Pĕü the only- or perhaps also the best, canoe-builder in Tăṅ (Păpítălâĭ). The boat builder receives payment in dog's teeth. The canoe belongs in common, to all who have paid. Also, in the Ŭsĭâĭ village of Mŭndī prow and stern pieces with crocodile carving were found in progress. These sorts of pieces are, in Tăṅ and probably also elsewhere, made by the builder himself and not appointed among the Ŭsĭâĭ, so it can probably be concluded that the Ŭsĭâĭ of Mŭndī build canoes themselves. Individual boat builder's yards of the Mătăṅkŏl have a widespread good reputation such as that of the settlement at Pŭr͡au half an hour inland on Lămbŭtjo (south of Ndrĭol), whose products are brokered as far as Mbŭn͡ai. During one visit to the settlement, around twelve canoes were seen in progress.

Rafts

Besides the outrigger canoes there are used as auxiliary vessels for transport over shorter stretches just a few rafts of wood bound together. On Pāk these are called *pụχ*[492].

Lighting

Torches of coconut palm leaves are fastened to the canoe at night, particularly when they set out fishing. For journeys in the dark they also use "rude bamboo torches"[493] and they also use bamboo torches at the puberty feasts for the girls in the villages on the south coast of the main island[494]. [296]

Signals

Talking drums

With the slit drums, several examples of which are present in every village, signals are sent to neighbouring villages or to absent villagers. For this, one man belabours the drum near the slit with one or two curved wooden mallets.

A drum signal with which the Păpítălâĭ chief Pō Mĭnĭs summoned his brother from fishing back into the canoe, beginning with slow beats and, with brief pauses, increased in tempo, had the effect that the person summoned appeared shortly later, and was fully informed as to the communicated message[495]. The tempo is usually very rapid, and Thilenius[496] describes the rhythm as "very much like our telegraph except that the delight of the drummer gladly lengthened the strokes that already inherently correspond with a series of the quickest strokes". The signals begin

[492] Friederici, 1912. p.227
[493] Mead, 1931. p.37
[494] Mead, 1931. p.140
[495] Vogel, 1911. p.87
[496] II, 1903. p.141

with an introductory phrase that roughly says “Come home” or announces a date. Persons are addressed by an individual rhythm and numbers by slow strokes “interspersed with a formal spacing beat”[497]. The arrival of strangers, impending trade, the course of a battle and so on, are announced with similar signals[498]. According to Thilenius[499] the custom predominates along the entire south coast of the main island that the inhabitants of a village must entertain those of a neighbouring village, during meals, with drums. Only after that do they take their own meal, during which they in turn are entertained by the first village. This custom is noted particularly for Ndrűwal and Tjápale. For the most part, these drum signals do not consist of announcements but are regarded more as musical entertainment interwoven with a few snippets of news.

In the mountains, the possibility of sending drum signals is limited at times. For example in Savoi the sounds are clearly heard only to north and south[500].

Children and women understand the drum signals insofar as they convey simple announcements. Otherwise individual male experts understand one another very well. Boys practise drumming in the bachelors’ houses; women generally do not send drum signals and are restricted to sounding the drums with a simple beat on the occasion of a death, instead of men[501]. For example, in 1908 the women eat some of the drums in Pǐtĭlu when the man Pŏmbūē died. [297]

Signal Horns

Short signals are sent with a wind instrument made from the shell of the *Triton*. This is particularly the case in war and during sea voyages. They also use the *Triton* to call the pigs for feeding, Fig. 190.

Fig. 190.
Signalling horn 2689 I. 1/3 actual size

Fire- and Smoke Signals

According to Schnee[502] news is passed from island to island using smoke signals by day and fire signals by night. In this manner the arrival of European ships would always have been made known.

When in May 1908 the *Seestern* approached Ndrűwal, abandoned by its inhabitants, “news of the movements of the *Seestern* was relayed along the coast by the natives by means of heliographs(?)”[503] from the mountains on the western side of the neighbouring bay of the main island. Also, in 1875 great fires were seen at various places on Nauna from the *Rupak*; these were thought to be signals[504].

Sea Voyages

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497 Mead, 1931. p.35
498 Thilenius, II, 1903. pp.141 *et seq.*
499 II, 1903. p.142
500 Leber, 1923. p.263
501 Mead, 1931. p.34
502 1904. p.212
503 *Deutsches Kolonialblatt*, XIX, 1908. p.856
504 Robertson, 1888. p.56

Within the group there is a lot of happy voyaging by the natives. Almost all of the greater journeys are undertaken by the Mănus, while the Mătăṅkŏl seldom undertake long voyages, and the Ŭsĭâ̂ĭ, in as much as they do go on the water, remain only in the vicinity of the coast.

Regular journeys are undertaken by the Mănus from Păpítălâ̂ĭ to the Los Reyes Islands to catch turtles. Regular communication also exists between the Mănus from Sĭ́vĭsă, Móuk and Takúmal and the residents of the pole villages on the south coast of the main island, from Pălămŏt and Ndrĭ́ol on Lămbŭ́tjo, from Lóu and Mbŭ́ke. Earlier, regular journeys were also made by the Móuk people to Alim to avail themselves of the stands of coconut palms there.

The furthest voyage within the Admiralty Islands is the one to the Purdy Islands, similarly undertaken because of the coconut palms and turtles. This journey is made by the Mănus of the south coast of the main island, or from Mbŭ́ke. [298]

Likewise, regular voyages seem to be made beyond the Purdy Islands. At any event Parkinson[505] in 1897 encountered two Admiralty Island canoes on Jacquinot Island in the le Maire group that had come from Mbŭ́ke via the Purdy Islands and stayed for six months on Jacquinot Island with whose inhabitants the Mănus were friendly.

Earlier there was also contact with the islands of the Agomes group. The tradition of the Luf people, heard by Miklucho-Maclay in 1878, that their forebears had come from "Taui" three to four generations previously, alludes to this[506]. Also the "flint arrows", i.e. small throwing spears with obsidian tips that Yñigo Ortiz de Retes saw on "La Caymana" (= Luf) in 1545, indicated old trade relationships with the Admiralty Islands. Commerce also existed with Ninigo, where the Admiralty Islands were familiarly known as Tâ̂ŭwwūĭ̂ or Tâ̂ŭi. That the reciprocal connections were not always based on voluntary journeys, is shown by the fact that in 1898 Mănus were shipwrecked on Ninigo[507], and that a Luf man, who had been shipwrecked on the Sĭ́sī Islands in his youth, was able to serve as an interpreter there in 1908. Insofar as the voyages were voluntary, the Mănus frequently conducted them earlier as raids on Luf and Ninigo[508].

New Ireland and St Matthias had likewise been visited by the Mănus, although probably hardly voluntarily. For example, the Păpítălâ̂ĭ chief Pō Sĭṅ with his then still very young later successor Pō Mĭ́nis were shipwrecked on both islands, and on St Matthias a voyage by the natives to the Admiralty Islands remains in their memory.

In most cases such extensive voyages are based on shipwrecks of Mănus canoes that missed the Purdy group. Thus occasionally items made by the Admiralty Islanders come to New Guinea[509] and, according to Willemoes-Suhm, the name *Telok lintju*[510] for Humboldt Bay would have been familiar to the Admiralty Islanders.

Numbers, and Ways of Counting

505 1907. pp.351 *et seq.*
506 *Deutsches Kolonialblatt*, XX, 1899. p.211
507 Thilenius, II, 1903. p.134
508 Finsch, 1914. p.478
509 Thilenius II, 1903. p.340
510 Moseley, 1877. p.395

People count according to the decimal system provided by the ten fingers, by flexing the finger. Numerals from 7–9 are formed as subtraction numbers[511]. For counting further, on Pāk after ten (*soṅa*), they interpolate a "*giṅo*" (= ready).

Besides the commonly-used type of counting for fruit, shell money, and days, there are forms of counting, with their own counting words, for living things (humans, spirits, animals), for items of clothing, for trees, canoes and villages, for houses [299] and for garden, poles, etc.[512]. On Pō̂am there are special counting words for fish[513].

As an aid for counting the number of pigs eaten in Mű́ndī and on Hǎ́rǎṅgǎn, a stick is fastened to the beam of the house with a small peg stuck into it for each pig. The owner of a counting stick with almost 90 pegs, on the other hand boasted to Bühler that he had recorded the number of women with whom he had had intercourse. Other details that Bühler obtained deserve greater credence and relate the counting stick to recording the payment transactions for the purchase of women etc. Among the Sōri, people are counted by producing little sticks from broken branches that are divided, and gathered together once more with the number of little sticks and the number of people into one bundle. Also the women in Pár̄ā and the neighbouring Mǎ́nus villages count the duration of a pregnancy, which they calculate as ten months (from the last menstruation right up to delivery), with the help of bundled little sticks[514].

Money

Strings threaded with polished white discs of *Conus* bases are in circulation as money. This shell money is prepared mainly on Pónam and Sōri — currently by the Sōri people on Sabo. They measure it by strings (according to Thilenius *nási*, on Lambű́tjo *ngāsi*); half-strings (*sánal*); and, less-commonly, elbow-lengths (*malemal-enemai*)[515]. Small quantities of bright glass beads or, originally, black coconut shell discs are interspersed in the shell money cord. According to Schoede[516], this is done to denote lesser value. A special shell money (*lŭtű́n*) is used on Lămbű́tjo only for pig trading, wife buying etc., but not for buying taro and coconuts[517]. Superficially, it is no different from other shell money.

Dog's teeth likewise qualify as money. Chiefs especially pursue dog breeding to gain possession of all four canine teeth of the animal[518]. They are used individually as money or are pierced and strung on cords. In Drūgű́l they are strung onto rattan loops which are then hung from the roof beams.

Money of strung *Coix* fruit is used solely for women[519].

Recently tobacco and English money have been introduced as a payment medium[520]. [300]

The value of the money is not fixed but is determined by supply and demand, and especially is subjected to great swings by trade through intermediaries. Dog's teeth lost value

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511 Ray, 1892. p.8; Thilenius II, 1903. p.126; Dempwolff, 1905. p.210; Meier, 1906. p.228
512 Meier, *loc. cit.*
513 Dempwolff, 1905. p.209
514 Mead, 1931. p.242
515 Eichhorn, 1916. p.261, according to the Thurnwald Collection
516 Eichhorn, 1916. p.260
517 Thurnwald Collection in the Berlin Museum
518 Parkinson, 1907. p.397
519 Thurnwald, 1910. p.36
520 Mead, 1931. p.236

everywhere when Europeans introduced dog's teeth from China and Turkey before 1914[521]. Where previously a pot cost one dog's tooth, around 1929 it cost ten teeth[522]. The introduction of glass beads, which began in the seventies, had an adverse effect on the quality of shell money, since the natives generally preferred glass beads to *Conus* discs. On Lămbŭtjo in 1910, instead of *Conus* money, double-strand lengths of cord with black and white glass beads (*buàjăp*) were produced for the purchase of vegetables[523].

In 1900 two Marks was quoted as the value of a strand of shell money 33 cm long[524]. On Sōri around 1904, ten obsidian spears were worth three fathoms; two obsidian blocks: ten fathoms; a large container of coconut oil: 30½ fathoms; a small packet of pyrolusite: three fathoms; and a necklace of one hundred dog's teeth: a belt of thirty strands of shell money; and cords of glass beads were reckoned as equal to the shell money[525]. Men paid one hundred strands of shell money to marry a girl[526]. In 1907 ten spears were worth one strand of shell money in their production site on Lóu — equal in value to a small pig[527]. In 1908 the Pāk people paid the Sōri people one dog's tooth for each strand of shell money. Medium-sized wooden bowls from Lóu were paid for with five strands of shell money on Pāk and everywhere else. In 1910 on Lămbŭtjo ten strands (*lŭtŭ̋n*) of shell money were offered for a big pig; five strands for a little one; and 2.39 metres of *lŭtŭ̋n* were worth one hundred dog's teeth[528]. On Pónam two fathoms (about 3.40 metres) of glass bead money were worth fifty taro roots, or ten bunches of bananas, or ten baskets of sago[529]. In 1929 one dog's tooth was valued at ten taro roots or coconuts, or 40 betel nuts, or a bundle of tree bast fibre. At that time a packet of sago on the main island was worth two dog's teeth; a lime calabash similarly two teeth; and a lime spatula 5–6 teeth; while the Pắlŭăn people handed over three hen's eggs for two teeth, but ten eggs for a packet of sago[530]. In 1932 4–5 dogs' teeth were equated with a shilling [*sic*.] by both the Mắnus of the main island and other natives[531].

Money also plays a role in all ceremonies, such as weddings, mourning etc. On these occasions however, it seems more of a gift and a reciprocal gift, whose size is determined more by the wealth of the individuals, than depending on payments at fixed scale rates determined at the outset. [301]

Trade

The wares that are traded in the Admiralty Islands are foodstuffs, samples of crafts, obsidian, dyes, shell money, and dogs' teeth.

Trade is conducted among the Mắnus, Mătăṅkŏ́l and Ŭsĭa̋ĭ, and, on fixed market days, villages with whom people have trading ties are sought out. For example in 1929 the Mbŭ̋ke people called on the Ŭsĭa̋ĭ of the main island twice a week. Also, regular markets are held at various points along the south coast of the main island. Previously armed Ŭsĭa̋ĭ and Mắnus came to

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521 Mead, 1931. p.236
522 Mead, 1930, p.122
523 Eichhorn, 1916. p.262, according to the Thurnwald Collection
524 Schneider, 1905. p.59
525 Parkinson, 1907. pp.390 *et seq.*
526 Parkinson, 1907. p.394
527 Thurnwald, 1910. p.29
528 Thurnwald Collection, Berlin
529 Eichhorn, 1916. p.262
530 Mead, 1930. pp.121 *et seq.*; 1931, p.224
531 Orally, from A. Bühler

gratings that stretched across a river, and exchanged their wares in silence across the grating[532]. At the same time the Mănus and Mătăṅkŏl are the more enterprising traders, yet Ŭsĭâ̂ĭ also come to trade on the Mătăṅkŏl islands in the north of the main island, for instance to Bŏrĭtŏ on Pĭtĭlu.

The exchange of foodstuffs constitutes a significant part of the trading. The Mănus, particularly those on the south coast of the main island, have virtually no opportunity for raising vegetable plants themselves but, on the other hand as fishermen, they are often in possession of quantities of fish that cannot be consumed for their own needs. Consequently, the fishermen trade fish with the farmers for their vegetables. Thus the Mănus of the main island's south coast obtain taro, yams, and sago in particular, and also taro leaves, betel nuts and betel pepper leaves[533] from the Ŭsĭâ̂ĭ villagers of the main island. Their own sago swamps have come into the possession of the Pārā̄ people only in more recent times[534], while other villages such as Lŏmbᵘá, Tjápale, and Mbŭnâ̂ĭ in obtaining sago are totally reliant on bartering with the Ŭsĭâ̂ĭ, to whom they give fish. Mbŭnâ̂ĭ obtains its sago solely from the Ŭsĭâ̂ĭ of the village of Kĕtyĕ́. By the same token, many coastal dwellers again are in the position of providing coconuts to the inland people, and Tâ̂ūī provides them for the Ŭsĭâ̂ĭ village of Ndrabui[535]. Most of the coconuts however come from the inhabitants of the smaller islands to the east and south-east of the main island. The inhabitants of Pāk produce oil from the coconuts, which they sell to the main island for sago[536].

The Mătăṅkŏl of the islands to the north of the main island likewise barter taro and sago from the Ŭsĭâ̂ĭ of the main island in exchange for fish. Pĭtĭlu has a special trading relationship with Lukús; Hăŭs with Drūgŭl; Pónam with Săhă and Sōri; Hărăṅgăn and the Sĭsī Islands with the Ŭsĭâ̂ĭ of Līĭndrâ̂ū. Besides fresh fish, smoked fish are also offered by Pĭtĭlu[537] and Hărăṅgăn in exchange for taro and sago. There the inducement for barter trade is not so imperative as it is for the Mănus of the south coast, since taro also thrives on the islands of the Mătăṅkŏl, but [302] there is no smaller amount of trade on account of this. Turtles and dugongs are caught and sold only by the Mătăṅkŏl of the northern islands[538].

Yam roots and hen's eggs[539] are introduced into the trade, from Pălŭăn, and pigs[540] from Pô̂am.

Shell money is manufactured on Ăndră, Pónam and Sōri. From there it is traded to Hăŭs, Mbŭnâ̂ĭ, Pătŭsī, Lălā, Lŏnĭu and Pāk, and then passes from Mbŭnâ̂ĭ to Ndrĭ̂ol, and from Pāk to Lóu. The Pāk people supply dog's teeth to the Sōri people for shell money. Vegetables cannot be traded on Lămbŭtjo for shell money (*lŭtŭ́n*)[541].

The Mănus offer the Sōri people obsidian spears, blocks of obsidian, coconut oil, cords of glass beads, and black earth dye for shell money[542]. The Pāk people buy wooden bowls from the Lóu people for shell money.

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532 Mead, 1930. p.118
533 Mead, 1931. p.223
534 Mead, *loc. cit.*
535 Leber, 1923. p.201
536 *Deutsches Kolonialblatt*, XX, 1909. p.531
537 Parkinson, 1907. p.388
538 Mead, *loc. cit.*
539 Mead, 1931. pp. 223–224
540 Parkinson, 1907. p.392
541 Eichhorn, 1916. p.262
542 Parkinson, 1907. p.390

Pots are traded from Hấŭs, Lấlā, and Mbű̃ke. The Mbű̃ke and Lấlā pots are sold in Ndrūbiū, Pătű̃sī, and Mbű̃n͡aî; the Mbű̃n͡aî people sell them on to Pĭ́tĭlu. Ndrĭ́ol buys pots from Mbű̃ke, and pays with shell money and dog's teeth. The pots reach Pāk only by intermediate trading, and the production sites are unknown there. Hấŭs supplies pots to the north coast of the main island and to the offshore islands. From the two production centres, the pots reach the interior of the main island through intermediate trade. According to Thurnwald's information, the Ŭsĭá͡î pay the Mắnus 30–40 taro roots for a pot, although the price doubles if they do not pay immediately[543].

Obsidian spears are made-to-order by the Lóu people. Pigs, taro roots, and packets of sago are paid as bargaining money, and the buying price is agreed. The spears are collected one month later, and paid for with the same currency and shell money. In 1907 a bundle of ten spears was handed over for a fathom of shell money or a small pig, however for a good contribution they give a bonus in spears[544]. With intermediate trade the spears become more expensive, so that on Sōri (around 1904) three fathoms of shell money were paid for ten spears[545]. Of course it must be remembered that shell money is manufactured on Sōri and has not yet increased in value by intermediate trade.

From Lóu and Pắlŭăn to Móuk and, through the mediation of Móuk, to other villages, in addition to yam roots, the people trade wooden dishes and other carvings, coconuts, oil, oil containers, lime calabashes and fishing nets[546] and combs from Pắlŭăn[547]. Lămbű̆tjo and Náuna supply the islands with carved beds. In Ndrĭ́ol on Lămbű̆tjo wooden bowls are bought from neighbouring [303] Mătăṅkő̆l. Pāk trades battle decoration for wearing on the back[548] and slit drums[549]. Drums and canoes are made in Mű̆ndī for sale to Pĭ́tĭlu. Furthermore, canoes are made for sale in a local centre of the settlement of Pŭra͡û on Lămbű̆tjo, (probably identical to the Polotjal mentioned by Parkinson[550]), and traded as far as Mbű̃n͡aî.

From the Ŭsĭá͡î of the main island the Mắnus of the south coast obtain lime calabashes, lime spatulas, *Parinarium* nuts, water-tight baskets with a *Parinarium* resin coating, other baskets and material for cord work and rope work[551]. The carved staircases in Lấlā came from the Ŭsĭá͡î. Even the building materials for the pole buildings in Pắrā̄ and its neighbouring villages must have been obtained from the Ŭsĭá͡î[552].

The Drūgű̃l sell black, red, and yellow earth dye to Hấŭs. The Gắramaṅ people buy bundles of ten strips of liana bark from their Ŭsĭá͡î neighbours in order to make armbands, paying especially in fish. The Sōri people (closely-related to the Gắramaṅ people) who had migrated from

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543 Thurnwald, 1910. p.33
544 Thurnwald, 1910. p.29
545 Parkinson, 1907. p.390
546 Mead, 1930. p.119; 1931. p.223
547 Parkinson, 1907. p.386
548 Mead, *loc. cit.*
549 Schnee, 1904. p.170. According to Chinnery (p.59), wooden bowls were also an export item from Pāk, yet in 1908 they were imported from Lóu. In contradiction to the observations of the Hamburg Expedition, Chinnery states that drums are imported to Pāk as products from Lóu exchanged for dogs' teeth.
550 1907. p.391
551 Mead, *loc. cit.*
552 Edwards, 1931. p.551

Sabo, produced made-to-measure plaited armbands to order in 1932, and brought other pairs for trade[553].

As far as possible the Mănus of the south coast of the main island and the Mătăṅkŏl of the northern islands try to wrest trade completely for themselves. In so doing it often comes about that they make the Ŭsĭăî economically dependent on them. In Mŭndī in 1908 a Pĭtĭlu man and another man from Ndrūbiŭ (the son of a Pĭtĭlu woman) had the property of the Ŭsĭăî at their disposal and sold it as if it were their own property. In Săhă too, Pónam people behaved the same way. Mătăṅkŏ l were present in every Ŭsĭăî village on the north coast of the main island, and monopolized trade as middle-men, so that trade had to be conducted with the Ŭsĭăî through them, or with them alone, as agents of the Ŭsĭăî who had probably been removed from the villages by intimidation. By proceeding in this manner they wanted to avoid the Ŭsĭăî receiving the relatively high price that the Europeans paid for purchased items, so that their own price with the Ŭsĭăî might not be spoiled by the foreigners. That they did not pass on to the Ŭsĭăî the full amount that they received from the Europeans for the wares of the Ŭsĭăî but retained a portion as fee for the intermediate trading, is beyond doubt. By these same Mătăṅkŏl the prices of foodstuffs were driven so high that they far exceeded those of the equally-skilled Mănus traders of the south coast.

The trading of these Mănus of the south coast is so extensive that among themselves — apart from pottery — they make only canoes, houses, a portion of the fishing equipment and [304] threads for stringing beads[554]: everything else is traded.

Also within the villages one person trades with another, and barter, payments, and gifts play a major role in all social events. Important for the individual above all is the possibility of being able to sell his knowledge of sorcery to others[555].

IX. Sociology

Birth

According to Parkinson pregnant women must not eat taro, yams, and pork lest their child be deformed[556]. Among the Ŭsĭăî in Boltzal, Bojang and Savoi however, dietary restrictions for pregnant women do not exist[557]. Likewise Margaret Mead[558] did not hear of any dietary restrictions in Pă̆rā. However, there, the cutting and cleaving of wood and fish with axes and knives is forbidden to pregnant women, since otherwise they would cut off a limb of their child. They also trace miscarriages back to a violation of property-protecting *tabus*. Parkinson[559] heard that miscarriages stemmed from a woman staying overnight in the forest or at sea and thus becoming a slave to an evil spirit. From Klink's information[560] the birth of twins is not a good sign since one of the children is "evil". People believe that both children must go into the "pig"(?) Uniam, where the "evil" child remains, while the good child reappears.

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553 According to A. Bühler
554 Mead, 1931. p.223
555 Mead, 1931. p.224
556 Parkinson, 1907. p.398
557 Leber, 1923. p.265
558 1931. p.241
559 1907. p.395
560 Manuscript

The birth of a bastard child is regarded as shame. To avoid this, pregnant girls attempt to abort the foetus by leaping down from a high object[561].

In Pā́rā̄ they believe that the child develops from male seed and menstrual blood. However, the will of the ancestral spirit of the husband is important also, that he has descendants[562].

Birth takes place at home. Only women who have already given birth are allowed to be in attendance at this time. The woman in labour supports herself on a bamboo halter suspended from the roof beam[563].

The umbilical cord is usually cut with an obsidian knife[564]. However, Margaret Mead heard in Pā́rā̄ that a bamboo knife was used. In Boltzal, [305] Bojang, and Savoi where better hygiene conditions prevail than on the coast, Leber[565] found careful treatment of the afterbirth, with ligation of the umbilical cord.

The baby is washed immediately after birth, and suckled for the first day by a woman other than the mother. The mother is confined at home with the child for 20–30 days and receives food that is cooked just for her on a single fire. During this time the father may not enter the house. Only the women who are assisting the mother who has just given birth have right of access. At the end of this period the woman bathes and her relatives put on a feast[566].

During the first months of life the infant in Boltzal, Bojang, and Savoi is fed only breast milk[567], while elsewhere they are already giving the babies other food, especially taro[568].

Formal Naming

On the day of birth the relatives give the babies a name; father and mother do not take part in this. Later other names are added — usually allusions to some event or other, one of which will be the main name[569]. The name-giving is not connected with ceremonial occasions such as the admission to the men's house, ear piercing, circumcision etc.

Admiralty Islands men's names[570] are:

In Păpítălâ̂ĭ: Pō Sĭṅ, Pō Mĭ́nis, Bālek, Guŏ́lam, Lŏ́bĕhin, Bŏ́e, Tšā́ge, Mŏ́ma, Dā́bor, Bŭ́nĕb, Gĭ́âû, Gĕ́hin, Pomandrăl(?), Mŏ́ssog, Bŏ́bo, Bŏ́tehin, Mŏ́rmon, Pḗū, Lĭ́lī; according to Meier: Moenpak, Haplos, Ndrakot, Suean, Songan, Kopen, Lowar, Kaui, Selan, Po Tjili, Po Kisel, Sokou, Kaje, Angat, Ndraui, Po Sempak, Kalie, Pamei, Ndrauka

On Pĭ́tĭlu: Kidjĭm, Pŏmbūē, Kĭ́djúi, Nŭ́n[571], Lĭ́lī, Pŭtyĕn

In Mbŭ́n͡âĭ: Bắtabo, Bugajo, Bŏ́li, Nŏ́ri, Bŏ́iō

In Lŏ́nĭu: Po Pau[572]

In Pătŭ́sī: Bondrlé; according to Meier, Kuluep

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561 Parkinson, *loc. cit.*
562 Mead, 1931. pp.241 *et seq.*
563 Mead, 1931. pp.242 *et seq.*
564 Friederici, 1912. p.44
565 *loc. cit.*
566 Parkinson, 1907. pp.398 *et seq.*; Mead, 1931. pp.54 *et seq.*
567 Leber, *loc. cit.*
568 Mead, 1931, p.244
569 Parkinson, 1907. p.399; Mead, *Natural History* 1931. p.70
570 For names in Pā́rā̄ see Mead, 1931. pp.247 *et seq.*
571 With a long 'n'
572 Parkinson, 1907. p.388

In Mĭndrū̆n: Bŏ́nioṅ, Bogulem, Bomăt, Matakabet, Bassē̆n, Bâ͡un, Bogắsi
In Kyĕlâ͡uắk: Bómbŭlḗn
In Lắlā: Lŏ́li
In Drūgŭ̊l: Namŭ́, Rehắ, Tăteúrĕ, Drŏ́han, Muĕhắbei, Búk, Wŏ̆tĭ́ [306]
In Sắhă: Sĕlĕ̄ō, Bohōa, Loret
In Līĭndra͡u: Batakalé[573]
In Ndrombut: according to Meier, Tou, Morumou
Among Mắnus of the south coast of the main island: Eiuei, Dšokâ͡ù, Palondo, Guắt
Among Ŭsĭâ͡ĭ of the main island: Sulaŭ́
On Poamatjau: according to Meier, Sojan
On Ăndră: Mŭ́leu
On Pónam: Kĭ́, Kulŭ́o Kắso, Sắn, Lĭ́šŏ, Dḗbin
On Hắŭs: Bŏ́ruhol, Dšodšie, Nuambu, Toŏ́n, Grĕ́mat, Sŏ́rrea, Bắbi
On Hắrăṅgăn: Pajab (Pajap), Loye(?); according to Moseley, Oto(?)
On Sōri (respectively Gắramaṅ): Kapturosso (Rosso[574]); according to Moseley[575] Oto, Susu, Shibaya, Yare, Heve, Pomoi, Banawayi, Babaiu, Balusu, Babaru
On Sĭ́sī: Bosso[576]
On Mbŭ́ke: according to Meier, Kauas u Jap
On Pāk: Sắŏgaṅ (Sagon[577]), Simioṅ (Simio[578]), Jimmy[916], Jamboâ͡ĭ[579], Bŏχobŭ́, Djagon[580], Diábun[581], Bako[582], Ksakau[921], Bangela[583], Kanau[584], Polau[919] (Pollau[922]), Abot[918]
On Lămbŭ̊tjo: Nassangat, Zau, Buŏ́nau, Mŏ́nēi, Mpŏ́mpē (Bŏ́mbē), Tambắlit, Pak, Pōpŏsŭ́ī (Boposui[921]), Kĭsắgīū; Kámau[585], Kóun[924], Mamenga[586]
On Lóu: Lăjin, according to the *Planet* report[919] Dóbunrey(?), Sogo, Basio, Siren
On Pắlŭăn: Gḗgat, Mulien
On Poa͡m: Păthĕn, Kibau, Kalanges (Langes)[587], Biam[588]
On Sĭ́vĭsă: Kanenwu, Kävenu (Kewenu)[589], according to Meier, Tapali
On Móuk: Nauvain[590]
On Uaimkatou: Po Katou, Po Lot[591]

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573 *Deutsches Kolonialblatt*, XXI, 1910. pp.991 *et seq.*
574 *Deutsches Kolonialblatt*
575 1877. p.390
576 *Deutsches Kolonialblatt*, XXI, 1910. p.992
577 *Deutsches Kolonialblatt*, XX, 1909. p.530
578 *Deutsches Kolonialblatt*, XX, 1909. p.898
579 According to Krämer
580 *Planet*, I, 1909. pp.84 *et seq.*
581 According to Krämer
582 *Deutsches Kolonialblatt*, XX, 1909. p.899
583 *Deutsches Kolonialblatt*, XIX, 1908. p.624
584 Webster, 1898. p.303
585 Parkinson, 1907. p.409
586 Thurnwald, 1913. p.134
587 *Deutsches Kolonialblatt*, XI, 1900. p.330, and XIX, 1908. p.855
588 Dempwolff, 1905. p.208
589 *Deutsches Kolonialblatt*, XI, 1900. p.331; Schnee, 1904. p.204
590 Schnee, 1904. p.182

On Naúna: according to Meier, Kuwai

Very frequent in the Mănus men's names is the prefix 'Po' or 'Bo' which also appears occasionally among the Mătăṅkŏl, although missing among the Ŭsĭâ̂ĭ.

Several of the names no longer seem to be local, such as 'Kapturosso', which is probably a combination of the name 'Rosso' and 'Captain', and 'Simioṅ', that can be either a missionary name or a misrepresentation of 'Jimmy'. [307]

The name 'Pē̆ū' borne by a man in Tă̆ṅ (Păpítălâ̂ĭ), means shark; 'Po Lot' = festering sore, for the Uaimkatou chief Po Katou), and Kóun = 'The left-handed one' for the Limóndrol chief Kámau)[592] are nicknames. The meanings of other names, according to Meier, are: Pō Sĭṅ = 'the scorching one', Suean = 'his style of paddling', Songan = 'the collector', Kopen = 'who is retarded in growth' Tou = a bird of prey, Kuluep = 'ashes', Kauas u Jap = 'guest of the Europeans', Kaui = a species of tree, Morumou = 'two', Tapali = "the opener", Sojan = "He who eats standing up", Po Tjili = "piercing of the earlobe", and Po Kisel = "He who will divide". Besides the name Pŭtyĕn, a Pĭ́tĭlu man carried the name Lĭ́lī.

The following were heard as women's names:

In Păpítălâ̂ĭ: Nĕ̄monâ̂ĭ, Hĕnĕ́ū, Lĭ́ebat; according to Meier, Hi Poailep, Kisojai, Hi Pojang, Hi Tjatji, Hi Tulukor, Kitalasi, Sokoloh, Hi Lul.

