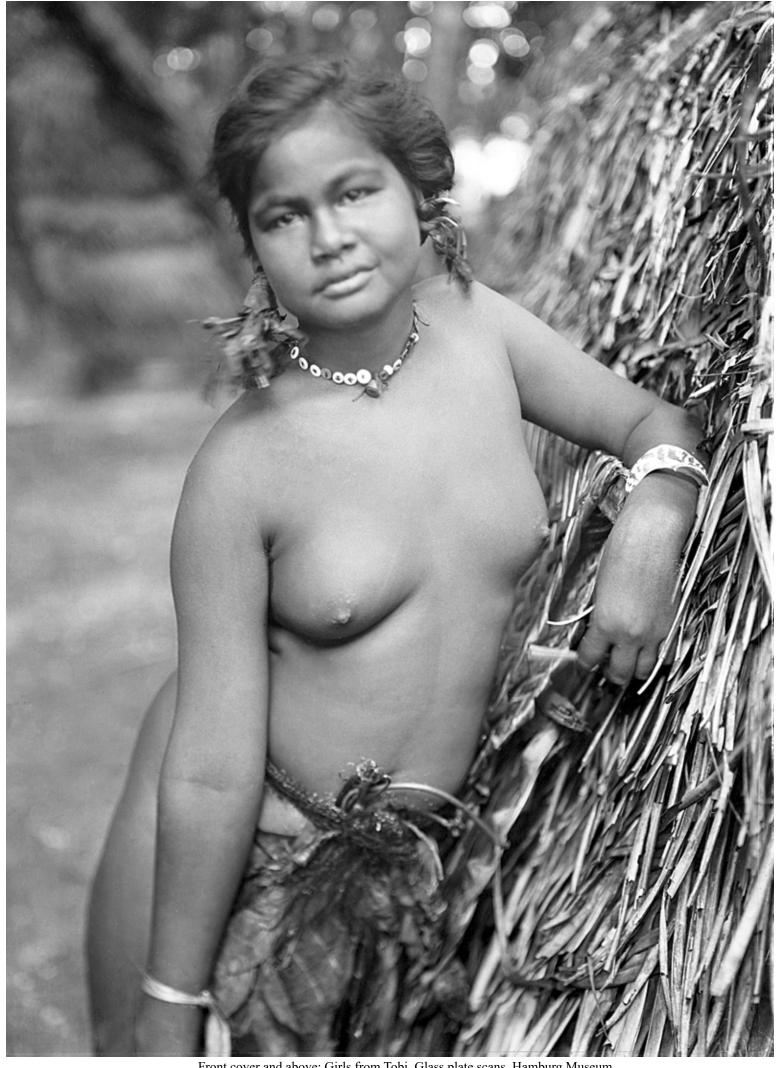


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All proceeds from this non-profit translation project will be used to re-print these books.



Front cover and above: Girls from Tobi. Glass plate scans, Hamburg Museum.

HAMBURG SCIENTIFIC FOUNDATION

RESULTS

OF THE

SOUTH SEAS EXPEDITION 1908-1910

PUBLISHED BY

DR. G. THILENIUS DIRECTOR OF THE HAMBURG MUSEUM FOR ETHNOLOGY

II. ETHNOGRAPHY: B. MICRONESIA

DR. ANNELIESE EILERS: WEST CAROLINES VOLUME 2

Translated by

Tobi- by Johanna Swartzentruber for the Etpison Museum. Donated by Shallum and Mandy Etpison.

Merir- by Carmen C. H. Petrosian-Husa

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HAMBURG FRIEDRICHSEN, DE GRUYTER & Co. m. b. H 1936

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WEST CAROLINES

BY

DR. ANNELIESE EILERS

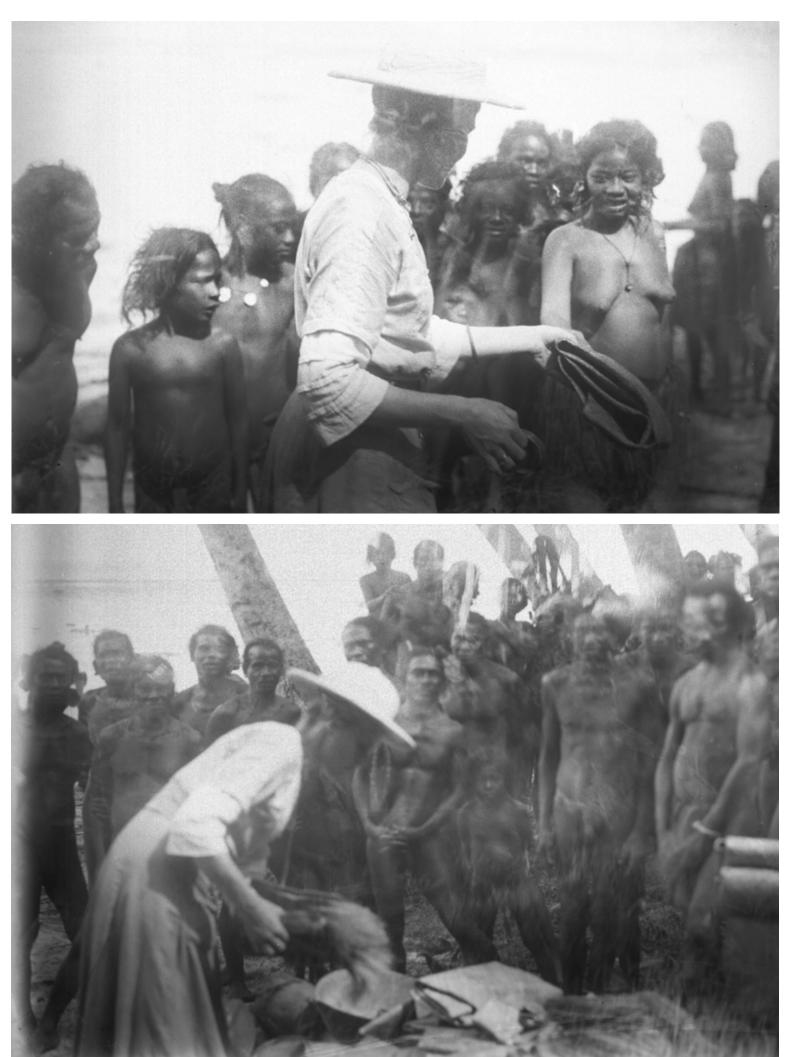
PALAU **TOBI, MERIR.**

2017 reprint © Belau National Museum Etpison Museum

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Note to the Reader:

Originally Dr. Eilers wrote two volumes, West Carolines 1 (covering the islands of Tobi and Ngulu), and West Carolines 2 (covering the islands of Songosor, Pur, and Merir). Since Ngulu today is politically a part of Yap and the FSM, not the Republic of Palau, the KETC committee decided to leave this island out of the printed Palau volumes, and added Merir Island to the Tobi volume, to even out the pages between the Southwest Island volumes. The committee plans to donate the Ngulu volume to Yap whenever the two Yap South Sea Expedition volumes will be translated in the future. The Southwest Islands today consist of two states of the Republic of Palau, Sonsorol State (Sonsorol, Fanna, Pulo Anna and Merir), and Hatohobei State (Tobi and Helen Reef).



Elisabeth Krämer handing out gifts upon arrival on Tobi.

TOBI.

1. History of Discovery

The first account of Tobi comes from Woodes Rogers, who sighted the island on April 10, 1710, as he was voyaging from Guam to Ternate on his ship "Duke of Bristol." He gives only a very short account:1 April 11th Nothing remarkable has occur'd worth noting, but that we have generally had a strong Current setting to the Northward. At Two Yesterday Afternoon we made Land, bearing S.E. distant about 5 Leagues, being a low, flat Island, all green, and full of Trees. Lat. 2º 54' N. This Island is not laid down in any Sea Chart; our Ship continues very leaky

Apparently, he thought his discovery so trivial that the island did not even receive a name. The next to notice the island was Carteret, on his 1767 journey with the ship "Swallow." He writes:²

(Monday 28th September 1767...) In the Evening, we discovered from the mast-head another island to the southward of us: the east end of it seemed to rise in a peak, and the appearance of a sail, but we did not go near enough to see any thing of it from the deck. I suppose its latitude to be about 2° 50' N., and its longitude, east of London, about 136° 10' E...

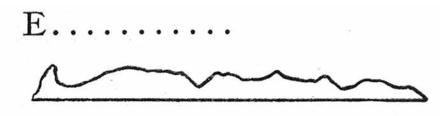
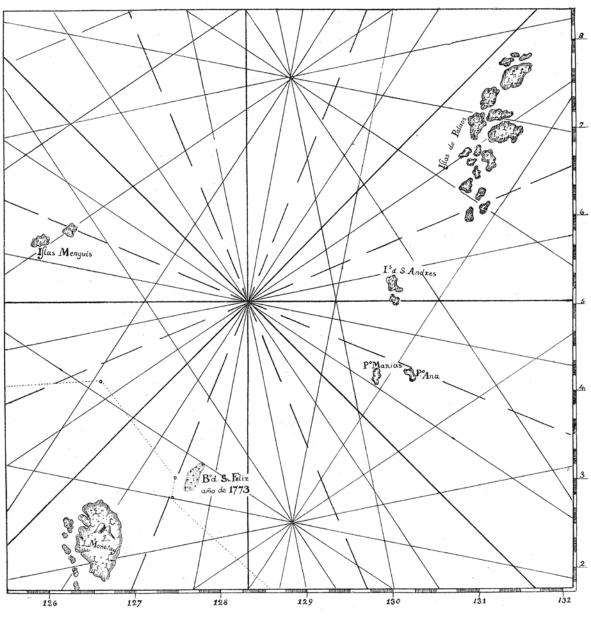


Fig. 1. An Island seen from the mast head & this view taken there Sept. 29th 1767. S. 50° W. (Carteret).

After this report, Tobi bears the name "Evening Island" on some maps. But as yet, no connection was made between the two discoveries. It seems that a few years later the Spaniards too "discovered" Tobi. In 1773, the ship "Nuestra Señora de Consolation," also called "Buen Fin," sailed from Manila to San Blas, Mexico. The helmsman was Felipe Tompson.³ His account is not available, but Jos. Espinosa reports that according to it, the ship was not far from the New Guinea coast on March 5.⁴ In a Spanish atlas ⁵ from the last decades of the eighteenth century, there is a map on which a reef is marked between Pur, Merir and Morotay at approximately longitude 127° east; the date 1773 has been added, and underneath is the caption "Ba. S. Feliz." Since the longitude was presumably reckoned from the Madrid meridian, a calculation on the basis of the Greenwich meridian would give a longitude of about 131°. It is likely that Felipe Tompson's journey and this note go together. The reef is Helen Reef, called Osariki by the natives of Tobi.



In 1782, Tobi was twice (in January and July) sighted by the ship "Lord North" coming from Canton under Captain William Hambly. The island was named after the ship, and its position given as 3° 2³/₄' N and longitude 131° 20' east. The ship had its course set for the Strait of Makassar, but was blown off course to the Pacific Ocean by unfavorable south winds coupled with a strong northerly current.¹ The first detailed report about Tobi became known through the travelogue of John Meares. He was employed by a trading company he had founded, which purchased two ships, "Felice" and "Iphigenia," and traded mainly furs from Canada to China. The ships usually sailed separately, alternating with each other, and the "finding" of Tobi can be credited to the captain of the Iphigenia, Douglas. His report is contained or reworked in the work of Meares:²

Fig. 2. Map from the "Spanish Atlas" 1789?

2 John Meares: Voyages made in the Years 1788 and 1789 from China to the N.W. Coast of America.... Vol. II, p. 103-106. London 1791.

¹ Woodes Rogers: A Cruising Voyage round the World. The Seafarers Library. Ed. Manwaring. Cassel & Co. Ltd. London, Toronto, Melbourne and Sydney. First published in 1712, reprinted 1928. P. 273. The old Dutch translation: Nieuwe Reize naa de zuidzee, van daar naa Oost-Indien, en verder rondom de Waereld 1708-1711; gedan onder het bestier van William Dampier. In't Engels beschreven door Woodes Rogers, Kommandeur en Chef van de Schepen de Hertog en Hertoginne van Bristol. Vertaald door C.P. Amsterdam 1715, p. 342 contains a different latitude according to which Tobi is located at 2° 24' N. While the reprint mentioned above no longer contains any maps, the Dutch edition has a "Waereld-Kaart, aanweisende de Kors van W. Rogers reistogt rondom den Aardklot van't Jaar 1708-1711." The newly discovered little island is not indicated on it. According to Wichmann, Nova Guinea Vol. I, p. 164, the Woodes Rogers voyage is also described by another participant: Edward Cooke: A Voyage to the South Sea, and Round the World. Performed in the Years 1708-1711. London 1712. However, he characterizes this account as "even more unsatisfactory" than that of Rogers himself.

² Carteret's journey, published by John Hawkesworth: An account of the Voyages undertaken by the Order of His Present Majesty for Making Discoveries in the Southern Hemisphere and successively performed by Commodore Byron, Captain Wallis, Captain Carteret and Capt. Cook in the Dolphin, the Swallow and the Endeavour. London 1773, Vol. I, p. 389.

³ Wichmann, Nova Guinea I, p. 219.

⁴ Jos. Espinosa, Memorias sobre las observaciones hechos por los navegantes Española. II. Madrid 1809, Memoria tercera p. 16-17.

⁵ Anonymous Spanish Atlas (1789?) with the routes of the galleon voyages.

¹ Wichmann: Nova Guinea Vol. I, p. 228

"As they were proceeding to the Northward and Eastward, on the 9th of March a small island appeared, bearing East half North, at the distance of about ten or twelve leagues. They continued steering up with it till nine at night, when observing a great number of lights on the shore, Captain Douglas imagined that they were kept burning in order to induce the ship to stop. At eleven o'clock, it being considered as hazardous to run during the night, which was very dark, the ship was hove to, but no soundings could be obtained with fifty fathoms of line. At break of day on the 10th they made sail to close in with the land, when several canoes were seen approaching. They therefore again hoved to, in order to permit the natives of the island to come on board. —For some time they kept at a certain distance, holding up cocoa-nuts in their hands; but they no sooner saw the hatchets which were exposed to their view in return, than the Iphigenia was favoured with an immediate visit. From the whole of their conduct, it very evidently appeared that they had never before beheld such an object as that which now engrossed all their regard, as it called forth their utmost astonishment; and from the very great indifference with which they promiscuously received every thing that was offered to them, it seemed as if the ship alone was the object of their attention.

It was indeed that the Iphigenia should remain off this island for a day, in order to get a supply of water, of which they were informed by the natives there was great abundance. In the afternoon the canoes returned with more cocoa-nuts and taro-root, and the inhabitants seemed to have learned, since their last visit, the value of iron; as they now would take nothing but Owashee, Owashee, which is their word for that metal. They were entire strangers to fire-arms; for one of them expressing a wish to have a pistol, Captain Douglas discharged it; ---which alarmed him to such a degree, that when it was held towards him, he kissed the barrel, but could not be persuaded to lay hold of it.

This island, which was now named Johnstone's Island, lies in the latitude of 3° 11' North, and in the longitude of 131º 12' East. It consists of low land covered with verdure, and cocoa-trees, and is about a league in circumference. One tree in particular rises above the rest, and appears at a distance like a ship under sail. ---What the island produces, besides cocoa-nuts and the taro-root, was not discovered, as the inhabitants brought nothing to barter but those articles. —The natives did not appear to exceed the number of two hundred and are a stout, robust people. Their canoes, which held twelve or fourteen of them, were exactly the same as those of the Sandwich Islands; and the people not only displayed the same activity in the water as the Sandwich Islanders, but made use of several expressions which Tiana (a Sandwich Islander) readily understood. A fine breeze springing up, Captain Douglas gave up his design of taking in water at this island, and continued his course to the Eastward"

The following year, the squadron of John Davy Foulkes was stationed in these waters. It included the ships "Asia," "Raymond," "Contractor," "Bridgewater," and "Duke of Montrose." The latter sighted Tobi on January 1, 1789 and apparently called it Neville Island. It was under the command of Captain Joseph Dorin.¹

Some little-known detailed reports about Tobi were published in 1833 and 1839. The American ship "Mentor" under Captain Edward C. Barnard was shipwrecked near the Palau Islands on May 20, 1832. The crew was rescued and treated kindly by the natives. The captain could not stand it there for long and did everything in his power to get back off the island. After a futile attempt, they finally managed to leave the waters of the Palau island group and reach the open sea. Three Palauan natives had accompanied the sailors, chaperoning them, as it were, since the natives were eager to obtain ransom money for those they had rescued. A few Americans stayed behind as hostages, some voluntarily, apparently preferring the safety of the island to the uncertainties of a sea voyage in such fragile vessels.

The others met their fate on the open sea. In constant danger for their lives and at the end of their strength, the sailors reached Tobi and were taken on land by the natives. Two reports of this event survive: an earlier one by Captain Barnard, and a later very detailed one by two of his crew, who remained captives of the Tobi natives for many months. The two accounts differ strongly in form and especially in tone.

The captain matter-of-factly relates the events and clearly sees them as more harmless, pleasant and mild than the experience of the sailors would seem to justify. The reason for this is clear enough: Barnard got himself rescued onto a passing ship as soon as he was able, with one single companion from his crew. He did not succeed in delaying the Spanish ship that saved him from his predicament long enough to bring the rest of his crew on board. Later, too, he did nothing to bring them back. His conduct was less than comradely, since the account of the sailors makes clear how much they were counting on his help. He justifies himself by portraying the sojourn on Tobi as not at all unpleasant, and is at pains to prove he had every reason to believe that all those left behind were doing quite well. Apparently, he himself was treated well, and the miserable time that Holden and Nute were forced to survive was the result of a famine that did not set in until after his departure.¹

The sailors Nute and Holden, on the other hand-the latter the author of the second account-2 are writing from the opposite point of view. As the last of the survivors and themselves at death's door, they finally arrived back home, completely pauperized, with the help of friendly traders.³ To obtain a little support for them, John Pickering⁴ of Boston had them give an account of their experiences. Unfortunately, the tone of the story is totally foreign: it is not the simple seaman who speaks, but his voluble publisher.

Captain Barnard begins with the departure from Babeldaob.5

"On May 18, 1832, I passed the island Mortz (Morotai) and the ship, driven by a strong south-southwest wind, took its course toward the north-northeast and was making about 7-8 knots per hour. Around noon on the 20th I sailed toward the northeast and on the following day around the same time I thought we must be to the northwest of the Palau Islands. Since our departure from Mortz I had not seen the sun at all; a strong wind was blowing from the south-southwest, it was raining in torrents, and the sea was very rough. We were now at latitude 8° 50' north and longitude 132° 20' east from London; for the rest of the day, our ship was carried away by a very powerful current. Around eleven o'clock at night it suddenly hit a cliff ... "

3 In the end, they act no differently than Barnard, leaving the Palau native behind; at least Barnard and his rescuer, the Spanish captain, had given the Tobi natives a little iron, whereas Captain Short of the "Britannia" sails on immediately out of fear, without making an appropriate

5 A French translation of Barnards report is printed by Domeny de Rienzi. Océanie ou cinquième Partie du monde. Paris 1843, p. 104ff. He does not indicate where the English original was published; he merely notes: Report of Captain Edward C. Barnard, given after his arrival

¹ Wichmann: Nova Guinea Vol. I, p. 242. In his account, Wichmann refers to the information in Horsburgh's India Directory, 4th Ed. II., London 1836, p. 571; Oriental Navigator, London 1801, p. 565; and George Robertson: Memoir of a Chart of the China Sea, London 1791, p. 102. In this work, Tobi is called "Navil" Island and erroneously placed south of the equator.

¹ In this context the judgment of Hale should also be mentioned. He writes: "It should be mentioned that the release of the four Americans who survived (two of whom got free a short time after their capture [Captain Barnard and the seaman Rollins]) was voluntarily on the part of the natives, a fact which shows that the feelings of humanity were not altogether extinct in their hearts. Indeed, although the sufferings of the captives were very great, it did not appear that they were worse, relatively to the condition in which the natives themselves lived, than they would have been on any other island of the Pacific. Men who were actually dying of starvation, like the people of Tobi, could not be expected to exercise that kindness towards others which nature refused to them."

² The title of the American original is: A Narrative of the Shipwreck, Captivity and Sufferings of Horace Holden & Benjamin Nute. Horace Holden, Boston, Weeks, Jordan & Co. 1836, I Vol. A copy is in the British Museum. -Relation du Naufrage de la Captivité et des Souffrances de H. Holden et de B.-H. Nute, qui, embarqués sur le navire Américain Le Mentor, furent jetés sur les Îles Pelew en 1832, et, deux ans après, supportèrent des Maux inouïs Chez les Barbares Habitants de l'Île du Lord North, Nommée par eux Tobi. Nouvelles Annales des Voyages et des Sciences Géographiques. Paris 1842. T. 1 and 2 (Tobi T. 2, p. 129ff.) The French publisher signs merely E-s. According to Hambruch, he is Eyriès.

gift; cf. p. 24.a

⁴ Pickering was president of the Cambridge Academy in Massachusetts. in Canton.

Here follows the account of the shipwreck and the sojourn on Palau. They reached Babeldaob. The natives of this island intended to gain the same advantage from his sojourn as their countrymen on Goror had from the sojourn of Captain Wilson of the "Antelope." He then continues his account:

"...They told me that if I wished to leave (in the dinghy, which had been repaired) I would have to resign myself to leaving behind with them Mr. James Meager, my son-in-law, and two of my people, the choice of whom they would leave up to me. Horatio Davis, Calvin and Catlin from Massachusetts, who were afraid of risking a voyage in the boat, offered to stay, and on November 15 we began to ready our vessels and to bring food and other necessities on board. Since the wind was favorable, I departed Palau on the 22nd. My dinghy was guided by three members of the crew, and there were four others in the boat, as well as two chiefs and a native of the island. We made about 20 miles that day. When night fell, I was not at all calm; I found myself on a frail vessel on the open sea, accompanied only by a boat carrying food and water for 20 days; and without any navigational tools. I possessed only a compass and was 600 miles from Ternate, the closest land.

As soon as we were past the reefs, I steered toward the southwest. The sea was quite turbulent and we made only difficult progress. To make matters even worse, our rudder developed a problem, and we had to interrupt our progress for a whole night in order to fix it. This delay was all the more unfortunate since there was a strong breeze from the northeast which would have been quite helpful to us. It rained terribly the whole night, and the thunder was awful. The crew began to grumble, and I foresaw the moment we would have to turn back to Palau to wait for the arrival of a ship that would take us on board. This would, of course, have been the best thing to do; but when day broke, the rain stopped and the wind calmed. We repaired the rudder and voyaged on without incident until the 29th. The wind was almost always favorable. The dinghy was tight, but the boat kept filling up with water. All this time we were on a southwest course in the hopes of reaching Mortz or Gilolo.

On the evening of the 29th, the boat capsized on account of the awkwardness of one of the Palauans who was supposed to hold the sail; the mast fell into the ocean and we spent an hour in vain trying to pull it out. Around the tenth hour, a wind came up and it began to rain. I took four men from the boat aboard the dinghy and left only three behind to sail it; but in the night it filled with water to such an extent that we found it impossible to keep it afloat and found it necessary to abandon it. We took as much food and water into the dinghy as we found advisable, as we were now eleven people. Our supplies consisted of coconuts and fresh meat, which we had roasted before our departure and sealed with fat. We carried our water in large bamboo containers. After we had taken everything we needed aboard the dinghy and lightened our load by throwing overboard everything heavy—each man kept only a change of trousers and shirt—we abandoned the boat and continued our voyage to the southwest. When it was calm, we rowed, and whenever a wind came up, we set our sail.

We thus continued on until December 6th, when we spied land at daybreak about 6 miles away. A little later we noticed several boats approaching us. Flight would have been impossible even if we had thought of it, because we were running short of water and needed to replenish it at any cost. Our decision was therefore quickly taken. In any case, the boats were only a half mile distant by now. I made for the nearest one to us, and when we were only a few yards away, the natives sitting in it showed us coconuts to let us know they were willing to trade with us, and called out: "Pecio, pecio!" Meanwhile another boat approached from the opposite direction; its crew jumped aboard our dinghy, and in less than five minutes they had looted everything on board. All our possessions were divided among several boats; and two or three of my crew who resisted being robbed were thrown overboard, where they nearly drowned. After these savages had taken everything it contained out of the dinghy, they placed three or four of their people in it in order to guide it to land. The boats then made for the island, which is barely ³/₄ mile long and ¹/₂ mile wide and has about 300 inhabitants. As we approached land, I saw women and children

streaming onto the shore. They danced and leaped into the air and welcomed us with songs and cries. When we had disembarked, they gave us food and water. The island is low and surrounded by a reef that follows the coastline a half mile out. The men were stoutly built; the women, in contrast, seemed weak and miserable to me. While I was with them, they treated me with kindness; they demanded no work from me—just once or twice they asked me to help them pick coconuts. But their curiosity was draining, and since they do not show any consideration to age, we suffered especially from the intrusiveness of their children. It is impossible to imagine anything dirtier than these natives. The men are more involved in the household than among any other people I know.

I spent my time exploring this small island. Often I became hungry and did not know where I was. I thought I had passed Mortz on the west and must be on the island of Maggo. Several times I determined to take possession of one of the boats lying on the shore and attempt to make the open sea. I reckoned I would come to Ternate if I steered east, and that if after 24 hours I saw no land, I would change my course to southwest, where I could not miss it. The difficulty was that we did not know how we were to obtain sufficient coconuts for the voyage. Not a day passed without our crafting some plan for escape.

Then, on February 3, 1833, a ship appeared making directly for the island, apparently intending to land on the eastern shore. Immediately the entire island sprang to life. Men, women and children ran instantly to the shore with coconuts to bring on board. We went as well, but were pushed out of any boat we attempted to board. They had decided to keep us on land. I turned to the chief, who told me that I was not allowed to leave. I then saw that his brother's boat was on the verge of departing, and jumped in. As soon as I was in, they demanded that I get out again. I told them that I promised to get them iron—which they prize most highly—if they would permit me to accompany them. They would hear none of it and demanded again that I leave the boat. I resisted. Two savages had already taken hold of me to throw me into the water when an elder asserted his authority and rescued me from their hands. We immediately hoisted sail and made for the ship.

When we were past the surf, I looked back and saw that they had kept all my crew onshore with the exception of Bartlett I. Rollins from Bangor. One must have experienced circumstances similar to mine in order to imagine my excitement at approaching the ship. It was a beautiful vessel, and since I saw many blacks on board, I thought it must be a Dutch ship with a Malayan crew. I called to the ship and asked for permission to come on board. A moment later, when the besom sail had been hoisted,¹ I came onto the bridge and discovered that it was the Spanish ship "La Sabine" under captain Gomez from Manila, who was going from Bengal to Macao. This officer welcomed me with the greatest hospitality and I am eager to convey my thanks to him in this place.

We stayed only long enough to take Rollins on board. The captain told me that due to many delays during the crossing his supplies of food and water were running so low that he could not afford to lose the twenty-four hours it would take to send people to pick up the rest of my crew. He then gave me several iron rings, which I gave to the natives who had brought me to the ship, and I could see by their astonishment that they had not counted on a gift of such value. I think they would have brought us all on board the Spaniard if they had not feared our revenge for having destroyed our dinghy. The natives returned so content that they are sure to treat those remaining on the island well and bring them on board the next ship that visits their coast. These men are: Charles B. Bowkett, William Siddon, Milton Hewlitt, Horace Holden, Peter Andrews, Benjamin Nute; and the three natives from Palau: Lebac, Tet and Kaier. It was only after my arrival aboard the "Sabine" that I discovered that the island on which I had spent two months was Lord North Island."

Captain Barnard arrived in Macao on February 23 and landed in Canton on February 28.

1 In the French text: Le perroquet d'artimon ayant été hissé...

The supplemental account of Holden is as follows:

"... At this time no objects were seen, except a few sea birds. We continued in this condition for nine days and nights with actual starvation before us as the most probable end of our activities and sufferings.

We were about settling down into a state of confirmed despair when to our inexpressible joy we discovered land apparently about 10 miles off. We exerted all our remaining strength to reach it, when within six miles we saw approaching us a fleet of 18 canoes filled with the natives of the small island we were approaching. At first the small canoes came near us for the purpose of ascertaining who and what we were. The appearance of these natives was such as to excite at once our astonishment and disgust. Like the inhabitants of the island we had left, they were entirely naked, and as our subsequent experience proved, they were more barbarous and cruel. Very soon the large canoes came up, when the wretches commenced their outrages. They attacked us with brutal ferocity, knocking us overboard with their clubs, in the meantime making the most frightful grimaces, and yelling like so many incarnate devils. They fell upon our boat, and immediately destroyed it, breaking it into splinters and taking the fragments into their canoes. While this was going on we were swimming from one canoe to another, entreating them by signs to save our lives, and permit us to get into their canoes. This, they for a long time refused, beating us most unmercifully, whenever we got hold of anything to save ourselves from sinking.

After they had demolished our boat, and kept us in that condition for some time, they allowed us to get on board. They then compelled us to row towards the land. They stripped us of all our clothing immediately after we were taken in; and the reader may form some idea of our distress in this condition; under a burning sun, from the fact, that before night our shoulders were blistered, by being thus exposed to the heat. On approaching land we discovered no habitation, but after going round a point of the island, we saw near the beach a row of small and badly constructed huts. We were compelled to jump from the canoes into the water, and wade to the shore. By this time the beach was lined with women and children, who caused the air to resound with the most horrid yells and screams. Their gestures and violent contortions of countenance, resembled the frantic ravings of Bedlamites.

The reception we met with on land was no more agreeable than that upon the water. Judging from the treatment we had received from the females of the island which we had left, it was hoped that the gentler sex would extend to us some proof of their commiseration; but, in this we were sadly disappointed. If possible they were more cruel than their inhuman lords and masters. We were soon separated from each other and dragged about from place to place; our brutal captors, in the meantime, contending with each other to see who should have us as his property. Frequent contests of this kind occurred; in one of which, during the first day, I was knocked down. The question of ownership was at length settled, and we were retained by those into whose hands we had at first fallen. Some of us were taken to their house of worship, called by them Verre-Yarris, literally God's house, where they went through with some of their religious ceremonies, and we received a few mouthfuls of food, which was the first we had tasted through the day.