On Pĭ́tĭlu: Dŭ́ma, Zăni

In Lŏ́nĭu: according to Meier, Hi Otjun

In Uarwei: according to Meier, Hi Mou

On Moakareng: according to Meier, Hi Lueni

In Pătŭ́sī: according to Meier, Sauai

In Mĭndrŭ́n: Natâ̂ĭ, Njassūn, Nâ̂usâ̂ĭ, Naχuwĕ́n, Esâ̂́u, Maud, Endrlō, Ṅallĭ́n, Balâ̂ĭje

In Mŭ́ndī: Kahĕ́ŭ, Wila, Gosab, Giritān(?)

On Hắrăṅgăn: according to Meier, Hi Kenai

Among the Mănus of the southern part of the main island[593]: Mĕ́lbo, Meĭ́a

On Pāk: Hi Pak[594]

The meanings of the names heard by Meier is Hi Poailep = "opening of the cave", Kisojai = "She who will always bathe", Hi Lueni = "She who lets things drop" (Mătăṅkŏl language), Kitalasi = "She who will share out", Hi Kenai = a tree species, Hi Otjun = "Sitting on the mother's neck", Sokoloh = "She who waves", Hi Pojang is derived from *jang* = "women's leaf frock".

Hi Pāk probably means nothing other than "a woman from Pāk", and is a fictitious name.

It is forbidden to utter the name of a relative related by marriage — also that of the marriage partner — in the presence of other people. According to Margaret Mead[595], it is even regarded as unseemly just to insinuate the name, e.g. to sneeze in the presence of a woman whose daughter is married to a man named Niesen. [308]

Adoption

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591 Parkinson, 1907. p.384

592 Parkinson, 1907. pp. 384 and 409

593 Cf. also Mead, 1931. pp.274 *et seq.*

594 Parkinson, 1907. p.409

595 *Natural History*, 1931. p.70

According to Thurnwald[596], the custom exists on Lămbŭtjo of giving children older than three and four years over to relatives to raise; their own children have, in turn, been handed over in exchange, to raise. As a result of this adoption the children will often barely know their real parents.

In Pā́rā Margaret Mead[597] found a quarter of all children adopted. Half of those children were orphans. In most cases the adoptive parents were relatives. The real mother had no further connections with her child than to take care of the feeding.

Children conceived in adultery and children of a pregnant widow who has remarried, are brought up by the husband as his own children.

Child-raising

Small children are encouraged to respect the property of strangers and to treat valuable items carefully[598]. People make a point of the children learning decency in a timely fashion and developing a sense of shame[599]. Among the Mắnus great value is also placed on the children quickly becoming able to move around the pole buildings safely and learning to swim.

The children's schooling is limited to a few points. The boys learn combat with spears, fire-rubbing, drumming and a few methods of fishing from their fathers. Apart from that the children learn in play by imitating the grown-ups, everything that they will need later in manual skill.

Children under 14–15 own only a child's canoe, bow and arrows, and toys that are made only for temporary use[600].

Celebration of Puberty

The beginning of puberty is celebrated only amongst the girls. The Mắnus of the south coast of the main island advertise the onset of a girl's first menstruation by the father or his proxy throwing into the water a lot of coconuts that are then collected by the neighbourhood children[601]. The girl sits in the hut for five days and eats food from her own fire, although subject to several dietary restrictions[602]. During this time she receives visits from other girls and young women. At the end of five days the women and girls assemble in the house with burning torches, and the grandmother, with a torch in her hand, pronounces a declaration over the new grown-up. [309] A distribution of foodstuffs accompanies this, with a second distribution following seven days later, for which a reciprocal gift is expected[603]. Five days later the women enjoy a feast among themselves with food and incantations[604]. A one-month *tabu* for girls, as recorded by Margaret Mead[605], is probably related to the puberty celebration. During this time the girl's brothers catch fish, which she eats and stores the bones, while her father's sisters eat up the fish heads "in order to ensure her health". If the girl is already betrothed then another feast follows, during which the girl

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596 1910. p.123
597 1931. pp.60 *et seq.*
598 Mead, 1931. pp.26 *et seq.*
599 Mead, 1931. p.38
600 Mead, 1931. p.93
601 Mead, 1931. p.138
602 Mead, 1931. p.139
603 Mead, 1931. pp.140 *et seq.*
604 Mead, 1931. pp.140–144
605 1930. p.126, figure

stands in shallow water and receives oil poured over her head by her grandmother[606]. Otherwise at this feast there is trading between the participating families. Following the puberty celebration comes the piercing of the girl's ear lobes, the celebration of which is of lesser importance.

Among the boys earlobe-piercing represents the puberty celebration. According to Margaret Mead[607] it is consummated on boys of 12–16 years, yet in 1908 in the Lőnĭu region it was noted that the earlobes of nine-year-old boys had already been pierced, but not those of seven-year-olds. Schoede[608] too reports that on Pāk earlobe-piercing is carried out on 8–9 year-olds.

Before the ceremony itself the boy is forbidden from cutting with a knife, making fire, and bathing. His food is prepared by the wife of his maternal uncle[609]. The breaching of a sanction leads to fear that the pierced ear lobe will split.

The operation is carried out with an obsidian sliver used to slit the ear lobe. The blood is caught in a coconut shell and buried, in order to hasten the healing of the wound[610]. According to Thilenius[611] a woman performs the surgery, and gives the boy patient two pigs; however according to Parkinson it is a man who, like the second man who catches the blood, is given shell money.

Following the ear piercing the boys are sequestered for thirty days according to Thilenius (twenty days according to Parkinson), and the girls for six months according to Parkinson, in a dark house, which they can leave only if fully-cloaked. During this time they may not cook anything. To protect their ears, the boys in Pătűsī and on Pāk wear funnel-shaped ear protectors that are sewn out of stiff palm leaf sheaths and held on their heads with a fine cord. In Pătűsī the ear-protectors are called *kéalom* or *bágo*[612], and on Pāk *polimbené*[613]. Sexual intercourse before or during the sequestration is punished by ripping the ear lobe. This is regarded as a scurrilous disgrace. [310]

After the sequestration the boys are regarded as adults. That is celebrated by a feast put on by the maternal uncle of the boy operated on.

They insert a spiral made from a strip of pandanus leaf into the pierced ear lobe to gradually enlarge the opening.

Some time after the ear lobe piercing, the nasal septum of both boys and girls is pierced. Nine-year-old boys in the Lőnĭu area with pierced ears still did not have the nasal septum pierced. According to Parkinson's information[614] however, among the Mănus piercing of both ear lobes and nasal septum must take place at the same time. The operation is performed with a thorn that is left in the wound[615] to prevent its closing up. In the Lőnĭu area, after the nasal piercing, the brother of the mother of the individual who has been operated on puts on a feast that, like the operation itself, ranks next to the celebrations surrounding the ear lobe piercing in size and importance.

Boys' circumcision generally takes place only on Pāk and Tong and in Lőnĭu. According to Parkinson[616] it is carried out early on small boys at the same time as the cutting of the hair;

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606 Mead, 1931. p.144
607 1931. p.150
608 Catalogue of the Schoede Collection
609 Mead, *loc. cit.*
610 Parkinson, 1907. p.400
611 II, 1903. p.132
612 According to A. Bühler
613 Catalogue of the Schoede Collection
614 1907. p.400
615 Parkinson, *loc. cit.*
616 1907. p.399

however, according to Friederici[617] on Pāk, it happens at the same time as the piercing of the ear lobes. Chinnery[618] on the other hand reports that circumcision on Pāk precedes the ear lobe piercing. There it is performed in the chief's house, in which the circumcised can socialise from then on. Women are excluded from participation in the actual circumcision celebration, but may be present at the subsequent dance feast. Also in Păpítălâî the circumcision that according to information from a few natives is across-the-board, but according to others is not common, is said to take place in the canoe shed. On Pāk and in Păpítălâî an obsidian knife serves as the surgical instrument. More recently on Pāk they also use pieces of glass[619]. Wherever circumcision is not common, admission into the bachelors' house is also not fixed to a particular timetable, but can take place soon after the piercing of the ear lobe.

Hair cutting takes place on Pāk and Tong and in Lőnĭu through a sorcerer, with the incantation of blessings. A festive meal follows the ceremony, and a distribution of gifts by the parents. Shortly thereafter the *kalou* ceremony is performed on the boys, to make them big and strong. It is carried out in a men's house constructed especially for the ceremony, in which the boys will live enclosed for nine days, eating fish[620].

A change of names is not connected with any ceremony.

The conclusion of the coming-of-age ceremonies among the youths is marked by their acceptance among the warriors. [311]

Initiation as a Warrior

The boys learn spear throwing and avoidance by play imitation of the men. For the game itself they make[621] wooden spears about 75 cm long with a resin tip or alternatively they use children's spears (*kuba*[622] on Pāk) with a wooden or obsidian tip, resembling the spears of the adults.

When the boys have got bigger, they are given better instruction in spear throwing from their fathers[623].

Adolescent boys are taken along on war expeditions to assist as paddlers or drummers, thereby relieving the warriors[624].

The boys who have received sufficient training in throwing spears, are taken into a battle armed as warriors, an experience that ends only when they have all killed or wounded an enemy. After the return home the new warriors are solemnly addressed by an elderly warrior chewing betel and ginger and holding a bunch of *Dracaena*, in front of the assembled war party, and are accepted with a blessing among the warriors[625]. There follows a feast and the war dance.

Bachelors

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617 1912. p.46
618 p.58
619 Chinnery, p.58
620 Parkinson, 1907. p.399
621 Mead, 1931. p.36
622 Schoede Collection, Berlin; also *niu* after the raw material (coconut palm wood) of the shaft
623 Parkinson, 1907. p.401
624 Thilenius, II, 1903. p.128
625 Parkinson, 1907. pp.401 *et seq.*

The bachelors' houses serve as a dwelling for all boys following puberty — all the youths and all older unmarried men. They are often, at the same time, canoe sheds or chiefs' houses. The wives of the chief then live in separate houses. In Pā́kĕrăn however, the wife of the chief was said also to live in the bachelors' house, but this information is probably based on a misunderstanding.

The doors of the bachelors' houses are "men's doors" and forbidden to women. In Lŏ́nĭu in 1908 people did not seem to be so scrupulous about it, since little girls went into the bachelors' house, and an old woman said to be connected with the chief, worked in there.

By way of exception, there was no bachelor's house in Brŭ́n͡ai, and a youth of about seventeen lived together with four men and their wives in a pole house. However there was probably no house available for him at that time.

Where circumcision is practised, only the circumcised are accepted into the bachelor's house. Elsewhere however, admission is not bound by any firm rules. [312]

Fireplaces are not found in bachelors' houses because food for the inhabitants is prepared by the women in their houses and brought to the bachelor's house. On Uainkatou Rickard[626] felt able to determine that the inhabitants of the men's houses were looked after by the chief.

Married men when visiting other villages stay in their bachelor's house. In their own village they are free to visit the bachelor's house if they have prepared themselves by a two-day sexual abstinence. Otherwise they mollycoddle the youths. On Hā́ŭs married men are said to reside almost permanently in the canoe houses and bachelors' houses. Where the men's house has only a compartment for bachelors[627], these provisions apply to that compartment.

The only women who have access to the bachelors' houses are the prostitutes. However they are only allowed to go into the bachelor's house at night; during the day they stay with the chief's wives.

The bachelors have to keep out of the way of the other women. Only as a reciprocation of a visit of married men to their houses are they permitted to speak to the women[628].

Drums, canoes and nets are often stored in the bachelors' houses, or they are stored in adjoining lean-tos.

The principal occupation of the bachelors is any of the manual crafts carried out by the men: voyaging, trade, and warfare. In many cases they set out for battle alone, or with only a few married men. While the men stand watch over the women gardening, the bachelors remain on guard in the village[629].

Marriage

Membership of both partners in the same totem group, and relationship by blood are effective impediments to marriage. Marriage between brother and sister is especially reprehensible[630]. Whoever brings about totem shame or incest, is ostracized from the community, and must live in exile in the bush[631], or people do not associate with him anymore and expect him to die from emaciation[632]. The affiliation of both partners to different villages or groups of the

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626 Ray, 1892. p.5
627 Parkinson, 1907. p.395
628 Parkinson, *loc. cit.*
629 Thilenius, II, 1903. p.132
630 Fortune, 1932. p.278
631 Thurnwald, 1910. p.40
632 Thurnwald, 1912. p.325

Ŭsĭâĭ, Mătănkŏl, and Mắnus is no impediment to marriage. Thus, for example, the Ŭsĭâĭ of Drūgŭl and the Mătănkŏl from Hấŭs intermarry. The Mắnus of the south coast of the main island in particular, prefer women from the neighbouring villages[633]. Premarital sex of the girl is bloodily avenged by the bridegroom on the perpetrator or on her relatives[634]. [313]

Widows are allowed to remarry two months after the death of their husband — in many villages even somewhat later[635].

The form of conclusion of a marriage is the bride price. This is carried out by the mother's brother or father or by other relatives or friends of the husband. The husband himself is consulted just as little as the woman, since it usually comes to the issue of the contracting parties bartering among themselves in the betrothal and marriage. According to Parkinson[636] people usually pay 100 fathoms of shell money, or other equivalent value for a girl; according to Margaret Mead[637] 10,000 dog's teeth.

Purchase is possible only after the girl reaches maturity, although it has been agreed upon years before. From this point forward the girl should not see her future husband nor utter his name[638]. Also the names of his relatives are forbidden to her, and generally she must not enter his village, which is often at the same time her mother's home village. Among the Mắnus of the south coast of the main island, the betrothed wears a *tabu* garment that earlier consisted of a big rain mat, but is now made from a blanket.

On the day of the wedding, the bridegroom's goods — dog's teeth, shell money, glass beads — are given by the relatives of the husband to the family of the bride, who hand over pigs, oil, sago, pots, women's skirts etc. in exchange[639]. The occasion is celebrated by feasting and dancing by the men. People do not expect the bride to emerge[640]. On Lămbŭtjo[641] during a wedding a water purification ceremony is carried out and a wedding canoe is used; this carries a type of May pole made from coconut palm frond ribs bound together with mature sprouting betel nuts, fragrant herbs, and bunches of bast fibre and a phallic symbol on the prow, and bunches of bast fibre on the cross beams over the outrigger poles. After the ceremony, the paddles of the wedding canoe are seized by the participants, who run away with them.

Matrimony

Marriages are monogamous or polygamous, according to the wealth of the individuals. Monogamy is prevalent among all free people apart from the chiefs and among all bonded people[642]. Polygamy is the rule among chiefs. In the interior of the main island, for 100 married women there are 67 husbands[643]; and in Mĭndrŭn in 1908 there were eight wives for four husbands. Where, as in Gắramaṅ, the number of married women remains lower than the number of husbands, despite this, polygamy predominates among some men while [314] other men remain bachelors. The number of wives for one husband ranges between one and five.

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633 Mead, 1930. p.120
634 Parkinson, 1907. p.395
635 Parkinson, 1907. p.396
636 1907. p.394
637 1931. p.48
638 Parkinson, 1907. pp.393 *et seq.*; Mead, 1931. pp.46 *et seq.*
639 Mead, 1931. p.162
640 Mead, 1931. pp.50 *et seq.*
641 Thurnwald, 1913. pp.138 *et seq.* and Plate VIII, No. 120
642 Thilenius, II, 1903. p.132
643 Leber, 1923. p.265

With marriage the wife does not lose contact with her relatives, but is entitled to seek protection with them if ill-treated by her husband[644]. The wife's dowry becomes joint property of husband and wife, with the exception of her shell money, which stays with her relatives and can be made available to the husband only as a loan. She has control of the husband's shell money and the household goods, and can also own a garden, but never landed property, nets, canoes, weapons and so on, like the husband[645]. Ownership of *Coix* money on Lămbŭtjo is exclusive to wives[646].

The wife can be banished at any time by her husband, right up to the first conception. He is then entitled to claim back the bride price from her immediate family, although this is not considered respectable, and hardly ever happens[647].

Men and women often live in different houses, even when they are married[648], although this custom does not appear to be universal. For women the doors that are called *tšăṅā́* or *tšăṅā́ măsără̆ n* are forbidden. These doors are found in all family houses, pole houses and adolescents' houses that are exclusively for men. Permissible for women are only those doors designated as *tšăṅā́ kārūt*, or the side doors of the houses, called *tšăṅā́ drăgŏrŏn*. However, in a bachelors' house in Lŏ́ nĭu in 1908 an old women was found plaiting decorative cords. She was said to be an associate of the chief.

It is forbidden to the husbands to enter the family houses in their wife's home village. One Bŏ́rĭtŏ man who had married wives from Pā́kērăn and Bŏ́rĭtŏ was allowed to enter only the bachelors' house in Pā́kērăn but not the family homes, which are forbidden (*mĕlĕaŭ̆ĕn*) to him. In Bŏ́rĭtŏ the house of the Bŏ́rĭtŏ wife is forbidden to him only when the marriage is dissolved, even though his child may be living with her. Only women, girls, and infants are allowed to stay in the women's houses[649].

Meals are cooked by the wife but not eaten in the company of the husband. Often the married men appear to eat in the bachelor's house.

The fulfilling of marital duty is said to take place not in the huts but usually during the midday pause in the gardens[650]. Sexual abstinence is required by the men before departure for war and for [315] fishing with big nets, visiting a bachelor's house and the *kalou* ceremony[651].

Adultery is atoned for by the adulterer's paying shell money, or he must fight the deceived husband. The offspring of an adulterous wife is however raised by the married man without claim on the actual father[652]. Also, the man who marries a pregnant widow regards her children as his own[653].

If a husband in the Mắnus villages of the south coast of the main island has been married for 15–20 years, he puts on a feast in honour of his wife; the point of which is mainly the display of his wealth and his gifts for his wife[654].

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644 Parkinson, 1907. p.395
645 Parkinson, 1907. p.394
646 Thurnwald, 1910. p.36
647 Thurnwald, 1910. p.23
648 Thilenius, II, p.132; Moseley, 1877. p.413
649 Thilenius, *loc. cit.*
650 Thilenius, *loc. cit.*
651 Parkinson, 1907. p.395
652 Parkinson, 1907. p.396
653 Mead, 1931. p.61
654 Mead, 1931. pp. 65–68

Extramarital Sexual Intercourse

The Mắnus and probably also the Mătănkŏl, lay great store on the virginity of marriageable girls, and should they be deflowered, they exact vengeance on the perpetrator or on the girl's family.

Despite this, men seek to seduce girls, and abortion is familiar among girls. On account of the feared revenge, many men kill the girl with whom they have committed an offence so that it remains secret[655].

Among the Ŭsĭâî they do not hold such strong views, and permit the girl to hire herself out as a prostitute among the Mắnus and Mătănkŏl for a few years[656].

In Bojang and Savoi Leber[657] found one women's house in the centre of each village, that served young girls, divorced women, and widows as a dwelling, and in which they shared their bed with young men from the village.

According to Margaret Mead[658], among the Ŭsĭâî sexual freedom is granted to the girls one year before the marriage, which they often enter as the second or third wife of a rich man. Rich people therefore build separate houses for their daughters and the daughters' female friends, where they can entertain young men. This appears to happen especially on Pắlŭăn.

Prostitution

Since the polygamy of individual men leaves no women for other men, the inhabitants of the bachelors' houses must obtain satisfaction in other ways than through marriage. War-prisoner women are placed at the disposal of the bachelors in pairs or in threes, by the chiefs of the Mắnus. This [316] happens especially when a new bachelors' house has been erected[659]. Only rarely do chiefs retain captured women for themselves, in order to avoid coming under the suspicion that they are too poor to buy wives for themselves[660].

Girls out of the bush are also hired for a few years as prostitutes for the bachelors' houses[661].

Among Mătănkŏl on Lóu[662] the chief places prostitutes at the disposal of the unmarried men; these live with the other women and go only at night into the bachelors' house. There were also prostitutes in Pĭ́tĭlu. Since the coloured crew of pearl fishers' and traders' cutters stayed around them too often and for too long, trader Stehr considered it necessary to buy the three girls.

As for the women who were offered to the crew of the *Challenger* by a Sōri chief, this seemed likewise to be a case of prostitutes; hardly likely to be wives of the chief, as Moseley believed[663].

Kinship

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655 Parkinson, 1907. p.395
656 Thurnwald, 1910. p.17
657 1923. pp.262 *et seq.*
658 1931. pp. 189 and 238
659 Parkinson, 1907. p.396
660 Parkinson, 1907. p.394
661 Thurnwald, 1910. p.17
662 Friederici, 1912. p.85
663 1877. p.413

The family is based on the patriarchal clan. Usually the clans are limited to a single village and are relatively small[664]. Although the male line is the decisive factor and patrilocality prevails, the female line, which of course never appears externally as community, is regarded as "an ideal solidarity"; in spite of the patrilineage the female line is more closely associated with the ancestral spirits than is the male line[665]. The father's sister and her descendants in the female line, and the father's mother, stand in especially close association with the ancestral spirits.

The kinship system is based mainly on the relationship of brother and sister and their offspring to each other[666]. The companionship of only their sisters and female cross cousins is allowed to young men[667]. For a woman the husband of her sister-in-law is *tabu*[668]. There are different expressions for the relationship of brother to brother, of brother to sister, and of sister to sister[669]. In-laws related by marriage do not give their names in the presence of others, and expect that others will not give or suggest their names either. Such relatives eating together is also frowned upon. The mother-in-law avoids encountering the son-in-law about the house[670]. [317]

The expression for the relationship between father and son ("my father") counts along with the expression "my friend". Female relations are designated as *patiéje*, "my niece"[671].

Among the relationship designations heard by Chinnery[672] on Pāk, *asahuk* is particularly important, since that is what a man calls his daughter and the wife and daughter of his younger brother. They call him *damak* = father. Correspondingly, the younger brother calls the wife of the elder brother "mother".

Patrilineage and Matrilineage

Matrilineage appears to have been the original situation in the Admiralty Islands. It was however suppressed by patrilineage over the course of recent decades. About the turn of the century totem membership seems to have been inherited by the children from their mother, while Thurnwald on Lămbŭtjo even by 1907 was able to determine inheritance of totem membership by the son from his father[673]. At that time the mother's totem was only respected by the son but no longer transferred to him.

Originally the children belonged to the mother's family. Schnee[674] felt that the relationship to the mother's brother was the decisive factor, yet at Parkinson's time[675] the father had the right to claim the child for himself, with the acquiescence of the mother's relatives. Instead of the mother's brother, who entered into the bride purchase on behalf of a young husband, in many cases the father had taken over at that time, in validation of his rights over his son. Also children of a widow, if she remarried, remained with the family of their father[676].

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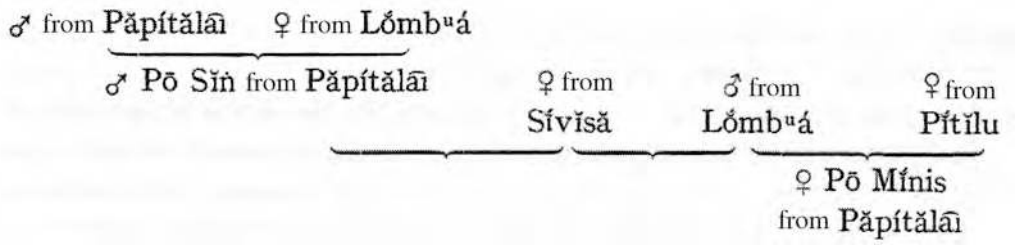
[664] Mead, 1931. pp.224 *et seq.*
[665] Fortune 1932. p.40
[666] Mead, 1931. p.225
[667] Mead, 1931. p.127
[668] Mead, 1931. p.73
[669] Meier, 1906. p.482
[670] Mead, *Natural History*, 1931. p.70
[671] Meier, 1906. p.481
[672] p.57
[673] 1904. p.211
[674] Parkinson, 1907. p.393
[675] Thurnwald, 1912. p.441
[676] Parkinson, 1907. p.396

In 1908 matrilocality was still valid — at least in Păpítălâî. For example the child of a Păpítălâî woman, regardless of the father's home territory, also belonged to Păpítălâî. However that this rule could be broken is demonstrated by the family of the chief Pō Mĺnis in Păpítălâî:



[318] With Pō Mĺnis' attainment of the chief's position as descendant of his step-father Pō Sĭṅ, personal demeanour, the number of supporters etc., play rather more of a role than patriarchal or matriarchal grounds. In Mŭ́ndī the chief was successor of his father.

Recently the patrilocal and patrilinear succession appears to have been generally accepted[677]. Chinnery[678] reports with all certainty reports that on Pāk chiefly succession is patrilineal. Even so, the view still exists that the female line possesses "superior supernatural power gained from the family ghosts." The female line does not have any kind of gatherings.

Totemism

According to information from the chief Pō Mĺnis of Păpítălâî, there are fourteen totem groups in the Admiralty Islands, several of which have multiple emblems, or rather, sub-branches. With a single exception, where a pod fruit is regarded as the totem, the totems belong to the animal kingdom. Signs of totem membership are not used[679]. On Pāk Chinnery[680] was able to determine eight totem groups (shark, snake, and six birds).

According to Parkinson, membership of a totem is inherited by the child from the mother; however according to Thurnwald's[681] information, which is probably more reliable, it passes from father to son, while people respect the mother' totem only as much as that of husband and wife. Often the totem animals are also regarded as tribal ancestors.

People avoid killing and eating, or even ill-treating, their own totem animal, or that of their mother or that of their spouse.

Reportedly, members of the same totem group do not wage war among themselves, do not steal from one another, and always treat one another as friends[682].

Dangerous totem animals like the crocodile are not supposed to be dangerous to the members of its group[683].

Marriages within the totem group are not allowed. The idea that the Ŭsĭâî and Mătănkŏ́l are less scrupulous about it than the Mắnus[684], seems to be a baseless suspicion, courtesy of the

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677 Fortune, 1932. p.40; Mead, 1931. pp. 41 and 224 *et seq.*
678 p.58
679 Parkinson, 1907. pp.392 *et seq.*
680 p.56
681 1912. p.441
682 Parkinson, *loc. cit.*
683 Thurnwald, 1910. p.19
684 Parkinson, 1907. p.393

Mắnus. Also the Pāk people's assertion that they were the inventors of totemism is probably unfounded.

Lizard figures, that Leber[685] found carved into the bark of pale trees in the bush on Sabumo and painted (probably with betel juice) were explained to him by a Lóu man as being totem signs. His native bearers — mostly Pǐ́tĭlu people — refused to carry the image. Evidently the figures were trail blazes. [319]

Burial

Due to the absence of marked burial sites on Ăndră, the opposite region of the main island, and the south-east part of the main island, Miklucho-Maclay[686] believed that he could conclude that the dead were buried in their huts. Burial in the huts is customary among the inhabitants of Ndrĭ́ol and Pắlămŏt on Lămbŭ̊tjo, Hắŭs, Pǐ́tĭlu, Pónam, Lŏ́nĭu, Păpítălâ̂ĭ, Lóu[687] and Móuk[688]; and among the Ŭsĭâ̂ĭ of the main island opposite Ăndră[689] and Hắŭs. In Pǐ́tĭlu they decorate the corpse with arm rings, and red dye on forehead, cheeks and the hair of the head, and lay it out with shell money. The day after death they wrap it in *pandanus* mats and bury it, while the shell money is distributed[690]. The grave (*ndŏp*) in the house is strewn with sand, covered with a mat and bordered with sago palm frond ribs. In Păpítălâ̂ĭ and Lŏ́nĭu, and in the Ŭsĭâ̂ĭ village of Mŭ́ndī they sprinkle the rectangular grave with white sand that is renewed from time to time, and reset it with sago palm frond ribs or sticks of wood. On the grave of the chief Pō Sĭṅ in the house of the baptized Pō Mǐ́nis, lay several dried leaves for smoothing the strewn sand. In Păpítălâ̂ĭ, deceased residents of pole houses are buried in houses on land. There are also graves in the bachelors' houses there. On Lóu and Móuk women's corpses are buried in the houses where they lived during their lifetime. There, the deceased's nails are removed as amulets[691].

On Pónam, after three days, with the corpse already in the process of putrefying, it is buried. Beforehand, according to information from the planter Komini, women pluck out the hair with parts of the skin detaching. The skin is stored in a shell. In another version from the same informant, it is a case of scraping off the outer skin with the fingernails, giving the corpse a totally pale appearance[692].

In Ndrĭ́ol on Lămbŭ̊tjo, only a few corpses are left in the grave, (as always happens in Pắlămŏt), and others are disinterred after putrefaction in order to make amulets out of the bones (*pŏ̆ăn̆kĕ̂ĭ*). However, Thurnwald[693] heard from a Lămbŭ̊tjo man that people left the bodies to decay for twenty days on a bier in the house, and then buried the bones in the sand on the beach.

In Bahajud the Ŭsĭâ̂ĭ lay out graves in the huts, near the entrance, in which the deceased is buried wrapped in a mat, with legs drawn up and arms crossed over their chest. After about four

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685 1923. p.203
686 *Izvestia*, 1878
687 Thilenius, II, 1903. p.134
688 Parkinson, 1907. p.389
689 Thilenius, *loc. cit.*
690 Leber, 1923. p.264
691 Leber, 1923. p.264
692 Thurnwald, *loc. cit.*
693 *Zeitschrift für Ethnologie*, 1910. pp.131 *et seq.*

weeks the head is disinterred, the brain is removed from the skull, which is cleaned and stored under the roof from then on[694]. [320]

Moseley heard from the Hắrăṅgăn and Sōri people that they buried their dead but then disinterred them[695]. As he did not see any graves there, it is assumed that they too were inside the houses. In 1908 an open grave covered only with a mat, and a corpse whose knees were drawn up, were found in a house there. If the corpse is decayed, the bones are stored in a wooden bowl placed on the floor and enclosed within a wall of seven bamboo staves, with a mat laid around the outside. However on Hắrăṅgăn and Sōri decomposition of the corpse is also said to take place on a platform in the open air, instead of in the grave inside the house. It is a contradiction of current burial customs that in uninhabited Old-Hắrăṅgăn intact skeletons lay in the ground. In several villages (Kyělâûắk, Drâûŭ etc.) as well, skulls with traces of soil and root systems — clear signs of earth burial outside the huts — were sold to the expedition, while the corpses were alleged to decay in the houses and the washed bones stored in bowls. This manner of burial was established in the Mắnus village of Tâûī, where the corpses decay in the houses and later the skulls — just as among the Ŭsĭâî in the interior of the main island[696] — are hung in bowls inside the house. Besides the skulls, all retaining their lower jaws, fragments of other bones, feathers, dry leaves, and small bunches of hair lay in the bowls, apparently little disturbed since rats had nested inside one skull. In contrast to skulls from Kelaua etc., these skulls were heavily smoked. None were painted. Once all the family of a dead person have died in Tâûī, somebody throws his skull from a pole building into the water. On the Fedarb group the Mắnus lay out the corpses, wrapped in banana leaves, in the houses, leave them there to decay, and then gather the bones, in order to bury them in the bush[697].

In Pắrā̄ the lying-in-state used to last twenty days; now, by decree of the Mandate's administration, only three days. The body is washed daily in the sea. For putrefaction, the corpse is laid out on small, uninhabited islands[698].

In 1908 on Ndrówa the Mắnus of Mbŭ̂nâî had erected a house where they left corpses to decay on its platform, prior to burying them. The corpse is enveloped with three layers of small mats about 75 cm long, a mat wrapped with cord over the top, and a further, outer, mat, forming a bundle a metre long that is buried about 75 cm below ground. Sago palm fronds are laid over the bundle before filling in the grave.

Parkinson[699] reported, as a rite of the Mắnus, that corpses are laid out in the women's house for twenty days until putrefaction is complete, and traces this custom back to the shortage of burial sites in pole house settlements, or [321] to the New Guinea influence (Berlinhafen/Aitape). Rotting pieces of flesh are brought down to the sea in baskets by the women keeping watch over the corpse, or they are buried. The head of the corpse lies toward the sea, the legs toward the land. The skeleton is washed and sometimes bleached in seawater. Skull, ribs, and forearm bones are stored on herbs in wooden bowls inside the dwelling. The teeth, ribs and arm bones are distributed, while the skull, after a ceremony, is again carefully stored.