It was my good fortune to be retained by one who, compared with the other natives, was humane. His name was Pahrahbooah; the female head of the family was called Nahkit; and they had four children. I went by the name of Teemit; and Benjamin Nute by the name of Rollo. The Captain was also fortunate in falling into the hands of a friend of my master, who treated him with comparative kindness. He was valued the more highly, also on account of being a large fleshy man-they judging of these things by the size and appearance.

It may now be proper in this place to give some account of the place where our unhappy lot was cast, and of its rude and miserable inhabitants. It will be impossible to convey a correct idea of their ignorance, poverty, and degradation; but some conception may be formed, by imagining what the condition of beings must necessarily

be, when wholly separated from the rest of their species, stripped of all the refinements of life, and deprived of all means and opportunities for improvement. We were now upon the small piece of land called by the natives To 'bee, but known to navigators by the name of Lord North's island, situated between the third and fourth degrees and north latitude, and in longitude one hundred and thirty one degrees twenty minutes east. It is also known by the name of Nevil's island and Johnston's island; and it has been hitherto considered by navigators and others as uninhabited. This is not surprising; as we were told by the natives, that no one white man had ever visited the place, though it seemed, from the pieces of iron in their possession, and from other circumstances, that they had had some communication with the Spaniards and Portuguese in that quarter of the world.¹

Like many other islands in those seas, this is surrounded by a coral reef, which is from an eighth to one and a half mile wide; but outside of the reef the water is apparently fathomless, the water being as blue as it is in the middle of the sea, and the largest vessels may in many places approach within a quarter of a mile of the beach. The whole island rises so little above the level of the sea, that the swell often rolls up to a considerable distance inland. It is about three quarters of a mile in length, and not far from half a mile in width. There were upon it three villages situated on the shores, and containing in all, between three and four hundred souls at that time when we were taken there; but the number was considerably diminished by the famine and disease before we left.

The inhabitants are in a state of entire barbarism and ignorance. The men wear a sort of girdle or belt made of the bark of a tree. This is girded round the loins so as to leave one end to hang loose behind, the other is brought forward and fastened to the belt in front. This is their only clothing. The females, after arriving at the age of womanhood, wear an apron made of leaves of a plant, by them, called kurremung, split into fine stripes and plaited. This extends from the loins nearly to the knees. Some few wear rings upon their wrists, made of white shells, and some had this kind of ornament made of turtle shell. In their ears, which are always bored, they sometimes wear a leaf, and round their necks a necklace made of the shell of a cocoa nut, and a small white shell called keem shell. The children go entirely naked. The complexion of these islanders is a light copper color, much lighter than the Malays or the Pelew islanders; which last, however, they resemble in the breadth of their faces, high cheek bones, and broad flattened noses. They do not color their teeth, by chewing anything, as many of these islanders do: but their teeth are so strong that they can husk a cocoa nut with them instantly.

Their principal food is cocoa nut. They occasionally succeed in procuring fish; though the supply obtained during our residence there was exceedingly small. Their fishhooks are made of turtle shell, and not well contrived for the purpose: but we could not induce them to use our hooks, till they had heated them and altered their form so that they would not hold the fish. They did this because they said that Yarris (God) would be angry with them if they used our hooks without preparing them according to their fashion. Sometimes they are so fortunate as to obtain a sea turtle; five only were taken during the two years we were there. The turtle, I may add, had something of a sacred character with them. They also raise some quantities of a vegetable somewhat resembling the yam; but while we were with them they were unsuccessful in cultivating it. These constitute the slender means of their support, and they are thus barely kept from actual death by famine, but on the very verge of starvation. When anyone of them begins to fail, for want of food, so that his death is pretty certain, they inhumanly turn him off from among them to starve to death.

Their religion is such as might be expected among a people in their condition. Their place of worship is a rudely constructed building, a hut, about fifty feet long and thirty wide. In the centre suspended from the roof, is a sort of altar, into which they suppose their deity to come and hold converse with the priest. Rudely carved images

Portuguese (or possibly the French Chapeau) and the Spanish Sombrero.

¹ They occasionally wore a kind of broad hat called by them Shappo and sometimes shambararo; which are evidently derived from the

are placed in different parts of the building, and are supposed to personate their divinity. As nearly as could be ascertained to us, they supposed that the object of their worship was of like passions with themselves, capricious and revengeful. During the time we were with them they attributed to this displeasure their want of success in taking fish as they had done in former times, and the unfruitfulness of their bread-fruit and cocoa trees.

Their religious ceremonies are singular. In the commencement the priest walks round the altar and takes from it a mat, devoted to the purpose, which is laid upon the ground. He then seats himself upon it, and begins to hoot, in the meantime throwing himself into a variety of attitudes, for the purpose of calling down the divinity into the altar. At intervals the congregation sings, but immediately stops when the priest breaks out in his devotions. By the side of the altar is always placed a large bowl and six cocoa nuts. After the incantation is gone through, and the divinity is supposed to be present, the bowl is turned up and four of the nuts are broken and put in it, two being reserved for the exclusive use of the priest,—by them also called "Yarris". As soon as the nuts are broken, one of the company begins to shout, and rushing to the centre seized the bowl and drinks of the milk of the nuts, generally spilling a considerable quantity of it upon the ground. After this, a few pieces are thrown to the images and the remainders are eaten by the priest. This closes the ceremony, after which they indulge in any recreations that chance to please them best.

While we were on the island several earthquakes happened, and some of them pretty severe. On those occasions the natives were much terrified, they would not let their children speak a word, and they said amongst themselves, "Zahbee'too Yarris, To'bee yet tah men", that is: "Yarris (God) is coming and To'bee will sink". They were also very much alarmed at thunder and lightning, and used to say at such times: "Yarris tee'tree", (God is talking). I do not know how they would be affected by an eclipse as none happened that I noticed while we remained there. I will here mention some other things in respect to their customs and usages as they now occur to me.

Their implements of war are spears and clubs, they have no bows and arrows. Their spears are made of the wood of the cocoa trees; the points of them are set with rows of shark's teeth, and being at the same time very heavy and from ten to twenty feet long are formidable weapons. Their canoes are made of logs which drift to their island from other places, there being no trees large enough for that purpose, they are hollowed out with great labour and are of very clumsy workmanship; to prevent their oversetting they are fitted up with outriggers, like those of the Pelew islanders. They kindle their fires, as they informed me, by rubbing two pieces of wood together, as is common in the islands of the Pacific Ocean, and they cook their turtle or other meat (when they are so fortunate as to have any) as well as their vegetables by covering them with heated stones. I should state, however, that during the whole time we stayed among them fire was always preserved in some part of the island, so that there was no necessity for kindling it in the manner here mentioned.

Like other savage people, they reckon time by moons. I could not learn that they ever reckoned by any other period, except, indeed when speaking of two or three days. They take pride in their hair, and are particularly careful about it, washing and cleaning it almost every day. They do not color it however, as the natives of some islands are said to do; but they moisten it with the juice pressed out from the cocoa nut which gives it a very glossy appearance; and it is frequently so long as to reach down to their waist. Their mode of salutation is, to clasp each other in their arms and touch their noses together, as is practised in many other islands. We found no musical instruments of any sort among them. They sometimes, on particular occasions would sing or bawl out something like a rude tune, but we would not understand it. We frequently tried to teach them to whistle and their awkward attempts to do it amused us but they never were able to learn how it was done.

In their names I could not find that they had anything like a family name, but only a single one, corresponding to our christian names; as is the case, I believe, throughout the islands of the Pacific. I could not learn that the names

Pahraboo'ah Nah'kit Bukwur'timar Kobaw'ut Kobahnoo'uk Wah'rebo

the mother the fourth, a son.

The children do not address their parents by any word corresponding to Father and Mother, but by their names. Their parents treat them on the footing of equality, they are generally well behaved, and are never punished, except occasionally when impatient for their food. Their language appears to be different from those of the other islands in that quarter, we found that the three natives of the Pelew islands, that accompanied us would not understand anything they said; though I observed afterwards, occasionally a resemblance in two or three words. The reader will however be enabled to judge for himself by means of a short vocabulary of common words which will be found at the end of this narrative.¹ I may add that the Pelew chiefs had never heard of Lord North's island, but they are acquainted with the Caroline Islands. A detail of all that befell us would serve only to give pain to the benevolent, or at most to show how much human beings can endure. I shall attempt but little more than to describe the sufferings of a day, observing once for all, that for the term of two long years we experienced the same brutal treatment and were subjected to the same privations; life, during all that time, being no better than the constant succession of the most acute sufferings. This island unlike the Pelews is one of the most horrible and wretched on the face of the globe. The only product of its soil worth mentioning is the cocoa tree, and those are of so dwarfish and miserable growth as to bear but very few nuts. These few, however, constitute the food of the inhabitants with the exception of a species of fish caught occasionally near the shore. The only animals or creeping things known on the island are lizards and mice, and, during our stay there, scarcely a solitary seafowl was known to have alighted on the island, and but few fish were taken by the islanders.

The character of the inhabitants much resembles that of the island itself. Cowardly and servile, yet most barbarous and cruel, they combine in their habits, tempers and dispositions the most disgusting and loathsome features that disgrace humanity. And, what may be regarded as remarkable, the female portion of the inhabitants outstrip the men in cruelty and savage depravity; so much so that we were frequently indebted to the tender mercies of the men for escapes from death at the hands of the women. The indolence of the natives which not even the fear of starvation itself can rouse to exertion, prevents their undertaking the least toil, although a little labour well applied might be made to render them infinitely more comfortable.

Strange as it may appear it is nevertheless true that notwithstanding they are in this miserable condition with no prospects of its ever being improved, they are of the opinion that they are highly favoured. This can be accounted for in no other way than by the fact that they are entirely ignorant of all that lies beyond the narrow limits of their observation. They know nothing of any other portion of the globe than the mere speck of barren land upon which by some accident they were thrown and where they remain to drag out a wretched existence. Their traditions do not extend further back than to about a hundred years, and to their simple minds, it seems like a splendid effort of mind to be able to relate with tolerable accuracy the time-hallowed stories told them by their parents. Whether they could in any way be improved by instruction is a question which it would be difficult to answer. They seem to be doomed to remain as one of the last links in the chain that connects our race with the mere animal part of the creation.

1 The vocabulary mentioned here is included in the word indexes under P. = Pickering.

were significant either of animals or other objects as the Indian names of America are, and I never found any two persons of the same name. The names of the members of the family with which I lived were as follows:

> father of the family the eldest child, a son, ten or 12 years old the second, a daughter the third, a daughter

We were captured and taken to the island December 6th 1832; and on the third day of February 1833, two month's wanting three days, Captein Barnard and Bartlet Rollins effected their escape. Compared with the remainder of our captivity, our privations and sufferings up to that time were less severe. But at no time did we have sufficient food to satisfy the cravings of hunger! The very crumbs that fall from an ordinary table would have been to us a luxury; the swine of America are better fed than we were, on the most fortunate day of our residence upon that island.

It was on the day above mentioned that a ship was discovered a short distance from the island, and the natives immediately collected and prepared to go to it, in order to obtain iron, or some other article of value. Hope once more visited us. To escape was, of course, our strong desire and intention. Accordingly, when the canoes put off we attempted to go. Our savage masters interposed their authority and by menaces and blows prevented us. Many of us were severely beaten and all but two were detained by the brutal force of the savages. At length Captain Barnard and Rollins, after being severely beaten, were allowed to accompany the natives to the ship and succeeded in effecting their escape. Trusting to the humanity of the Captain and crew, we for some time confidently expected that they would contrive some way of enabling us to join them. They were in sight about three hours; at one time they were so near that we could distinctly see the hands on board; but judge of our feelings when we saw the vessel pursuing her course! Our expectations were all blasted in a moment and our minds which had been gladdened by the hope of once more enjoying the society of civilized beings, of once more reaching the shores of our beloved country sunk back into a state of despair; we wept like children. The natives when they returned from the vessel, brought with them a small quantity of iron hoops, and a few articles of some small values, but they were highly dissatisfied with the amount received and greatly enraged. They held us accountable for the conduct of those who had left, and they quarrelled about it for several days. Those of us who remained, though innocent, were the greatest sufferers. The division of the property caused much difficulty and they vented the malignity of their unfeeling hearts on us. We were given to understand that now our doom was fixed; that we should remain with them and die the victims of our tormentors. Alas, it was but too true that such was to be the fate of all but two of our numbers. We were destined to see one after the other of our fellow-sufferers sink under the constantly increasing severity of the burdens imposed upon them, and perish either from actual starvation or by the blows of the savages.

After the departure of the captain and Rollins, we were treated with much greater severity than we had been before. Generally we were aroused from our broken slumbers about sunrise, and compelled to go to work, we were usually employed in cultivating a species of vegetable somewhat resembling the yam and called by them: "Korei". The root is raised in beds of mud which are prepared by digging out the sand and filling the place with mould. The whole of this labour was performed with hands. We were compelled day after day to stand in the mud from morning till night and to turn up the mud with our hands. Frequently we were required to do this without receiving a morsel of food till about noon and sometimes we were left without anything to eat until night. At best we could get no more than a small piece of cocoa nut, hardly a common sized mouthful at a time, and if, either from exhaustion or any other cause we neglected to perform the required amount of work, our pittance of food was withheld altogether.

From this plain and unexaggerated account it will be seen that our condition at best was bad enough; but a misfortune befell us which rendered it still worse. About four months from the time of our landing on that dreary spot there was a violent storm which came very near sweeping away the whole of the means of support which remained for the miserable inhabitants. The wind blew down many of our best cocoa trees and materially injured the fruit on such as were left standing. Besides this, the low places in which they raised the root by them called: "Korei" were mostly filled with sand and famine stared us all in the face. They attributed this misfortune to the

anger of their god, and did not fail to use such means as they thought best calculated to appease him; and the calamity greatly added to our sufferings. Besides subjecting us still more severe deprivations we were compelled (though hardly able to drag our limbs from place to place) to labour in repairing the damage done by the storm. We were employed for months in carrying in our arms and on our shoulders pieces of the coral rock, in order to form a sort of seawall to prevent the waves from washing away the trees, and this drudgery, considering that we were naked under a burning sun and reduced to nothing but skin and bones, was too severe to admit of anything like an adequate description. Our flesh, or to speak more properly, our skin—for flesh we had none—was frequently so torn by the sharp corners of the rock and scorched by the sun, as to resemble more that of the rhinoceros than of human beings.

A new trail now awaited us. The barbarous beings among whom our lot had been cast, deemed it important that we should be tattooed, and we were compelled to submit to the distressing operation. We expostulated against it—we entreated—we begged to be spared that additional affliction, but our entreaties were of no use. Those savages were not to be moved and we were compelled to submit; and that the reader may form some idea of the painful process I here will give a brief account of it.

We were in the first place securely bound down to the ground and there held fast by our tormentors. They then proceeded to draw with a sharp stick the figures designed to be imprinted on the skin. This done, the skin was thickly punctured with a little instrument made of sharpened fish bones, and somewhat resembling a carpenters adze in miniature but having teeth, instead of a smooth, sharp edge. This instrument was held within an inch or two of the flesh and struck into it rapidly with a piece of wood, applied to it in such a manner as to cause it to rebound at every stroke. In this way our breasts and arms were prepared; and subsequently the ink, which was made of a vegetable found on the island and called by them the "*saovan*" was applied. The operation caused such an inflammation of our bodies, that only a portion could be done at a time, and as soon as the inflammation abated another portion was done as fast as we could bear it, till our bodies were covered. It was effectually done for to this day the figures remain as distinct as they were when first imprinted, and the marks will be carried by us to the grave. They were exceedingly anxious to perform the operation upon our faces, but this we would not submit to, telling them that sooner than have it done we would die in resisting them. Among themselves, the oldest people had the greatest quantity of tattooing and the younger class less.

Besides this operation of tattooing, they compelled us to pluck the hair from different parts of our bodies, and to pluck our beards about every ten days, which was extremely painful, and at every successive operation the beard grew out harder and stiffer. About seventeen days after the captain and Rollins left, we saw a vessel to the windward; but the natives did not attempt to visit it. Five months afterwards another came in sight and remained for three days near the island. At one time we could distinctly see the men on board; but we were kept on shore and closely guarded. Several canoes visited the ship and brought back a few pieces of iron, fishhooks, glass bottles etc. We tried, but in vain, to escape. It seemed to us that we were doomed to remain on that dreary spot, to wear out our remaining strength in hopeless bondage and to submit to the control of brutal masters, whose tender mercies were cruelties. Death, in any form, would have been a relief and often did we see moments when it would have been welcomed as the best of friends! To some of our companions it did come though dreadful in the manner, yet as a not unwelcome alternative. About a year after we first arrived at the island, William Sedon became so reduced as to deprive us of all hopes of his recovery. He looked like a skeleton and, at last was so entirely exhausted by hunger as to be unable to walk, or even to rise from the ground. He continued however to crawl from place to place until all his remaining strength was nearly gone, when the inhuman monsters placed him in an old canoe and sent him adrift on the ocean. Gladly would his unhappy shipmates have extended to him the last, sad offices of friendship, that poor consolation was denied both him and us. My heart bleeds at the recollection of our separation

and his melancholy fate, when we saw him anxiously turn his languid eyes towards those who were doomed still to linger on the borders of the grave. Our sighs were breathed almost in silence and our tears were shed in vain. It may be observed here, that it is not their custom to deposit the bodies of any of their dead in the earth, except very young children. The bodies of grown people, after death, are laid in a canoe and committed to the ocean. It was soon our lot to part with another of our companions Peter Andrews. He was accused by the natives of some trifling offence and put to death.

The savages knocked him down with their clubs and then dispatched him in the most cruel and most shocking manner. I was at this at a distance from the place where he was killed. My master was absent; and upon my hearing a noise in the direction of the place where the foul business was transacted, and, suspecting that all was not right, I started to see what was going on. I was near the beach when I saw a number of the savages coming towards the spot where I stood, dragging along the lifeless and mangled body of our comrade! One of them approached me behind and knocked me down with his club. The body of Andrews was thrown into the sea, and it seemed to be their determination to destroy the whole of us. I warded off the blows aimed at me as well as I could, and recovering myself ran towards the hut of my master. He had not yet returned but fortunately an old man, who had previously shown some regard for me and who was the particular friend of my master happened at that moment to be passing; and seizing the man who had pursued me, held him fast. I escaped and ran into the hut, and crawled up through an aperture in the floor into the chamber under the roof. I seized an old box and covered up the hole through which I had ascended; but this was not sufficient to detain for any length of time the wretches who were thirsting for my blood. They soon succeeded in displacing the box and one of them seized me; but just as he was pulling me from my place of refuge, my master returned with several of his friends and rescued me from the clutches of my enemies.

In the meantime Nute and the rest of our companions were at the "*Tahboo*," a place of public resort, where, for the only time the females rendered our people any assistance. They concealed the men under some mats and kept them there till the fury of the natives had in a measure subsided. We were next called upon to part with one of the Pelew chiefs who had come with us. He died of absolute starvation and, according to custom was committed to the waves in an old canoe. In a short time after this the Pelew private who had also come with us was detested in the crime of taking a few cocoa nuts without leave, for which offence he had his hands tied behind him and was put into a canoe and sent adrift; which was their usual method of punishment for offences of different kinds.

About a year and seven months from the commencement of our captivity, Milton Hewlet died, and, like the others was committed to the ocean. A short time afterwards Charles C. Banket, having become so reduced by his sufferings as to be unable to help himself, was (horrible to relate) placed in a canoe while still alive, and committed to the mercy of the ocean. Thus did one after another of our companions sink under the weight of their sufferings, and perish without any alleviation to their wretchedness. Nute and myself, with our friend Kobac, the other Pelew chief, were all that remained; and we were constantly expecting that the next hour would end our existence.

The idea of death, however had now become familiar; and often did we desire the release from suffering which that alone could afford. Nothing as it now appears to us, but the kind interposition of Providence could have continued our lives and have given us the power of endurance to hold out as long as we did. We were frequently so reduced as to be unable to walk, and were forced to drag ourselves on our hands and knees to some place where we could lie down under the shade of a bush and take rest. But the small comfort to be obtained in this way was greatly lessened by the annoyance of moskitos which could attack us with impunity in our helpless and feeble condition. Besides this, our flesh had so fallen away, that on lying down our bones would actually pierce through

the skin, giving us the most severe pain. After we were tattooed, the parts operated upon were, for a long time running sores; and when exposed to the sun, the pain was excruciating.

It has been already said, that the natives were indolent, filthy and degraded, but the half has not been told, and some things which we witnessed cannot be related. The intercourse of the sexes was unrestrained by any law, and the decencies of live were almost entirely neglected. Instead of taking pains to keep clean, they seemed to be not unwilling to have their heads overrun with vermin; and however incredible it may seem, it is a disgusting truth that they are accustomed to eat them; and particular care seem to be taken to keep those loathsome animals in the heads of the children. But I forbear any further particulars.

I have already said that only two of the crew of the Mentor, namely Nute and myself, remained alive, with the exception of Captain Barnard and Rollins, who had fortunately escaped. The Pelew chief had become strongly attached to us, and we take pleasure in stating the fact, that his faithfulness and affection had greatly endeared him to us. He seemed more like a brother than a Barbarian; and most gladly would we have saved him from those sufferings which, no doubt, before this time, have terminated his life. Alas! It was not in our power to administer to his relief; and when we last saw him he was but just alive.

Having thus briefly related the story of our captivity and sufferings, it only remains to give an account of our escape from this barbarous people. We continued to survive the horrible sufferings to which we were constantly subjected, and to serve our tyrannical masters, in despite of our agonies of body and mind, till the beginning of the autumn of 1834, at which time we had become so emaciated, feeble and sickly, that we found it impossible any longer even to attempt to labour. By this time we had acquired a sufficient knowledge of their tongue to converse fluently with the natives, telling them that we informed our masters that our feeble condition rendered it impossible for us to attempt to do anything more. We also reasoned the matter with them, telling them that death was our inevitable doom, unless we were allowed to relax our labour; that if we died, we could be of no service to them, but if allowed a respite, and we lived, and could be put on board a vessel, they should be liberally rewarded.

With much difficulty we at length persuaded our masters to allow us to quit labour, and obtained from them a promise to be put on board the first vessel that should come to the island. But, at the same time they informed us, that if we ceased to work they should cease to furnish the miserable of cocoa nut on which we had before subsisted, and that we must either labour or starve. We deemed death as welcome in one shape as in another, and relinquished our labours and our pittance of food together. We were thus literally turned out to die! We crawled from place to place, subsisting upon leaves, and now and then begging of the natives a morsel of cocoa nut. In this way we contrived to live for about two months, when the joyful intelligence was brought to us that a vessel was in sight, and was coming near the island! Hope once more revived our despairing hearts, and seemed to inspire us with renewed strength and animation. After taxing our exhausted powers to the utmost, we persuaded the natives to prepare for visiting the vessel; and throwing our emaciated bodies into their canoes, we made for the ship with all possible despatch. The vessel proved to be the British barque: "Britannia", Captain Short, bound to Canton. Our reception on board is faithfully described in the following certificate given by Captain Short, the original of which is still in my possession.

This is to certify, that on the 27th day of November, 1834, off the small island, commonly called Lord North's by the English, situated on latitude 3° 3' north and longitude 131° 20' east, on board the British Barque "Britannia" bound to Canton river, we observed about ten or eleven canoes, containing upwards of one hundred men, approaching the vessel in a calm, or nearly to, with the intention of coming alongside. But having the small complement of thirteen men, it was considered most prudent to keep them off, which was effected by firing a few six pound shots in a contrary direction from the boats, some of which were then with in pistol shot. At the same time hearing

cries in our own language begging to be taken on board, the boat was dispatched away to know the cause. The boat returned to the ship, and reported an American on board one of them. She was then sent back, having strict orders to act with caution, and the man got from the canoe into the sea, and was taken up by the ship's boat and brought on board. He then stated in what manner he came there, and said he had another of his countrymen in another canoe. I said, if we could get some of the boats dispersed, that every assistance should be rendered for the liberty of the other man. Accordingly they did so, all but three. The ship's boat was then dispatched in search, and soon found the other men. He was brought on board, but in a most deplorable condition with fever, from the effects of a miserable subsistence. These two poor fellows were quite naked under a burning sun. They appeared to bear all the marks of their long servitude, and I suppose, two or three days would have been the end of the last man taken on board, but from this act of Providence. It appears that these men were wrecked in the ship "Mentor" on the Pelew islands and were proceeding with their commander to some Dutch settlement, in one of the Pelew island canoes when they got to the afore mentioned island; which has been confirmed by the different masters now at the port of Lintin.

The statement given in to me by the two men runs thus. That they were wrecked May 21st 1831 on the Pelew island, and detained on Lord North's island 6th December 1831. The two men's names are Benjamin H. Nute and Horace Holden. I should thank any ship master now in port, acquainted with the circumstances, to confirm it by his signature in order to make some provision for these men, should they require it. But from the disposition and liberality of those American Gentlemen coming forward, that are already acquainted with the circumstance, perhaps it will be unnecessary. At the same time I shall be very willing to draw up any form or in any way that I may forward their views, according to the opinion of their American friends. I should hope that every vessel passing in the direction of the afore-mentioned island, passing any of their boats, will give them a trifle. I gave them what articles those two men thought most beneficial, and should have held a closer communication with them had I been better manned and armed.

Never shall we find words to express our joy at once more finding ourselves in the company of civilized men! Nor can we be too grateful to Captain Short and his officers and crew, for their kind attentions during our passage to Lintin. Everything in their power was done to restore our health and strength, and to render us comfortable. On arriving at Lintin we found ourselves sufficiently recovered to be able to pass up the river to Canton. We remained there, at the factories, under medical treatment, until the ship Morrison of New York was ready to sail, when we took passage in her for our native country and arrived in New York on the 5th day of May, 1835.

For many years nothing more was heard of Tobi, and it was only from 1885 on that reports appeared now and then in the "Annals of hydrography and maritime meteorology" of captains who had passed by the island. They are superficial and portray the natives as quite a dangerous people. The first report is from Captain Kraeft of the German bark "Karl:"¹

"From the line we followed a northeast course, accompanied by a light inconsistent west wind which was frequently interrupted by strong gusts and rain showers; on December 13, 1882, we came in sight of Tobi or Lord North Island. At the time a light WSW breeze was blowing, with which we were doing an average of 4 knots. In the afternoon around 2 o'clock we saw a boat from the aforementioned island approaching us. At first I thought it might contain the crew of a boat shipwrecked in the area, and therefore steered toward it. All to soon I realized my error, for the vessel approaching us was a canoe with 20 occupants, seemingly unarmed. Immediately thereafter two other canoes appeared near us and all three circled our ship accompanied by the frightful noise of the occupants, who were totally without clothing of any kind.

They finally succeeded in catching hold of the safety chain of the rudder, and we had to resign ourselves to dragging along the whole horde, 63 strong, behind us. Armed well, we waited for the islanders to come aboard, while they were probably intending to delay this enterprise until the evening. At 5 p.m. an unexpected lively breeze came up, we cut the lines to the canoes and quickly sailed out of their reach. An absolute howling and a few rifle shots followed us, without the bullets reaching the ship. Since I was completely unfamiliar with this area, I at first suspected nothing evil, but was soon taught otherwise by the experiences described above; I would therefore counsel no one to intentionally seek out the area around Lord North Island. As I later learned, this island is inhabited by the cruelest population of the entire East Indian archipelago."

In 1888, Captain Jost of the bark "Augusta" reports.... from the journey from Cardiff to Hong Kong: (coming from the Asia Islands) "... the wind, though not strong, remained in the center of the northeast line, even registering ESE from time to time and a little livelier now and then, so that at noon of January 15, 1886 we reached 2° 9' N and longitude 131° 1' east, when the island of Tobi registered NNW1/2W, according to which our longitude should have been about 4' east. The current was still southerly and westerly, with a velocity of about 1/4 knots.

Shortly after noon we saw nine large, heavily manned sailing canoes approaching us from Tobi Island. In spite of all our cries, gestures and threats, the first three pulled directly alongside, so that we saw ourselves obliged to chase them away by force and then to turn to the southeast, entirely against our wishes, in order to wait until nightfall to sail northwards again between Tobi Island and Helen Reef-----.1"

Under the heading "Hostile Behavior of the Inhabitants of Tobi Island (Lord North Island)," an extract from the report of the captain of the German sailing ship "Columbus" was published² with reference to the previous reports from the Imperial Consulate in Hong Kong. On November 19, 1890 the ship was sailing through the Gilolo Passage and due to the warning reports of the previous few years was intending to avoid Tobi. Unfavorable winds, however, brought it near the island. The captain writes:

"... At daybreak on November 21, 1890 the island came into view. At 8 o'clock already two boats sighted. Because we were only lightly armed, the ship attempted to escape and turned westward. Light wind NNW. We hardly had our ship over the other bow when seven other vessels were within view, all of them now heading for us under full sail. - Since we were quite a distance from the island, we had a good head start, but several of the boats were approaching rapidly, so that by 11 o'clock we were already able to distinguish individuals in several of the boats; in the one nearest to us we counted 15 head. The boats most to leeward were now losing significant ground, though they continued to follow us, but six larger, heavily manned vessels still pursued us and had approached to within ½ a nautical mile when the island had already disappeared from view. Only at 12 o'clock, when the breeze also freshened somewhat, did all the boats turn back simultaneously and took their course back to the island. If I were now to suggest that the islanders were intent on piracy, one might be tempted to answer that after all, nothing bad had as yet happened to us; but it is hardly conceivable that ten large, heavily manned sailing vessels would have pursued our ship so determinedly, until their island was out of view, merely in the hopes of barter or curiosity. Rather, there is reason to believe that this band had approached with hostile intent. A particular ground for this opinion of mine is furnished by the statement of a man presently on board my ship, who relates that while on board a German ship four years ago, he too was attacked by the islanders near this island; they were only able to defend themselves against the band by force and after killing several of the natives with shots from their revolvers.

¹ Annals of hydrography and maritime meteorology, vol. XIII, 1885, p. 208.