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694 Vogel, 1911. p.108
695 Moseley, 1877. p.416
696 According to A. Bühler
697 Thilenius, II, 1903. p.134
698 Mead, 1931. p.239
699 1907. pp.404 *et seq.*

From Uainkatou Rickard[700] reports that the body of a chief's wife was first "embalmed in oil" and then laid out for ten days. The skull was cleaned and stored and "the remainder of the body" buried.

The Mătăṅkŏl in Pŭĕ on Lóu leave the body laid out on a scaffold (*kănămbắt*) for five days. Under the scaffold they place bowls (*pŭrūkā̆*) of water into which the body fluids (*ᵘā̆*) drain and are then drunk. After a feast comes the burial, followed by a second feast. From then on the bones remain in the ground.

According to information from the trader Stehr, the Ŭsĭā̂ of the main island opposite Pónam have a similar custom. They too lay the corpse on a putrefaction scaffold outside the houses and let the fluids drip onto yams, sago, and taro, which they then eat. The waste too is said to be drunk in its own right[701]. While skulls were sold without a thought everywhere else, and were available in great numbers — of course these were to some extent enemy skulls — just one, that of a chief's wife from Pónam, could be purchased out of the possession of the Ŭsĭā̂ chief, after protracted trading.

Originally, allowing putrefaction to take place on scaffolds was a Mắnus custom, and Pĭ́tĭlu people mock the Mắnus as "devotees of corpse odour"[702]. The Mătăṅkŏl and Ŭsĭā̂ on the other hand, as land-dwellers, appear to have been accustomed originally to earth burial, and to have copied the Mắnus in exhumation. As an Ŭsĭā̂ tradition, Parkinson[703] claims quite generally that the corpse, having been adorned while in a sitting position, is then laid out in the hut until putrefaction sets in after three days. It is then buried within the hut and the women keep watch and wail for a month over the grave. This fully corresponds with the custom of the Mătăṅkŏl of Pĭ́tĭlu, Lŏ́nĭu etc. Notwithstanding, the Ŭsĭā̂ of Sá̆hă are said to bury their corpses (*hắmăt*) in front of their houses.

On the small island of Amo near Ndrowa in 1908, many noticeably-weathered, broken bones were found together with coconut bowls, shells, pieces of wood, roots, soil and greenery in crevices in the coral limestone cliffs. It [322] appears however that they had been washed into the rocky crevices by water. In no way were they deliberately hidden at the site in the middle of impenetrable bush.

Mourning

Following the death of a loved one, men and women put on mourning jewellery and mourning paint and shave their heads completely with a sliver of obsidian. Pĭ́tĭlu men do not shave their hair immediately after the death, but only some time later. The shorn hair is hung in bunches in the houses. As an exception to the custom of shaving his hair, one Lŏ́nĭu man wore two felted locks hanging down behind his ears, in mourning for his brother. Mourning make-up for men is black. The dye consists of pyrolusite and is smeared with oil in stripes over the face and the upper body. On Lóu black mourning paint was seen also on the upper body of a woman; the entire body of a widow in Pĭ́tĭlu was covered with greenish-white dye; and a widow on Pāk had whitened the right half of her body, with the exception of the hand and the foot.

Men and women on Lóu and in Lắlā wear a mourning ornament as a head- or forehead decoration; it is made from a rectangular mesh[704] coated with a *Parinarium* mixture. Otherwise,

[700] Ray, 1892. p.5
[701] Vogel, 1911. p.108
[702] Parkinson, 1907. p.389
[703] 1907. p.381
[704] Parkinson, 1907. p.369 and Plate 25

mourning decoration consists of cords that are natural coloured or dyed red, often also black, and resemble the cord ornament worn particularly by women. These are worn around the forehead, crosswise over the chest, or as a belt, and less-commonly wound several times around the neck or as armbands or leg bands.

According to Thilenius[705] the mourning period lasts two to three months, and five months for chiefs. According to Parkinson[706] widows may remarry after two months. Margaret Mead[707] even reports a ten-month mourning period for widows. Prior to the end of the mourning period, (not with a feast where pigs are eaten), Hărăŋgăn men did not want to perform the penis shell dance at that location, however they had nothing against performing it on Nŏru. It is a custom of the mourning ceremonies in Pĭtĭlu that women beat the big slit drums (*nĕmaī*).

The two wives of a chief who had died six or ten months previously in Bird Island Bay were found in a den inside a pole house. The room had an open entrance and had a fireplace. People could freely speak with the women. It was not a case of watching over a [323] corpse, as is sometimes still the tradition, but it was probably a mourning custom. The wives no longer wore signs of mourning.

On Lămbŭtjo, shortly after the death of a husband, the widow and the rest of the female relatives lie on top of the deceased, who is laid out on a type of bier, in such a way "that they cover the deceased like a pyramid". They lie like this for one entire night. The widow then keeps watch alone over the deceased until putrefaction sets in. Following the burial of her husband she is barricaded in a den inside the house and must stay there up to ten months "if she does not escape in the meantime"[708]. In 1908 in New Ndrĭol there were two widows' dens outside the houses.

On Hăŭs too, widows had to live in separate little houses (*pānhŏl*).

Earlier in Părā a man was slain in order to end the mourning period, or they took a prisoner and availed themselves of his ransom money as a contribution to the costs of the burial- and mourning ceremonies. Today, a turtle is killed[709]. After a death there, the roof covering of the house is removed, followed by the roof. The house is rebuilt on another site and incorporates the skull, which has been cleaned in the meantime[710].

Ancestral Figures

Wooden figures, representing naked men and women, are carved as a memorial to the deceased, but not as the location of the spirit of the dead (*bĕlīt*). They are 15–70 cm tall, and are always made from a single piece of wood. Their arms hang down by their sides with their hands touching the hips. Their knees are always slightly bent. The enlarged ears are almost always represented. Tattooing, and the arm and leg decoration, are indicated by painted relief carving. The tattooing is generally richer than that of living men. Male figures often wear a carved neck ornament, and almost always a representation of creative hair styling, which does not stick out at the back, as in the living, but as a topknot. On Pāk, Krämer saw it even redoubled and transformed into turtle heads (*barumbolan*). Strangely enough, the odd female figures have the tuft of hair, although they mostly have a naturalistic representation of the bald or shorn head. The figures stand

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[705] II, 1903. p.134
[706] 1907. p.396
[707] 1930. p.117, Figure
[708] Thurnwald, *Zeitschrift für Ethnologie*, 1910. pp.131 *et seq.*
[709] Mead, 1931. p.239
[710] Mead, 1930. pp.122 *et seq.*, Figure

either on a carved slab or on their broadened feet. The parts of the figure not covered in relief carving are painted red, Fig. 191.

In the same manner, a pair of figures as man and wife or even in fours, is carved onto a single pedestal. [324]

Ordinarily the memorial figures are stored under a type of bag made from betel palm leaf.

The wooden figures, carved in the same manner but sometimes juxtaposed with crocodile heads on door posts, stairs, the foot of the bed, lime spatulas, spears and daggers, are also regarded as memorial figures. So are the human head representations on those, on combs, and on the carved heads of battle and dance neck ornaments.

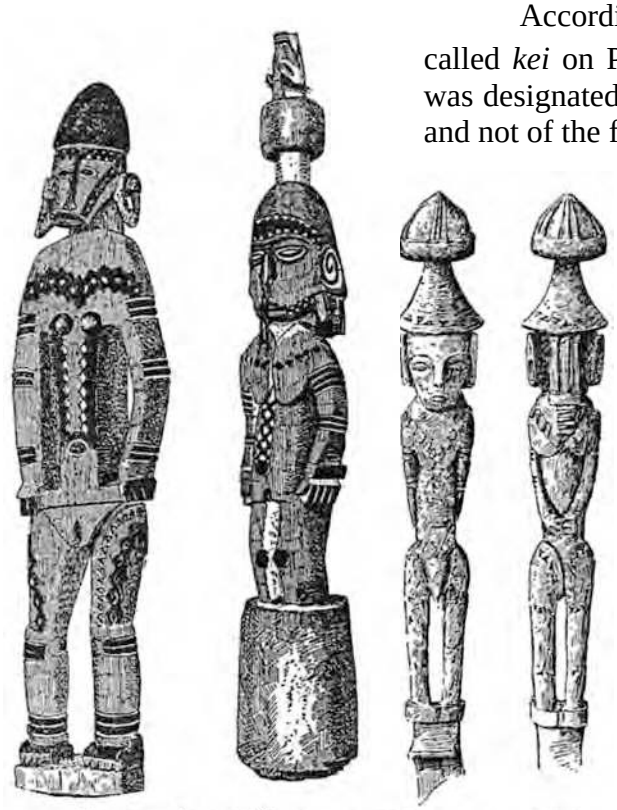

Fig.191. Ancestral figures 3153[I]. 73 cm high. 2004:05. 77.8 cm high. 689[I]. 22 cm high.

According to Dempwolff[711] the memorial figures are called *kei* on Poa͡m, and on Pĭtĭlu the head of a neck ornament was designated as *ké*. Possibly that is only the name of the wood and not of the figure.

Elsewhere, the male and female figures are consistently designated[712] on Hă̆ŭs as *hámăt*, *hamă̆t*, *hamár*, or *hă̆mă̆r*; on Pĭtĭlu as *rámă̆t*; in Lŏ̆nĭu as *hamă̆t*; in T͡auī as *lamăt*; and on Pāk as *hamă̆t* or *hamă̆r*. This is reminiscent of *yă̆măt* on Poa͡m[713] and Pă̆lŭăn[714] designating a man, but also *imă̆t* on Pă̆lŭăn and Lóu[715] = "he is dead". On Pónam and in Să̆hă corpses are called *hă̆măt*, and amulets of human bone are called *huī̆n hămă̆* and, according to Schoede, *potu lamat* on Lămbŭ̆tjo. n

Inheritance

According to Parkinson[716], after the death of a Mă̆nus chief the principal wife or his eldest son, who inherits the properties, canoes, and spears, dispenses the rest of the effects and the shell money to all who attend the mourning ceremonies. The procedure is the same at the death of a servant, although there the chief takes the major part for himself. Should a wife die, her dowry falls to her husband, who, however, has to give a small gift to the relatives[717]. [325]

This probably applies mainly to Păpítălai͡, but other Mă̆nus have similar customs. Thus, on the death of a husband in Mbŭ̆na͡i, the house falls to the eldest son while the wife receives the shell money and the dogs' teeth of the deceased and shares these with her relatives.

In Pŭ̆ĕ on Lóu the inheritance is said to fall only to the family of the surviving spouse.

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[711] 1905. p.210
[712] Cf. *chamă̆t* figure on betel lime spatulas from Luf, according to Hellwig
[713] Dempwolff, *loc. cit.*
[714] Friederici, 1912. p.224
[715] Friederici, 1912. pp.225 *et seq.*
[716] 1907. p.398
[717] Parkinson, 1907. p.394

The Ŭsĭâî in Mŭ́ndī string the dogs' teeth of the deceased on rattan loops hanging from the roof in the house of mourning. At the feast after the burial, the teeth are divided among the participants. The bed, the mats, and the spears of the dead man are shattered or torn up, and buried with the corpse.

On Pāk, Chinnery[718] found that patrilineage was decisive in the succession.

On Pónam the house of a dead person, (*hā́măt*), is alleged to be burned down: "*Hā́măt* = man he die, house belong him he cook him finish". In contradiction of these indigenous assertions however, they bury the dead in their huts there.

Division of Labour

The selection and clearing of a garden site is men's work; watching over the women who work in the garden or transport loads; canoe building and house construction; the production of weapons, tools, wood carvings, obsidian implements; *Parinarium* resin coatings and *Tapa*; hunting; fishing apart from reef-gathering; animal rearing; voyaging; trade; and sorcery.

Women's work is planting, weeding and harvesting in the garden; the transporting of field crops and drinking water to the houses; food preparation; housework; manufacture of skirts, pockets, baskets, mats, decorative cords, shell money, and pots; and catching small fish and other sea creatures on the reef. The oversight of the household equipment and shell money also devolves upon the wife[719].

Women's work is carried out by all women, right up to the locally-restricted production of shell money and pottery. For men's work, obsidian-working and woodwork, canoe building, the manufacture of weapons, livestock farming, and sorcery are carried out professionally, by individuals.

Fishing and trade predominate among the Mā́nus; woodwork among Ŭsĭâî and Mătăṅkŏ́l; and gardening among the Ŭsĭâî. [326]

Chiefs

Each village stands under one or several chiefs (*lăbăn*[720]) each with his following. Thus in Lōkŭ́l the chiefs Pōpŏsŭ́ī and Kĭsā́gīū; on Sívĭsă the chiefs Kanenwu and Kävenu[721]; in Wălŭ́n the chiefs Sā́ŏgan and Polau, and in 1906 even the three chiefs: Polau, Jamboâî, and Diábun[722] ruling together and on an equal footing. In Păpítălâî, which initially stood only under the chief Pō Sĭṅ, Pō Mĭnis and Songan ruled side by side after his death, and the Limóndrol chief Kámau, who settled there, retained the position of a chief to his followers. Quarrels among the chiefs often lead to a physical separation within the village or to one of the chiefs leaving the village and setting up a new village with his followers. However, the division of a village into individual autonomous chiefdoms need not always be traced back to a spoiled double-chiefdom — it may go back to the self-reliance of the heads of families, as in the Mătănkŏ́l settlement on Lămbŭtjo, incorporating the component sites of Tšălăṅgŭ́p, Pătăndrŏ́ etc. Alternatively, it may have come about that, as on Pāk, the resident population is confronted by immigrants with their own chief, opposing the old chief.

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[718] p.56
[719] Parkinson, 1907. p.394
[720] Pāk dialect
[721] *Deutsches Kolonialblatt*, XI, 1900. p.331
[722] According to Krämer

Occasionally, the separation of the individual chiefdoms in a big settlement is so sharp that, as on Sōri or Pǐtĭlu, they find themselves in a constant state of war with one another.

Extended dominion of a chief over several villages occurs only to a small degree. For example, the Mătăṅkŏl village of Tăṅ seemed to stand together with the Mănus village of Păpítălâî under the chief Pō Mĭnis; Po Pau from Lŏnĭu was at the same time chief of Dalálo[723]; and on Pāk the chiefs Săŏgan and Polau from Wălŭn had dominion over the small village of Habei, in which admittedly only their own relatives lived[724]. There has never been a "King of the Admiralty Islands" that Festetics von Tolna[725] claimed to have seen in 1896.

Under the chiefs stand the heads of family, who play a major role only in smaller self-sufficient settlements but otherwise scarcely appear outside. The matter of such heads of family probably concerned the "chiefs" of the individual canoes observed by Labillardière[726] who, of the gifts given to the paddlers claimed most for themselves, thrashing the paddlers with a stick while doing so. [327]

The heads of family are subordinate to the actual chief, although more in a friendship than a subject relationship with him, and owe him no unconditional obedience.

The followers of a chief consist of his own family and his bondsmen. The bondsmen work and conduct war for him; however they do enjoy a certain independence and providence from the chief[727].

Prerogatives of the chief consist of the distribution of war loot[728] and the inheritance of a bondsman[729]. Apart from the advocacy for his followers and the free families of his village, leadership in war, the exercise of certain sorcery[730], the knowledge of astronomy[731], trade with the chiefs of other villages, and the representation of the village towards strangers, all belong among the particular obligations of a chief. In the latter case the village elder supports him. On the north coast of the main island and on the offshore islands, the chiefs came forward so little in 1877 to Miklucho-Maclay[732] that he did not dare to say that there actually were chiefs there. Among the Mănus of the south coast, Margaret Mead noted that the chief's duties were only the representation of his village at combined feasts of several villages, and naming him "war-leader"[733].

The chiefs' families have the right, over all families (*lau*), of hanging shells on the house, the canoe, and the belt; of stringing 100 instead of 50 dogs' teeth on a cord; of constructing their house near the biggest of the small islands on the reef; and in disputes with other families of emphasising their own rank to the disadvantage of the latter[734].

In the chiefly families the chief's position is hereditary. During the transition from the maternal to the paternal succession that seems to be taking place, or to have taken place, since the turn of the century, fixed rules for the chiefly succession could not be constituted. In general the succession of the son from the father seems to have been put in place a long time before and, in some cases, the personalities of father and son have probably often tipped the balance much more

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[723] According to Krämer
[724] *Deutsches Kolonialblatt*, 1909. pp.530 *et seq.*
[725] 1904. pp. 132 and 137
[726] I, 1796. p.262
[727] Parkinson, 1907. pp.396 *et seq.*; Thurnwald, 1910. pp.13 *et seq.*
[728] Thurnwald, 1910. p.15
[729] Parkinson, 1907. p.398
[730] Parkinson, 1907. pp. 379 and 402 *et seq.*
[731] Parkinson, 1907. p.377
[732] *Izvestia*, 1878
[733] Mead, 1931. p.227
[734] Mead, 1931. p.226; Edwards, 1931. pp.550 *et seq.*

in regard to paternal rights, matrilocality, etc. In 1908 the chief of Păpítălâî succeeded his stepfather, and the chief from Mű́ndī followed his father.

Where the chiefs do not dwell in separate houses together with their wives, their house serves at the same time as canoe house and bachelors' house, for example in Wălű́n and Pắkērăn. The chief's wives are accommodated in separate houses in such cases, [328] although it was claimed in Pắkērăn, that "the" (probably: one) wife of the chief(?) also lived in the canoe house.

Through the Mandate administration only internal representational duties have been left to the chiefs. The administration entrusts a *kukerai* with the village administration, as the Executive's incumbent, and as his assistant a *tultul* (translator and representative of the *kukerai*) and a nursing executive. All three are exempt from the ten-*Schilling* tax. In bigger villages two precincts have been formed, with separate *kukerai*[735].

Bondsmen

The bondsmen (*tapo*, according to Parkinson[736]) of the chiefs are recruited as free men who turn up prepared to be of service to the chief in return for payment of shell money, or youths and boys as prisoners of war who are not sufficiently rich to buy their freedom. They are obligated to work for the chief in his gardens, to stand watch over his property, help him fish, build canoes and houses for him, or look after dogs, and render allegiance to him in war. For this the chief supplies their food, gives them a portion of the war plunder, and puts on feasts with dancing for them[737].

Bonded people are allowed to own gardens, shell money, canoes etc. However, the chief claims the major portion of a bondsman's legacy[738].

The chief sponsors the marriage of a bondsman by paying all or part of the bride price on his behalf. The bondsmen's wives help the chief's wives with their work[739]. The chief provides unmarried bonded women, if they are war prisoners, to the inhabitants of the bachelors' house as prostitutes; they live with the chief's wives[740].

In a blood feud situation the bondsmen do not stand alongside the chief, but the blood feud of his bondsman belongs to the chief, and he must pursue the bondsmen of another chief on his behalf[741]. Disputes between one bondsman and another are fought out, without the chief's intervention. A bondsman's adultery with the chief's wives is avenged in a duel between the chief and the bondsman. Slackness in work or cowardice in battle is punished by a beating, with a stick, by the chief[742]. [329]

Nation-Building

The sovereignty of a chief usually extends only over a single village or part of a village. Only those places that arose as small branch settlements, such as Habei on Pāk, are an exception: since it was at the same time the residence of the relatives of the chief of Wălű́n, it was under the control of the chief of Wălű́n. Another exception is the dominion of the chief of Păpítălâî over the

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[735] Mead, 1931. p.228
[736] 1907. p.380
[737] Parkinson, 1907. pp.396 *et seq*.; Thurnwald, 1910. pp.13 *et seq.*
[738] Parkinson, 1907. p.398
[739] Parkinson, 1907. p.397
[740] Parkinson, 1907. p.396
[741] Thurnwald, 1910. p.14
[742] Parkinson, 1907. p.397

neighbouring settlement of Tă̆ṅ. In this case Păpítălâ̂ı̂, as a village of the Mắnus, and Tă̆ṅ as a village of the Mătă̆ṅkŏ́l, melded into one political unit.

In many places a loose connection exists between the Ŭsĭâ̂ı̂ population of the main island and the neighbouring Mătă̆ṅkŏ́l and Mắnus. For example, the Ŭsĭâ̂ı̂ from Drūgŭ́l stand in relation to Hă̆ŭs; those from Sấhă to Pónam; and those from Kĕtyḗ to Mbŭ́na͡ı̂; while Sōri, when it was still powerful, kept the Ŭsĭâ̂ı̂ from Lĭĭndra͡ŭ in subjugation[743]. Initially such a relationship was based on trade relations, particularly the exchange of the Ŭsĭâ̂ı̂'s produce from the soil for the Mắnus or Mătă̆ṅkŏ́l's fish and trade goods. In so doing, the Mắnus or Mătă̆ṅkŏ́l use this opportunity to hold the Ŭsĭâ̂ı̂ in economic dependence while strenuously maintaining their trade monopoly. In this way they can determine the price, and they know how to coerce the Ŭsĭâ̂ı̂ into making deliveries that then take on the character of tributes[744]. Finally, even services such as allegiance in war can be extorted from the Ŭsĭâ̂ı̂ by use of economic pressure. However, nominal domination over the Ŭsĭâ̂ı̂ by the Mắnus or Mătă̆ṅkŏ́l does not exist and, legally, the Ŭsĭâ̂ı̂ depend only on their own chiefs.

Internal History

The internal history of the Admiralty Islands is almost totally dominated by the ongoing feuds of individual native groups against others, and the consequent migrations. In most cases the trouble-makers are Mắnus or Mătă̆ṅkŏ́l, while the Ŭsĭâ̂ı̂ mostly appear as attackers only on inducement from the Mătă̆ṅkŏ́l. What we know of the internal history is only sketchy, and relates to much-visited places like Păpítălâ̂ı̂ and Pĭ́tĭlu, or to cases involving white traders.

Typical of the internal situation is the history of Móuk (Mŏk-mắndrĭă̆n) and Takúmal (Mŏk-lĭĭn). For a little while, after it had been conveyed by the *Möve* to these Mắnus that they should neglect their feuds[745] and behave well towards [330] the white traders, the Móuk people slew trader Maetzke on Kŏmŭ́li in 1899 and plundered the trading post. The main participants withdrew to Alim, which was usually only visited from time to time from Móuk, where in January 1900 they fell into the hands of the punitive expeditions of the *Mascotte* and *Seeadler*[746]. Other Móuk people retreated to Pắlŭă̆n[747], defended themselves against the trader Molde with their twenty captured guns, and made raids on Păpítălâ̂ı̂ who then, for their part, attempted to procure weapons to defend themselves by making an attack on the Europeans. In January 1900 the villages of the Móuk people on Pắlŭă̆n were destroyed by the *Seeadler* with the assistance of the Mắnus from Sĭ́vĭsắ[748]. Most Móuk people then moved to Pătŭ́sī, although in 1908 there was still a group of Móuk people armed with guns on Pắlŭă̆n. A third group of Móuk people lived at that time on the northern tip of Lóu and owned six guns.

Soon after the attack on Maetzke, the Mắnus from Takúmal had feared that the Europeans would likewise take revenge on them. As for the attack itself, they do not appear to have taken part in it, yet the names Mok-mandrian and Mok-lin that the Europeans usually used for Móuk and Takúmal respectively, were familiar to them and they probably feared mistaken identity. Accordingly, most of them proceeded to Sĭ́vĭsắ while a smaller group reached Mădyaval and

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[743] *Deutsches Kolonialblatt*, XIX, 1908. p.855
[744] Schnee, 1904. p.209
[745] Schnee, 1904. p.162
[746] *Deutsches Kolonialblatt*, XI, 1900. p.328; Schnee, 1904. pp.182 *et seq.*
[747] Schnee, 1903. p.363, and 1904. p.184
[748] *Deutsches Kolonialblatt*, XI, 1900. pp.328 *et seq.*

stayed until 1908. An attack on the Mătăṅkŏl on Lolau, who were killed and driven out[749], is probably the act of these Takúmal people. The Takúmal people were said to have been expelled from Sĭvĭsă by police-soldiers and moved further to Ndrŏwā. There they killed the Chinese trader Ahu and had to flee the police-soldiers once more, to Mbŭn͡aĭ. According to other reports[750] they fled to Mbŭn͡aĭ before attacks by the Părā and Pāk people. After a fight with the Pătŭsī people they settled in the village of Kyĕlâŭăk. The Mbŭn͡aĭ people undertook further war expeditions against Părā, Lŏnĭu, the Ŭsĭâĭ and even Pĭtĭlu[751]. The general uproar among the other natives, who wanted to take away their guns induced them to build new houses in Pālēsĭs. However, there they were given strife with the Melanesian youths of the Chinese trader settled on Pāk, and they shifted their abode once more. This time they moved to Mătâŭĕn, a small island near Pălămŏt. Under their chief Barbi they drove piracy out of there, and seem to have taken in immigrants from Polot. On 6 November 1906 the *Seestern* burned down Pălămŏt and Mătâŭĕn and took hostages to Herbertshöhe[752]. As a result the Mătâŭĕn [331] people under the chiefs Pōpŏsŭī and Kĭsăgīū settled in Lōkŭl on eastern Lămbŭtjo. Armed with guns they feuded firstly with Ndrĭol, whose inhabitants saw themselves forced to give up their pole building settlement and establish a new village of Ndrĭ ol on land. Despite this, they continued to call themselves Mănus. Next Lōkŭl attacked Pălămŏt and ravaged it. Pălămŏt was totally devastated and some of its inhabitants fled to the new settlement of Ndrĭol, while another group was still wandering around in canoes in November 1908. At that time the chief Pōpŏsŭī planned to separate from Kĭsăgīū and settle in Tyăl on the south coast of Lămbŭtjo. A little later he moved into the new settlement of Galingai[753].

After the withdrawal of the Takúmal people from Mbŭn͡aĭ, the Móuk people in Pătŭsī began to carry out raids on a grand scale. Parkinson[754] names their enemies as being Sĭvĭsă (which appeared totally devoid of people when the *Planet* passed by in October 1906)[755]; Ndrĭol; Polotjal; Pălămŏt; Lóu; and Mbŭke. In August or September 1907 one group of them, who had taken themselves back to Móuk, attacked Po͡am, which had already been attacked by hostile Mănus[756] shortly before 1902, and killed ten men. At this two Po͡am chiefs turned to Herbertshöhe for protection. The Móuk people then withdrew to Pătŭsī once more, and back to Masawal, and began hostilities against Lŏnĭu; but then, together with a few Lŏnĭu people, they turned on Păpítălâĭ. Lóu was attacked from Masawal, and on 6 November 1907 — on the very day of the destruction of Pălămŏt and Mătâŭĕn by the *Seestern* — Pĭtĭlu was raided. Because of these incidents Pătŭsī was burned to the ground by the *Seestern* on 13 November 1907[757]. The Pătŭsī then reappeared on Móuk at the end of 1907, attempted unsuccessfully to attack the trader Schmidt on Kŏmŭlī, and withdrew right back to Pătŭsī at the beginning of April 1908[758]. The Mbŭn͡aĭ people always made common cause with those of Pătŭsī and settled for the time being in Pătŭsī. However in 1908 the

[749] Parkinson, 1907. p.384
[750] Parkinson, 1907. pp.385 *et seq.*
[751] Possibly at that time they also populated Poamatjau, that previously belonged to the Mătăṅkŏl, and which in 1932 Bühler found inhabited by Mănus from the south coast of the main island.
[752] *Deutsches Kolonialblatt,* XIX, 1908. p.622
[753] *Deutsches Kolonialblatt,* XX, 1909. p.899
[754] 1907. p.384
[755] According to Krämer
[756] Schnee, 1904. p.208
[757] *Deutsches Kolonialblatt,* XIX, 1908. pp. 622–624
[758] *Deutsches Kolonialblatt,* XIX, 1908. p.855

Mbűnai̯ chief Bondrlé in Pătűsī came into conflict with several of his people for no reason, and drove them out. As a result they settled in Mĭndrűn with Bogǻsi as their chief.

The Mbűke people were heavily involved in the disturbances caused by the Móuk and Takúmal people in Pătűsī, Mbűnai̯ etc., and also in the renewed disturbances that they caused. The chiefs Kanenwu and Kävenu from Sĺvĭsǻ incited them, with a payment of shell money, to kill the trader Carlbourn on Kŏműlī in July 1901[759]. Thereupon Kanenwu withdrew with his people to Lămbűtjo, while others of them settled on Bull Island opposite Kŏműlī. With the Mǻnus of the islands [332] they then undertook raids with the captured weapons, as far as Ndrűwal. Poa̯m was attacked from Ndrűwal, with ten men killed and thirty women taken; shortly before 1902 Mbűke attacked Sōri, and killed 34 men and 1 woman[760]. According to Parkinson[761] Mbűke stood on a war-footing with Móuk, Ndrűwal, and Hǻrăṅgăn, and was allied with Sĺsī. All the inhabitants of Halovat, Masan, and Papenbus were murdered by Mbűke warriors, and the residents of old-Hǻrăṅgăn were forced to seek safety in the present Hǻrăṅgăn. Fear of punitive expeditions finally induced many Mbűke people to withdraw to Malai Bay near Lǻlā, on the main island. There they also continued the pottery industry from Mbűke. From the *Planet* in October 1906 Krämer saw no signs of a Mbűke settlement, but in 1932, according to Bühler's observation, the island was again the seat of pottery, no longer practised in Lǻlā. It is questionable whether Lǻlā even existed in 1932. Ostensibly the reason for the relocation to Lǻlā was the murder of a European, although it is unclear who this could have been. A war campaign was mounted from Lǻlā against Lőmbᵘá, which was depopulated in 1908. The surviving Lőmbᵘá people moved to Ndrūbiū. An epidemic later caused many Ndrūbiū people to abandon their village. Several of them then founded Dra̯uŭ. When the crew of a Hernsheim cutter mistreated a Sōri man, and the Sōri people incited the Ŭsĭa̯ĭ of Līĭndra̯u to vengeance, the Lǻlā people also had a hand in it, although they did not take part in the attack by the Līĭndra̯u and the Sōri on the cutter *Waikatu*, whose crew was killed and eaten. Sōri, which up to then had been split into three feuding chieftancies[762], and where the chief Kapturosso (Rosso) seems to have been the instigator, was burned to the ground at the end of April 1908 by the *Seestern* with help from Hǻrăṅgăn people. The *Seestern* then proceeded against Līĭndra̯u. After her departure from Sōri, the Pónam people immediately carried out a raid on the island, where the remainder of the population comprised virtually only women. This developed into a fight with the police boys of the surveyor Klink who intervened; he himself was attacked at the same time on Nő ru[763]. The Sōri and Līĭndra̯u people who had fled from the *Seestern* just in time, had withdrawn to Boat Cove and Savorsa (Sabo)[764]. The punitive expedition resulted in Kapturosso being taken as a prisoner to Herbertshöhe and the fleeing Sōri people retreating to Gǻramaṅ, where they made a new settlement. In 1932 Sōri people were still resident there, in neighbouring Lebbe, and on Sabo. The Līĭndra̯u then joined up with the chief Bosso from Sĺsī, since Sōri could not offer them any more. With the captured guns from the *Waikatu* they attacked the village of Rassilio(?) in 1910 under [333] the leadership of their chief Batakalé. In September 1910 the *Seestern* proceeded

[759] Schnee, 1904. p.208
[760] *Deutsches Kolonialblatt,* XIII, 1902. pp. 198 *et seq.*
[761] 1907. p.385
[762] Parkinson, 1907. p.391
[763] Vogel, 1911. pp.116 *et seq.*
[764] *Deutsches Kolonialblatt,* XIX, 1908. p.855

against them from Malai Bay. At the same time, her intervention was necessary against the persistent intimidation of the coastal villages of Sau offshore from Ăndră by the Drūgŭl (Ulkul), living in the interior, who, since February 1910 had made frequent attacks on the Sau, always killing three to eight men and later eating them. Originally the Drūgŭl lived opposite Hă̆ŭs and around Bahajud, but then, at the recommendation of the station boss, they moved into the Lisi area near the coast[765]. The neighbouring Ŭsĭa̯ĭ further inland, and the Savoi too were decimated by the Drūgŭl[766]. Around the same time, the Amok on Kali Bay were similarly terrorising the weaker neighbouring Ŭsĭa̯ĭ, who abandoned their villages and gardens and had to retreat into the mangrove thickets[767]. In 1910 the Amok attacked a post staffed by seven workers of the trader Komini at Kali Bay, killing and eating the victims, as they also tended to do with the Ŭsĭa̯ĭ. Since the *Seestern* Expedition "they roved around in the bush and made the whole area unsafe" until 21 April 1913, when the Manus police station burned down their village of Salien[768]. In 1932 they had moved out of the interior on the island of Salien in the southern part of Kali Bay, and other Ŭsĭa̯ĭ had moved out of the bush onto the beach in the west of Boudense Bay and had established the village of Tulu[769].

The Mătăṅkŏl settlement of Tă̆ṅ had become deserted a long time before 1900 due to war and epidemics. Mắnus from Mbŭna̯ĭ bought the site and named their new settlement alongside Tă̆ṅ, with whose inhabitants they mingled, Păpítăla̯ĭ, or, during the lifetime of the chief Pō Sĭṅ, after him: Kor e Pō Sĭṅ[770]. Under him the place achieved its first recognition. He was the son of a Păpítăla̯ĭ husband and Lŏmbᵘá wife. He frequently had to survive feuds with Pĭ́tĭlu[771], and was shipwrecked on St Matthias and New Ireland with the later-chief Pō Mĭ́nis when the latter was still a boy. During Pō Sĭṅ's time Pắlămŏt people under the chief Kámau settled in Limóndrol near Păpítăla̯ĭ[772]. In 1899 Móuk people from Pắlŭăn attacked Păpítăla̯ĭ and Pĭ́tĭlu with guns, and Kámau, by attacking the *Nukumanu*, acquired guns for himself, for protection. With these, they bombarded the *Nugarea* which arrived shortly afterwards, in the belief that she had come seeking revenge. In January 1900 the *Seeadler* shot up Păpítăla̯ĭ and Pĭ́tĭlu. A new punitive expedition became necessary against Păpítăla̯ĭ and Lŏ́nĭu (= *Kor e Po Pau*, after the chief Po Pau[773]) in 1906, after both villages, together with Pāk people, had attacked [334] and killed the trader Schlehan on Pāk in 1905. When Pō Sĭṅ died about this time, he was succeeded as chief by Pō Mĭ́nis, who was the son of a Lŏ́mbᵘá husband and a Pĭ́tĭlu wife. His stepmother, a Sĭ́vĭsắ woman, married Pō Sĭṅ later. It seems however as though Pō Mĭ́nis succeeded his father less on the basis of right of succession, but much more on the reputation that he had acquired with his Winchesters. As a young man Pō Mĭ́nis came to Herbertshöhe as a hostage and voluntarily undertook education with the missionaries in Rakunei. While he showed himself to be a teachable pupil there, Christianity did not sit deeply within him and he later used the knowledge that he had acquired on New Britain ruthlessly to his advantage, so that the Administration had to banish him to Kavieng for some time[774]. However he always fronted up to Europeans in a white suit and then emphasized his

[765] Leber, 1923. p.264
[766] Leber, 1923. p.263
[767] *Deutsches Kolonialblatt*, XXXI, 1910. pp.991 *et seq.*
[768] Administration Report, 1913. p.132
[769] According to A. Bühler
[770] Parkinson, 1907. p.383
[771] Parkinson, 1907. pp.407 *et seq.*
[772] Parkinson, 1907. p.385
[773] Parkinson, 1907. p.388
[774] Parkinson, 1907. pp.375 *et seq.*

trustworthiness and integrity. Through him Păpítălâî had a good advocate with the Administration against Lŏnŭu, with whom renewed peace was concluded at virtually every visit by the *Seestern* and just as quickly broken again. In 1907 Pō Mĭnis attacked a drifting Pălŭăn canoe, killed the men aboard and took the women. In 1908 he again took a woman, from Pĭtŭlu. Not very long before 1908 a pandemic disease caused the Păpítălâî people who had not yet succumbed, to abandon Păpítălâî and move to Tăṅ. This pandemic raged also in the neighbouring villages causing many Ndrūbiū people to flee from it and found Drâuŭ. It quickly spread across all the islands but did not penetrate as far as the Ŭsĭâî in the interior of the main island beyond Ndrabui and Boltzal[775]. In Păpítălâî around thirty people died from it. As the second chief in Păpítălâî, Songan got into strife with Pō Mĭnis in 1909; this eventually led to Pō Mĭnis moving to Makarenge[776] with a few faithful, and relinquishing sovereignty in Păpítălâî to Songan. In 1910 antagonism no longer existed between Păpítălâî and Lŏnŭu, but there was probably hostility of both villages towards Pō Mĭnis.

In Pĭtŭlu the split of the village into internally-belligerent factions is already well established. Parkinson[777] reports battles between the western and middle sections, and the eastern section. On 14 October 1908 Pĭtŭlu and the independent village section of Bŏrŭtŏ were attacked by the Ŭsĭâî from Tabulâû, who had come to Bŏrŭtŏ to trade taro for fish. In this attack seven men and four women from Bŏrŭtŏ, and two men and one woman from Pĭtŭlu were killed, while four men were severely wounded. The attack took place after a prolonged period of peace. Around 1898 the Tabulâû people had carried out another attack on the men of Bŏrŭtŏ, Hăŭs, and Hâî, who had gathered on the beach for a feast, killing twenty of the guests. Later the inhabitants of Hauai retreated to Pĭtŭlu [335] when Hăŭs, with assistance from Hărăṅgăn and Sĭsī, attacked them[778]. Bitter hostility by Pĭtŭlu toward Ndrauo manifested itself at the beginning of 1909. Ndrauo had attacked the planter Komini near Lŏnŭu and had then established a sentry watch in expectation of a punitive expedition. When the *Seestern* arrived in April 1909 the Pĭtŭlu people helped her against Ndrauo[779].

Internal disputes were also the order of the day on Lóu[780] and on the infamous Pāk[781]. In 1893 Pāk people killed the traders Möller and Andersen with two black workers on Ulungau[782] and had only derision left over[783] for the punitive expedition of the *Bussard*, which bombarded Pāk. Also, the punitive expedition of the *Möve* in 1899 achieved little with them. Attacks by the Pāk people on Ndrĭol caused a portion of the latter population to retreat to Patúam. Pāk people killed the fugitives there. Pāk, together with Părā, drove the inhabitants from Ndrowa[784]. The Lămbŭtjo people, who had repelled an attack by the Nauna people on the trader Dow in 1881, attacked Nauna when in 1893 or 1894 Dow was killed by Sĭvĭsă people and his workers captured. Those of

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[775] Leber, 1923. p.266
[776] *Deutsches Kolonialblatt*, XX, 1909. pp. 896 and 898; *ibid.* XXI, 1910. pp.991 *et seq.*
[777] 1907. p.388
[778] Parkinson, 1907. p.388
[779] *Deutsches Kolonialblatt*, XX, 1909. pp.895 *et seq.*
[780] Parkinson, 1907. p.392
[781] Parkinson, 1907. p.391
[782] Schnee, 1904. p.167
[783] Schnee, 1904. pp.165 *et seq.*
[784] Parkinson, 1907. pp.385 *et seq.*

the population who survived fled to Pāk[785]. In 1905 the trader Schlehan was murdered by the inhabitants of the Pāk village of Moɣerắ aided by Păpítălâ̂ and Lŏ́nĭu. Moɣerắ was burned to the ground by the Administration, although 18 months later they had already recovered from this punishment[786]. In 1906 Krämer heard that on Pāk people feared the inhabitants of the main island; however on Lóu it was not them but the Pāk people who were feared. It no longer came to major battles, although on Pāk the villages of Moɣerắ under Simioṅ and Wălŭ́n under Sắŏgan were feuding, and this was restricted to taking women. The burning down of a hut etc., no longer led to a fight. The Moɣerắ people, as Klink[787] learned, had migrated a long time ago (from Nauna?) and were not regarded by the Wălŭ́n people as locals.

X. Weapons and Warfare

Weapons

Types of Battle Spear

Most battle spears consist of a hardwood shaft with an obsidian tip. For the most part they are made on Lóu and probably on those other islands with obsidian sources. [326] They are decorated with characteristic patterns or forms on the lengtmh between shaft and tip by the families involved in their manufacture, thereby revealing the origin of the spear to the well-informed — a form of hallmark[788].

The spear shaft is frequently not made by the producer of obsidian blades, but by the consumer[789]. When the consumers are Mătăṅkŏ́l or Ŭsĭâ̂, hardwood is abundantly available for their use (*ekuku* according to Thilenius; *kuku* on Pāk, according to Krämer). Betel palm wood is preferred for shafts. On Pĭ́tĭlu they use the wood species *ta͡ûwŭ́l*. For many spears they use bamboo (on Hắŭs *bŭ́* or *brŭ́*) for the shaft, instead of wood. Among the Mắnus, mainly reed (*endredau* according to Thilenius) and mangrove wood are at their disposal, instead of the hardwood from the bush and instead of bamboo, although among the Mătăṅkŏ́l on Pāk reeds (*bắdid*[790]) are also found as shaft material. Almost always, the spear shafts end quite simply and are, when they are made from wood, somewhat thinner at the butt. Only very rarely do they present a shoe-like butt thickening, carved in one piece. The rather-uncommon thrusting spears are given a particularly-long hardwood shaft (*kuku* on Pāk). Insofar as they are adorned with a human figure, they are called *kuku hamar* on Pāk. They are used so little in battle that they serve really only to frighten the enemy[791].

Since not all villages are in a position to obtain obsidian blades from Lóu, Móuk, and Poa͡m, either directly or through intermediate trade, bamboo or wooden imitations of obsidian blades are also to be found.

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[785] Parkinson, 1907. p.392
[786] *Deutsches Kolonialblatt,* XIX, 1908. p.624
[787] *Deutsches Kolonialblatt,* XX, 1909. pp.530 *et seq.*
[788] Thilenius, II, 1903. p.144
[789] Schnee, 1904. p.210
[790] On Poa͡m *pasid* (Dempwolff, 1905. p.210)
[791] According to Krämer

Spear points made from a piece of wood provided with barbs are used with wooden or bamboo shafts either in those villages that, like parts of the north coast of the main island, have difficulty obtaining obsidian[792]; or they are used for throwing over greater distances in conjunction with obsidian spears intended for shorter throws or for thrusting. Often betel palm wood (on Hấŭs *búĕ*) serves as wood for the points, or the type of wood called *lắ* in Lŏ́nĭu and *dắ* or *sắ*[793] on Hấŭs.

The same material is used for spears with wooden forked prongs. In many cases they are probably not battle spears but are intended for dancing and other ceremonial purposes, or even for sale to the Europeans. Generally, spears intended for immediate use are less decorated, while those that are made during a prolonged period of peace are given rich decoration[794]. Dance spears made from a single piece of palm wood with a tip richly provided with barbs or serrations were seen for the first time in Pătŭ́sī in 1932[795]. [337]

Barbs from rays are used as tips not only for fishing spears but also for battle spears. Naturally they are more available to the Mắnus and many Mătăṅkŏ́l, as coastal dwellers, than to the Ŭsĭáî in the interior.

Iron spear points have been used as a recent replacement for wood and obsidian tips in only a few places on the north coast of the main island, e.g. in Lukús.

Spears with Obsidian Tips

Obsidian ("a kind of bluish flint") spear tips were first observed by Carteret[796] in 1767.

The obsidian points are connected to the spear shaft with or without an intermediate piece.

If they do not use an intermediate piece, they abut shaft and tip, and lay splints from the thick, rib-end of the sago palm leaf over both of them[797]. They wrap multiple windings of a *tapa* cord or bast fibre cord very firmly round this, and coat the binding site with a thick layer of *Parinarium* resin[798]. After congealing, the resin mass sits on the shaft as though it were produced as one piece, and embeds the obsidian point like a calyx. This type of binding is used only when the shaft is hardwood.

With reed shafts and bamboo shafts, but often also with hardwood shafts, they introduce an intermediate section of soft wood or a coconut palm rib[799] between the blade and the shaft, which

is joined to the tip in the same manner. With reed shafts and bamboo shafts the lower end of the intermediate piece is inserted directly into the shaft, while with hardwood shafts they are joined by splinting. In all cases a wrapping and a *Parinarium* coating is added, sometimes extending over the entire intermediate section, though often leaving the middle free so that it can be artificially embellished, Fig. 192.

The splinted and wrapped *Parinarium*-coated bindings are often decorated with a new wrapping with thin cords over the coat of resin. Diagonal cords are drawn over the new wrapping, and the triangles and diamonds confined by them are painted black, white, or red, and stand out through their colours from the figures on the far side of the thread border. In them, or on the cross-

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792 Schnee, 1904. p.210
793 On Wuwulu and Aua *ra* or *ga*, according to Hellwig
794 Thilenius, II, 1903. p.145
795 Bühler Collection, Basel
796 Hawkesworth, I, 1773. p.324
797 Meier, 1906. p.477
798 von Luschan, 1897, p.80
799 Finsch, 1914. p.252

over points of two diagonal threads, *Coix* seeds or white beads are caulked with *Parinarium* resin. This wrapping and painting is the sole decoration of many spears, and the shaft end and intermediate piece are not decorated [339] any further. At most, the visible central thick piece of the intermediate wood is painted red or black.

In a few cases, the decoration of the wound cord is replaced by a braiding of black horizontal rattan strips and yellow vertical strips, particularly between shaft and intermediate section, using the same technique as in the plaited rattan girdles.

The intermediate section or, when it is absent, the upper end of the shaft, is readily coated with *Parinarium* resin decorated with incised and painted patterns (*inīn* on Pāk). The wrapping decoration is often added above and below, but often too the *Parinarium* resin is decorated in this manner right up to the blade, since the broad surface over the base of the blade offers a good opportunity for this. In many cases a representation of the frigate bird is incised and painted on this surface. It is only rarely presented naturally, but transforms into one or two parallel or opposing angles, with one or two diamond-shaped figures emerging from their apices. In turn, these diamonds transform into a vertical line, and the angle into a horizontal line from which the vertical line is suspended. By introducing two points to right and left of the vertical line, and below the horizontal line, the bird figure transforms into a human face[800]. Another variation of the bird figure leads to the representation of a *Palaquium* shell with two pig's tusks hanging out of it.

The *Parinarium* coating (Lóu and Lǒnŭ: *garid*; Pāk: *ahir*[801]) of the narrow part of the intermediate section is readily decorated with right angles with serrated borders; repetitions of the bird figure in simplified form; four curves coming together at one point; or triangles with a jagged base. In older spears, decoration of any kind whatsoever is absent from this section, or limited to a few lines.

If the wooden intermediate section is not coated with 'putty' it is either carved in relief with similar patterns or carved three-dimensionally. In this case the human body (*hamắt* on Pāk) and the crocodile head are the predominant motifs. The thicker, upper end of the shaft also undergoes this three-dimensional treatment when the intermediate piece is missing.

The human figure provides a supplement to the face modelled out of *Parinarium* resin over the base of the blade, or else the face is carved out of the same wood and wrapped in the resin or cord of the intermediate section (or shaft) and blade. The ornamentation of the human figures is lines of single diamonds or triangles from the shoulders to the middle of the chest, vertically down the lower part of the front of the body and the spine, and horizontal rings round arms and legs. These probably represent [340] tattooing or decorative scarification to a degree no longer seen on a body[802]. The battle decoration of a warrior's neck is represented as clumps of hair in a single-to-

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800 von Luschan, 1897. pp. 80 *et seq.*

801 According to Krämer

802 Thilenius, II, 1903. p.124

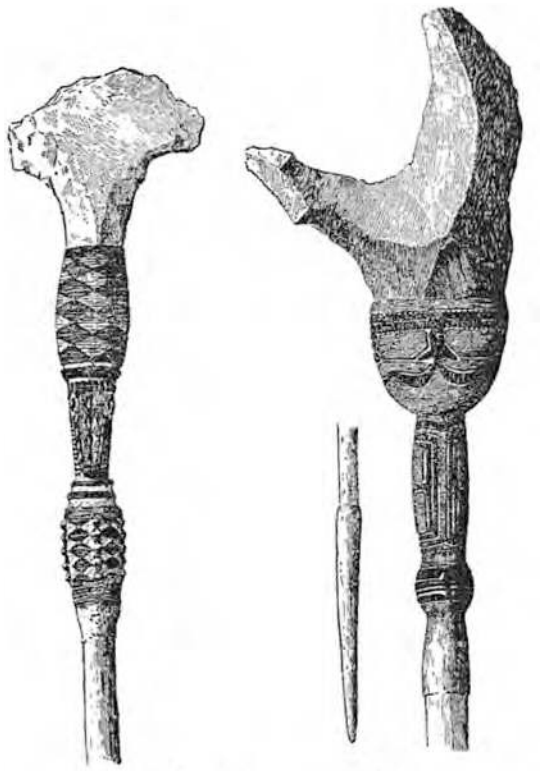
Fig. 192. Spear — intermediate sections

1. 4093[I]
2. 2115:05
3. 2107:05
4. E. 2693
5. 3029:07
6. 12. 135:250
7. 14. 38:7
8. 3280[I]
9. E. 2688
10. 2116:05
11. 12. 135:224
12. 3284[I]
13. 2114:05
14. E. 2686
15. 14. 74:4
16. 25. 20:1
17. 2109:05

triple design[803], paradoxically also in the rare woman figures[804]. Very often the figures are painted red and display tattooing, eyes, neck decoration etc. in black and white.

The crocodile heads are patterned in similar ways, particularly with regard to the ridge of the upper jaw, the eyes, nostrils, and teeth, and usually designed with the snout jutting upward and the fastening of the blade above. The fashioning of the part over the base of the blade as a human face leads to elaboration of the motif of the man devoured by the crocodile or, at least, the combining of the crocodile and human figures. The human body from the knees or hips rises out of the jaws of the crocodile; or the man's body is replaced by a crocodile head with the snout pointing downward, and the arms represented alongside while the legs are added beneath[805]; or two human heads are added to right and left of the crocodile head; or the man's body is separated from the head by the crocodile head, and added upside down, feet uppermost, below the crocodile head; or the human body is fully represented with one or two stylised crocodile heads beneath it.

The excess of three-dimensional and relief design shown by individual spears, and the fresh painting, suggest that this is not a question of battle spears. Furthermore, the open-work design of the portion below the tip is not directly conducive, in these decorated sections, to the absence of fragility so essential in battle. In many cases these may be dance spears, yet just as commonly behind the decoration the prevailing thought has been that Europeans prefer as far as possible bright and figurative representations rather than simpler spears. In any case the undecorated spears are old, as are those with diamonds made from diagonal cords, and those with representations of birds.



Obsidian spears. Fig.193
Stuttgart IC. 52366, IC. 30012. 1/5 actual size

Less common spear decorations are the fashioning of the intermediate piece into a flat, pierced disc with smooth and serrated ring patterns; the embedding of feathers in resin; or two opposing pieces of bone slanting upwards in the joint between shaft and intermediate section, and the attaching of glass-beaded or *Conus* disc cords with a hanging of possum skin, feathers or similar embellishment; and finally the elaboration [341] of the intermediate wooden section into a surface covered with protruding spikes.

Blades are usually simply tapered. In rare cases there are also spears with broad, axe-like blades, or half-moon-shaped blades, Fig. 193. A spear with a rounded obsidian blade that Bühler found in Buboi was almost 2.9 metres long and far too heavy for throwing. The natives assured him that people had manufactured such spear points earlier. However, the spear had probably served other purposes or perhaps even come from a 'prehistoric' archaeological find.

Spears with two or three pointed obsidian blades are more common. These are each fastened separately in the usual manner by splinting or wrapping, with a resin coating on a fork of the intermediate section, or of the shaft itself. The fastening of each point is individually decorated, or all tips are wrapped tightly together with cords that in turn display diagonal cords and diamond painting. Fig. 194, 6.

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803 Thilenius, II, 1903. p.130
804 Bühler Collection, Basel
805 von Luschan, 1897. p.81

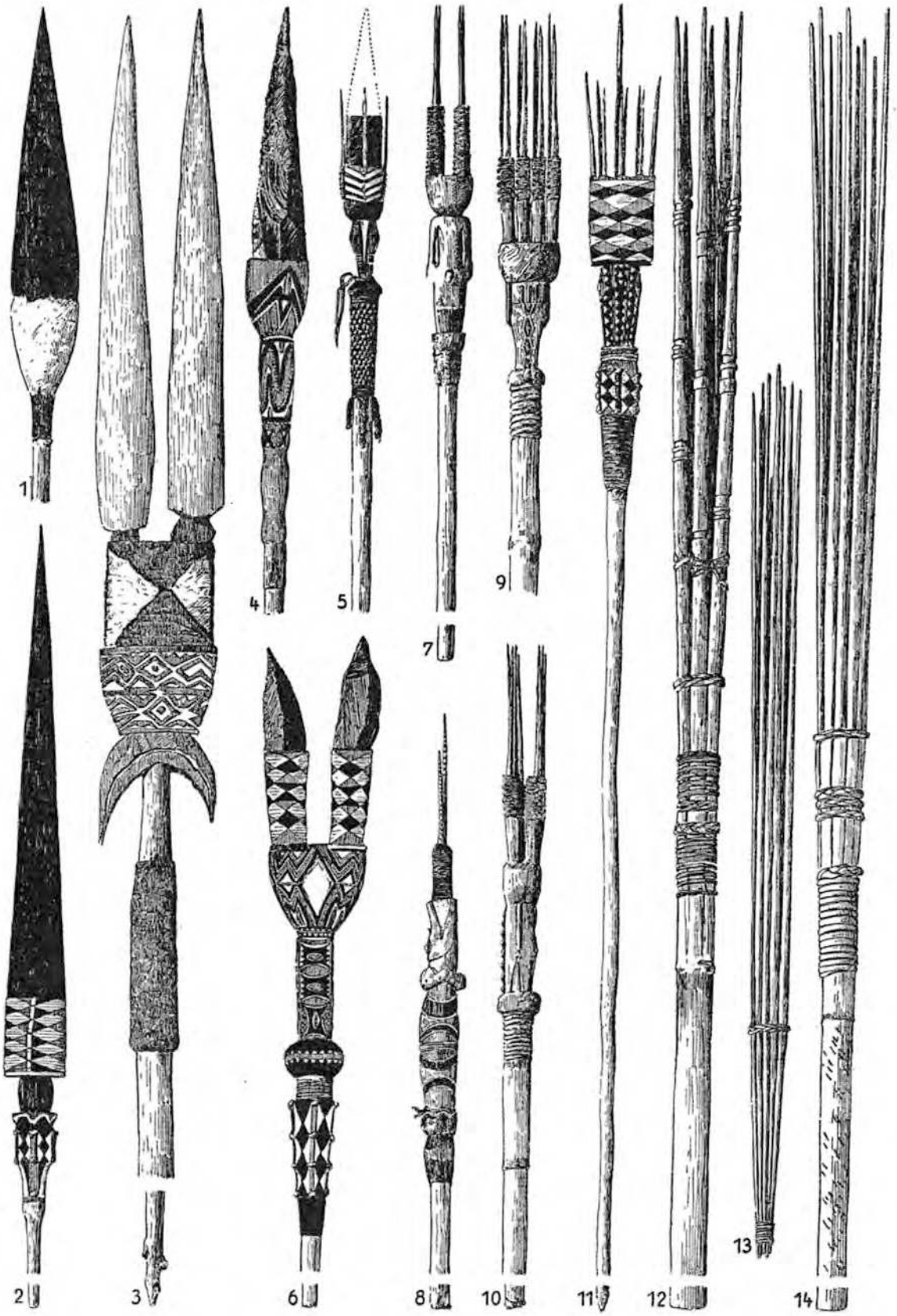

Fig. 194. Spears

1—3. Spears with wooden points 640[1], 653[1], 2561[1]
4—6. Spears with obsidian points 4096[1], 14. 38:10, 3022[1]
7—11. Spears with stingray spines 2024:05, 11481, 3285[1], 3014[1] (10. Side view of 9)
12 & 14. Fishing spears 4083[1], 3188[1], 13. = Insert part for 14.

A few spears feature a combination of one or several obsidian blades and stingray barbs. The obsidian blade is attached in the usual manner as the main tip, and four smaller stingray barbs are inlaid in a cross formation around its base, secured with cord and a *Parinarium* coating, Fig. 194, 5.

Spears with obsidian points are called *bă̆lĭu* or *bé̋lĭŭ* on Pāk; *lő̆u* (a derivation of Lóu?) on Pĭ́tĭlu; *bētilő̆ŭ* in Lukús; *pă̆tă̆lű̆* in Sā́hă; *bắlĭŭ* in Gắramaṅ; and *bătĭ́lu*, *bătĭ́lo*, or *bătĭwa͡u* in Kyĕla͡ŭ̆ák. Dempwolff[806] heard *bailo* or *pailo* as the Po͡am word; Thurnwald[807] on Nő̆ru heard *bātĭ́ lő̆ᵘ*; the Marine Expedition on Tong(?)[808] heard *pékilu*; Schoede on Pāk heard *peleu*; Kärnbach[809] heard *pattilau* from the Alim people; while Bühler: in Schenelin *beliau*, in Tingou *berlau*, in Buboi *petilou* or *petelou*, in Nada *peteleu*, in Pătű̆sī *patilou*, in Iru *pajou*, on Sabo *báleo*, in Tulu *patsidiu*, and on Ăndră [343] *ballo*. Krämer heard *pitilau* on Lóu, and *péleu* on Pāk; Friederici[810] heard *bé̋lĭŭ* on Pāk, *pĭtĭla͡u* on Móuk, *pútĭden ba͡ilo* and *kikirin ba͡ilo* on Pắlŭăn, and *belo* on Lóu, while the obsidian itself is called *χrŭ́é* on Lóu[1811]. On Lămbű̆tjo Schoede heard it called *badillo*.

One type of obsidian spear is named *ekuku*[812] after its hardwood shaft on the north coast of the main island and *gű̆gŭ* on Pāk.

Spears with Stingray Spine Points

The tail spines of the stingray (*Trygon*)[813], with a great number of natural barbs on both sides, are fastened, by splinting, wrapping, and a coat of *Parinarium* resin, directly to the spear shafts, or to an intermediate section between point and shaft, in exactly the same manner as the obsidian points. A man is seldom satisfied with a single spine, but fastens at least two and often eight or more spines. In so doing, they ordinarily combine two spines at one fastening position and wrap the *Parinarium* coat with new cords plastered in vertical lines with *Conus* discs or glass beads.

Occasionally the individual fastening sites also receive a shared cord binding in diagonal cords and diamond painting, Fig. 194, 7 and 8.

Motif carving of the obsidian spear in the form of crocodile heads recurs at the binding section; also entire crocodile figures, human heads, and human figures, sometimes in conjunction with the crocodile representations. Several studs often project from the upper, thick part of the intermediate section; two spines are fastened to each of them.

Where big and small stingray spines are combined as one point, the smaller spines are usually arranged around the single or multiple bigger spines, or to their sides. Two different-sized spines are pointed away from one another at an acute angle, Fig. 194, 11.

According to Thilenius[814], the stingray spine used as a spear tip is called *bódombéi*; according to Krämer on Pāk *bei*, on Lóu *kuku*(?) and in Lő̆nĭu *dombei;* according to Büller in Lekum *polampei*, and on Sabo *borobai*; according to Schoede on Lămbű̆tjo *botombé* or *botambé*;

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806 1905. p.210
807 Thurnwald Collection, Berlin
808 "Tanga Island (!) obtained from the Manus by Komine (!)" Schlaginhaufen Collection, Berlin
809 Zöller, 1891. p.509
810 1912. pp.106 and 228
811 Friederici, 1912. p.225
812 Thilenius, II, 1903. p.143; according to Schnee (1904, p.210) *kuku*
813 Not of the "cuttlefish" (Thurnwald, 1913. p.136)
814 II, 1903. p.144

and according to Thurnwald on Kŏmű̆li *bădămbĕi*. At the same time, this is the name of the entire spear. In Lő̆nĭu *lă̆* was heard as the name of the stingray spine spear that also had a wooden point. The same name simultaneously applies to the wooden point, the spine points, and the ray itself. [344]

Spears with a Wooden Point

Spears with a single wooden point have either a cane shaft or bamboo shaft into which the wooden tip is inserted and fastened by cord wrapping and a coat of *Parinarium* resin. Alternatively, they have a hardwood shaft carved in one piece with the point. Also, in one-piece spears there is an area below the tip reminiscent of a binding point; and with single hardwood shafts the point is actually set onto the shaft. With fixed shafts there is occasionally cord wrapping of the *Parinarium* resin point with diagonal threads and glass beads or *Conus* discs above, occasionally occupying only a short section below the binding point. However, the cord wrapping with diagonal fibres can, in association with diamond painting, spread over the entire thickened section, and is then even decorated with a couple of beads. In addition opposing bristle-like stiff fibres can extend as a decoration of the glass beads. An intermediate section with painted diagonal wrapping above and below, as in the obsidian spears, is found only in a few wooden spears and is shaped ornamentally or three-dimensionally no further. On the other hand, above the binding site or the thickened region, many wooden spears have the rudiments of the representation of a crocodile head that can be transformed into an open-work carving. Painting of the thickened section with a few lines and dots is also uncommon, whereas the spear point is often painted, Fig. 195.

In the simplest spears the point is smooth with a circular cross-section, or it may be flattened on one side. Mostly, however, they have barbs on their upper part, while the lower part of the spear point is smooth. Below the end provided with barbs the wooden point can be offset from the smooth section or be somewhat thickened. The barbs are carved as a single piece with the point. In a few spears, two of them are of different heights and added to different sides. Otherwise, they are arranged opposite one another in pairs, or there may be small differences in height in the arrangement of every second barb of a pair. The number of pairs of barbs varies greatly, ranging between 2 and 44. The lower-placed of a great number of barbs are often opposite each other only as pairs, whereas they are in threes or fours around the spear point. A diamond-shaped cylindrical or oval swelling can be carved out between two pairs or groups of barbs or, alternatively they attach an oblong open-work of an oblong, intermediate, lance-shaped surface. The tips of the uppermost barbs are always directed obliquely downwards, in the customary manner. However, with a greater number of barbs there is often an opposition among the lower barbs, which can alternate [346] with the normal direction. Thereby new angular carving can develop above the smooth part of the wooden spear tip.

Insofar as the wooden tips are painted at all, they display only a couple of bright rings around the smooth part, and painting of the pairs of barbs alternating in black, white, and red, corresponding with the pairs.

This configuration shows up also in dance spears (*éninuk*) made from a single piece of palm wood, that Bühler found in 1932 in Pătű̆sī. These spears are 180 – 215 cm long. The spear point occupies 57 – 70 cm of this length.