¹ Annals of hydrography, vol. XVI, 1888, p. 391

Their main help, however, was a freshening breeze which enabled them to get out of their reach. Mercy on the boat that comes near this island during a calm ... "

This somber description, which reminds one of Holden's experiences-although of course no connection exists between it and that older report—would have to refer to an event from the year 1886, according to its mention of the time. There is however no reference to it in the Annals of Hydrography.

The description of the natives by Captain Walsen of the four-masted bark "Paul Rickmers" sounds significantly more reassuring. He was the first to have closer contact with them again, was able to give a better description than his predecessors and seems to consider the dire reports exaggerated. He, too, was voyaging from Cardiff to Hong Kong and did not intend to venture near Tobi. After the Gilolo Strait had been negotiated on February 1, 1898, the following events took place:

"... seven days later (on February 7, 1898) at 5 o'clock in the morning we found ourselves about 3 nautical miles west of Tobi. The current displacement in the last 24-hour period was however S 64° E, 9 nautical miles, so that we unexpectedly passed nearer the island than we had intended. During the previous days the current had averaged a course straight to the south: on February 3rd 21 nautical miles, on the 4th 34 nautical miles, on the 5^{th} 15 nautical miles and on the 6^{th} 14 nautical miles.... To get back to Tobi: it hardly seemed believable to me in this day and age that the inhabitants of this island, lying along a heavily frequented sailing route, would still dare to approach the ships with hostile intent, as is commonly supposed, and as is also reported on p. 695 of the sailing manual for the Indian Ocean published by the Sea Watch. I was therefore extremely curious to observe the behavior of the inhabitants. Our enlightenment was to come soon enough, for already at dawn, when the island was visible to us only as a dark shadow, our attention was caught by the cries resounding from the area between the island and the ship. With the night glass we then discovered a canoe fairly close by, whose occupants, accompanied by cries and lively gestures, were straining to reach the boat, which was sailing along at about 2 knots under a northeasterly wind. When day broke soon after, a further number of canoes came into view, powered partly by paddles, partly by sails. To be ready for any eventuality, I called all hands on deck to prepare for the visit; the donkey cauldron was heated so that in case of an attack the islanders could be welcomed with hot steam, which no doubt would have had a terrible effect on the naked bodies of these people In the event, however, this cautionary measure proved unnecessary, as the islanders were entirely harmless and peacefully minded; nor did they have any weapons with them, which after all would have been essential in order to wage any kind of attack with a chance of success. What they brought with them were coconuts and thin lines made of coconut fibers, which they wished to barter for clothing, biscuits and other items. They were especially eager for any kind of iron implements, knives, wire etc. As a cautionary measure, however, I did not allow any of the natives to come on board, since their number appeared dangerously large against our crew of thirty.

Little by little, thirteen large canoes had come alongside the boat with a total of 180 to 200 people, all men. However, when some of them had completed their trading and the greater part of the canoes had turned back toward the island, I permitted the islanders remaining alongside to come on board, since we were now more than a match for them. They in fact behaved calmly and modestly, marveled at everything like children and revealed through their behavior that they had the greatest respect for the white race, even signaling submission, as several of them kissed our clothing and our hands. The first canoes had arrived at the ship before 6 in the morning, and the last ones left only at noon, when a fresh gust of rain from the northeast made it impossible for them to stay alongside any longer. At this time, the island lay 10 nautical miles S. to E. of us, and was visible only as a low line along the horizon. Two of the young people seemed to feel little yearning for their island home; they had actually

hidden themselves on the ship in order to stay with us. The elders of the last canoe remaining with us, to whose crew the abovementioned two belonged, noticed that two of their countrymen were missing and brought them out of their hiding place, welcoming them with cuffs to the head and putting them back in the canoe, which then set out on its homeward journey. These islanders were similar to the Kanaks of the Samoa Islands in appearance, but did not have such robust figures as these; the tattooing on their bodies was similar, however. They were wholly different from the inhabitants of the Asia Islands, of whom we had had a canoe full near our ship when we drifted near those islands a few days before

The inhabitants of Tobi have straight and very attractive black hair which they either wear long and loose or tied up in a knot. They are no match for a typical European in size and strength. Among the nearly 200 men that came to our boat, most were of small, slight build; I had the impression of a degenerate race, although there were a few imposing figures among them. We took close to 1000 fresh coconuts on board; they had no other fruits. In addition, we took a fair quantity of their cordwork, which, as stated above, was made from coconut fibers, and was crafted so beautifully and evenly that a European ropemaker would have had cause for pride. Their canoes, made of a single tree trunk, were solid and well-crafted, and were equipped with an outrigger, mast and mat sail. They proved themselves quite seaworthy amidst the high northward swell and alongside the ship; the largest of them could hold several score of occupants. At 2 o'clock in the afternoon the island had disappeared from sight...."

From all these reports it can be inferred that no landing or visit on Tobi had taken place since the time of Holden, which is not surprising considering the bad reputation of the natives. Apparently the Spaniards, too, do not seem to have bothered themselves with this small, remote island. Nowhere is any indication about any kind of exploration to be found. Thus, the German visit on April 12, 1901 "for the purpose of flag-raising" is significant even for nonpolitical reasons, and the official report about this event is the first description of Tobi we have since Holden's publication. In all probability, no European ship had anchored there in the meantime—in any case, we have no reports whatsoever; only the possession of rifles (see Captain Kraeft's story) raises this possibility.

Regional officer Senfft describes the claiming of Tobi by the German government as follows:¹ "Already from a great distance a large number of large and small canoes, heavily manned, had rowed toward us; they swarmed around the ship ("Stephan") and followed it with loud cries and the constantly repeated call: "Very good, Captain, allright, Captain!" With effort, the chief was identified among a large, screaming crowd of Tobi natives and acquainted with the purpose of the visit. He proved very pleased about the intended flag-raising and led me to one of his two houses, in front of which possession was taken by the planting of a black, white, and red staff and the raising of the German flag accompanied by a threefold firearm salute of the police squad.

Tobi is a small island covered densely with healthy coconut palms; it is thickly populated by well-nourished, large and strong men and well-grown, graceful women. Numerous children bespeak a healthy strain of people; I estimate the population at 500 to 600 head. By and large, they speak the same language as the inhabitants of the eastern and southern islands of the area, though with great differences in dialect, and according to a statement of the Malayan police sub-officer, they are very similar to the inhabitants of the large neighboring Molucca island Almaheira (Gilolo). A relatively large proportion of the Tobi natives was furnished with clothes; the remainder, as customary also on the southern islands, had their bodies covered only by a narrow modesty belt for the men, and for the women, by a short stiff mat. The houses are built in the same slapdash way as those on the islands of Merir, Pul and Sonsorol, and here consist only of a large gable covered with coconut fronds; the hearths are in the huts.

llag raising on the island of Tobi and Helen Reef. (Western Carolines). Report of Regional Officer Senfft of Yap." German Colonial

¹ Annals of hydrography and maritime meteorology, 1898, p. 209ff.

Newsletter 1901, p. 559.

Besides the dwellings, there are many sheds on the land which serve to protect the numerous, strongly built cances from rain and sun. The Tobi natives make high-quality rope, wooden bowls and boxes, of which I received some in trade. They had a very lively desire for tobacco. I took a few people along to Yap; if they prove themselves as workers, Tobi would be a suitable recruitment location for smaller plantations in the Carolines, and thus significant in this way also."

In 1906 the regional officer for Saipan, Fritz, undertook an exploratory voyage to Tobi on the "Seestern."¹ The population, encountered five years earlier in such good health, had become totally wasted through a famine resulting from a devastating typhoon. The same kind of misery described by Holden somewhat more than seventy years ago had set in, and most likely the population had had to go through similar circumstances more than once in the meantime. Captain Walsen, too, received the impression from the people of a weakened population.

"On December 17, 1906, the "Seestern" is positioned near Tobi....Tobi, too, is a reef island, consisting of washedup sand and shell remainders on a base of coral and hard sand, glued together by living organisms. There was no spot to anchor; landing a boat, too, is difficult. During low tide, the flat-bottomed canoes can pass over the edge of the reef, while boats cannot. We had to wade through the shallow water to get to land. Numerous canoes, similarly shaped to the ones described above, came to meet us. The occupants, yelling and waving, offered their native wares for exchange: coconuts, lines and ropes made from coconut fiber, coolie hats made from thin tortoiseshell, carved figurines. The cries of "allright" and "very good" indicated to us that we had reached the military road of pidgin. Early the same day we noticed a large steamship.

The land was swarming with people. Under the assumption that the entire population was gathered there, I estimate their number at over 1000, among which were innumerable children of all ages. But what people, what children! Such skeleton-thin poor creatures consisting literally of skin and bones; I could never have imagined such screaming, hungry misery. And along with it, dumb, ugly faces, dirt and stench. Their skin color is a dirty yellow. Many men and women were stunted and wasted like dwarfs, while the greater part was of medium stature. The black, straight hair, the wide, bony faces with their dull expressions reminded me strongly of the Indians of South America. This impression was later strengthened, when I was able to observe a larger number of these people in their apathy on board the "Seestern" for days at a time. Of course, they are not related to the Indians, but reckoning from their character and appearance they are not related to the Caroline natives either. A weak strain of Caroline blood may be present nonetheless. The language of Tobi is no longer the same as that on Sonsol and Merir; my Saipan people were not able to communicate with them. Striking, too, was the presence of a number of strong, well-nourished, even fat men, clearly of noble and wealthy status, perhaps a ruling caste of foreign lineage.

I had them perform dances, in which especially the corpulent people participated. Men and women faced each other in two rows each and moved their bodies and limbs to the rhythm of their singing, sometimes standing, sometimes squatting, without otherwise changing their position. Apparently, dance and song serve cultic purposes; for before it began, several people gathered in a large house. The crowd in front of the house kept silence. Suddenly, a man walked rapidly through the crowd, which fearfully parted for him, toward the house. His gaze was fixed on empty space, and he snorted audibly through his nose. A while after he had entered the council house, everyone came out and the dance began.

As on Sonsol, the clothing of the men consists of a narrow band; the women wear short skirts of dry leaves. Children go altogether naked. The women adorn themselves with black-and-white belts fashioned of nine rows of small, rounded platelets of coconut wood and shells held together by crossbars of tortoiseshell, arm rings of tortoiseshell and mother-of-pearl, and necklaces of filed-down shell closures, the violet, porcelain-like limbs of the sea urchin, or peculiarly stylized tortoiseshell fishhooks such as are also worn on Oleai. The natives craft very high-quality ropes and lines of coconut leaf: a professional rope maker could do no better. Moreover, they offer peculiar white-painted figurines for barter: men with hats and pipes, a complete steamship with compass, tiller, signal horn and other details—crude works that nevertheless bear witness to keen powers of observation.

The meager huts are located on the beach and, like their surroundings, are very dirty. The island is ringed with a broad belt of numerous coconut palms. However, they grow too densely and bear only meager fruit. The interior of Tobi revealed to us extensive, carefully planted fields of taro and batata. In order to provide the taro plants with the necessary continuous ground moisture, large areas had been dug out to sea level, with the removed earth piled into hills and reinforced with rows of stones. For the rest, I noticed a type of Pandanus plant with edible fruit, beautiful *Calophyllum* trees, and chickens, but no dogs or sheep. All the plantings bear witness to industriousness, a certain intelligence, and overpopulation. My question of whether there was enough to eat for so many people was answered in the positive: they said that now there were coconuts again and enough food. I could not get any more out of them. I do not think I am wrong in supposing that the epicenter of that typhoon of 1904 passed between Merir and Tobi, stripping the coconut palms of their blossoms and fruit set as happened on Saipan in 1905, so that they have only just recovered. Thence the horrifying figures of famine, the numerous children's graves we encountered in the midst of the dwellings: graves sprinkled with corals and white sand and covered over with a small low roof.

I pointed out to the people the misery in which they were living: they should come with me to Palau, Yap or Saipan. There they would receive land, and there is food in abundance for all. I particularly wished to take the poor children with me. Forty-eight men followed me; I saw that some came secretly and against the wishes of their parents or masters. No children came, and only two women; but I had to pay eight bars of tobacco for each. It is high time that as many of these decrepit people as possible be removed from Tobi. It is a rescue operation. One failed harvest, one storm that damages the coconut blossoms, the introduction of scale insects (which, by the way, I did not encounter there) would condemn the greater part of them to death by famine. These weakened bodies would surely succumb to any imported contagious disease. Therefore, I promptly asked the governor to transport as many people as possible from Tobi to Palau or Saipan on board the "Seestern." Still on the same day, the "Seestern" sailed back via Sonsol, where we took on another great number of natives, so that there were finally 114 men and 73 women on board. Of the Tobi natives, 39 remained in Yap, along with natives from Sonsol. Some are working for the regional office; others were hired as workers by Europeans. 10 Tobi natives are following a Spanish colonist to Saipan on January 15, 1907 as workers.¹"

The Spaniards, who learned the names of Pur and Merir on their first visit to Songosor, did not receive any notice of Tobi at that time.² **P. Cantova** is the first to mention the name **Cadacopuei**, without doubt the native name for Tobi, but he mistakenly applies it to the southern island of Songosor, Fana. Presumably he got this information from transplanted Oleai natives, and it remains an open question as to whether he was wrongly informed or applied the new name to the known St. Andrews Group of his own accord.³

2. Name

¹ Report of Regional Officer Fritz, Saipan: A voyage to Palau, Sonsol and Tobi. Oct.-Dec. 1906. German Colonial Newsletter 1907, p. 666.

The last paragraph is from the German Colonial Newsletter 1907, p. 668.
 Somera's diary, Velarde and Juan de la Concepcion, Vol. I, p. 3ff.
 Lèttres Edifiantes, Paris 1723. Cantova writes Codocopuei, Chamisso, following Edok, Katogobui, and following Kadu, Kathegube. In the geographical handbook of Plant Leipzig 1799II the accompanying map reads Codocopuei-Current Island (!) The Spaniards Coello and Vidal write Cadocopuey, and Keate goes even further with Cadocapuéé. In the most recent British and American sailing guides, the word has mutated to Kodgubi (see bibliography).

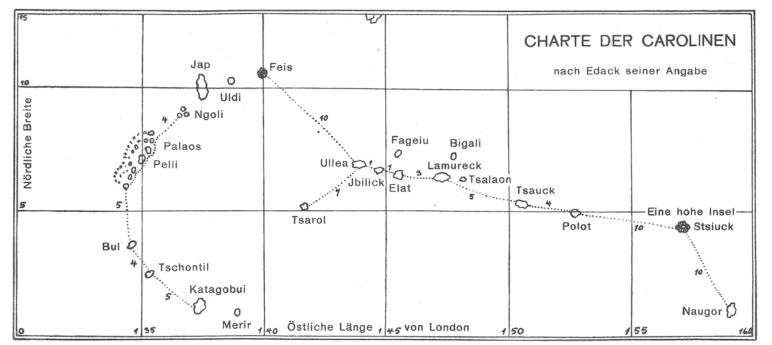


Fig. 3 Chart of the Carolines

In any case, the mistaken attribution made its way through many maps and sailing guides, standing its ground for a very long time and increasing the confusion over the identity of this small island. Cantova's statements were so strongly relied upon that Chamisso¹ rejects the significantly more accurate information of the Oleai native Edok in its favor. This man had claimed that Katogobui lay 5 days' voyage southeast of Tshontil (Songosor), "but," continues Chamisso, "this man cannot really carry authority in this matter concerning islands that he himself has never visited." Now the map to which this remark refers is not at all accurate as regards the four islands Songosor, Pur, Merir and Tobi. Neither the orientation nor the distances are correct, but the position of these islands relative to each other makes it perfectly clear that the natives never thought of considering Tobi a part of Songosor, but rather an island at quite some distance from it.² Furthermore, the actual name is simply Togobue. The Co or Ka at the beginning is merely a prefix, apparently a particle indicating direction, which was mistakenly taken for part of the name by the Europeans. Even today, the natives of Merir and Songosor say "...ga toui" to describe an object imported from Tobi, i.e. thing from Tobi. The conclusion from all this is that the correct name for the island was known from the beginning, and that it was simply consistently misapplied. Chamisso's reports also indicate that it was known in the Carolines, and that the small island cannot have been entirely forgotten and removed from all traffic.