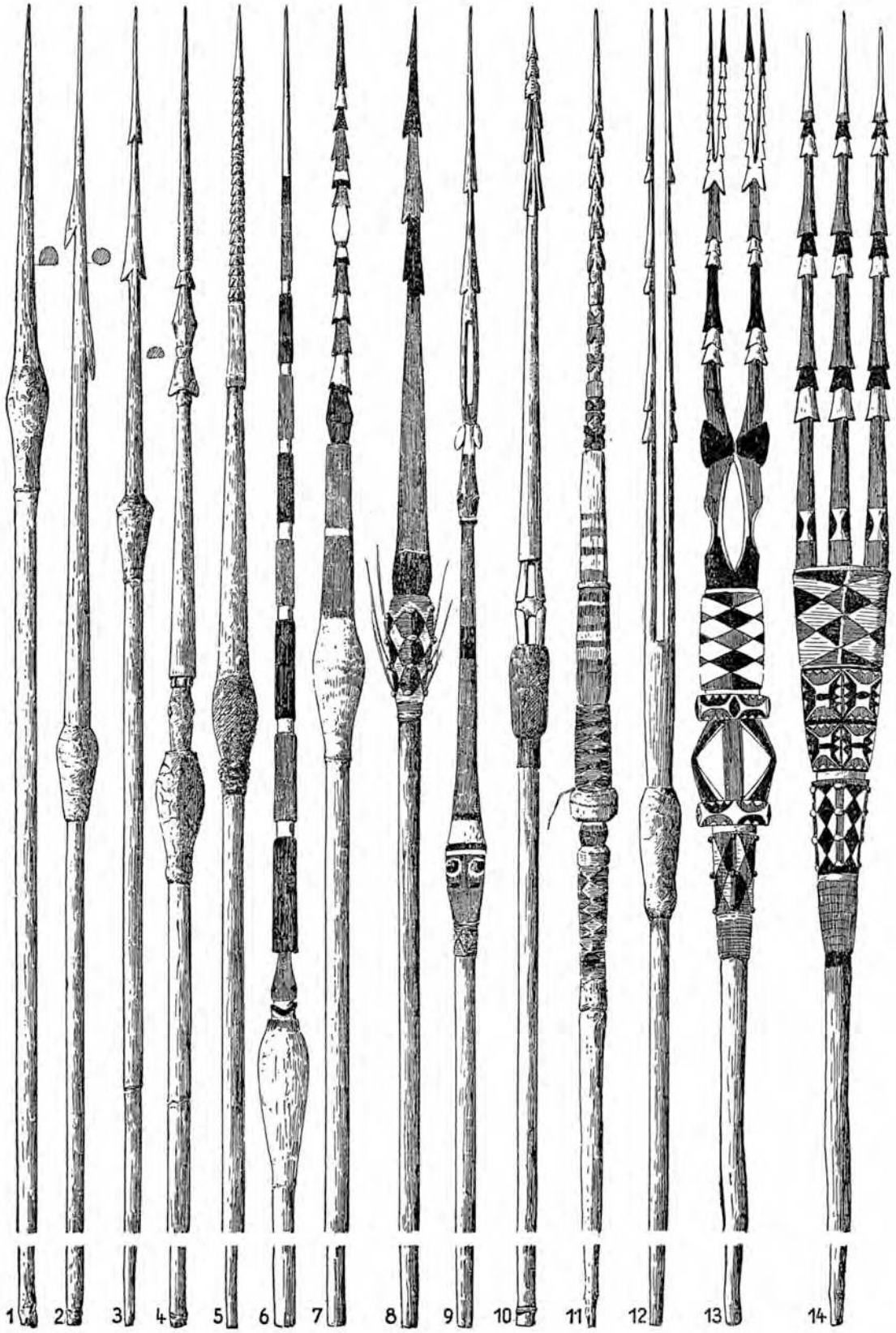

Fig. 195. Spears

1. Spear with a simple wooden point 647[I]
2. Spear with alternating barbs 2608[I]
—5. Spears with barbs arranged in pairs 650[I], 2602[I], 4086[I]
6. Spear minus its barbs 2861[I]
—11. Spears with paired barbs and painting 2800[I], 2859[I], 2601[I], 4102[I], Stuttgart Intr. Nr. 7
—14. Spears with forked points 2600[I], 2679[I], 2678[I].

Simplification of the barbs, where they have lost their actual significance, is limited to short, offset narrowings of the round point, white paint at these sites, and alternating black and red painting of the thicker areas between.

Spears with a wooden point on Pāk are called *kakaû* or *marănrĕrī́* (point out of tâuχ wood); on Hấŭs *kakaû, kakaû búĕ* (= betel palm wood), or *kakaû mărĕn marúl*; on Lóu *gagau*[815]; in Lŏ́nĭu *gaugau*[28]; on Nŏ́ru *kavakaū*[816]; in Sấhă *kấkaû*; on Nauna *kawakawa*[817]; and in Pătű́sī *kawakäu*[818]. In Lŏ́nĭu Thurnwald heard a spear with a wooden point also called *balĕ́ŭ*, whereas that name would more normally designate an obsidian spear.

Spears with Wooden Forked Points

Simple wooden spears with forked points are prepared from a single piece of hardwood with a thickened section below the spear point; or they have an offset point, and a correspondingly thickened section conceals the binding under a partially white-limed resin coating. In its lower section the tip is still undivided, and forks only in its lower or upper third. On each lateral side of the fork prongs, 2 – 6 barbs are attached in such a way that each of them corresponds with a barb on the other fork tip[819]. With a greater number of barbs, people prefer to arrange them in pairs closely one above the other, Fig. 194, 12.

More richly decorated fork-tipped spears have, between shaft and tip, an intermediate wooden section richly covered in painted relief carving and preferably fashioned with human figures in open-work or in three dimensions. It is attached to shaft and point with the usual *Parinarium* resin cement with diagonal wrapping in cord and paint, Figs 195, 13 and 14. At the intermediate section either three or more individual points arise side by side, provided with brightly offset pairs of barbs in a symmetrical pattern; or only one initially board-like undivided point, which can also be open-work in its lower section [347] and fork later. The arrangement of the barbs corresponds with that of the simple forked spears, except that more barbs are present and also appear alternately on the lower part of the tip, or the barbs are pitted against each other in pairs as in the three-or-more pronged decorative spears, and in groups one above the other. Each of the two prongs can fork once more, and the prongs arising again carry small barbs or pairs of barbs corresponding with their proportions.

The name given to fork-tipped spears on Pāk is *marănbű́län*; on Hấŭs *marănbúlăn, kakaû bű́rumű́nŭi, kakaû mĕ́ndĕ́n mahắ*, or *bĕ́rĭlo*; and on Lămbű́tjo[820] *kaukau*. Thurnwald[821] on Pĭ́tĭlu heard *batilu* as the designation for a spear with two wooden points — a word that elsewhere was the name for obsidian spears.

On Hấŭs, with the *bĕ́rĭlo* spear they name the prongs *bắmĕ* and a carved human figure on the intermediate section *hámăt*; with the *kakaû mĕ́ndĕ́n mahắ* spears they name the prongs made from betel palm wood (*búĕ*), *mĕ́ndĕ́n mahắ*, and the wood of the intermediate section *nắt*.

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815 According to Krämer
816 Thurnwald Collection, Berlin; Schnee (1904, p.210) too, from the north of the main island
817 Thilenius, II, 1903. p.144
818 Bühler Collection, Basel
819 Thilenius, II, 1903. pp.29 *et seq.*
820 Schoede Collection, Berlin
821 Thurnwald Collection, Berlin

Spears with Bamboo Points and broad Wooden Points

In villages where obsidian is hard to obtain, they use imitation obsidian with wood or bamboo as the spear points. They usually colour the broad wood or bamboo pieces black and fasten them to the shaft without an intermediate section. In so doing they proceed exactly as with real obsidian points and coat the base of the blade, or they apply a painted diagonal cord system over the resin coat. Other decoration is limited to a small section at the end of the shaft, carved in relief and painted, Fig. 194, 1 and 2.

For battle on Pāk they use spears with two natural-coloured broad wooden or bamboo points jutting out side by side from a spot covered with diagonally-woven cord. The intermediate section, which is bound to the shaft by a splint covered in *Parinarium* resin, features a half-moon figure overhanging on both sides. Above it is a widening section covered with diamonds etc. in relief carving and painting. The entire spear is called *marănbŭlän*, after the forked point Fig. 194,3.

Daggers

Dagger-like devices with obsidian or stingray spine points are ordinarily designated as weapons, although Thilenius[822] thinks that the Admiralty Islanders are more spear throwers than close-quarter fighters, and the shape of the "dagger" does not preclude a laceration of one's own hand. They may in fact be used for stabbing wounded people to death or for cutting out eyes, [348] but elsewhere they are more hand tools than weapons of war. However, Schnee[823] reports that in Păpítălâî Captain Dathe was stabbed to death with an obsidian dagger in 1899.

Use as a weapon is more certain in the case of ray spine daggers that, when set on a cane shaft, can serve at the same time as spear points; and in daggers with several ray spines. The decoration of the obsidian dagger handle also shows strong similarities with that of the obsidian spears so that the possibility of use as a weapon does not exclude use as a hand tool — this is not improbable.

The base of the blade of the obsidian dagger is provided with a thick coat of *Parinarium* resin in the same way as that of the obsidian spears, covering a piece of coconut palm rib[824] and often also a piece of wood and a splint, and the base has the form of an oblong triangle. The resin is usually decorated in relief and painted, and very often displays the stylized black frigate bird figure in the middle of deep, white-painted lines on a red background, Fig. 196, 1. The figure is always added to the broadest part, near the base of the blade. Instead of that, there is often a three-dimensionally shaped human head on one broad side of the handle, while the reverse side remains smooth, Fig. 196, 2. There is no supplementing the head by modelling on the body or adding a crocodile head, as in the spears. However, the heads occasionally display ornamental tattooing or ornamental bands added to the ears, chin and neck, or sharply-tapering processes in shallow relief. Any other three-dimensional shaping of the dagger handle is absent, and it is only fairly rarely that the handle is pierced in its middle section by a narrow longitudinal split, Fig. 196, 4. Apart from the bird figures there are three other relief patterns for the spear, for example simple diamonds, rectangles, and circles, or diagonally-divided diamonds, rectangles, and circles with a jagged border, rows of diamonds etc., Fig. 196, 3,4,7. Not found in spears, is a patterning of the entire handle with arches lying closely one behind the other, all opening towards the (wooden) point. This dagger is an imitation, made completely out of wood, Fig. 196, 6.

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822 II, 1903. pp.151 *et seq.*
823 1903. p.263
824 Finsch, 1914. p.252

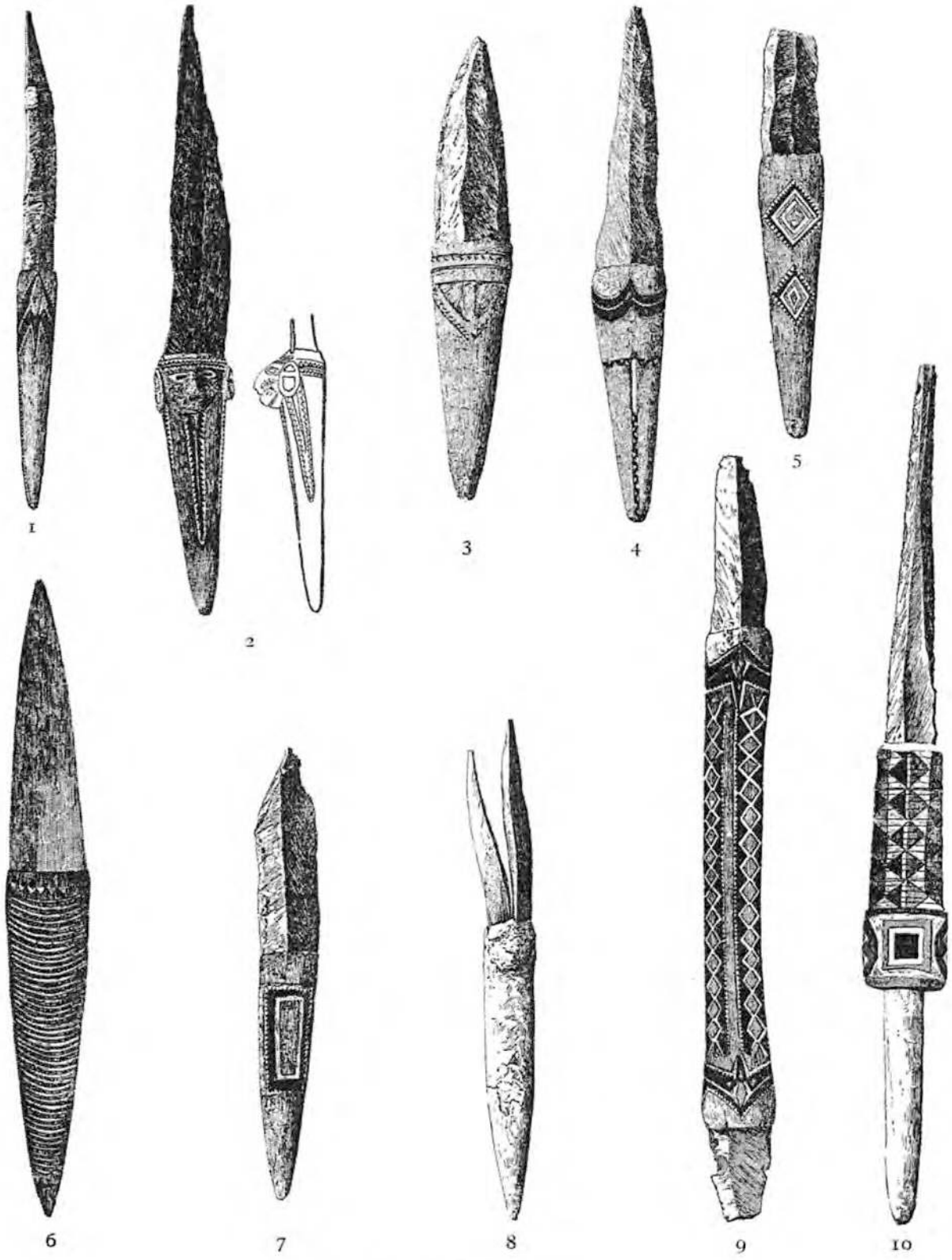

Fig. 196. Obsidian daggers
1/4 actual size

1. E. 3518
2. E. 4122
3. 16. 39:25
4. E. 4210
5. E. 4123
6. 2503[1]
7. E. 3424
8. 2049:05
9. 20.49:1
10. 21. 116:7

Daggers with two rather gaping obsidian points starting from a common cementing appear to be more weapons than hand tools, Fig. 196, 8.

On the other hand, use of a tool that has a long wooden middle section patterned with lines of diamonds and a cemented obsidian blade at either end, Fig. 196, 9 is rather doubtful. The patterning of both resin sites with bird figures betrays its use in battle, [350] although intended sale to the Europeans might also have led to this design.

A few obsidian daggers fully resembling the intermediate section of a spear fitted with a blade, are probably also used as such, on a tubular shank. The undecorated end of the intermediate section inserted directly into the shaft is however also suitable for use as the handle of a dagger, especially since the adjoining middle of the intermediate section widens, thereby protecting the hand on the grip. The middle of the intermediate section is decorated with relief carving and painting, and over the surface, cord plaiting with diagonal cords and diagonal painting embeds the resin-coated root of the blade, Fig. 196, 10.

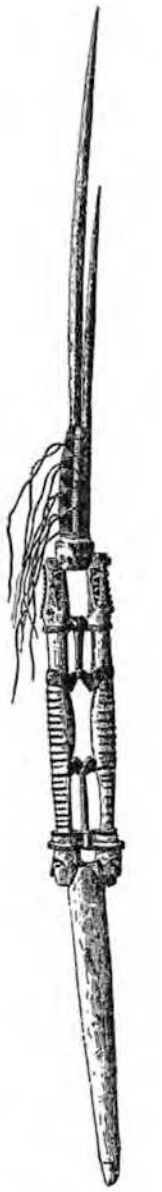

Fig. 197.
Linden Museum
Stuttgart.
1/4 actual size

Corresponding sections are found in daggers with stingray spines; these can be used at the same time as spear points. In these too, a wider section accompanies the smooth lower end, which serves as a handgrip or is inserted into the shaft. This is often carved in three dimensions and then displays human or crocodile shapes or head, Fig. 197. The spines are fastened the same way as in spears.

Other stingray daggers, not intended as a spear, with 1– 4 tips fastened in the usual way with cords and single *Conus* discs or glass beads over the top, have a simple, smooth wooden grip. This is usually round in cross-section, but can also adopt a lozenge shape around a diamond-shaped aperture, Fig. 198, 1 and 2. Sometimes the grip displays only a bulged or ring-shaped thickening under the fastening of the spine, but sometimes a crocodile or human head, or a three-dimensional human head arising out of it, Fig. 198, 6. In the odd dagger less effort is expended on the decoration, and the spine, with only a *Parinarium* coating, sits on a smooth wooden grip that has a thickening as its sole decoration, Fig. 198, 3.

The spines often emerge only from a wrapping. People readily gather together two or more different-sized spines and arrange them so that the largest spine stands in the middle with two smaller spines to right and left, Fig. 198, 4, or so that the largest spine sticks out on one side, in a straight line from the handgrip, while the rest stand alongside in order of size, and at an ever-increasing angle, Fig. 198, 5.

In other cases every 1–2 spines arise from 2–4 cord wrappings located [352] on the edges or in the middle of a widening of the upper border of the wooden handle. Heads are then carved on both sides below this enlargement, with sometimes only rudimentary pegs remaining, and opposing pegs facing them further down, Fig. 198, 7 and 8. The opposing pegs however could also be traced back to a crocodile head opening upwards. These types of specimen are often strongly reminiscent of spear points but are seldom needed as such, without re-working of the handle end.

A third type of dagger resembles the obsidian daggers, right up to the blade material, which consists of a broad, tapered stick.

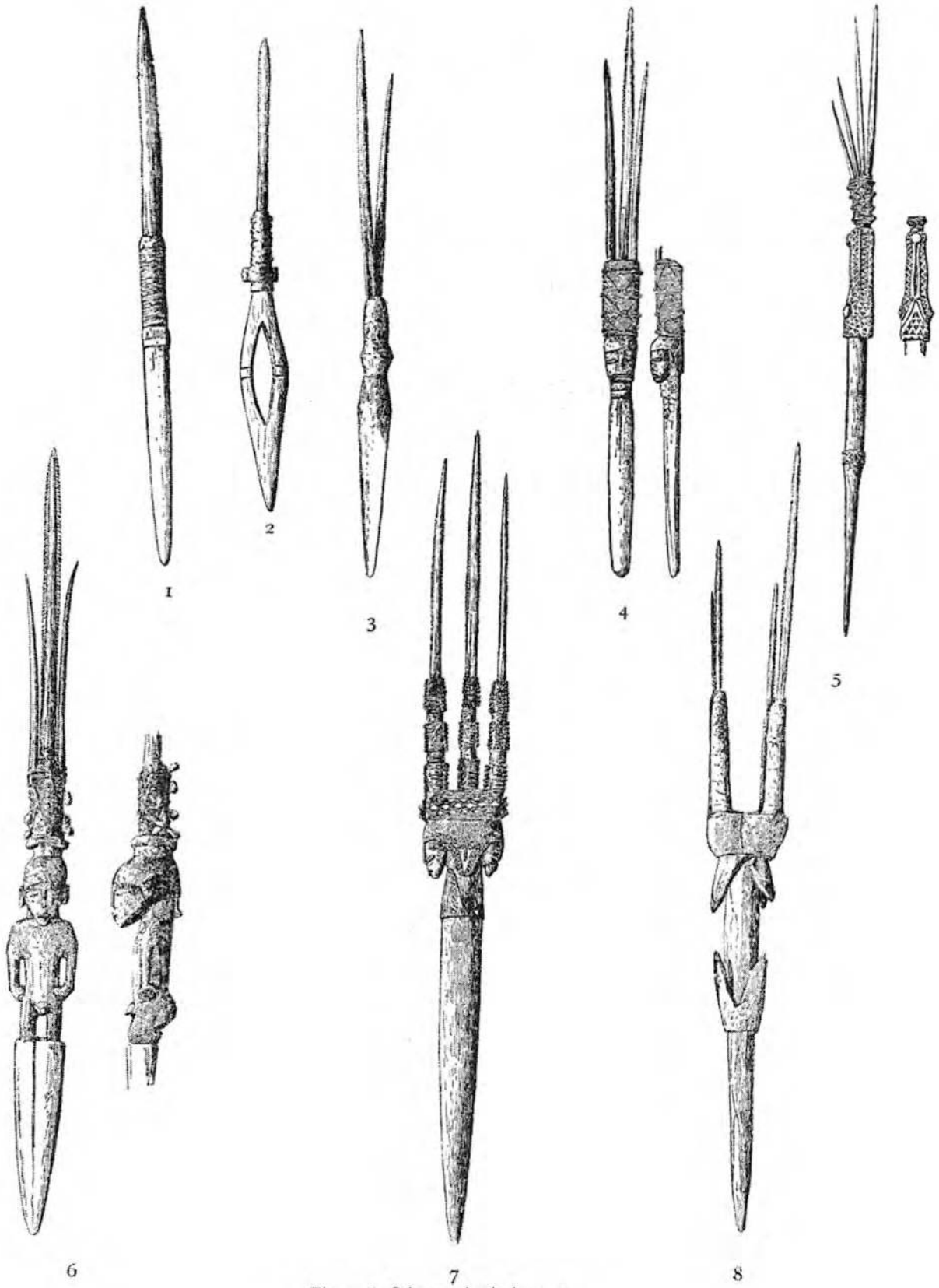

Fig. 198. Stingray barb daggers
1/4 actual size
1. 685[1] 2. E. 3520 3. 684[1] 4. 2826[1] 5. 662[1] 6. 12. 101:1 7. 2963[1] 8. 3112[1].

Daggers with stingray spines are called *kŏdjo* or *kŏdšo* on Hā̆ŭs; *a kŭkŭ* in Pătŭ́sī; *borobai*[825] on Pāk; and in Ndrī́ol on Lămbŭ́tjo *pŏtŏmbé* (*botombé*, according to Schoede). The stingray spine is called *börumbé* in Pătŭsī, and *lắ* on Hā̆ŭs. Reportedly the ray also is called *lắ* there, but elsewhere it is called *pei* or *bei*. Schoede heard *la* used as the designation for obsidian daggers on Pāk, while Krämer heard *gúdom* and Thurnwald heard them called *katjo* on Lămbŭ́tjo and Kŏmŭ́li, and Schnee[826] heard *kotjo*. In Lŏ́nĭu according to Krämer they are called *pelu*. As a general(?) name for daggers *langean*[827] seems to be still common on Pāk.

Webster[828] reports from Uainkatou that obsidian daggers were worn in the hair. That is not quite likely, given the risk that the daggers might fall out and shatter; it is more likely that Webster has mistakenly interpreted the protruding combs which indeed bear a certain resemblance to obsidian dagger handles. Daggers with stingray spine points actually often serve as hair ornaments[829]. In these daggers there is also curvature of the handle and binding section, and a decorative hanging of the binding area with dog's teeth and cords of *Conus* discs or glass beads.

Obsidian Axes

Obsidian axes are very rarely used as weapons. Giglioli[830] reports Pāk as their production site, and Thilenius[831] found them on Pĭ́tĭlu.

Obsidian axes were seen in use as weapons only in 1908, when Pĭ́tĭlu people armed with obsidian spears and axes proceeded against Ndrauo[832]; perhaps earlier by Molde[833] on Pĭ́tĭlu — the only proven consumption site for obsidian axes.

The obsidian blade is inserted into the upper part of a wooden stave at a right angle and cemented in with *Parinarium* resin. In the oldest known [353] specimen, obtained in 1880[834], and in the specimen described by Giglioli[835], an intermediate section with a *Parinarium* resin coat and incised and painted bird figure is inserted between blade and handle, covering the root of the blade, as in the obsidian-pointed spears. On the other hand, the axes collected by Thilenius and more recent axes have blades inserted directly into a hollow of the handle.

That axes had appeared before contact with the Europeans[836] is confirmed by the fact that a similar prehistoric axe was unearthed[837] in the Yodda valley of British New Guinea. Probably however, the obsidian axes are not all weapons, since sometimes they are very small and carved out of soft wood in less manageable forms[838]. Such axes serve perhaps as equipment for dances or other ceremonies, but may just as well be examples of foreign industry.

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825 Giglioli, 1911. p.231 according to Hellwig
826 1904. p.210
827 According to Krämer
828 1898. p.315
829 Eichhorn, 1916. p.279
830 1911. p.233
831 II, 1903. p.129
832 *Deutsches Kolonialblatt*, XX, 1909. p.896
833 Thilenius, II, 1903. p.129, Note 1
834 Finsch, 1904. p.252 = Berlin Museum VI 6413
835 1911. Plate before p.238
836 Parkinson, 1907. p.355
837 Finsch, 1914. p.253
838 Thilenius, II, 1903. p.129, Note 1

The wooden handles of the axes are usually rectangular in cross-section. However, in older specimens they are oval, with relief carving and painting over their entire surface. The patterns of four triangles with a jagged base, grouped round a point, are the most common, and are arranged in repetition (about 5–7 times) one above the other. Occasionally the site of the blade's insertion is somewhat enlarged. Above the blade a decorated knob, a half-moon image, or the representation of two birds facing each other and perhaps separated by a strip decorated by a zigzag line, terminates the handle, Fig. 199. The grip end of the handle describes a curve encompassing the stylized three-dimensional figure of a four-footed animal. Usually it is rounded on the same side that carries the blade; however, in the two axes described as having an intermediate section, it is on the opposite side. Also, a permutation of bird and arch carving occurs. In more recent specimens the lower end may be knob-like, Fig. 200, or represent a crocodile head, or both ends cut off smoothly and have only relief patterns.

Fig. 199. E. 3522. 1/4 actual size

The Pǐtĭlu people's term for the obsidian axe is *tabal*[839]. [354]

Fig. 200. E. 2559. 1/6 actual size

Bows and Arrows

In 1545 Yñigo Ortiz de Retes mentions flint arrows that were shot at him by the natives of "La Caymana". As Friederici and Wichmann have demonstrated however, these were not arrows but short throwing spears with obsidian tips.

In all the other, older, accounts it is consistently emphasized that bows and arrows are missing from the Admiralty Islands.

Nevertheless, the Hamburg Expedition found bows and arrows in Tăn̆ near Păpítălâ̂ı̆, and in Lŏnĭu, on Hâŭs, on Pāk, and in Kyĕlâ̂ùâ̆k, and Friederici[840] noted children's bows on Pāk and Pălŭăn. Margaret Mead[841] saw them in Pârā in 1929. Also, a short, rough, thick arch-like bow with a rattan bowstring fastened through a hole turned up in the Munich Museum; Friederici made the observation "as though it were produced not according to a pattern but according to hearsay".

The bows are made of wood and are simple, not compound, arcs with a straight inner side and a rounded outer side. They are about 1 m long, and about 2.5 cm wide at the midpoint. The bowstring is rattan. It is laid in a loop around one end of the bow, which is somewhat thinner than the rest, and knotted firmly at the other, similarly-shaped, end of the bow, so that the unused end of the bowstring hangs down freely, Fig. 201.

The arrows are simple, tapered sticks: very thin at the end and a little thicker towards the tip. They are about 87 – 95 cm long. A little behind the head some arrows have an inserted cylinder or a fruit-shaped sphere of pulp-wood, or plaiting with strips of rattan, Fig. 202. More recently people use tubular sticks with one or more wire points secured by wrapping[842]. [355]

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839 Thilenius, II, 1903. p.359. Cf. *sawali* = 'tomahawk' in Webster (1898. p.318)

840 1912. p.123

841 *Natural History*, 1931. p.67 Figure

842 Bühler Collection, Basel

In Kyĕlâûā́k the bows are used only for shooting fish, and on Pāk and Pā́lŭăn[843] only as children's toys. In Pā́rā̄ and Lónĭu[844] too the bows have become a semi-toy rather than fishing equipment. They are never used as weapons. Parkinson[845] heard that the bows were only a hunting weapon. In Păpítălâî the chief Pō Mĭ́nis assured us that the bows were older than the obsidian spears and had gradually been replaced by the latter. In spite of this, the bow does not give the impression that it is of local origin and the accounts of Morelle, Labillardière, Moseley etc. render Pō Mĭ́nis' information as being unlikely.

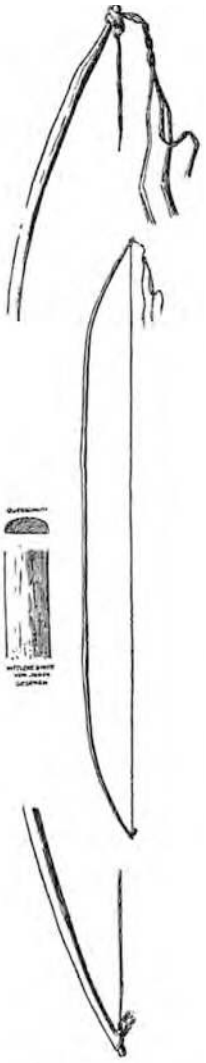

Fig. 201. Bow
577 I. 1.05 m long

Also, tautening the bow is done in an almost childlike manner, which is unconvincing as an earlier skill of shooting with the bow. The arrow is placed to the left of the bow, lying on the middle finger while the index finger lies above it. The bowstring is pulled back with the thumb and middle part of the index finger of the right hand and the end of the arrow is thus held with the tips of both fingers. An old man in Păpítălâî also tightens the bow in this manner[846], Fig. 203.

It is reported that in Păpítălâî earlier, two men would have tightened the bow in battle. The command for this was *ĭ́ắ*.

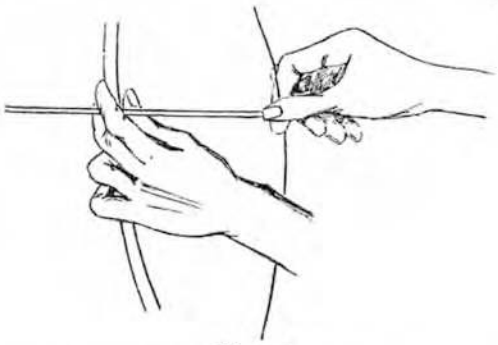

Fig. 203.
Finger position when pulling a bowstring, Păpítălâ.
After a sketch by H. Vogel.

On Pā́lŭăn according to Friederici[847] the bow is *bălaîĭắ*; however, according to Walden[848] it is *tritri*; in Lónĭu *léte*, and in Kyĕlâûā́k *ĕlălé*. In Pā́lŭăn according to Friederici the arrow is called *kíkĭrĭn baîlo*; according to Walden *páṅkat*; and on Pāk[849], *pălăṅắr*. Webster[850] gives *merrik*(?) as the local word for "bow and arrow".

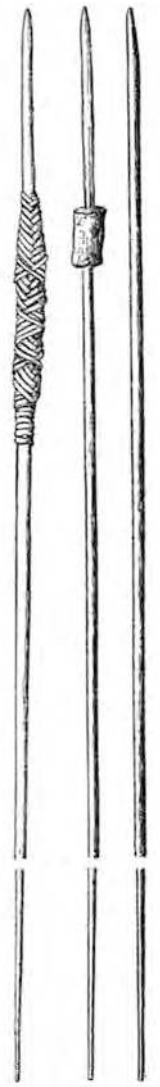

Fig. 202. Arrows
580 I, 581 I, 562 I.

Throwing Arrows

[843] Friederici, 1912. p.123
[844] Bühler Collection, Basel
[845] 1907. p.356
[846] Cf. also the figure in Mead, *Natural History*, 1931. p.67
[847] Friederici, 1912. p.225
[848] Vocabulary in the Berlin Museum
[849] Friederici, 1912. p.226
[850] 1898. p.318

Besides the throwing spears, short tubes (on Pǎlŭăn *kā̆p*[851], in Lŏnĭu *bada* or *bara*[852]) are used as weapons from a distance; these are fitted with an obsidian head. The heads are united with the tubular shaft by splinting, wrapping, and coating with *Parinarium* resin. The resin of the binding site is not decorated any further and, at most, receives a sprinkling of red ochre or several red decorative streaks.

These short throwing arrows have already been mentioned by Yñigo Ortiz de Retes, Carteret[853], [356] Hunter[854] and Maurelle[855]. The men usually carry them in bundles, especially in the canoes.

The throwing arrows are launched either by hand or with the aid of a throwing cord[856]. For unaided throwing they take the end in their right hand so that the index finger lies on the end of the throwing arrow, the thumb a short distance in front on the arrow, while the other fingers lie below it and the middle finger supports it. The arm is not raised when throwing; a powerful forward jerk of the arm suffices[857]. Krämer witnessed throwing arrows launched in this manner fly about fifty metres.

Throwing arrows with obsidian tips are often also used as a mantrap or they serve boys as a substitute for bigger obsidian spears.

More rare are throwing arrows with a tubular shaft and a wooden tip fastened with wrapping and *Parinarium* resin, with several barbs; they can be painted red and white. According to Thurnwald[858] they are called *káu̯akau̯* on Lămbŭtjo.

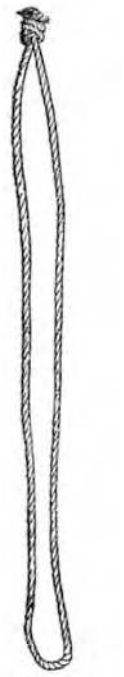

Fig. 204.
603 I.
1/3 actual size

Throwing Cords

Spears are thrown by hand without special equipment. Likewise the throwing arrows with obsidian tips are often thrown by hand, although often also with the aid of a cord[859] whose ends are knotted together. Men lay the closed end of the 27.5 cm long throwing cord around the foot section of the throwing arrow and grasp the other, knotted, end with the fingers which simultaneously hold the shaft of the throwing arrow. When throwing they let the shaft fly but hold the cord end firmly, and give the throwing arrow greater momentum by straightening the arm with the throwing loop. On Pǎlŭăn the throwing cord is called *sólesol*[860], Fig. 204.

Sling Stones

851 Walden's Vocabulary. Berlin
852 According to Krämer
853 Hawkesworth, I, 1773. p.384
854 1793. p.140
855 Milet-Mureau, I, 1797. p.268
856 Zöller, 1891. p.168
857 According to Krämer
858 Thurnwald Collection, Berlin
859 Zöller, 1891. p.168
860 Walden's Vocabulary, Berlin

Stone-slings and processed sling stones are absent from the Admiralty Islands, although occasionally in battle, besides spears and throwing arrows, stones are also thrown[861] — picked up on the spot and used as weapons. There is no processing of the stones, since they are always only improvised weapons.

Clubs

According to Parkinson[862] clubs are "customary in some places but always in a very small number and of less importance in battle". In [357] other sources clubs are not mentioned apart from the women's clubs, nor were they mentioned in 1908.

On Ṕítĭlu women use clubs as a striking weapon (*ŭā́k*). They are 1–1.6 m. long: mostly about 1.45 m. — flat pieces of wood with slightly rounded edges and a carved and partially painted upper section. In odd specimens the head section has painted relief carving as well.

The upper ends of the women's clubs are also flat; usually with three hour-glass-shaped sections with two diamonds in between, Fig. 205, 1. The tip of the upper end is also diamond-shaped. These diamond surfaces are readily covered in relief carving representing two touching curves, or conforming with curved lines or diamond-shaped transverse bands. Simple round holes or semicircular holes are frequently added inside the diamonds for decoration, Fig. 205, 2. The upper diamond is often stretched lengthwise and fashioned into a section bordered with wavy lines, Fig. 205, 3. These types of specimens can also be condensed. In the odd specimen, only one hourglass figure and one diamond figure are more or less rounded into a crocodile head form, which may also be reduced to a bulge. Occasionally there is a wavy upper section on the rim. In other specimens the hourglass figures drop out and the number of diamonds increases, Fig. 205, 4 and 5.

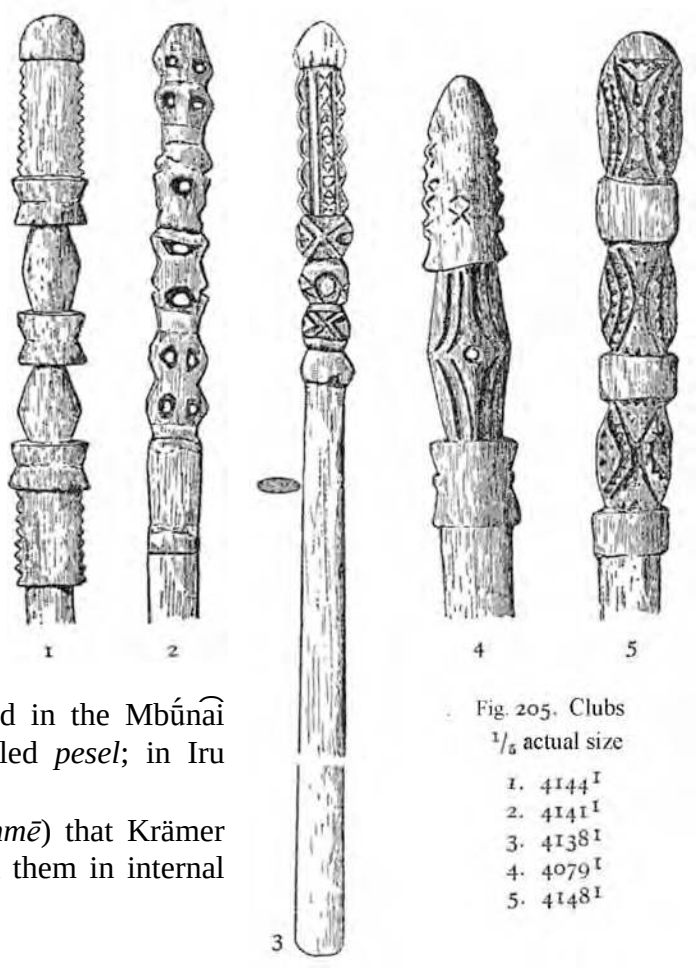

Fig. 205. Clubs
1/5 actual size
1. 4144[1]
2. 4141[1]
3. 4138[1]
4. 4079[1]
5. 4148[1]

Bühler heard in 1932 that these implements were wedding gifts for the women, who later would occasionally use them as weapons. He did not see them in use. He found them on Pónam, in Iru and in the Mbű͡nai hinterland. On Pónam he heard them called *pesel*; in Iru *wagg*; and in Mbű͡nai *wagg* or *owa*.

Regarding the women's clubs (*bémmē*) that Krämer saw on Pāk, he was told that women used them in internal disputes with a rival. [358]

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[861] *Deutsches Kolonialblatt*, XI, 1900. p.329

[862] 1907. p.356

In Ahus (Ndragot) Thilenius[863] found implements that fully matched these "women's clubs", yet he was told that they were carrying poles and that the grooves in the upper part were for cords from little taro bags or water containers.

They could be used equally for both purposes but we do not know which use — as clubs or as carrying poles — was the original one. Finally, mention is made of "women's festive swords" of considerable length (Fig. 206).

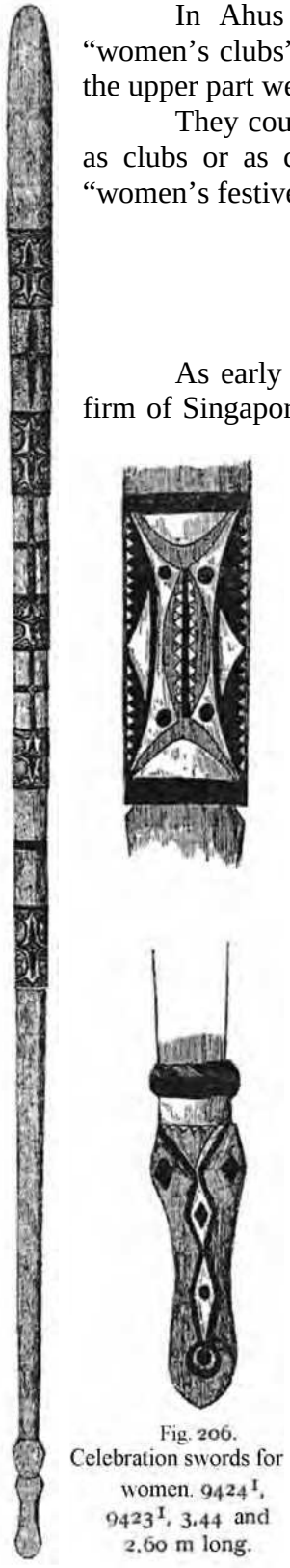

Fig. 206. Celebration swords for women. 9424 I, 9423 I, 3.44 and 2.60 m long.

Firearms

As early as 1877 the natives were offered old guns, out of use in Europe, by a firm of Singapore-based traders. Also "small cannons together with powder" were said to have been used as trade items at that time[864].

The first useful firearms came into the hands of the Pāk people through the murder of traders Möller and Andersen. Soon after, weapons came into the hands of the Lămbŭtjo people as well, with the murder of Donald Dow. They were given their first shooting training by the trader's coloured workers. In 1899 the Móuk people too procured firearms through the murder of Maetzke. However they must already have been familiar with shooting, because they shot the trader Molde from Pălŭăn with the stolen weapons immediately afterwards. When they used them to carry out raids on their neighbours, the Păpítălâî people in turn obtained firearms at the instigation of the Limóndrol chief Kámau, by attacking the *Nukumanu*. They were therefore soon able to maraud, and shot up the *Nugarea*. Through possession of a few Winchesters the chief Pō Mĭ́nis secured his position in Păpítălâî. From then on, attacks on traders and planters were planned again and again, and sometimes successfully carried out, thus acquiring more weapons. Recovery of these weapons was a major role of the punitive expeditions of the Imperial Navy. However, the last stolen weapons were recovered only after the establishment of the Manus station. [359]

Ammunition that was unsuitable to the stolen firearms but had been acquired with them was made useable quite simply. The Lămbŭ́ tjo people for example wrapped the revolver cartridges, probably from Lōkŭ́l, around the casing with rattan and so obtained ammunition that could be used quite well in their carbines[865].

Firearms that had come into the hands of the men from Salien on Kali Bay were, when they were retrieved a considerable time later, "completely intact, spotlessly cleaned, and well greased with coconut oil"[866].

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863 II, 1903. pp.136 *et seq.* and Plate IX

864 Miklucho-Maclay, *Izvestia* 1878

865 *Deutsches Kolonialblatt*, XX, 1909. p.899

866 Administration Report, 1913. p.132

Imitation Firearms

When the warriors of Păpítălâî had obtained weapons in 1899 and used them to attack the enemy village of Lŏnŭ, the inhabitants of that village were unable to get possession of firearms. Continuing feuds with armed enemies finally prompted them in 1907 to make wooden imitation firearms that were evidently a very effective deterrent to their enemies[867]. When in April 1909 intimidation by Păpítălâî was no longer an issue, the weapons were burnt. Only one "not unskilful imitation of the Gewehr 88", with a thin bamboo tube as the barrel, was seen during the *Seestern*'s visit. On Nŏru a worker who came from a village in the interior of the main island had an "imitation carbine accurate down to the smallest detail"[868]. Also, in 1909 Schoede obtained a wooden imitation of a gun (*pokal*) on Pāk.

Pitfalls and Mantraps

For protection against enemy attacks pitfalls and mantraps are set up: in the vicinity of the village; on the paths leading to the villages; and, when a village is vacated before an approaching enemy, around the huts in the village itself. In fenced villages pitfalls are set up behind the fortification as well. For example, in Ndrabui pitfalls lie behind a broad bamboo strip[869], and in old-Lĭĭndrâû mantraps were set up behind a palisade fence about three metres high[870].

The pitfalls are holes about 30 cm deep and covered over, so that the enemy unexpectedly steps into the pit and twists an ankle, or at least stumbles. In this instant the defender has the opportunity of hurling a spear from concealment[871]. [360]

The mantraps are mounted in these pitfalls, either sharpened, and often blackened, pieces of bamboo hardened in the fire, Fig. 207, (*wâû* on Sĭ́sī), or obsidian points that are firmly staked as blades or shards into the hard ground, or fastened with cord wrapping and resin coating after the manner of spear points[872]. Simple mantraps with obsidian points have these points pushed into a split piece of wood and securely held by wrapping with strips of liana without a resin coating. Should the enemy step into a pit containing a mantrap the bamboo or obsidian will pierce his bare foot.

Fig. 207. Mantrap 20 cm long. 1062[1].

The pitfalls and mantrap pits are concealed by an overgrown tangle of vegetation, by excavated slabs of turf laid over the pits[873], or by thin pieces of wood or leaves laid directly over the pit with earth thrown on top[874]. Concealment of the pit is done with such skill that it is barely recognizable to the naked eye, and the enemy has to proceed by crawling and testing[875].

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867 *Deutsches Kolonialblatt*, XIX, 1908. p.623
868 *Deutsches Kolonialblatt*, XX, 1909. p.898
869 Leber, 1923. p.202
870 *Deutsches Kolonialblatt*, XIX, 1908. p.854
871 Leber, 1923. p.204
872 *Deutsches Kolonialblatt*, XI, 1900. p.330; XIX, 1908. p.854; XX, 1909. p.896; Schnee. 1904. p.201; Leber, 1923. p.204
873 Leber, *loc. cit.*
874 Schnee, 1904. p.201
875 Schnee, 1904. p.200

As a protective device for valuable items that cannot be taken along when fleeing, and which need to be hidden in the scrub, Leber[876] found in Kawa a “feathered, three-pronged fish lance fixed at abdomen-level” over the hiding place.

A derivative mantrap is set by the Ŭsĭa̯ĭ from Kětyḗ in the mangrove swamp. It consists of a series of pointed wooden staves about a metre long, buried obliquely in the ground, to impale the enemy in the dark of night. Pits are not dug for these.

More symbolic is the custom, observed on Pāk by the crew of the *Möve*, where two obsidian spears are thrust obliquely into the ground at the entrance to the village with their points towards the approaching enemy. This is intended less as an actual means of protection and more as a challenge[877].

Conduct of War

Disputes between villages that have arisen often for trivial reasons — blood feuds, rapacity of the attacker, or omens — offer occasions for war. For example Thilenius heard that a falling star pointed the direction they should sally forth to battle, even though there were no other grounds [361] for war[878]. Sheet lightning is considered only a sign that a battle is raging somewhere or that a murder has begun; it is not an obligation to fight.

It is mainly the mature youths who go to war, often led by the chief, although another leader can stand in for him if the youths are free men. Older men seem to take part only of their own volition. Coercion to fight under the leadership of a chief applies only to his subjects.

Boys, after they have been instructed in spear-throwing (*déle*[879] on Pāk) by their fathers, are taken along to a battle, which lasts just until they have killed or wounded an enemy. Only then are they ceremonially declared warriors, at the end of the war[880].

Penis shells, neck ornaments, and painting serve as war decoration; as weapons: spears, throwing arrows, daggers and, very rarely, obsidian axes. The war cry according to Schnee[881] is a succession of short, clear shouts, sounding like *ui*; according to Thilenius[882]: a long, drawn-out *iō*.

Particularly common are attacks that take place either in the dawning light, or unexpectedly at markets. In the bush too the enemy is pelted with spears, as much as possible from ambush. People try to protect themselves against attacks on their villages by mantraps and pitfalls, palisades and, among the Ŭsĭa̯ĭ and on Lóu, by siting their villages on a hill. Similarly, entry to a village can be made more difficult by leading it along a water course, or by piling up brush on the path in order to barricade it[883]. In 1908 the river at Tau̯ĭ was found to have multiple beam barriers.

On a march through the bush they listen for a certain bird to call. If it does so then they are certain that they will be attacked soon after. This is not a case of a human imitating a bird call as a signal[884].

When warriors set out by canoe for battle there are always several adolescent boys who paddle and send drum signals, since warriors do not concern themselves with this[885].

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876 1923. p.204
877 *Deutsches Kolonialblatt*, X, 1899. p.699
878 II, 1903. p.128
879 According to Krämer
880 Parkinson, 1907. p.401
881 1904. pp.205 *et seq.*
882 II, 1903. p.142
883 *Deutsches Kolonialblatt*, XX, 1909. p.896
884 Note from L. Lukowski

Both sexes of those attacked are killed, and the attackers jab out their eyes and those of the severely wounded with obsidian daggers, and cut off their heads to take home as trophies. The bodies are eaten or, if they themselves are not cannibals, they are onsold to their trading partners for consumption. Those spared are only a few men who come under consideration as bondsmen to the chief, and several girls, who will become prostitutes for the bachelors' house. The houses are burnt and the cookware inside is smashed[886]. [362]

If the intended victims get information of the planned attack in time, they flee if they are too weak to resist, and take their valuables with them or they hide them. They know full well to hide themselves as well. For example, two Móuk people who were sought on Alim by a punitive expedition were not found despite exhaustive scouring of the island; they had buried themselves, and were covered by foliage and leaves[887]. So as not to diminish their ability to fight, smaller villages are unwilling for their men to be recruited by the Europeans, although they are happy to entrust their boys to the Europeans because they will then be safe. The women and girls are sent into the bush when the men want to defend the village[888].

If several enemy canoes come into contact, then, after reciprocal verbal abuse, the canoes of the chief's sons of both parties approach each other and a duel begins, with each chief's son throwing three spears. A general battle then ensues, with attempts to kill the opponent's steersman, capsize his canoe and spear the crew[889].

The spoils of battle are divided between the chief and the warriors, including his bondsmen. The chief receives the largest share. The victors also take possession of the enemy's land when he is wiped out or driven out; and they are particularly eager for his coconut palm gardens.

Under the influence of the Europeans the wars became slightly less frequent around 1908, and on Pāk the hostile villages were content simply to steal women from one another and to burn down huts[890], but there was no longer any real war with one another. Today wars are said to have ceased completely(?).

Conclusion of Peace

A sign of peace is the offer of peace gifts by the vanquished[891], or the hand-over of a bunch of betel nuts to the enemy, usually carried out by the women, as intermediaries[892]. Even without a preceding war a bunch of betel nuts is used as a sign of peace, for example when a visitor is greeted in the village[893]. It is crucial that each member of both parties actually eats his betel nut. With greetings, there may be a speech by the oldest person in the village; a procession around the bowls of food that have been set out; with the chief poking a stick into each bowl[894].

A peace ceremony after the war consists of a coconut being [363] split and its contents eaten[895]. The people compare peace with sunshine or heat[896].

Prisoners of war can buy their freedom or be turned into subjects[897].

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885 Thilenius, II, 1903. p.128
886 Parkinson, 1907. pp.400 *et seq.*
887 Schnee, 1904. p.193
888 Thilenius, II, 1903. p.132
889 Parkinson, 1907. p.401
890 *Deutsches Kolonialblatt*, XX, 1909. pp.530 *et seq.*
891 Parkinson, 1907. p.380
892 Parkinson, 1907. p.402
893 Thilenius, II, 1903. pp.127 *et seq.*
894 Thilenius, *loc. cit.*
895 Meier, 1906. p.475
896 Meier, 1906. p.474

Cannibalism

Whether the natives of the Admiralty Islands were cannibals, remained in doubt for a long time. Hunter (1842) and Meinicke[898] label all natives of the Bismarck Archipelago and the Admiralty Islands as cannibals, while Moseley[899] is more circumspect, and emphasizes that while he personally saw no signs of cannibalism, an anonymous correspondent of *The Times* who found himself on the *Challenger* claimed to have noticed signs. Again, Schnee[900] claims that the natives of the Admiralty Islands are cannibals. Festetics von Tolna[901] reports that human flesh had been offered to him many times, but this carries a fairly clear stamp of improbability.

The truth lies somewhere in the middle: one group of natives belongs with cannibals, while another section maintains that it has nothing to do with the eating of human flesh.

Cannibalism has been proven among the inhabitants of Móuk and Takúmal[902], Pāk[903], Sōri and the Ŭsĭáî villages east of Shoal Bay[904], the Amok and Drūgŭ́l, among the Ŭsĭáî of Bojang[905], on the Sĭ́sī Islands, on Hā́ŭs and on Pónam. To these can probably be added Lukús and Pĭ́tĭlu, whose inhabitants, according to Parkinson[906], are reviled by the Mắnus as cannibals. Cannibalism is openly admitted on Hā́ŭs and Pónam, without a second thought. On Hā́ŭs only, the reason given was that the Ŭsĭáî (from Drūgŭ́l) ate so many men, and therefore the Hā́ŭs people did too.

Among many Mắnus, and many Mătăṅkŏ́l cannibalism did not seem to occur. This is supported by their despising the cannibalism of the Pĭ́tĭlu people, and the Păpítălâî chief Pō Mĭ́nis describing[907] the Ŭsĭáî quite generally with contempt as cannibals. The people of Lŏ́nĭu and Bŭ́bi gave Miklucho-Maclay[908] to understand that Ŭsĭáî in their neighbourhood were low-class and cannibals. Despite this, the Păpítălâî people, and probably other Mắnus as well, supported the cannibalism of their trading partners by selling the latter the corpses of slain enemies as food[909]. According to Schnee[910] [364] the corpses were sold cooked, or given as gifts to the neighbours. Schnee's information[911] that the corpses of the coloured crew of the *Nukumanu*, which had been attacked in 1899, had been "stored in Păpítălâî and later eaten" is probably not proof of the cannibalism of the Păpítălâî people but only of their unscrupulous trade tendencies.

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[897] Parkinson, 1907. p.380
[898] 1888. I, p.145
[899] 1877. p.414
[900] 1904. p.210
[901] 1904. pp. 137 and 145 *et seq.*
[902] Schnee, 1904. pp. 162 and 184 *et seq.*
[903] Schnee, 1904. p.167; Parkinson, 1907. p.391
[904] *Deutsches Kolonialblatt*, XIX, 1908. p.855
[905] Leber, 1923. p.262
[906] 1907. p.376
[907] Parkinson, 1907. p.376
[908] *Izvestia*, 1878
[909] Parkinson, 1907. p.408
[910] 1904. p.187
[911] 1903. p.362

As for slain Europeans, it is specifically reported that the bodies are not eaten but thrown into the water, while their coloured workers, like the bodies of the Admiralty Islanders, were eaten[912]. In the most general sense, only those men considered enemies were eaten.

The preparation of humans is done in the same way as for pigs.

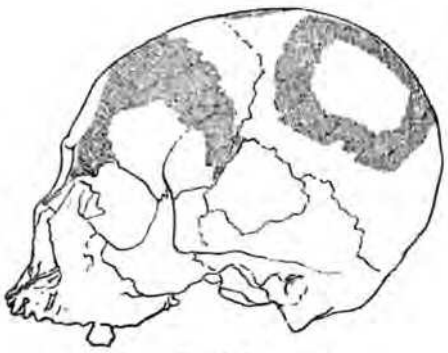

Fig. 208. Painted cranium Stuttgart IC. 13346.

Whether the Pā́rā̄ warriors' custom of taking the skulls of slain enemies home and smashing them on stones to remove the brain[913] is related to cannibalism, remains unknown. In the Linden Museum is a painted skull[914] with large holes in the sides, Fig. 208; there is no detailed information as to its origin. Von Bennigsen, who presented it to the museum, noted that the skull came from a cannibalized victim, and the brain had been taken out at the sides for eating. In other skulls that had been stored as trophies, the brain had frequently, although not always, been removed through a holes in both sides.

Trophies

The Mătănkŏ́l on Hā́ŭs paint the skulls of the dead and eaten Ŭsĭâ̂ with red ochre and store them in the canoe houses for use during festivals. Hā́ŭs people's skulls on the other hand, are never exhumed. The Ŭsĭâ̂ from Lukús and other areas of the north coast of the main island behave exactly the same, in painting the skulls and bones of the Mătăṅkŏ́l of the offshore islands as far as Pĭ́tĭlu, and of enemy Ŭsĭâ̂, red and storing them. The Mătăṅkŏ́l from Pónam also store the skulls of eaten Ŭsĭâ̂ from Sā́hă and other villages on the mainland opposite; however they hardly ever paint them. They place no value on the lower jaw, although these must be present as part of the ancestral skulls, and a skull is relinquished without a second thought. [365]

In Tâ̂uī and its neighbourhood the Hamburg expedition was offered freshly-painted skulls with the paint still moist. However, ancestral skulls inside the houses showed not one instance of painting. Painting seems to have been introduced by a few clever people, in order to set those skulls apart, to their profit.

Skull painting consists of red and black lines around the eyes; an arc over the forehead with circles or dots above it; and the same on the back of the head. Sometimes the skulls are simply painted completely red, but occasionally they are provided with complex patterns. The eye sockets are often smeared with a clay or resinous mass into each of which they press a shell. Insofar as the lower jaw is stored, these are bound firmly to the skull with bast fibre cords, and sometimes a hanging cord is arranged in a cross over the entire skull, securing the lower jaw at the same time. Fig. 209.

The brain is removed from the skull through two holes pierced in the side. Again, in many skulls these holes are missing.

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[912] Schnee, 1903. p.363; and 1904. pp. 167, 184 *et seq.*, 187
[913] Parkinson, 1907. p.382
[914] IC 13346

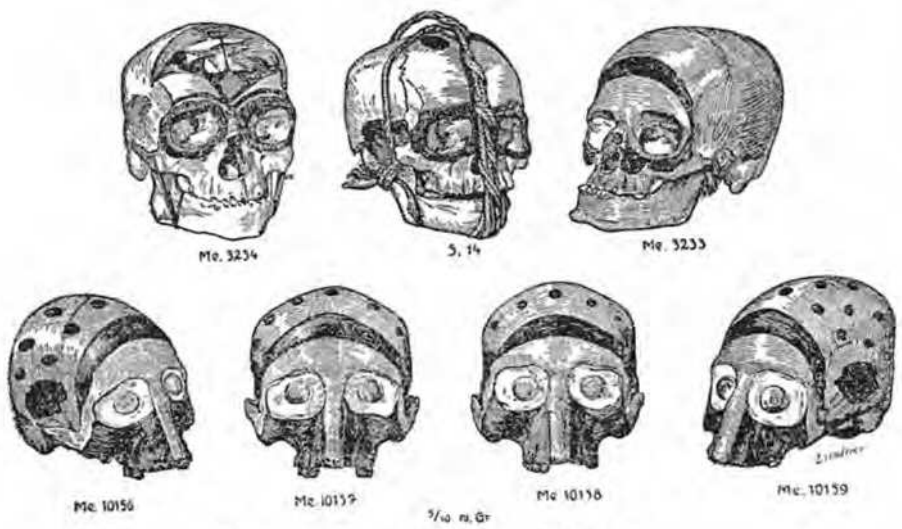

Fig. 209. Painted skulls Museum Leipzig.

From Pā́rā̄ Parkinson reports that the warriors took the heads of enemies home from the battle site, smashed them on stones and removed the brain[915]. According to Couppé[916], the heads of dead Lṓnĭu people were spiked onto poles opposite the village. Lower jaws of consumed pigs, for example on Pī́tĭlu and in Lukús, and skulls of pigs and turtles with red, black, white, and even yellow-painted simple lines, appear to be decorated for similar reasons, like [366] trophies for sale; but are, perhaps, stored like enemy skulls simply as memorials to a feast. In Ndrawa and other Ŭsĭáî villages Bühler saw pig lower jaws decorated with a *Parinarium* resin coating, and tusks used as hooks for hanging bowls containing ancestral skulls, with the hanging cords passed over the tusks; the lower jaw itself was firmly bound to a vertical pole. Loose tusks are made firm again by inserting a piece of wood. On Pī́tĭlu the lower jaws of pigs are called *băsă̆bu*; according to Bühler in Ndrawa *jeha pu*; in Pā́rā̄ and Mbū́n͡aî *passeabu*; and according to Krämer in Lṓnĭu *kapsambu*.

Neck ornaments made from humeri or shoulder bones, and the hair of slain enemies are worn by men in battle and for war dances (cf. Fig. 53). In 1877 Miklucho-Maclay[917] saw the hair of slain sailors from Yap hanging in bunches in the rigging of a sailing canoe from Lṓnĭu.

[915] Parkinson, 1907. p.382
[916] 1908. p.350
[917] *Izvestia*, 1878

XI. Spiritual Culture

Religion and World View

The Creation

Before the land was created, there was only sea. According to one account a serpent, (*malai*), allowed the reef to rise up into land, and created the founding pair of parents and food for them. According to another version the founding pair of parents, Nimei and Niwong, created land, trees, food and, from two mushrooms, the sun and the moon[918].

The mountain Sabumo (Tjawomu, Tjábomo) or Pounda earlier grew ever higher, or was built ever higher by giants, until an end was made to it by the serpent (*moat*) or the giants, who tipped it over[919].

The Poauai Channel arose when a giant threw a rock, which now stands in the canal as the Tjaretankor crag (land border), onto the land so that it burst[920].

First Parents

Viewpoints differ greatly about the founding parents. According to one version they are Nimei and Niwong who created the world; according to another, two children, who were first created by the serpent (*malai*) who created the world[921]. [367]

Many versions of sagas about the founding parents are clearly influenced by the totem groups. Thus the founding parents crawled out of turtle eggs, or a man comes out of a pigeon egg and unites with his mother into a founding parent couple, or the founding father Manuai (= bird!) carves his wife out of wood, or a parrot by the name of Ása stitches the founding father out of a tree leaf and counsels him to make himself a wife out of a *Terminalia* leaf, or from the blood of the woman Hi Asa come two eggs containing the founding parents[922].

Legend explicitly has it that the ancestors of the Mǎnus, (i.e. of all Admiralty Islanders) and the Jap came out of the eggs of the turtle; while one of the other differing versions[923], which, however, also hints at totemism in that it mentions the men Peu (shark) and Al (species of fish), lets a girl and the sun be founding parents of the Mǎnus and Jap.

Bḗlīt

The spirits of the dead are called *belíg* on Pāk; *balít*[924] or *bḗlīt* on Lămbŭtjo; *palit* in Păpítălâî; and *bḗlīt* on Pítĭlu. Generally they are well-disposed toward their living relatives — its ministration is particularly enjoyed by that family member to whom the *bḗlīt* is awarded by the

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[918] Meier, 1907. p.650
[919] Meier, 1907. pp. 652 *et seq.* and 933; Thurnwald, 1912. pp.417 *et seq.*
[920] Meier, 1907. p.653
[921] Meier, 1907. p.650; Parkinson, 1907. pp.408 *et seq.*
[922] Meier, 1906. pp.480 *et seq.* and 1907. pp.651 *et seq.*
[923] Meier, 1907. p.938
[924] Thurnwald, 1912. p.451

head of the family as a personal protective spirit[925]. The *bḗlīt* lives in the carefully-stored skull, but can also freely move about and follow the living. For example, the *bḗlīt* helps them catch turtles.

People do not sacrifice to the *bḗlīt*, but summon him when they eat in his honour, with the request that he may take part[926]. He is summoned by name or by soft whistling, with which he in turn announces himself.

The *bḗlīt* can also be angry, for example when a husband commits adultery; he then sends a crocodile, a shark, or a storm and overturns the canoes, or comes himself in the form of a shark in order to be appeased by presented betel nuts and betel leaves[927]. With friendly intent the *bḗlīt*, also in the form of a shark, helps his family on the high seas, or he appears to them in the form of a fish eagle to warn them of danger[928].

An evil *bḗlīt* can also draw the soul (*molua*) of a living person out of his body so that the living person falls ill and recovers only when the soul returns[929]. At the spirit sites of Ndrótjun, Látjei, and Limbúndrel dead chiefs and rich people in particular are emptied of envy and bad men are tormented as punishment, especially by evil *bḗlīt* serving them faeces as food. [368] The good *bḗlīt* in Tjawórum collect the spirits of the good deceased; the evil *bḗlīt* try to take them away from them, to eat them[930].

Fig. 210. Wrapped humerus, as a protective device 4044[I] ½ actual size

People ascribe illnesses and fatalities far more frequently to the effect of evil *bḗlīt* than to human sorcery[931].

Occasionally the evil *bḗlīt* is virtually equated with the *tjinal*, and people malign him by saying that he not only eats souls but also eats the bodies of living men[932].

As a protection against the evil *bḗlīt* they plant *Cordyline terminalis* on the grave[933]. *Cordyline* (*drlṓ*) is often also planted in front of the houses to deny entry to the evil *bḗlīt*, or to restrain the *bḗlīt* of somebody buried in the house. Leaves used for curing illness serve the same purpose.

As a protection against a *bḗlīt* who is said to live in the house, a human bone (*pŏăṅkḗ*[i]) with leaves (Fig. 210) was seen in Ndrḯol, while among the Mătănkṓl on Lămbṹtjo it was a stone wrapped in cloth.

Ginger is also laid near the deceased, or chewed and spat on them[934], as protection against the *bḗlīt*.

Kot

[925] Meier, 1909. pp. 354 and 362
[926] Thurnwald, 1912. pp.451 *et seq.*; Parkinson, 1907. p.406
[927] Thurnwald, *loc. cit.*;
[928] Parkinson, 1907. p.720; Meier, 1909. p.363
[929] Meier, 1909. p.363
[930] Parkinson, 1907. pp. 386 *et seq.*
[931] Fortune, 1932. p.157
[932] Meier, 1909. p.354
[933] Fortune, 1932. p.114
[934] Parkinson, 1907. p.403

The *kot* stands as a higher ghost above the ordinary spirits of the dead (*bé́līt*[935]). He is not the ghost of a dead person but has always been there, immutable[936]. It is said that he does not belong to the Mănus and their neighbours but to *Jap*[937].

The *kot* reveals himself in the form of a shooting star or a fiery sphere, and catches men's souls (*molua*), which he throws down from the sky into ravines. The noise caused by this is heard as thunder[938].