The pronunciation of this island's name is hotly debated: the American sailors on the "Mentor" heard and wrote simply **Tobi**, as is indicated in most of the sailing guides. The participants in the expedition heard it differently: A. Krämer: Togóbei and Tógobei; Hambruch: Touuvei; Hellwig: Tochuwui, Towin and Tobin.³ The frequently observed shifting pronunciation among the natives may play some part in the variations. Without a doubt, the stress is on the first syllable, and its o is long and perhaps disyllabic. At times, a weak ch or g seems to be inserted. This is not noticeable when spoken or heard rapidly, and thus it is understandable that in the official

German reports, "Tobi" is regarded as a perfectly correct transcription.¹ It should also be mentioned that the tone on the disyllabic o in the first half of the word sometimes rises and sometimes falls, according to the whim of the native speaker-which would have further confused the Europeans listening. Thus, Tochóbì exists side by side with Tóchòbi.²

The various "discoverers" also endowed the island with a substantial number of foreign names: in 1782, William Hambly called it "Lord North" after his ship; in 1789, Captain Joseph Dorin of the "Duke of Montrose" called it "Neville" Island, changed to "Navil" Island by Robertson; and in 1882, Captain Douglas of the "Iphigenia" called it "Johnstone" Island. Carteret himself never gave the island a name; but following his report, later editors called Tobi "Evening" Island or even "Peakedhill Island"—the first name after the time of day of the discovery, the second after the island's main characteristic.³ Of these foreign names, "Lord North" has asserted itself most strongly, and with some justification, since it is the first name given to the island by Europeans.

Location. The very conflicting reports about the location of the island were the reason why no one realized for so long that all the various names referred to one and the same island.⁴ Often, the location is given only in relation to Merir, as in the German South Sea Handbook. The last official mention is from the British sea map of 1933, which is based on a publication of the Japanese government. According to this, Tobi is located at latitude 3° 50' 00" north and longitude 131° 10' 37" east. The following overview gives the various measurements published over time:

Latitude N.	Longitude E.	Observer	Remarks
2° 50'	136° 10'	Carteret	Nov. 28, 1767 "SWALLOW"
2° 54'		Woodes Rogers	Apr. 10, 1710 "DUKE". In the Dutch edition, "Breete van 2° 24' 24. N."
3° 2¾'	131° 20'	William Hambly	January 1782 "LORD NORTH"
3° 11'	131°12'	Douglas-Meares	Mar. 10, 1788 "DUKE of BRISTOL"
3° 3'	131° 4'	Krusenstern 1819	p. 114
3° 2¾	131° 20'	Horsburgh, 3 rd Ed.	1826 "by mean of six ships' lunar observation." Capt. Seton of the ship "Helen" indicates 132° 4¼' (13¾ miles west of Point Pigot). According to Wichmann, however, he only saw Helen Reef. Similarly, in 1812 the ship "DORSETSHIRE" only passed by Helen Reef,
3° 2'	131° 10'	"DORSETSHIRE"	but not Tobi as Horsburgh indicates.
3°-4°	131° 20'	Holden 1833	
3° 2¾'	131° 4¼'	Rosser 1870	According to Capt. Seton of the "HELEN".
3° 1'	131° 7'	Rosser 1870	newer measurements
3° 8'	131° 8'	Findlay 1870	

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3° 1'	131° 7'	Rosser 1870	newer measurements
3° 8'	131° 8'	Findlay 1870	

364, who does not quote his source.

2 a = high tone; a = low tone; a = middle tone. After Hambruch. cannot be a candidate, since the Sequeira islands are explicitly described as "high islands."

3. Geography

1 The South Sea Handbook V-VI, p. 62, has Tobi alongside Togobei; among other names, it also has San Carlos, a name presumably added by D. Felipe Tompson, who is also supposed to have seen Tobi (1773). This information is apparently taken from Meinicke, op. cit. II, p.

¹ Kotzebue, Voyage of Discovery 1815-1821, vol. 3, p. 104.

² Kotzebue, ibid., vol. 2, p. 88. This map was drawn by the Oleai native Edok. According to Chamisso's indications, the distance in days was added by the native Kadu from Oleai, who was Edok's companion in suffering. Both had been cast up on the Marshall Islands from Oleai

³ Hellwig: Diary of the Expedition, p. 203.

³ As Meinicke indicates, II, p. 438, Carteret has this name on his map. In Hawkesworth I, 1772, both in the text and on the maps, this is not confirmed. - The name "Evening Island" is found in Arrowsmith, Hydrographical Chart of the World, London 1812.

⁴ Thus, Burney took the island discovered by Carteret and Woodes Rogers to be two separate islands (op. cit. V, p. 23ff.) On the other hand, Krusenstern identifies Carteret Island with the Neville Island of Dorin from the Duke of Montrose. (According to the essay of Eyries in Nouv. Annal. des Voyages, p. 171, 1842/II. R.H. Major, in his work Early Voyages to Terra Australis, London 1859, p. XLVIII, attempts to identify Sequeira Island with Tobi, an attempt which is thoroughly rejected by Wichmann in Nov. Guinea I, p. 17. In this controversy, the researchers generally did not pay sufficient attention to the route of the Spaniards, or to the distances covered. In any case, however, Tobi

3° 3' 3° 2'	131° 4' 131° 5'	Findlay 1886 Pacific Islands 1890, 1908	
3° 2'	131° 11'	H.M.S. "PALLAS" 1894	
3° 1'	131° 9' 0"	D.S. "PEIHO" 3. 9. 1909	
3° 02'	131° 05'	Pacific Islands Washington	
3° 03'	131° 05'	1916 Pacific Islands Washington	
3° 00' 50"	131° 10' 37"	1928 Brit. sea chart 1933	A

According to information from the Japanese government

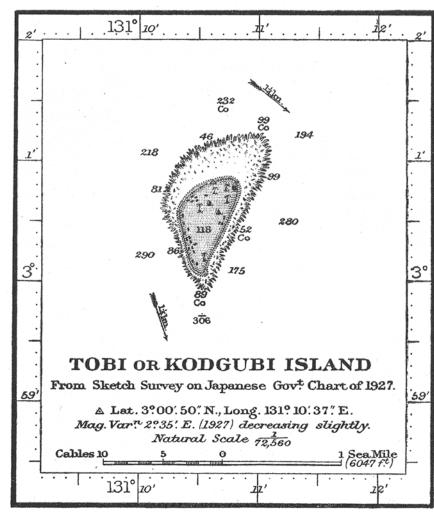


Fig. 4.

Hambruch described the atoll as follows: The island is coralogenic and concave-convex in shape. It is surrounded by a reef that is narrowest on the western coast, widest in the north, less wide in the south and east. It drops off rather sharply. At low tide, one can step directly up to the steeply descending edge of the reef. The flat reef falls off to the steep reef edge via a step that is approximately 11/2-2 m wide and 1/2 m tall. The reef consists of cemented reef lime, which is also the basic material of the whole island. A layer of sand, deeper inland, covers the parts protruding above the water. The sand is quite coarse-grained inland, especially in the upper layers, while on the beach it is fine. The island's elevation above the high-water mark is about $1\frac{1}{2}$ to 2 m; near the taro fields

the elevation has been artificially increased up to 10 m. While it is possible to discern a beach embankment, it is wide and its inland depression is hardly noticeable; in some places, especially in the taboo grove getik, it is clearly recognizable. The sand beach varies in width. On the west coast it measures about 10-15 m, at the northern tip 50 m, on the southern tip 60 m, and on the eastern side $\frac{1}{2}$ -5 m. Here, the beach falls off steeply to the reef $\frac{1}{2}$ m below, while on the west coast, the beach and reef gradually merge. The currents, which move westward, have deposited very many stones on the northern and southern tip; the east side is richer in stones than the west side. At favorable times of year, it is easy to land here, while during the southwest monsoon the strong surf makes it impossible to land. In this case, it may be possible to make land on the protected eastern side.

Seen from the sea, the island appears to be entirely covered with palms; in reality, only parts of it are. A belt of varying width containing settlements in the west and mixed with dense bush in the northern taboo grove encircles Tobi. Continuing inland, one finds a narrow belt of high deciduous trees, and the middle of the island is taken up by taro fields. In the north of the island there is an arid stretch of sand, poor in vegetation, covered only with meager ferns, in all probability old deteriorated taro fields. It occupies the space between the taboo grove and the current taro fields.... It should be mentioned that the block enclosures to be found everywhere on the island are artificial and originated as field markers of abandoned sites. For it is native custom to mark the boundary of individual fields with coral rocks....

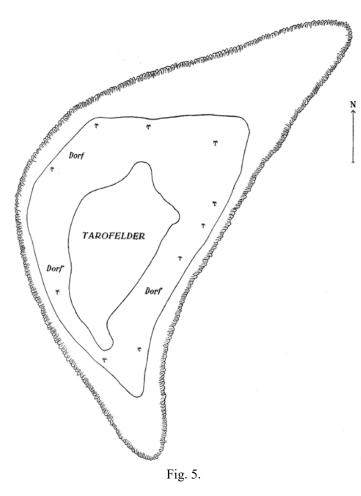
This description accords very well with the ones familiar to date. The dense tree cover drew the notice of all passing ships. Tobi's trademark feature, as it were, the "sail-like tree" or "peaked hill" mentioned by Carteret and Douglas, had disappeared by 1854.1 The island, which is extremely flat, is visible from a distance of about 12 nautical miles. Only Horsburgh mentions a distance of 4-4¹/₂ miles. The reef protrudes sharply to the east at the northernmost tip of the island. According to the 1933 reports of the British Admiralty, it juts out toward the north about 41/2 cable lengths into the sea. Holden estimated its total extent to be 1/8 to 1/4 mile. According to Barnard, it lies at a distance of about 1/2 mile from the island. According to the measurements recorded in the latest British sea chart, the depth behind the reef measures 46 and 52 fathoms at the shallow points and close to 100 fathoms at other spots. Very close by, however, depths of 200 fathoms can be found at sea. There is no anchoring ground, but ships can approach to a distance of a quarter mile. The canoes of the natives are able to pass over the reef if the water conditions are favorable; this is not possible for other boats. Generally, it is necessary to wade over the reef, as Holden and Fritz discovered for themselves. The current near the island measures 1¼ knots in a southeast direction, according to the reports of the British Admiralty.

Douglas was the first to estimate the size of the island. He gives the circumference as about 1 mile. Barnard and Holden, who had plenty of time to estimate or measure it, both mention a length of ³/₄ mile and a width of ¹/₂ mile. All the later British sailing guides agree on "an extent of 1 or 11/2 miles in an ESE-WNW direction." The South Sea Handbook also quotes these measurements. Hambruch estimated the area of the island to be 1,200,000 square meters total. Of this, 200,000 square meters are taken up by the settlements; 250,000 are covered with brush, including the arid sand fields which measure about 20,000 square meters. 300,000 square meters are covered by coconut palms (4 trees per 25 square meters), and 450,000 with taro fields.

During the sojourn of the American sailors in 1833, there were many severe earthquakes. The destructive effects of the **typhoons** are enumerated in detail by Holden and the regional officer Fritz. Certainly there would have been other such catastrophes visiting the island besides the two made known by these men; this would also explain the varying impressions made by the natives on the sailors: wretched and decrepit after typhoons, healthy and hale during good times.

mented by the captain of the "Cordelia Beran," whom Horsburgh cites.

¹ Horsburgh, loc. cit., moves the tree to the center of the island, while the others saw it in the east. Its disappearance is apparently docu-



The fauna of Tobi is as monotonous as on all coral islands. The only native mammal is the rat. It was found there already in Holden's day, who believed himself to be the first white person on the island. Dogs, pigs and cats-Hellwig saw a few tame cats-were introduced later. The single dog found on Tobi is said to have died. No pig stalls were to be found on the island. Strong winds from any direction frequently bring in flying foxes. The natives prize them as food: the flesh is baked in coconut shells. They value their chickens highly and keep them in special huts. Apparently, wild birds are not very well represented. In Holden's time, only isolated examples found their way to Tobi's beaches, but Krämer was able to list several species represented: kingfisher, Phaeton, Gygis (tame around the dwellings), Anous stolidus, the black and the white noddy, and a few of uncertain zoological designation whose native names are listed in the word list. The most frequent shorebirds are plovers and snipe or godwit.

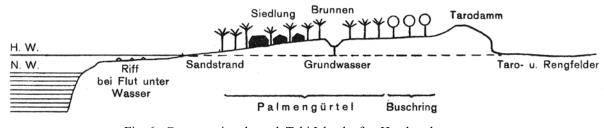


Fig. 6. Cross-section through Tobi Island, after Hambruch.