On Lămbŭ́tjo people distinguish several *kot*, which are regarded more as goblins. One of these is the *niombungot* or *monbrumgot* which appears in shooting star or bird form, ripping the soul out of chiefs and their relatives in order to throw them down with thunder. Another is the human-headed bird *tjikot* which, as a shooting star or shining sphere like other goblins, catches men's souls (*molua*) or dead spirits (*bé́līt*, *balī́t*) with a rattan noose[939]. [369]

Saviour

Generally widespread throughout the Admiralty Islands is the belief that the foods in the form of taro, bananas, sugar cane, yams etc., were collected by humans out of the belly of a serpent at its invitation, and that fire too came from the serpent, or that it taught men to rub fire[940]. The serpent is called *moat*, *muát*, or *mat*. The tree *mbuahat* arose from its penis, which was planted in the soil. Pottery too is traced back to the serpent, which brought the first pot in its belly. The serpent came from foreign parts, or from the mountains of the main island. When it had given gifts to the humans it departed from the Admiralty Islands, for "*Jap*" according to widespread opinion. Wherever it either didn't go (western islands) or didn't bring gifts to (*Jap*), there is no taro.

In one legend[941] it is not the serpent *moat* but another serpent, *málai*, that created the earth and mankind at the same time, and is regarded as the provider of food. According to Parkinson[942] *málai* is a mythical crocodile well-meaning toward the Păpítălâî people. Perhaps the representation of a man-swallowing three-dimensional crocodile, common throughout, can be traced back to the representation of the human in the essence of the *málai*. Another legend[943] says that out of two eggs to which was the blood of a woman [*sic.*], came a fish eagle and the *moat* serpent. The serpent, chopped up by the fish eagle, then became fish and smaller snakes.

A story of how a man named Muan from Lokomo wanted to bring all cultural assets in a canoe to the Admiralty Islands, but had to throw ballast overboard during a storm, arriving only with pig, dog, taro, coconut, yams and bananas[944], probably arose only after contact with the wealthier Europeans (*Jap*), or was strongly influenced by it.

It is only rarely asserted that the serpent also brought the coconut. Instead, the coconut arose from the skull of a buried person[945]. Also, the *Areca* palm grew from the skull of a buried

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935 On Pónam *pălĭt*
936 Parkinson, 1907. p.386
937 Meier, 1908. p.659
938 Parkinson, 1907. p.387; Thurnwald, 1912. pp.337 *et seq.*
939 Thurnwald, *loc. cit.*, and 1910 *Zeitschrift für Ethnologie* p.134
940 Meier, 1907. pp. 653-659; Thurnwald, 1912. pp.409 *et seq.*
941 Meier, 1907. p.650
942 1907. p.408
943 Meier, 1907. p.659
944 Meier, 1907. p.666
945 Meier, 1907. pp. 660-663

woman[946]. Finally, the coconut is also traced back to its creation from a stone by Po Kolang, a man from Loku[947].

As for fire, it is asserted that the sea eagle and the starling, i.e. two totem birds, fetched it from the skies[948].

Tjinal

The *tjinal* or *moan tjinal* (*tjinal*-men) are evil spirits that pursue humans and attempt to eat them. They appear in human form but often [370] have long fangs, and can often be recognized by their anus glowing with fire. They are also recognized by their acceptance of only uncooked items and detesting cooked food or being unfamiliar with it[949]. A human-like figure with a thick belly and broad protruding snout on a wooden bowl handle was explained in Ndrĺol as *drămpănănyĭnăl* i.e. as “Tamberan ’long bush”.

Kapou

The *kapou* live on Naúna in the ravine *mbuli en kapou* (*kapou* mountain). They are hairy all over with white hair on their head. In the mornings they warm themselves in the sun’s rays. They are only intermittently visible[950].

Spirits of the Forest

The *kasi* are woodland spirits that travel in men’s bellies in order to eat their intestines. They live in trees in a forest in Pongópou[951].

On Pónam, Hắŭs, and Ăndră the *ngam* live in trees. They are occasionally summoned into the houses when a stranger must be conjured to death[952].

The *pongopong* women are harmless spirits, who develop out of the sheet ropes of the *pongopong* or *moi* tree and assume human form; when they fall into the hands of men they remain human. Should they revert into trees they can turn back again. The *Terminalia* leaves earlier turned into women[953].

Betel nuts[954] and mango fruit[955] can likewise transform into humans, although these are more mythical forms than seriously-regarded ghosts.

A two-headed snake is said to live near Kŏmű̀li, and have its nest in trees[956].

In Gali on the north coast of the main island and on Ăndră Lukowski heard of ghosts who sat in the crown of a tree or kept themselves hidden behind the trunk. It was said on Ăndră that this

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946 Meier, 1907. pp.664 *et seq.*
947 Meier, 1907. pp.663 *et seq.*
948 Meier, 1907. pp.659 *et seq.*
949 Meier, 1909. pp. 354-371
950 Parkinson, 1907. p.391
951 Parkinson, 1907. p.388
952 Parkinson, 1907. p.390
953 Meier, 1908. pp. 651-657
954 Meier, 1907. pp.664 *et seq.*
955 Thurnwald, 1912. pp.423 *et seq.*
956 Thurnwald, 1912. p.374

spirit makes every passer-by sick; however, in Gali — a swampy place — he makes those people sick who stay there overnight.

Under the ground, as Krämer heard on Pāk, lives a legendary animal form or ghost form called *kábas*. Accompanying it, is probably *lógai*, identical to "a small animal in the white sand" according to the accounts of the Lőnĭu people; it is reproduced in facial representations on combs as a point on the root of the nose[957]. [371]

Giants

Earlier, in the interior of the main island there lived hulking giants who piled up a mountain (Sabumo or Pounda) then, in anger, partially destroyed it. They also made the Poauai Canal and the Tjaretankor rock. People envisage the giants, apart from their size, totally as human.

Sun and Moon

The sun is good, the moon bad. They were brothers in the land of the sun (*kor e morai*) and separated in anger to follow the good or the bad path. The sun went with its people (women?) to the east, creating Naúna, where it left its people and continued on, to *Jap*. When it has not yet appeared, it has already risen over *Jap*. The moon on the other hand went with its people, the stars, to the west, where it begins its path[958].

The patches on the moon are interpreted as taro leaves, the rind of taro roots, shadows of a basket, or flecks of blood[959]. The moon is also explained to be a woman[960].

On Lămbŭ́tjo, where people regard the moon as a chief, the evening star is regarded as his wife or his servant[961]. If the early moon tilts towards Lămbŭ́tjo, it augurs that food will be brought there from Lőnĭu; with the opposite tilt, food will go from Lămbŭ́tjo to Lőnĭu[962].

According to a notion of the Mătăṅkől from Ndrombut (admittedly not very widely spread) the sun is regarded as the patriarch of the natives and of the *Jap*[963].

Stars

The stars are the people of the moon. In particular, the evening star is considered as the wife or servant of the moon[964].

According to the position of the stars, the Mắnus recognize the time of the occurrence of certain winds, certain fish species etc., and navigate at sea by the stars. Knowledge of the stars is fostered especially in the chiefs' families[965]. The Mătăṅkől, of whom the chief Pō Mĭ́nis had

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[957] Across Krämer
[958] Meier, 1907. pp.939 *et seq*., and 1906, p.473
[959] Meier, 1907. pp. 937 and 939; *id.* 1908, p.671; Thurnwald, 1912. p.329
[960] Meier, 1908. p.671
[961] Thurnwald, 1912. p.341
[962] Thurnwald, 1912. p.332
[963] Meier, 1907. p.938
[964] Thurnwald, 1912. p.341
[965] Parkinson, 1907. p.377

denied any knowledge of stars, might actually possess the Mắnus' knowledge, although the Ŭsĭáî, as a less canoe-oriented people, have probably less astronomical knowledge.

Familiar among the stars and star patterns are: the Pleiades; Scorpio ("stingray"); Altair ("shark"),; β and γ of Aquila (together with Altair "land star"); Orion's Belt ("fishing canoe"); Canis Major ("bird"); the Milky Way ("daylight"); the Evening Star ("steering star" or simply "star"); Corona borealis [372] ("fish" or "mosquito star"); Corona austrina ("net"); Delphinus ("fish *kailou*"); α and β of Centaurus ("star of the fish *papai*")[966].

Celestial Phenomena

The lord of the sky is *kunialang*, who was originally regarded as bearer of the sky. He makes thunder, lightning, and the calm after the storm[967].

Otherwise the thunder is interpreted as the casting down of souls by the *kot*, appearing as a shooting star or shining sphere.

In one legend[968] thunder is interpreted as flatulence, lightning as passion, and rain as the urine of a couple transposed into the sky.

Sheet lightning is regarded by the Mắnus as a sign that war is rampaging or that somebody is being murdered[969].

Cardinal Directions

According to Meier[970] and Parkinson[971] the Mắnus are familiar with the points of the compass: they distinguish wind from the north (*tŏ́lau*, *ndrai*), south (*lān*), east (*kūp*) and west (*ai*). According to Meier, this is the way they reckon southeast wind to easterly wind, and northwest wind to westerly wind. The sun serves as the zero point for determining the cardinal directions.

According to Walden[972] the Ŭsĭáî from Pắlŭăn similarly distinguish north (*lan*) south (*t'ra*), east (*kum*), and west (*'a*).

Time Reckoning

Time is calculated by days, nights, the new moon, and the Pleiades year, which extends from the rising of the Pleiades, (which coincides with the beginning of the northwest monsoon), up until the next ascent[973]. Twelve changes of the moon makes one year[974], without counting the days exactly.

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[966] Parkinson, 1907. pp.377 *et seq.*; Thurnwald, 1912. p.341
[967] Meier, 1907. pp.936 *et seq.*
[968] Meier, 1907. p.666
[969] Meier, 1906. p.475
[970] 1906. p.473
[971] 1907. p.378
[972] Vocabulary in the Berlin Museum.
[973] Meier, 1906. p.473
[974] Thurnwald, 1912. p.341

The Mắnus recognize the beginning of the southeast trade wind by the appearance of Altair and Scorpio at twilight[975].

The year is divided into three seasons according to the position of the sun: north of the equator, over it, and south of it; which are differentiated as wartime, peacetime, and colder time[976].

According to the position of stars, people know the time of the appearance of fish and mosquitos, the beginning of certain winds and rain, the mating season and egg-laying season of turtles etc.[977] Also, according to the phases of the moon they calculate [373] the time at which certain fish appear. The day is roughly divided according to the position of the sun. The time at which the morning star rises is regarded as the hour for setting out to catch turtles on the beach[978].

According to Pō Mĭ́nis, it is only the Mắnus who have such knowledge, while the Mătăṅkŏ́l and the Ŭsĭâî know nothing about it[979]. However this is to be taken with a grain of salt, and the Mătăṅkŏ́l's knowledge at least would hardly be behind that of the Mắnus.

Jap

The land of *Jap* is said to lie in the south and south-east of the Admiralty Islands, thus in the region of New Hanover, New Ireland, New Britain, and the Solomons[980]. Then again it is also sought in the east, since the sun over Pāk, Tong, and Nauna went to *Jap*[981], and, before it rises over the Admiralty Islands, it is already shining over *Jap*[982]. According to widespread opinion, the serpent bringer of health also went to *Jap* after it had given gifts to the Admiralty Islanders. Despite this, *Jap* is a much richer land than the Admiralty Islands.

The inhabitants of *Jap* are a pale-skinned people (*ala angouin*, *ala Jap*) and are equated with the Polynesians and the Europeans. However, on Pắlŭăn Walden[983] heard the Europeans called *mŭ́sa͡û* and a pale-skinned shade called *kara͡ûūn*. Besides this, *Músa͡û* is the designation of St Matthias, which in no way has a pale-coloured population. According to Krämer on Pāk, the Europeans are called *māgo*.

The Admiralty Islanders describe the Melanesians as dark-skinned (*ala puitjon*; on Pắlŭăn: *karán*) and sometimes reckon themselves as such[984]. On Lămbŭ́tjo they describe their own skin shade as *ndramandraman* (*ndramán* = red), and that of the Solomon Islanders as *buitjón* = dark or black[985]. Paradoxically, in a legend[986] the Buka people (*mbuka*), known well enough to the Admiralty Islanders as black, are referred to as pale, and included among the *Jap* people. On Pāk Krämer heard foreign Melanesians called *déwai*.

The *ala Jap* people have nothing ghostly about them and are humans like the Admiralty Islanders, but with different skin colour and language, and with other, and more, cultural assets. They have the same ancestral parents as the Admiralty Islanders and previously also spoke their

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975 Parkinson, 1907. p.377
976 Parkinson, 1907. p.378
977 Parkinson, 1907. pp.376 *et seq.*; Thurnwald, 1912. p.341
978 Thurnwald, 1912. p.340
979 Parkinson, 1907. pp.376 *et seq.*
980 Meier, 1907. p.649
981 Meier, 1907. p.940
982 Meier, 1907. p.475
983 Voice recording in the Berlin Museum
984 Meier, 1908. p.658
985 Thurnwald, 1913. p.12
986 Meier, 1907. p.669

language, until a quarrel led to the point where the languages became different[987]. Marriages with the *Jap* are absolutely possible and unobjectionable. [374]

Sorcery and Oracle

Sorcerers

Sorcery is certainly practised by individual natives, but it is the business of the chief to deal with war magic, and more difficult sorcery is handed over to a professional sorcerer who, according to Parkinson[988], is always a bondsman of a chief. The magic art usually passes from father to son and is strenuously kept secret, though sometimes shared with other men in special cases, for money. The sorcerers can get along with the *bḗlīt* and other spirits like the *ngam*, and bring them to heel by incantations. The sorcerer offers food to the spirits daily, in a wooden bowl[989]. Apart from sorcery the sorcerer is also concerned with health, and he functions as doctor. He does not wear outward insignia.

Besides the sorcerers there are also female sorcerers and women doctors who deal with incantation and healing of illnesses. A special type of female doctor deals particularly with the healing of illnesses by beating the body with leaves[990].

The sorcerer receives payment in shell money for his work.

Sorcery

Sorcery serves mainly for the calling forth of ancestral spirits and the healing of illnesses, which people also attempt to accomplish by evoking health-bringing spirits with the aid of incantations, leaves etc[991].

People do not particularly fear bewitching of food (poison magic), and calmly throw away their food scraps. A Lămbŭ̊tjo man, whom Thurnwald accompanied to the Gazelle Peninsula and the Solomons however, quickly adopted their usual practice of burning the remains of his meal[992]. Enchanting of food is said to be performed mostly by the Mătăṅkŏ̊l from Pónam, Hā̊ŭs, and Ăndră[993].

Rain-making magic and the art of calming the stormy sea can, in the opinion of the other natives, be carried out best by the Náuna people[994].

Before catching fish, the nets must be charmed so that fish will go inside. Also, a spell must be cast before feasts, so that they are successful[995].

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[987] Meier, 1907. p.659
[988] 1907. p.402
[989] Parkinson, 1907. p.403
[990] Thurnwald, 1912. p.444
[991] Cf. further detail under Medicine, and *bḗlīt*
[992] Thurnwald, 1912. p.444
[993] Parkinson, 1907. p.390
[994] Parkinson, 1907. pp.391 *et seq.*
[995] Parkinson, 1907. p.404

Oracle

In order to discover the whereabouts of a wanted person a man takes lime dust in his hand, and faces all four cardinal directions while holding it [375] to his nose. Should an attack of sneezing ensue, he knows that the wanted person is in the indicated direction[996].

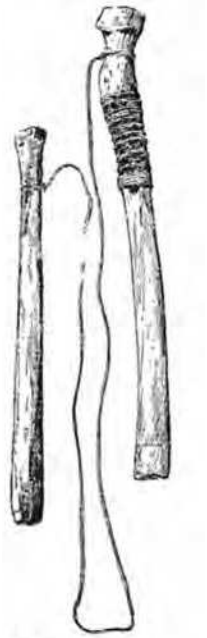

Fig. 211. Fortune-telling bones 1059 I. 1/3 actual size

Whether an attack of sneezing occurs after snuffing lime dust, also determines whether a war will begin or not. By the flow of betel spit over an *Areca* palm leaf, and the striking and beating of a loaf of sago bread with a stick people will determine whether a battle campaign is advisable[997]. A falling star indicates the direction in which they should set out to fight[998]. Sheet lightning indicates that a war is going on or a murder has begun. The cry of a certain bird in the bush indicates that you will soon be attacked[999]. Two fighting fish eagles (a *bél̄īt* impersonation) or their restless flight signal danger to canoe voyagers and prompt them to turn back[1000].

On Bird Island Bay the hanging of an amulet bone round the neck to the left is considered a bad sign, and to the right as a good sign, Fig. 211. According to Parkinson[1001] it indicates whether a sick person will stay alive or die.

Also theft is assured through an oracle — whether a planned theft will succeed[1002].

Before a celebration, should hair remain in the hands of the sorcerer after tugging at a tuft of the host's hair, then the host will be prejudiced and speak badly[1003].

Amulets

Amulets made from Bone and Hair

When the flesh of a dead person has rotted away, his vertebrae, upper arm-, thigh- and calf bones are put in a basket and buried with him. Skull[1004], ribs and forearm bones are placed in a bowl in the house. Moseley[1005] found an unsaleable skull used as the gable ornament of a house in Hárăṅgăn. The sister of the deceased makes herself a necklace out of his teeth and, after some time, his son distributes the ribs to the widow and the rest of the immediate family[1006].

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[996] Meier, 1908. p.203
[997] Parkinson, 1907. p.379
[998] Thilenius, II, 1903. p.128
[999] According to L. Lukowski
[1000] Parkinson, 1907. p.720
[1001] 1907. p.403
[1002] Parkinson, 1907. p.404
[1003] Parkinson, 1907. p.405
[1004] On Lămbŭtjo, according to Schoede, *poimpalei*
[1005] 1877. p.415
[1006] Parkinson, 1907. pp.404 *et seq.*

The ribs are worn by the recipients in armbands and are [376] embellished in Tau̍ī by a narrow-net hanging with glass bead appliqué with a fibrous fringe, Fig. 212.

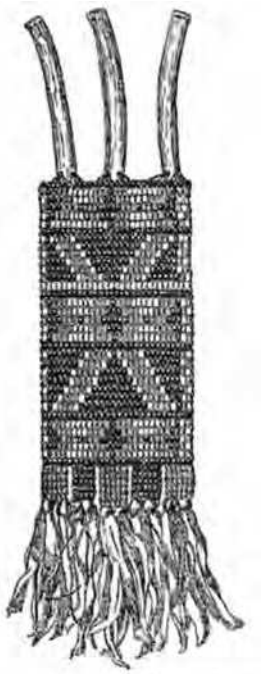

Fig. 212. Ribs with a bead hanging as an arm decoration. 3221 I. ½ actual size

Radius bones are used as amulets by women in dance celebrations on Pi̍tĭlu, where they are called *li̍mei*.

On Poa͡m the upper ends of arm bones from the father or mother are bored through near the joint and fastened to the little carrying basket as an amulet (*ua̍ṅkej*) by a cord passing through the hole with bunches of fragrant herbs (*kū* and *laundrobondrob*) and fragrant tree bark (*lāṅ*)[1007]. In Lŏ̍nĭu Krämer found a bone amulet decorated with a bunch of hair (*hum*) from a woman, and bunches of plant fibres (*hongu*) on cords.

Everywhere, as protection against evil spirits, people wear human bones around which leaves are wrapped with twisted cord sometimes coated with *Parinarium* resin, either on a cord over the chest or tucked under the armband. In Ndri̍ol these amulets are given the name *pŏ̍ăṅkẽ̍*, and they are worn as protection against the spirits of the dead (*be̍līt*). It is said that on Bird Island Bay bones of the father are also worn as a neck ornament. However, this seems to be the case only when a person wants to use the bones as an oracle, Fig. 213. If the bone on its back falls to the right side it is a good sign; if it falls to the left it is a bad sign.

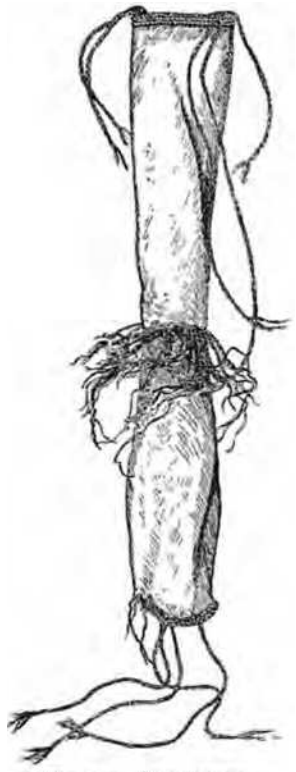

Fig. 213. Arm bones in a plaited pouch 2823 I. 1/5 actual size

The bones, that are otherwise worn on the back with feathers or leaves and are amulets for war, come from slain enemies. Likewise the tuft of hair that forms the warrior's back decoration and amulet at the same time, is taken from an enemy.

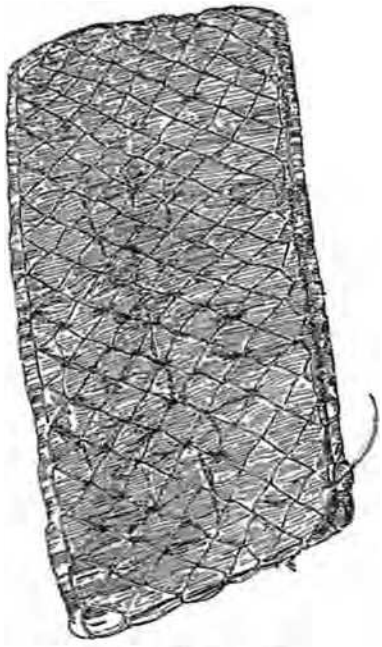

Fig. 214. Packet of hair 719 I. 1/3 actual size

On the other hand, hairs of their own dead are wrapped in leaves and stored together with the skulls in bowls inside the huts. In Tau̍ī the hairs are laid beforehand between two layers of cotton material that is sewn with basting [377] stitches. Later the edges are tucked in and sewn, Fig. 214. Moseley[1008] found hair also in "small receptacles of a very open basket-work" in the bachelor houses in Sōri and Hă̍răṅgăn. Margaret Mead[1009] saw that widows in Pă̍rā wore their hair "sewed into the back of a flat bladed bag worn suspended from the shoulders". Also Bühler saw in Pătŭ̍sī that men and women carried the hair of dead relatives — including their father's — in a little pouch of red material encrusted with glass beads hanging round

[1007] Thurnwald Collection, Berlin
[1008] *loc. cit*,
[1009] 1931. p.235

their neck. This amulet is called *kámumbal*. Bones of their own relatives are never painted red like enemy bones but often show traces of smoke from storage inside the hut.

The clavicles or part of them and the lower jaw[1010] of relatives are also regarded as amulets, and are accordingly carefully treated. The lower jaw is wrapped in *tapa*, leaves, or a cotton cloth, and secured to the coronal process and the jaw joint by cords with *Conus* discs or glass beads, and *Palaquium* shells or bundles of feathers. The cloth may also be pulled over the anterior surface of the lower jawbone with a network of glass-bead threads. The clavicles are wrapped in leaves and *tapa* tied with threads and decorated with rings or attachments of *Conus* disc threads, glass beads, *Coix* fruits, feathers, and the like[1011].

As a substitute for human bones, frigate bird bones (*kăta*) on Lămbŭtjo are wrapped in leaves and carried in armbands[1012]. In Lŏnĭu, bird bones (*a͡ul*) scratched with criss-cross patterns serve as amulets. In Pătŭsī bird bones (*bángata*) are carried in armbands, and in Mbŭna͡i they are hung with leaves on a cord around the neck[1013].

The finger nails of the deceased are occasionally stored and probably also serve as amulets.

Human hair is fastened onto the tip of a staff over 1.1 metres long. The hair is in two net bags secured to the tip by strips of rattan. The staff is thickened near the upper end and then tapers upwards to the tip. The purpose of the staff is unknown, although it might tie in with some kinds of ceremony, Fig. 215. [378]

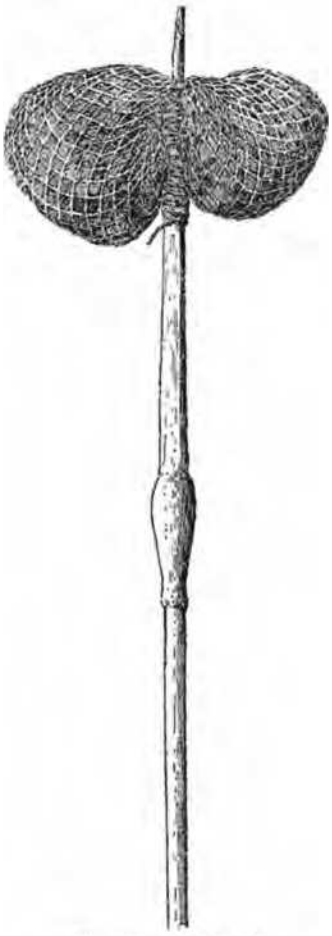

Fig. 215. Hair bundle
Linden Museum, Stuttgart.

Amulets made from Stones, Plants, and Shells

For protection against illnesses, stones of a particular type are often carried on the chest in small rectangular plaited purses made from brown plant fibres. The neck cord is plaited on to the purse, although in Sā́hă men were seen with a fusion of purse and mourning neck cord. People prefer to overlay the purses with a net of glass bead cords, or they sew these cords on.

On Lămbŭtjo, the Mătănkŏl prefer to wrap the stone in cloth (earlier, probably in tapa) as a protection against spirits of the dead (*bĕ́līt*).

The people on Hā́ŭs obtain the stone (*bā́t*) that is effective against illness from Drūgŭ́l and a particularly effective type of stone (*nkāb*) from Pónam. One stone of each sort is hung around the neck in two interconnected purses decorated with beads. In Drūgŭ́l they wear the same stones (*pat*) as on Hā́ŭs in a chest purse, Fig. 216.

[1010] On Lămbŭtjo, according to Schoede, *kabassi*
[1011] Eichhorn, 1916. pp.281 *et seq.*
[1012] Catalogue of the Schoede Collection, Berlin
[1013] According to A. Bühler

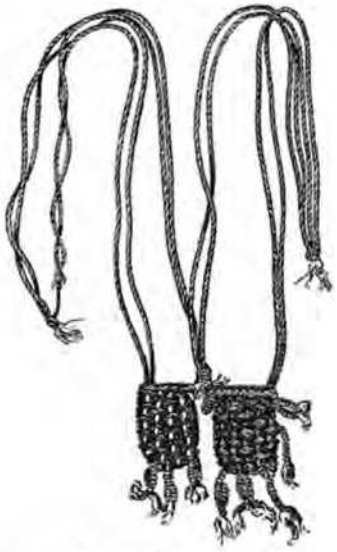

Fig. 216. Chest amulet 2903[1]. 1/3 actual size

In T͡auī two to four stones (*bā́t*) are combined into an amulet (*bā́t*) in a chest purse (*aī̯n*, *ein*); or the penis shell of a man's dead father is carried in it; or two stones wrapped in material are combined with a *Tridacna* disc into a glass-bead chain covered with possum teeth, further glass bead chains, and a cotton neck cord, into an amulet, Plate 7, Fig. 11. They also wear certain plant leaves (*ägū́*) on their chest as protection against sickness.

Fig. 217. Amulet made of leaves. 3225[1] 1/2 actual size

Elsewhere, people often insert leaves into the armbands to protect themselves from illnesses and evil spirits. The leaves of *Cordyline terminalis* are considered particularly effective in driving away the spirits of the dead (*bé́līt*), Fig. 217.

On Lămbŭ́tjo they fit the fragrant leaves of *Ocrenum commune* (*kāuwé́i*) firmly to their neck when attending a death, to protect themselves from the *bé́līt*[1014].

Tabu Signs

To indicate that taking water from a fresh-water source is unwelcome and forbidden, a bunch of brushwood was pushed into the mouth of the watercourse by the inhabitants of the Lukús district in 1908. [379]

In Drūgŭ́l two *tabu* signs were set up in 1908. One of them was erected to protect betel nuts, and threatened anybody planning to steal nuts that their arm would wither. It consisted of a pole, fastened to the top of which were several betel nuts and leaves on a withered branch which, with five little adjoining branches, resembled a hand[1015], (cf. Plate 22).

The other *tabu* sign in Drūgŭ́l was for the sago palms; it was a pole with two sago scrapers. It stood near a derelict ceremonial house, and was erected from poles with coconuts; the betel nut *tabu* stood on the path near simpler dwelling houses.

In 1908 a *tabu* sign for coconuts stood in Bŭ́bi (cf. Plate 22). A little tree was bound firmly onto a pole on which coconuts were fastened. A thicker stake was pushed into the ground between the pole and the protruding roots of the little tree.

A *tabu* sign for betel nuts existed in Păpítălaī̯. It consisted of a few dry bamboo branches, and stood in front of the chief's house to protect his own betel nuts.

Songs

Songs are sung for dancing, as laments, while working, and for entertainment. Besides this there are epic songs. Ever newly written are battle-, banter- and love songs that have some bearing on an experience of the singer or the listener[1016].

[1014] Berlin Museum VI 38065, Thurnwald Collection
[1015] Vogel, 1911. p.94
[1016] Parkinson, 1907. pp.406 *et seq.*

XII. Music and Dance

Musical Instruments

Slit Drums

The most important musical instrument, which alone provides the rhythm for dancing is the slit drum, which serves at the same time as a signalling instrument. It consists of a smoothed and hollowed tree trunk with a long narrow slit along nearly the entire length. At either end of the drum, at the height of the slit are extensions, one representing in three dimensions the upper body and head of a male or female figure, and the other the legs[1017]. The section between, i.e. the drum itself, [380] is, according to Parkinson's investigations on Lóu[1018], actually regarded as a human body. Less often the processes are in the form of a crocodile. The rim of the drum body is decorated with bands of relief carving running right round, while a further incised band runs along only one side of the slit. Below it the drum wall has further carving in the form of *Palaquium* tassels, lizards, star-shaped figures etc. The bands themselves are filled with triangles, arches and diamonds. If the drum body is not painted, then the carvings are not painted either. However, when it is painted red, the decoration receives a painting in black, red, and white. The same happens with the extensions. The round sidewalls of the drum can, even when the drum is not painted, be divided diagonally into two white and two red segments. Big drums are sometimes hollowed out from the ends and closed in again by round wooden discs[1019].

Most slit drums are made on Pāk, although in Mŭndī as well drums were prepared for sale to Pĭtĭlu. Besides small drums, that Schoede was told serve for children's play, there are small dance- and signal drums about 50 cm long and 20 cm high, and bigger drums up to 3.5 metres long and 1.5
metres high[1020]. Numbers of them are stored in the bachelors' houses or canoe sheds, and in special sheds in the interior of the main island. They are beaten there or in the village square.

For beating the big drums, they use one or two knee-shaped curved drum sticks about 40 cm long. They strike a spot near the slit. Each side of the slit gives different tones, as they have different thicknesses. The drummer stands or crouches according to the size of the drum. Big drums do not stand directly on the ground like the smaller drums, but are supported by wooden blocks inserted beneath them[1021].

For dancing, people prefer several drums beaten at the same time. When 6–10 large and small drums are used together, the musicians incite one another through sizzling sounds to an ever-quickening rhythm, and stick to it with great precision. Only men perform dance accompaniment and signalling; women beat the drums only after a death[1022], while boys often practise drumming in the bachelors' houses.

[1017] Forming an extension on one drum in Kawa Leber (1923, p.204) saw "a clothed, crowned female figure, whose more sensitive facial expression differed from that of all the animistic art of the South Seas."
[1018] Parkinson, 1907. p.372
[1019] Parkinson, *loc. cit.*
[1020] Parkinson, 1907. p.372; Schnee, 1904. p.170
[1021] Thilenius, II, 1903. p.141
[1022] Mead, 1931. p.34

Nevermann, Admiralty Islands, Plate 22

Penis shell dance on Pónam

phot. Sarfert

phot. Fülleborn

Tabu for coconuts in Búbi.

Tabu for betel nuts in Drûgûl.

phot. Fülleborn

phot. Fülleborn

Pan flautist from Ndrfol.

On Pĭtĭlu the slit drums are called *nĕmaî*, on Lămbŭtjo *dā̆mē̆*, on Pălŭăn[1023] *lŏlŏb*, and on Pāk *tamée*[1024], *tami*[1025], *démmē* or *gáme*[1026]. The drumstick is called *kérame* in Pătŭsī according to Bühler. [381]

Children's Drums

Boys of 4 – 5 years accompany the drum music of the men with drums on "small hollow log ends" or pieces of bamboo[1027]. According to Schoede the smaller slit drums are generally intended for children, although this seems to be only a supposition kindled by the different size of slit drums, and not valid. On the other hand, various small drums about 45 cm long are genuine children's toys. They are imitations of the big drums and, like these, have two extensions in the form of two halves of a human figure; below the slit there are two horizontal bands with short vertical bands between to connect them. The bands are carved in shallow relief and painted, Fig. 218.

Fig. 218. Child's drum. Stuttgart Nr. 1196 Instr. Nr. 6. 44½ cm long.

Nose Flutes

Nose flutes do not play a significant role in the music of the Admiralty Islands. They are made out of a piece of bamboo with a knot point and are only rarely decorated with patterns — painted diamonds, whose borders continue a little beyond the corners. A small blowhole is bored into the knot, and on one side the angle of the knot position is somewhat slanted to enable the flute to meet the nostril. A little below the slant position is a small grip hole in the bamboo wall; a second small grip hole is bored on the opposite side of the bamboo tube, in its lower part. The bamboo tube is open below. Nose flutes are relatively short: 18–20 cm long. On Móuk they are called *mbrŭ̆naû*, on Pāk *hu*[1028], and in Pătŭsī *ránkoan*[1029], Fig. 219.

Fig. 219. Nose flute 1105 I. 20 cm long.

[1023] Friederici, 1912. p.225
[1024] Schoede Collection, Berlin
[1025] Chinnery, p.58
[1026] According to Krämer
[1027] Mead, 1931. p.34
[1028] Friederici, 1912. p.104; Schoede Collection, Berlin
[1029] Bühler Collection, Basel

Bone Pipes

A pipe (*lĭ́mei*) of a human radius bone, 20 cm long, whose joint end is wrapped with a cord with a piece hanging free, was indicated on Pĭ́tĭlu as a women's dance instrument ("belong singsing [382] belong mary". The bone has a natural opening at both ends, with no decoration. Its use as a pipe is unproven, although likely, Fig. 220.

Fig. 220. Bone whistle 4230 I. 20 cm long.

Pan Flutes

Pan flutes are made from 4–6, (more rarely only 3[1030]) bamboo canes of varying length that are open above and closed below by a knot. The canes are arranged according to size, although the second and third cane are usually interchanged — after the first, and longest, pipe a shorter pipe follows, and only then the second longest. The pipes are arranged side by side in a straight line. They are bound together by a broad wrapping of bast fibre, or *tapa* or even cotton, or by one or two narrow braids with rattan strips or other fibrous material, Fig. 221. The binding is preferably coated with a thick layer of *Parinarium* resin incised with relief patterns, Fig. 222. The patterns, that feature transverse bands, angles, curves and the ubiquitous jagged triangles and curves that go with *Parinarium*, are brightly painted, and the entire resin coat receives a red coloration around the pattern.

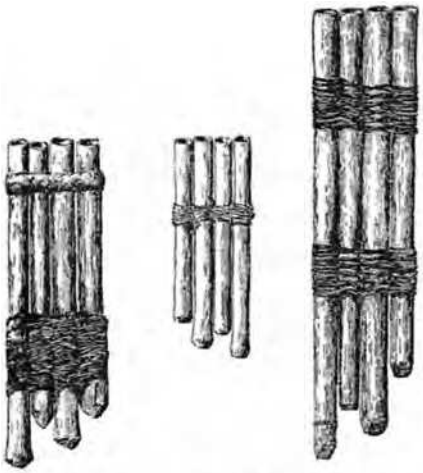

Fig. 221. Pan flutes 821 I, 1107 I, 862 I. 1/3 actual size

On Hắŭs the pan flutes are called *nhắ*; in Lŏ́nĭu *kŭ́e*; according to Thurnwald on Nŏ́ru *sŏ́ndri*, and on Lămbŭ́tjo *drắngŭắ*; according to Bühler in Iru *kua* and in Iringou *gua*; according to Schoede on Pāk *gao*; and according to Kölle on Nauna *i*. In Lŏ́nĭu the bamboo for the pipes is *baĭ̂d*. Thilenius[1031] heard them called *tarángua* by the Măńus.

Fig. 222. Pan flute Stuttgart IC. 23029. 1/3 actual size

When playing the pan flute, the instrumentalist holds the lower part of the pipes (cf. Plate 22).

Apart from the pan flutes, they use bundles of bamboo tube roughly bound together; these are the same in principle but are used only very rarely. [383]

[1030] Moseley, 1877. p.411
[1031] Berlin Museum VI 17462 f

Triton Horns

The shells of the *Triton*, with a round blow hole drilled in the side near the pointed end, are used as a signal instrument, especially in war and in canoes, but also, for example, to call the pigs for feeding. In better-produced trumpets, the hole is polished smooth. On Pǐtĭlu the *Triton* horns are called *dā́, dá*, or *ĕndắ* or, according to Schoede, *bolos*; in Pĕlūăha on Hā́ŭs *muinowắ*; and in Rāî on Hā́ŭs *muinowĕ́*; in Sā́hă *ĕndrắ*; in Talắlo according to Kölle *ndra*; and according to Schoede on Pāk *tohu* and on Lămbŭ́tjo *andrago* or *ra* (cf. Fig. 188). Where it serves for calling the pigs, the Mắnus (probably those from Păpítălāî) designate it as *pounda* according to Meier.

Mouth Drums

Mouth drums, which Moseley[1032] had seen at Nares Harbour, are fairly rare and resemble those used on the southern islands of the Bismarck Archipelago. They consist of a tapered strip of bamboo about 22 cm long, with a moveable tongue cut out of the middle. The instrument is held against the lips and the player produces humming tones in reverberating oscillations. A cord is fastened to the upper part where there is a bung, and at the beginning of the tongue; there is a bunch of leaves at the end of the cord. In Salien the mouth drum is called *búgabug* according to Bühler, Fig. 223.

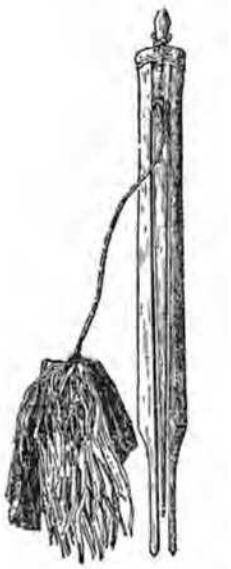

Fig. 223.
Mouth drum
2066:05. 22 cm long.

Dance Rattles

Half *Palaquium* shells with protruding teeth, feathers, threads and the like are attached to the dance aprons and ear pendants as dance rattles. *Haliotis* shells are also found as clinking appendages for dancing. In Búihann Bühler found *Cardium* shells (*boegell*), on Sabo sea urchin spines (*sang*), and in Lebbe *Pomgium* shells (*boeláruei*) fastened on cords as dance rattles. The *Pomgium* shells carried clappers made from pieces of bone and an iron bracket, and were secured by little cross pieces of wood, or knots. These rattles probably came from New Guinea. Schoede saw rattles made from sea urchin spines (*jalai*) on Lămbŭ́tjo. They were held in the hand when dancing[1033].

Bigger dance rattle pendants consist of a soft, light piece of wood that is thin and cylindrical above, then widening downwards into a cone, so that the whole thing takes on a funnel shape. Holes are bored in the rim of the lower part; short cords are pulled through with [384] 13–18 little *Conus* discs. The ends of these cords carry half *Palaquium* shells with bunches of feathers and long fibre ends, or bunches of possum fur or snail shells[1034]. The piece of wood is sometimes painted red. It is fastened to the dance aprons with threads pulled through holes in the upper rim of the cylindrical section. Usually several of these dance rattles, called *tiamewai*[1035] by the “Usiai”, are fastened to the lower edge of a *tapa* apron.

[1032] 1877. p.411
[1033] Catalogue of the Schoede Collection
[1034] Eichhorn, 1916. pp.276 *et seq.* and Fig. 53
[1035] Berlin Museum, VI 17442, Thilenius Collection

Other dance rattles, held and swung in the hand (*endra* according to Thilenius), consist of a red-painted snail shell (*Fuscus*) that is coated inside with *Parinarium* resin and extends out over an inserted wooden handle where it is painted red and black. *Conus* disc cords with *Palaquium*-, snail- and mussel shells[1036] hang from the snail shell and from the central part of the handle.

Singing

Dance songs that Thurnwald recorded on Pắlŭăn are all two-part harmony, and are over in seconds. They usually conclude in a split second. Occasionally there are also unisons with isolated great intervals, yet there predominate the dissonant discords that give a rough character to the song according to European concepts, but not according to the concepts of the natives. Laments for the dead from Lămbŭ́tjo, performed as a monotone recitative "on merely two tones a whole tone apart"[1037], present an older musical form.

Dances

Penis shell dances

Dance feasts are, as a rule, held from dusk to midnight or until the moon goes down. People consider the state of the moon when choosing the time for a dance feast[1038].

The penis shell is worn for the war dance of the Mắnus and Mătănkŏ́l, as it is for war expeditions. An additional dance decoration is a yellow-black woven belt and a battle ornament worn on a band on the backs of the warriors[1039]. Their bodies are also painted red and white.

The dancer holds his spear in the fingers of his right hand, enclosing it "in the manner of a quill pen" so "that the tip points upward, with the shaft on [385] the outside of the slightly bent forearm, and the butt of the spear close to the ground"[1040].

One or several slit drums give the dance beat. This is usually performed by the two oldest men[1041] (cf. Plate 22).

Initially the dancers, several side by side in lock-step, proceed in swaying, running steps around the drum or around a fire. Schnee on Kŏmŭ́li saw them thrust the arm with the spear away from themselves, accompanied "by abruptly-staccato vocal high-pitched cries". Thilenius, departing from this, describes how the music suddenly cut out, and the men on Fedarb rose up on their toes and made a movement as though they wanted to fling their spears away. They all stretched their bodies and uttered a long drawn-out "*iō*" as soon as their right hand stretched up as high as possible. While doing this, the spear lay horizontally in their hand.

Then, a new dance phase follows. All the dancers stand still, bend their knees slightly and, by rapid backward movements of the pelvis, set the penis in motion so that the penis shell flies to and fro. According to Schnee the arms are outstretched and they expel a muffled bellow. In

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[1036] Eichhorn, 1916. p.277 and Fig. 54
[1037] E.M. von Hornbostel, in Thurnwald, 1910. p.142; Schnee, 1904. p.205
[1038] Hans Klink's manuscript
[1039] Thilenius, II, 1903. p.142; Schnee, 1904. p.205
[1040] Thilenius, *loc. cit.*
[1041] According to Klink

flinging the penis it seems to be that it moves right, left, up, and towards the perineum and, where possible, describes a circle.

After this phase the running steps are re-introduced and the dance restarts from the beginning. With each repetition, the movements become increasingly rapid and the cry, which resembles the war cry, becomes ever louder.

Klink saw the men with spears in their hands initially gazing upwards, dancing in a line, on the spot, without any commotion. Suddenly the drum began a frenzied beat and, with a loud cry, bedlam erupted among the dancers who stamped the ground with their feet. The penis shell, probably not mentioned by Klink but accepted by him as present, was set in motion by this. The drum suddenly broke off and the peaceful dance began again until the noise broke out once more.

A similar dance is also performed without spears and without signs of war. People are satisfied simply to replace the T-binding by the penis shell, but still retain the everyday adornments. In this dance, there are also changes of direction around the drum with rapid steps, with a shaking of the lower body, while standing with slightly bent knees. Miklucho-Maclay[1042] saw the penis shells "dance upwards and then downwards, or rotate like a wheel around an axle". As a final movement he saw that the shell was hidden between the legs. In 1908 on Pónam the penis was seen mainly thrown high and then clamped between the legs, but there was also a [386] sideways movement. The dancers kept their arms out, sloped obliquely downwards. The dancers always stand side-by-side in a line when swinging their penis.

Erection does not occur during the penis shell dance, but the shell's movements appear to cause pain. On Pónam several dancers broke away, and took the shell off. They turned their backs towards the spectators while doing this, so as not to let them see the exposed penis.

Only adult men fit to bear arms take part in the penis shell dances, although on Pónam and among the Mănus of the south coast of the main island[1043] women and children may watch. On the other hand, dancers from Hăräŋgăn wanted women who happened to be in the vicinity by chance, to go away before beginning the dance. Among the Mănus from Pärā and the neighbouring villages, 4–5-year-old boys are already beginning to practise the movements of the penis when dancing, while bigger boys, from 10 to 12 years old, practise with a nutshell as a substitute for the mussel shell[1044].

The penis shell dances are called *măna*[1045], like the penis shell itself. They take place as a war dance on celebratory occasions, such as the greeting of guests[1046] and, without weapons, on a trading occasion begun with pomp between two related groups[1047]. Penis shell dances are also presented without weapons for the amusement of strangers[1048] — particularly in the neighbourhood of gardens and trading posts such as Kŏmŭli, Pāk, Pónam, and Nŏru.

After a death no dancing can take place until a ceremony of closure has taken place, including the eating of pork. People from Hăräŋgăn, who found themselves in this situation refused to dance on their own island, but performed without hesitation on Nŏru.

Among the Ŭsĭäĭ[1049], for example in Kĕtyĕ, the penis shell is similarly familiar as a dance ornament, although no such dance has been portrayed among them.

[1042] *Izvestia*, 1878
[1043] Mead, 1931. p.34
[1044] Mead, *loc. cit.*
[1045] Meier, 1906. p.474
[1046] Thilenius, *loc. cit.*
[1047] Mead, *loc. cit.*
[1048] *Deutsches Kolonialblatt*, XIX, 1908. p.854; Ebert, 1924. p.51
[1049] Parkinson, 1907. p.381

Nevermann, Admiralty Islands, Plate 23

Carvings, about ¼ actual size

1 Headrest
2 House posts
3 Wind vane
4 Dance figure
5 + 10 Canoe decoration
6 Obsidian axe
7 Anti-rat board
8 Calabash
9 Oil container
11 + 12 Water flasks
13—15 Spoons
16 Float
17—18 Carvings

Other Men's Dances

Skirts of little discs of mussel shell, armbands, belts, and knee bands serve as men's dance jewellery. In addition, the body is painted. It is not known what movements can be performed with kilts weighing about a kilogram. However, as with the women's dances, it all seems to depend on setting the skirts into picturesque swinging movements.

As for the Ŭsĭáî dances, which are "not of great variety", Parkinson[1050] describes one individual dance and one group dance. In the individual dance, which is performed when a pig has been given as a gift, the recipient scampers with spears in his hands, [387] to the beat of the drum in ever-increasing tempo, before the donor, and finally hands over the spears as a reciprocal gift. In the group dance the Ŭsĭáî trip with spears in hand around two singers and drummers. At the conclusion they lay down the spears, as a gift for the organizer of the feast. Women too take part in the group dance. but hold mother-of-pearl bowls in their hands.

On the dance beams, seen only on Lóu in 1908, but were seen virtually everywhere in 1932, individual men performed a dance whose cause usually seemed to be a funeral ceremony.

Women's Dances

Moseley[1051] heard from the natives at Nares Harbour that during dances both young and old women moved in a circle with rapid steps.

Margaret Mead[1052] saw a totally different style of dance generally among the Mắnus women and girls in the south of the main island. The dancer keeps both feet together, and springs quickly to the side and back again to the beat of the drum. Six to seven-year-old girls already know how to dance like this. This dance is probably the same as that described by Parkinson[1053], where the dancer wears a decorated *tapa* apron in front and another at the back, and these aprons are set into a graceful swinging motion.

In an Ŭsĭáî group dance the women also take part with mother-of-pearl bowls in their hands while the men carry spears; they trip around two singers and drummers[1054]. The Mătăṅkŏl women on Lămbŭtjo also carry mother-of-pearl bowls in their hands when dancing.

Dance Accessories

The men carry a spear in their hand during the penis shell dance and also during other dances. The women of the Ŭsĭáî[1055] (probably on the main island) and those of the Mătăṅkŏl on Lămbŭtjo, hold spoons or taro-peeling knives, sometimes with small decorative hangings and made from mother-of-pearl shell, in their hands when dancing. According to Bühler, women in Pătŭsī and Mbŭnáî also hold such dance instruments when dancing.

[1050] 1907. pp.380 *et seq.*
[1051] 1877. p.411
[1052] 1931. pp.33 *et seq.*
[1053] 1907. pp.367 *et seq.*
[1054] Parkinson, 1907. p381
[1055] Parkinson, 1907. p381

Fig. 224. Dance staff. 552[1] . 37 cm long.

Any other dance instrument is fairly rare. It was encountered mainly on Pāk in 1908,where it is called *bárangei* according to Krämer. A smooth staff, 37 cm long, ending in a carved crocodile head with a fish in its jaws and a bird sitting on the fish, served as a dance instrument, Fig. 224. Another dance instrument was a small crocodile standing [388] on a ledge, Fig. 225; another was a man's face sitting on a handgrip ending in a knob like a fish tail fin, with another fish tail fin or a half-moon-shaped piece on top, Fig. 226. Two roughly-carved fish, each 40 cm long, painted more roughly than the other dance instruments, and carrying a block in front of the mouth, belonged as a pair. Similar fish figures serve as dance instruments on the Sĺsī Islands as well. Reminiscent of the fish dance stave from Pāk is a wooden carving in the Hamburg Museum[1056], almost 35 cm long. It represents a fish in a rounded form biting the tail of a smaller fish, on which two birds sit facing each other. It is fitted for hanging and served perhaps not as an instrument for dancing, but as a house decoration during dance festivities. This may also be assumed for crocodile and other animal figures from Kyělâûák and other places. [389]

Fig. 226. Dance instrument 2586[1]. 56 cm high.

Fig. 227. Dance instrument 17. 36:6, 16. 48:6. 1/6 and 1/8 actual size

In Mbűnâi Bühler found simple, smooth dance staves without any decoration except a bunch of leaves fastened to the top.

Fig. 228. Dance instrument 2551:05. 1/4 actual size

The use of other dance staves has never been seen, although in museums there are devices from 45 to 60 cm long that could hardly be anything else. They have a simple round handle and a cylindrical or board-shaped upper part with painted relief carving displaying the usual triangular, serrated and jagged-curve group patterns, Fig. 227. A similar staff, stripped of bark at the handle, still retained the black bark in the upper section; pieces were carved out of the bark, giving rise to diamond patterns. It was ceremonially presented to Hamilton's pearling fleet crew by the Fedarb people in 1902, as an "Admiral's staff", Fig. 228.

Perhaps also belonging among the dance instruments is a spear-like stick over a metre long. Two bunches of hair in nets are fastened to its tip by a rattan cord (cf. Fig. 215).

[1056] 11.88 : 16

Masks are unknown in the Admiralty Islands. According to information from the Păpítălâi chief Pō Mĺnis there should indeed be masks in Mbűnâi, Ndrőwa, Pătűsī and "Mắnŭs", yet no masks were found there, and it is to be assumed that Pō Mĺnis' disclosure to the inquiring Europeans was given as an intentional lie.

XIII. Games

Water Games

Among the Mắnus of the south coast of the main island, children are given small dugouts without outriggers as canoes that they use for play and for travelling among the houses. They use poles to propel the canoe. On Pĺtĭlu the boys also have paddles with a crest-shaped wooden blade rounded off and an inset shaft[1057]. The children love to stage canoe races. Every Mắnus child can swim, and the children often play together in the water. Margaret Mead also observed children riding on swimming pigs[1058] and others who amused themselves "making figures in the water"[1059]. They use models of outrigger canoes (*endrol*) for a game familiar in Lőnĭu (*háwar*), which is probably also common elsewhere. These differ from the bigger vessels only in size and the fact that the boat's hull is not hollowed out but two pegs (*möllud*) each are hammered into it for fastening each outrigger pole. The pegs of each side of the canoe are joined together by a batten (*bara*)[1060]. [390]

Children's Weapons and Children's Fishing Equipment

Boys practise throwing spears with wooden sticks about 75 cm long with a pith tip[1061] and try to dodge the flying spears. On Pāk Schoede also found children's spears (*kuba*) with wooden tips and obsidian tips, which resembled the men's spears right down to size.

Their fathers make bows and arrows and fishing spears for them. The boys use these to catch small fish on the reef. The boys are also very keen to catch fish with cobweb frames, as a game[1062].

Exercise Games

Besides playing in the water and the boys' spear throwing, Margaret Mead[1063] observed among the Mắnus children in Pắrā and its neighbouring villages football (probably of more recent date), as a physical game, foot races, and imitation of adult dances.

[1057] According to A. Bühler
[1058] Mead, 1931. pp.22 *et seq.*, and Plate with p.24
[1059] Mead, 1931. p.96
[1060] According to Krämer
[1061] Mead, 1931. p.36
[1062] Mead, *loc. cit.*
[1063] 1931. p.96

Guessing Games

Among the Mắnus the children position themselves in the moonlight and twist their bodies so that the shadows adopt weird shapes. A child must guess who is casting the shadows[1064].

Imitation of the Adults

Quite rarely the children imitate the activities of the adults. They play funeral ceremonies, build houses out of cane, or boys impersonate engaged girls[1065]. A special toy is a rarity, although in Mbűnai Bühler found a cup-shaped basket shell (*bándis*) about 6.5 cm high, coated with *Parinarium* gum, as a child's toy. It mirrored the food bowl of the adults, though on a smaller scale.

Fig. 229. Top. Stuttgart, List 1247 No. 185. 20 cm high. ø 12½ cm.

Tops

Tops are made out of a large bowl-shaped piece of coconut shell about 12 cm in diameter, pushed onto a 20 cm long thin wooden stick with the open side down, so that about 11 cm of the stick rises freely above the coconut shell. The lower end of the stick is simply [391] sharpened, and the upper part decorated by a small hour-glass-shaped figure, Fig. 229. Tops for temporary use are made out of various kinds of fruits[1066]. According to Krämer, tops are called *dangeliu* on Pāk, and *dangaleu* on Lóu.

Fish Game

Several flat pieces of wood about 10 cm long, roughly cut out in the form of a fish with a broadened projection in front of their mouths, are each tied to a little piece of thin reed by two loops running around the reed and the attachment. The reeds are strung on a thin twisted cord so that the fish figures hang down from it. A person holds the cord firmly at both ends with one arm raised and the other arm lowered, so that it lies somewhat obliquely. The person begins to make gentle short, jerking hand movements; or the cord is stretched like a bowstring on a coarse upright bow that is gently shaken. Through the slackening and the repeated tightening of the cord, the fish figures begin to set themselves in motion and to slide slowly and jerkily from the top of the cord downward. In Pătűsī according to Bühler the fish game with the bow is called *lou*, Fig. 230.

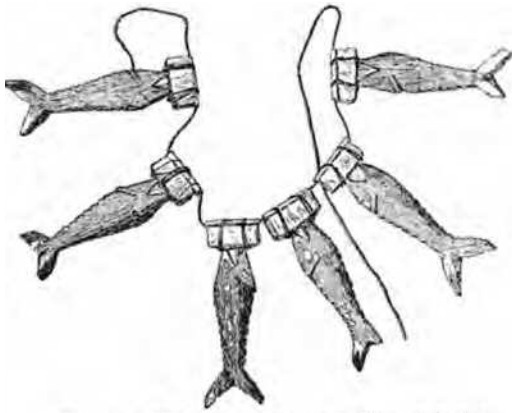

Fig. 230. Fish game. 21. 93:1. ¼ actual size

[1064] Mead, *loc. cit.*
[1065] Mead, 1931. p.94
[1066] Mead, 1931. p.93; 19030. p.116

Plaited Leaf Game

On Lămbŭ́tjo Thurnwald[1067] found a game called *buatχole* that consists of two 18 and 24 cm long strips of palm leaf sliced 3–4 times according to the length right through to narrow pieces on the edge. From the four or five adjacent narrow strips in each leaf, each two are cut off at one end at right angles to the lengthwise direction of the leaf. This scarcely seems [392] to have happened intentionally. Both leaves are then interwoven by one man; another then attempts to undo the plaiting without damaging the leaves.

Toy Figure

In 1908 a flat figure of pale bark, 8 cm long, was found as a toy in Păpítălâ̂. It is probably intended to represent a human or mammalian form, and is pierced in the middle and has four undulations along the edge.

String Games

Among the Mắnus in Pắrā̄ and its neighbourhood Margaret Mead[1068] found various types of string games played by the children and also by older girls.

XIV. Ornamentation

One of the favourite patterns is an arch whose ends are connected by a jagged line. Probably it represents, as is the case on Palau for example, the *Tridacna* shell, and, as in Nature, the two shells also appear as a decoration, usually doubled, and with the two arches diverging. The figures are often transformed in such a way that the arches are replaced by angles. This figure can then easily be dovetailed into a right angle, Fig. 231. On Pāk Müller heard the name of the pattern as *hūhūlŭ halolo*; and Krämer *hololo* or *holulō*. It was explained to Krämer on one occasion as the name of a thumb-sized bird, but on another occasion as the name of the wing pattern of a butterfly. Krämer heard a bare jagged line called *hololo*. The whole pattern was described to him in the Lŏ́ nĭu district as *gamōmoed* with the comment that it held no special significance. A combination of the pattern, in which a stellate, jagged figure approximating a rectangle is inserted between both arcs, is called *taroan* on Hắŭs according to Hellwig, although this can also mean “to draw” or “to carve”. A further combination in which the arcs are separated by a cross with diminutive patterns of the same kind aggregated on the arms, is called *a͡ŭmŭrŭ́* on Hắŭs according to Hellwig. A simpler connection consisting of only two parallel strokes is interpreted on Lóu as *búiod* according to Krämer, i.e. supports for keeping canoe planks apart [393]. A figure that stands to the side of this and resembles a laterally-concave arch is called *móläu* (a type of fish?) there. Hellwig heard corresponding connections of triangles (*inīn*) on a penis shell called *boiná* on Pāk. Where two free triangles arise with the integration of the design into a rectangle, one filled-in small circle is integrated into each of these; this is interpreted as *beruhau* on Pāk according to Krämer. He also

[1067] Thurnwald Collection, Berlin
[1068] 1931. pp. 96 and 139; *Natural History* 1931. Figure p.68

heard *beruhau* on Lóu as the name of circles on the rim of a bailer; as the name of a circle divided by two diagonals; and as the name of a rectangle with a triangle on each of the short sides, the apex pointing to the centre of the rectangle. *Beruhau* is said to be a fruit found on Lóu.

Circles with a point in the centre are called *boro maran* on Lóu according to Krämer, and a series of such circles *gondar*. A circle, within which is a serrated circle around a centrepoint, identifies the fruit *bámbunui* ("piccanini belong devai") on Pāk according to Krämer. A circle with four diagonal lines, between which the sectors are in alternating colours is called *molleä* on Lóu, according to Krämer. Two concentric circles on the body of a bird figure were identified to Krämer on Pāk as *telingan* = "his ear", located there only because it might not look good on the neck of a bird.

The figure that is found on that part of the obsidian dagger and spear that is coated with *Parinarium* resin, represents the frigate bird. A diamond under its main part represents the bird's body (on Pāk *dúbuen*). Otherwise however, diamonds on Pāk are designated as *par* (= bed?) according to Müller when they stand between *hololo*-designs, or as *alúrun rumbon* according to Krämer, when they enclose a circle. This figure is called *turum* on Lóu according to Krämer. Derivatives of the figure of the flying frigate bird (Lóu: *gara*; Pāk: *kara*), are the designs on lime calabashes combined from two downward-concave angles, with a line extending downward from the point of intersection of the two arms. Often the wings (Pāk: *banin*) or tail feathers (Pāk: *lumun*) of the bird, or even its head (Pāk: *barun*, *badun*) and beak, are represented simply as an angle. The triangles may stand individually side-by-side, or they may be connected in zig-zag lines, or even form a system of angles and rectangles — particularly in tattooing and decorative scarification. Krämer heard the name of these patterns of angles as totally matching the name of the frigate bird — on Lóu *gara*, *digigara* and *karad*, and on Pāk *kara* (*karắ*) and *badun* (= head) and *buon* as well. [394]

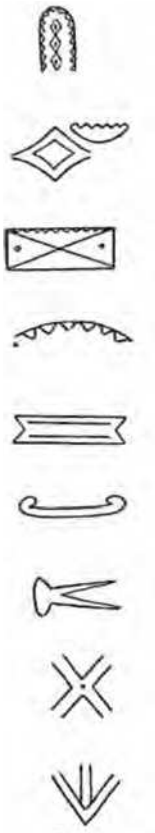

Fig. 231. Ornamentation After sketches by Dr. W. Müller.

Resembling this simplified frigate bird design are others that are called *īnŭ́n* or *īnĭ́n* on Pāk according to Müller, and form rows of triangles — occasionally with a more or less marked curvature — or a series of diamonds. According to Krämer *inin* on Pāk probably just signifies "to carve", hence it is understandable when Müller also on Pāk heard a rectangle with notched, narrow sides and two long lines on the inside called *īnĭ́n*; and when Hellwig heard *inīn* as the name for pairs of triangles with opposing bases. In Lŏ́nĭu *iṅon* was heard as the designation of totally different designs e.g. oblong hexagons connected by lines, or fringe lines on a plaited belt(!) or diamonds — sometimes running out into *Palaquium* tassels — between curved lines that contained a criss-crossed rectangle on a bamboo box for betel lime.

Also *kaî* or *gaî*, a designation for designs of a different sort on lime containers in Lŏ́nĭu, might not be the name of a particular pattern yet mean "to brand". A general name for decoration is *kamuĕ́t* in Lŏ́nĭu; and *gamŭ́ét* or *kamŭ́ét* on Pĭ́tĭlu; which in Lŏ́nĭu was heard as the designation of a zig-zag line or a series of triangles, and on Pĭ́tĭlu as the designation of a rectangle with a doubled margin line and a cross inside enclosed by an oval.

An oblong, often oval, figure at either end of which a pair of angles is arranged in such a way that one angle is to the right and the other to the left, with the apices of both angles pointing to one side on top of each other, is called *bémmē* (women's club) or *téngau* on Pāk, according to Krämer. It is made up of the trunk *dúbuen* and the front legs or angles (*mínen*) and the back legs (*gien*). Occasionally, when the figure is presented naturalistically, the head (*barun*) and the tail (*góloben*) also appear, so that the figure represents a lizard. The name *téngau* however designates a

frog that is found in the bush (*tɛ́ŋ̀aû*, according to Friederici). Müller on Pāk heard an oblique cross, formed from pairs of lines that are interrupted and contain a dot at the crossover point, being called *dĕnaû*. A very similar cross with a circle in the middle, and a figure from whose centre — a circle — four acute angles extend like star points, was explained to Krämer on Pāk as a sea star (*dongedong*). The central circle was called *mohon*.

The three-dimensional or relief-carved spiral is called *belaman* on Pāk, according to Krämer; and *balaman* on Lóu. It is highly likely that it goes back to the curved tail of the possum as a model, as has already been recognized in the shape of wooden bowls in the form of a possum. A related figure, similar, on both sides, to a small double line bent round into a circular arc — the pairs of feet of many wooden bowls — is called *kau*[1069] on Pāk according to Müller. [395]

Natural representations of *Palaquium* tassels with two dog's teeth are called *mahuō* on Pāk and Lóu according to Krämer; or *lehemui* after the dog's teeth; or *lémŭi* on Pāk according to Hellwig. Occasionally they are so simplified that they resemble the stylized frigate bird figure of the lime calabashes.

Fish figures, often recognizable only from the oval fish bodies or the curved or angular tail fins, are firm favourites. The fish bodies are intended to represent the bonito (*baliau*). as Krämer heard from various sources on Pāk. An angular figure on a water scoop was pointed out to him as the fish *hurón*.

Few and far between are the names heard by Müller on Pāk: *daudau* for an angle with a line running between the arms to the apex — a bird figure? — and *bő́ēnő́* (= comb) for a two-pronged figure widened at both ends. A vertical line with angles closing on it to right and left, their apices to the outside, was designated to Krämer on Pāk as *hém*, and a simple vertical decorative strip on a bailer as *dógubo*.

[1069] Or *kan*(?)

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