In addition, the Tobi natives distinguish two birds dwelling exclusively on the land, the *kohorian*, which is 5-8 cm in length and which is "not always present," and the *sauechau*, which, however, does visit the beach. The reptiles seem to be represented by a species of sea snake, of which nothing could be learned except the name. Holden mentions lizards along with rats as representatives of large animals. The turtle is highly valued. It apparently is not in plentiful supply at all times, but seems to be prevalent enough so that the expedition found three houses devoted to the cooking of these animals. Among sea animals (see the word list), the octopus, flatfish, *ligosobir* and *siefaga tsairen* are subject to particular culinary laws. This last is a small black or black-and-white-striped fish found in the reef lagoon and is said to be fatally poisonous even to birds. Of the remaining fauna, insects, only the names are known. The presence of scorpions is uncertain.

		names. ¹	
four-footed animal	marira	dog	<i>biris, piliz</i> Ham.
pig	peik	cat	moio
fur	hüra	tail	oger
beak	<i>iovar, iouvar, iauar</i> Ham.	feather	<i>ürar, ügür</i> Ham.
claw	<i>farar, kir</i> Ham.	wing	<i>baur, e'ir</i> Ham.
chicken	<i>gogo, goga</i> E.K. <i>koko</i> Ham.		<i>merimar, maru mar</i> Ham
hen	<i>meri feivir, maru faifil</i> Ham.		rair, batsik, rauri koko
kingfisher	tagasik	sea snake	rabut
Phaeton	sök	Gygis	giegi
white tern	<i>girkin</i> He.	Anous stolidus	kirigag, chirigach He.
sandpiper	girina He.	white seabird with long wi	
heron	<i>gagao, chachaut</i> He.	white heron	gagaubes
black heron	gagaitsor	plover	kirin
snipe/godwit	riengak, likeripoupor	land bird (general term)	miri
	long, dark plumage and light br	east, comes for 2 months (I	He.) kohorian, kokoria
migratory bird of prey the	1		
bird	<i>mar, kar 'rum</i> P. <i>karam</i> = sea	-	
egg	tsekai; tsagai E.K.; tserai Ha	am.	
sea bird, also comes ash			
flying fox	uarik, rebolel, mesu, mieg g	-	
rat	kes, gatsetsik, tum meeum P.		
lizard	galuf (only Yap) Ham; limai		
green sea turtle	uor, üor Ham.; wah 'ree P., H		
fish	<i>ik, hik</i> Ham.; <i>ee 'kah</i> P.	scales	<i>uörar, urara, hürar</i> Ham.
fishbone	<i>tser, tunur</i> Ham.	gill	tsivogar
air bladder	ugoug	dorsal fin	<i>ingir, ingi ni uor</i> Ham.
tailfin	<i>betsar, ingi paitar</i> Ham.	pectoral fin	paür
ventral fin	<i>sifir, ingi e far</i> Ham.	anal fin	ingisiar
whale	gas A.K., kahs P., kas Ha.	coral	rangit
large belone	mag	small belone	gafereiika
Mullus	sou	Caranx	ragan
flying fish	tor, gataf	beetle	kokorun
octopus	charechita	sepia	ngit
flatfish	libeg	unknown species	bub
small red fish	mataitsa	large red fish	mos
Exocoetus	magag	Mugil	iaak
shark	bagou, bochou; pocho He.; p		<u> </u>
Without indication of sp		gor, geniki, kio, mar, lipau,	isepotam and nmagabu
-	sh in the reef lagoon, very poiso		4 - 4
hermit crab	umen	jellyfish	tat, rimoton
1. crab, 2. edible crab	1. gagum, 2. hakum, hagich		n anim au
nautilus	<i>amageber</i> Ham.	sea cucumber	periper
sea urchin Tridacna alam	rag howitag	shell	sak Ham.
Tridacna clam Trochus shall mainly or	bonitog	pearl oyster	padageünan Ham.
Trochus shell, mainly or	00	a <i>kikoi</i> of similar type that	
snail limestone	uungne fasinatat	lime butterfly	betse chabek gabuek
limestone	fasinetet	butterfly	chabek, gabuek
fly	ran, uets Ham. lahng P., lan		ram, lahm P., Ha.
louse	kös, kus	scorpion	sasaribon, ero sunepon

1 Unless otherwise noted, all from A. Krämer. Hambruch (Ham.) obtained several terms from a thirty-year-old Tobi native living on Yap, Iaraua me soa. The words from the seaman Holden given by Pickering (P.) are given according to the spelling of the original (Holden, appendix). Ha = Hale, He = Hellwig, E.K. = Elisabeth Krämer. Hale's transcription has been adapted to the one used here, because it consisted mostly of upper- and lowercase Greek letters as well as a number of invented symbols, which would have necessitated a cumbersome explanation and made printing more difficult. Hale's very thorough differentiation of the vowels made it necessary to transcribe the a sound, not noticed by the German researchers but according to Hale like the sound in "but" and "burne," as α .

Ham. spider	sinerisebagaga	spiderweb	lusa bagaga	Scaevola
millipede	lipagar, diparar	cockroach	koharu	Hernandia
taro water beetle	marikir Astraea basingek	grasshopper	manivetiri	Trionfettia
dragonfly	otsapi	cricket	ngungupa (chirp)	banana
	Flo	ora		hibiscus
TI 0				taro
	-		as successful in recording the names	wild taro
-	=	e plants in another pla	ace to the extent that they play a role	types of taro
in the household of the r	natives.			V1
	List of plant species and	l names after A. Krän	ner.	
herb	zochudat Ham.;			sweet potato
small plant	batsitsik i teberil	ka; tirigät Ham.; wav	v'ree	Тасса
bush	<i>pipi iar</i> Ham.;	C .		Crinum
tree	teberika; tarapa	Ham.; tummutch 'ee	Р.	grass
tree trunk	tabur 'rah eek 'ah	<i>ı; tamatsi</i> P., Ha.		Pteris, bracken fern
leaf	ön, un, ün Ham.			moss
seedling	sieboro			bamboo
twig	<i>gar, char</i> Ham.			cumoro -
bark	kien, chin Ham.			
root	uagag, uachagar	^r Ham.		
thorn	kangitsir			open sea
seed	bekien			reef
resin ³⁵	bun			reef edge
Calophyllum resin buni safan				reef plateau
shell, rind (coconut) peian, paiian Ham.				shallow water on the reef
blossom	tororo			beach
fruit	uar			lower beach
decayed wood	igai			middle beach
grassy area under palm	ns nimeretak; uore	= grass Ha.		
forest	fariuorüor			upper beach
taro field	bannuot			land
palm	<i>ün e pan</i> Ham.			water
Cycas	<i>lui arigets</i> Ham.			salt water
nipa palm	<i>nipa gar</i> Ham.			brackish water
coconut palm	<i>rög, duch</i> Ham.			water hole
palm juice	ati, asi He., boile	ed juice <i>ito</i> He.		rain rivulet
breadfruit	bukeriäu, mai E.	K.; <i>ual</i> Ham.		fire
Terminalia	geisas			smoke
fruit	kiri			ash
Thespesia	kirifoi, silivo			firewood
sago palm	perem Ham.			sky
Ficus	kirio			air
Eugenia (Malay apple)	fariep, rebotel			horizon
Fagraea	gug			cloud
Wedelia	ietiel			rain
Casuarina	dou			it's raining
Pandanus palm			hose fruits are eaten raw) man	rain cloud
		ole for mat weaving.	E.K.)	fog (over the bush)
Cerbera, poisonous pla	int <i>moa</i>			dew
Pipturus	iegoma			
Derris, vine	uorimag			1 P. = Pickering.

not gotsar gagagag (they like to use the blossoms as adornment) *uits* (is supposed to have washed up in olden times) girifag E.K. uot, uod E.K., Ham.; molok Ham. *pula* or *burago* (only one type found) morig, ba (term for wild taro with stem), bamogu, uota gangagan, uet enen, gugug, uote rimagau, tauakiag, uota ngingaginga, anöri, iaigimog, tokomei, bagueri, diuaigan, bagagan tomuto, mongaueri E.K. mogemog kiop fatir, uati, vateri E.K., fatig Ham. kamagag, amagag, dzidzi E.K. rum baubou; sheeb P.; tsil Ha.

Expressions for the environment after A. Krämer.¹

metau ahrah'oo P.; raü Ha. iakiag aurun uorimet votsimarinam; pi He.; rau Ham. metaripi votokorima matari baraki igaut tsar Ham.; tah'roo P.; taru Ha. tat, dat Ham.; taht P., Ha. ielat gar eaguei *iaf* Ham.; *yah, yahf* P. buogorief, buochor Ham. uaran, faral Ham. vavi, fafi ran *ian* Ham. fari kepinen maniren, rain Ham.; kotcho P. katso Ha. ut, üüt He.; oot P. iogeruk He. gutsou rangerifoi eamokoribon

wind een, iiein Ham.; yang P.; ian Ha. trade wind ean eri gotuvafen eangian monsoon storm bagasarien, fas Ham.; pee pee oot P. (much rain) thunderstorm, thunder *bag, pah* P., *nepa* Ha. lightning fisier, vizik Ha. rainbow akim (rigim Yap) rabatut, dauü Ham. wave breaker rao, pungunau incoming tide bukuron high tide iekirab, bukonioitsik outgoing tide, decreasing tide eafivoi, vou, mesauoir (E.K.) low tide ietsingtsin neap tide tativocharach spring tide bukaroik swell roroparap ear; iaro He., E.K., Ha.; yah'ro P. sun *morikar, iagagatek* (E.K.) sunrise moribon, turon (E.K.) sunset shadow iaungar, ual Ham. noonday sun otaran E.K.; aeik iorou nikari E.K.; lenei Ham. day nimarier, e nemariet Ham. morning iaik E.K.; otarei Ham. noon nivagaf E.K.; tapar Ham. evening night ngibon, morubon E.K.; iaboin Ham.; neebo' P. midnight rükereparibon E.K. darkness klo wayzer 'ris P.; kluuaizaris Ha. seu masirap (1st year) E.K. kuou masirap (2nd year) sauiefen A.K. year month macham ienegogar E.K. dry season north iefen ioik, ieög Ham. south irotou. iliatau Ham. west iruk feteg E.K.; iruch Ham. east magam E.K.; meraun E.K.; melam Ham.; muk'kum P. moon ringetogor E.K.; eiougmelam Ham. new moon full moon natu, manirin Ham. megem Ham. waning moon waxing moon zaneigito Ham. vis, fis E.K.; fis Ham.; vish P., Ha. star *igaut, mesal* Ham. ground taro field soil metsok land farik taro field nibor path iar. otatar Ham. rise, hill hoha island farik, farüi Ham.

sand stone black lava sandstone pumice stone salt

According to Hambruch's observations, the population lives in eleven clearly separate sites that are nevertheless considered one common village. In the time of Holden, the Tobi natives inhabited three villages. Now as in the past, the houses are densely crowded together near the beach under coconut palms.

The sites extend from the southern half around the southern tip of the island to the midpoint of the west side; the largest single site in the southwest can be considered the heart of the village. Among its numerous buildings are the two spirit houses, the houses of the head chief and the women's houses. On the side of the settlements that faces inland there are numerous wells, dzor. Hambruch counted 13 of them. They are funnel-shaped water holes, very carefully lined with stones, the center of which is formed by stone plates standing on end to form a square. Behind these the deciduous forest, containing four farms belonging to the natives, begins.

The taro fields lie beyond. They lie lower due to the earth having been excavated, and are surrounded by an embankment that is 10 m high in places. Smaller berms run through the entire area, which is divided up into smaller fields. The larger berms have their own names. According to Holden's description, after the great storm flood he and his companions had to build a dam that was to protect the palms from further damage in the future. Nine of them worked on this project for several months, building it up using coral blocks. One is tempted to identify the high taro berm as this work, but his remark that the berm was meant to protect the palms-which are located in front of the taro fields-from flooding by the sea does not support this. Besides the taro field dam, Hambruch mentions a beach berm that seems a bit too low for the months-long labor of the sailors, unless it was taken down again later or destroyed by the sea over time. Hambruch writes: "a sea wall is discernible, but it is wide and its depth is hardly noticeable on the inland side; in a few places, especially in the taboo grove getek, it is clearly visible." In the area of the taro fields there are a few small houses that serve to store the harvest.

include the following sites:

- 1. *uangito*,
- 2. garingemog, farikir, fagep,
- 3. vanimagat, farebugik,
- 5. matari ferigasafa, materi feri bugos, 6. matari gevitsi.
- 7. matari feri burau, beioog, legutauuamets, aperifer
- 8. auarei, venaigeg,
- 9. matari kesa, mesarug,
- 10. rukurarimar,
- 11. fare mesusur.

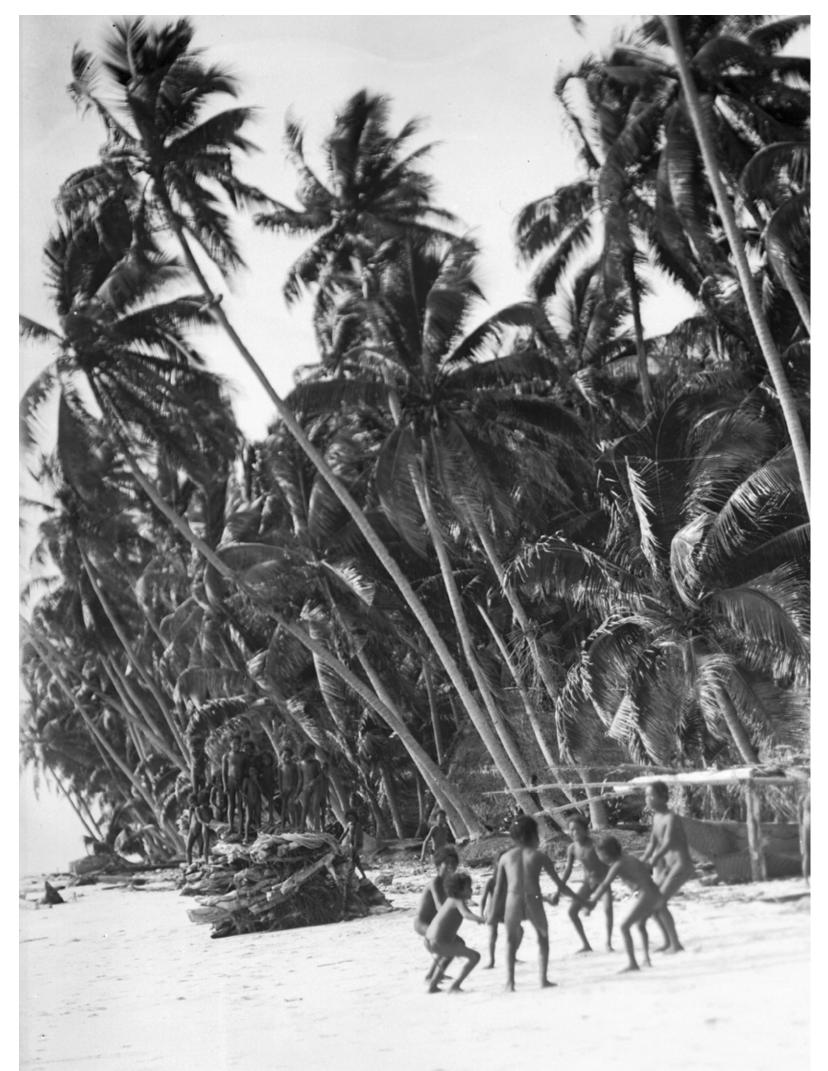
The last four sites are located on the eastern coast, which contains the most abandoned settlements; the remainder

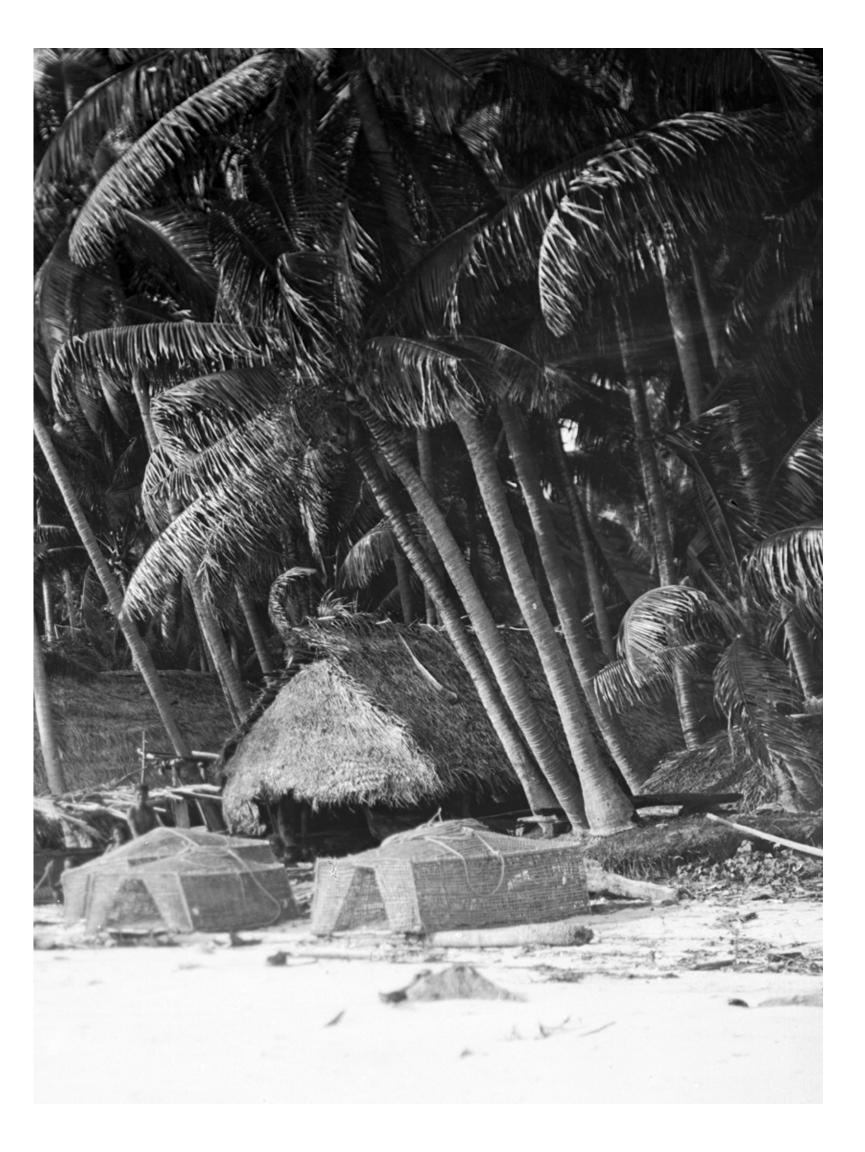
bi, pich Ham. fas, ba E.K.; faz Ham.; vahs P., Ha. fasitsör ieton uari maragagau

4. Settlements

The natives distinguish sections of the island according to their orientation: the eastern part is *irig*, the western part metag, the northern part iefen, and the southern part iog. The eleven inhabited settlements counted by Hambruch

4. fari mekeriasarau, nugeriviripis, materi feniaro, vatoberig, siarubau, fanurigerau, rikeruvongera, matari fenieran, matari feri samag, matari fitogan, mauer, matari maripar,





Canoe house with fish traps and boys dancing on the SW beach. Glass plate scan, Hamburg Museum.

are in the north of the island. Between the sites *materi maripar* and *matari feri gasafa* lies the strange **children's cemetery** *lepei*. Here, infants who still lacked teeth at death are buried.

The names of the abandoned sites in the east are *legusoboripi*, *vorikerifoi*, *meseoro*, *rogutsari*, *matane sirei* and *vorieran*; on the western side and in the northern part of the island *matari betsur*, *dauer*, *matari songorogo*, *raniere tirotsovet*, *ifageue* and *vaniborivatsa*. According to Krämer, the eastern six and latter four in the west belong to the area of the taboo grove *getek*. Hambruch has them located further south, probably due to a misunderstanding. On the sketch of the settlements they are corrected

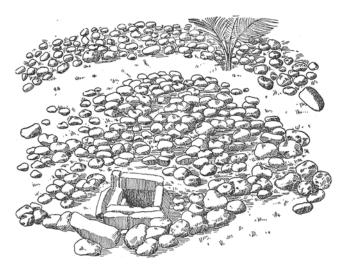


Fig. 7. Water hole. After a sketch by E. Krämer.

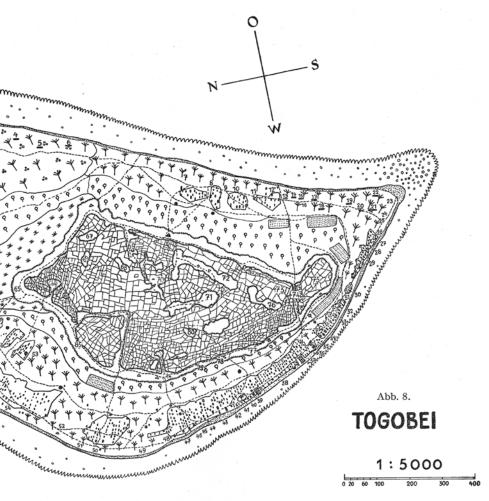
according to Krämer's records. The abandoned sites in the east of the southern half of the island are *vatanesegumar*, *varagabui*, *vatariara*, *farup*, *rikirakaman*, *vasugerigotuo*, *menetak*, *vatou* and *ranirogi*. The numbers designate the **place names** recorded by Hambruch and Krämer. The bolded numbers indicate abandoned dwelling sites, and the sites marked with an * are indicated on the settlement maps in Fig. 9 and 10.

	after Hambruch	after Krämer
1.	lugusuguripich	legusoboripi
2.		vorikerifoi
3.		meseoro
4.		rogutsari
5.		matane sirei
6.		vorieran
7.*	fari mesusur	fare mesusur
8.*	lugurelina	rukurarimar
9.*	mesarik	masarug
10.*	matarui gesuch	matari kesa
11.*	uenieg	venaigeg
12.*	uuori	auarei
13.	taniseiumaar	vatanesegumar
14.	uararabui	varagabui
15.	metaria	vatariara
16.	varumaginum	
17.	farup	farup
18.	uazorigotoch	vasugerigotugo
19.	lugerigumaan	rikirakaman
20.	menisak	menetak
21.	fato	vatou
22.		ranirogi
23.	uori feri iuch	
24.	vori foro goeig	fare gouaiog

5
The second second
Z
2 . 158
2. 1.5
₹. • N X:.
ž
3. 111
laines Z. T.
May
enzen ^z einingen
mun
🖩 Geisterhaus
Bluthaus
▲Tarohaus
Brunnen

Fig. 8 Sketch by	D Hambruch Tra
• •	1. Hamoruch. Ha
Stones and rocks	
Reef edge	
Road	
Borders of Holy Ha	aines (?)
Taro dam	
Taro fields with bo	rders
walking forest	
Jungle	
Coconut palms	
Wasteland	Spirit house
Beach	Menstruation hut
Farm	Taro hut
Settlements	Well, water hole

25.	dei emarie
26.*	apriuet
27.*	dugutuuouo
28.*	fani fene burar
29.*	peuuor
30.*	maturi gefits
31.	morimarch
32.*	
33.*	



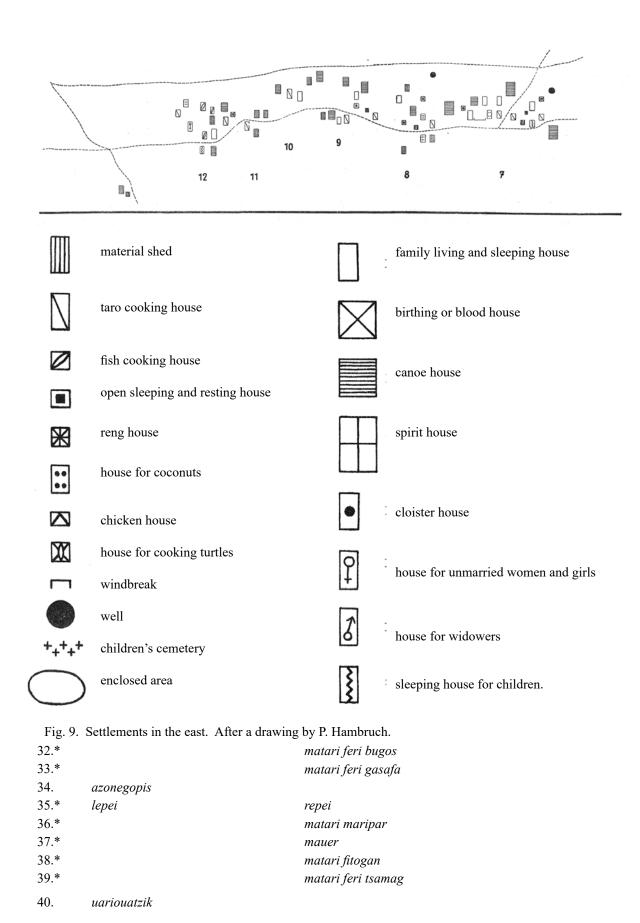
Unterstrichene Zahl=verlassene Plätze

anslation for above:

numbers underlined are abandoned settlements

aperifer legutauuamets matari feri burau beioog matari feri gevitsi

matari feri bugos matari feri gasafa



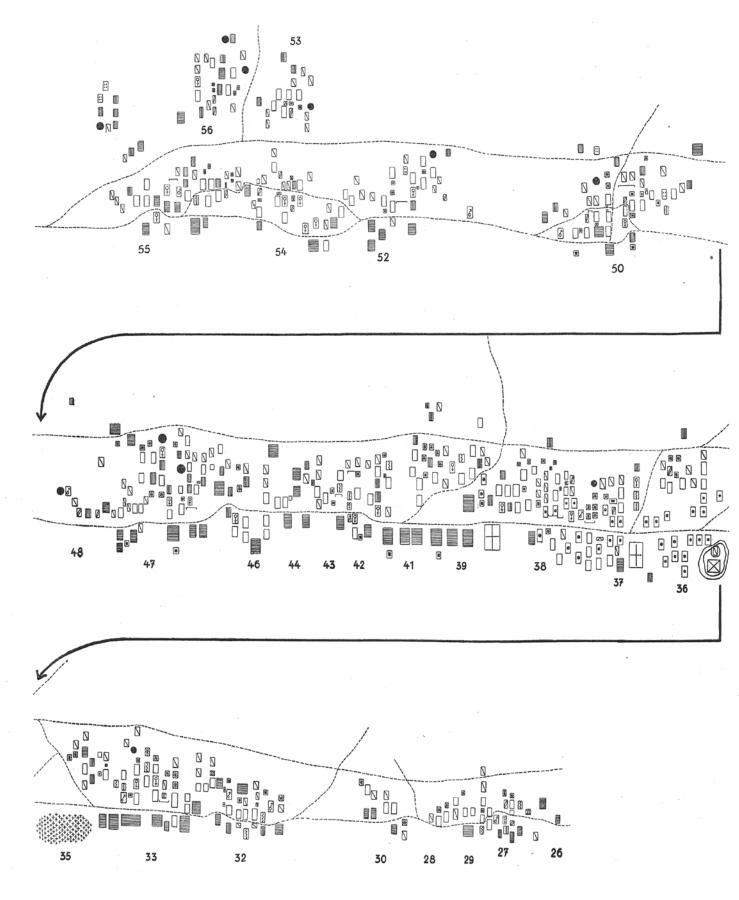


Fig. 10. Settlements in the west. After a drawing by P. Hambruch.

41.*	fanira	matari fenieran
42.*	lugeruuona	rikerivongar
43.*	fanügerau	fanurigerau
44.*	sieruua	siarubau
45.	matari feuazizich	
46.*	uatopirigis	vatoberig
47.*		matari feniaro
48.*	nugeriuiripis	
49.	animerisau	fari mekeriasarau
50.*	fari buch	fari bugik
51.	uanimerat	vanimagat
52.*	farepi	fagep
53.*	uariki	farikir
54.*	aringemoch	garingemog
55.*	moranugoch	
56.*	uangito	vano
57.		matari betsur
58.		dauer
59.		matari songorogo
60.		ranieretirotsovet
61.	bifageüe	ifageue
62.	uaniporifat	vaniborivatsa

The names ¹ in the area of taro plantations refer to the constructed dams.

63. fari meguch

- 64. pororimezarach
- 65. manuur
- 66. popariuarimesori
- 67. benitafei
- 68. ingetsich
- 69. fari getsouari
- 70. apriubor
- 71. fari fosumach
- 72. uaterugeia
- 73. fariuirürch
- 74. ferimu
- 75. fatorürch
- 76. boriurch
- 77. fari meganipech
- 78. fari meganugur
- 79. libonoch
- 80. sruirit
- 81. uamrioch
- 82. fari fürtich
- 83. fari magariuur
- 84. fanue
- 85. fari gezazich

1 Only according to Hambruch.

The paths of the natives, edged with coral rocks, circle the island, in several places forming several parallel lines; they branch out into the larger settlements and from there finally end in the taro fields, where they remain at the height of the dams. No path leads through the barren area north of the fields, whereas the taboo grove in the north is crossed by several thoroughfares.

The houses, built very close together, at first present an extremely uniform appearance. All the visitors noted their poor construction, and this impression is strengthened still more by the dirt and the slovenliness of the natives. They are simple rectangular structures: a roof covered with palm leaves and placed on the ground. With a single exception, the houses are oriented from east to west; most often, the door is located on the south side, although there is no strict rule regarding this. The natives distinguish between several functions: family living and sleeping quarters, im io mar,¹ birthing houses, im maripar,² houses for menstruation, im manuborutochob, houses for single girls, im io faifil, houses for widowers, sleeping houses for children, palarachach, and open houses for sleeping and resting. There are two spirit houses in the same settlement. Besides the numerous boathouses, im io ua, they have a great number of utility buildings: material sheds, imim io manifaifil; coconut sheds, im io fisud; chicken houses, im io koko; and the abovementioned work houses in the taro plantations. A curiosity is the great number of cooking houses named after the food prepared in each. It seems as if the preparation of other foods is not allowed there. They have fish-cooking houses, im manu sunik, taro-cooking houses, im io uot, and turtlecooking houses. In addition, there are certain houses for preparing renga, called im merigan or im matatarigan. Hambruch counted the following buildings, totaling 673.

142 family living and sleeping house 47 open houses for sleeping and res 8 houses for widowers

- 18 sleeping houses for children
- 25 houses for single women and gi
- 32 blood houses
- 80 cano rial sheds
- 8 coconut houses

The land, to the extent it is fertile, seems to be completely divided up. The individual fields, upeig, have special names. The boundary, uasi u torion, between neighboring plots is formed by stone edging or at least by boundary stones. Hambruch was able to ascertain the following concerning property:³

Owner Head Chief Vitzeraun, male	Family 2 wives 7 children (6 male, 1 female)	Houses 2 large living houses 1 large canoe house 1 cooking house 1 ren house 1 materials	Land Uorefeiuch Nakil Geleneiafit Repeiteitei Farekari Auari Ruiutseri	Palms 20 80 40 10 25 15 20	Fields Taro 4	Ren 1	Yam —	Canoes 2 large 1 small
Sisis, male	2 wives (one dead) childless	house 1 large living house 1 large canoe house 1 cooking house	Fato Uatsobor Sieruneai	210 7 7 <u>10</u> 24	_	4	9	1 large 1 small

blood house = era mateig; boat house = far (obtained on Yap). 2 Compare on Yap: dapal = blood house 3 It was not possible to obtain a comprehensive listing.

ses	8	chicken houses
esting	122	taro cooking houses
	22	fish cooking houses
	1	birthing house
irls	2	spirit houses
	3	turtle cooking houses
	72	renga houses
	19	taro houses in the fields

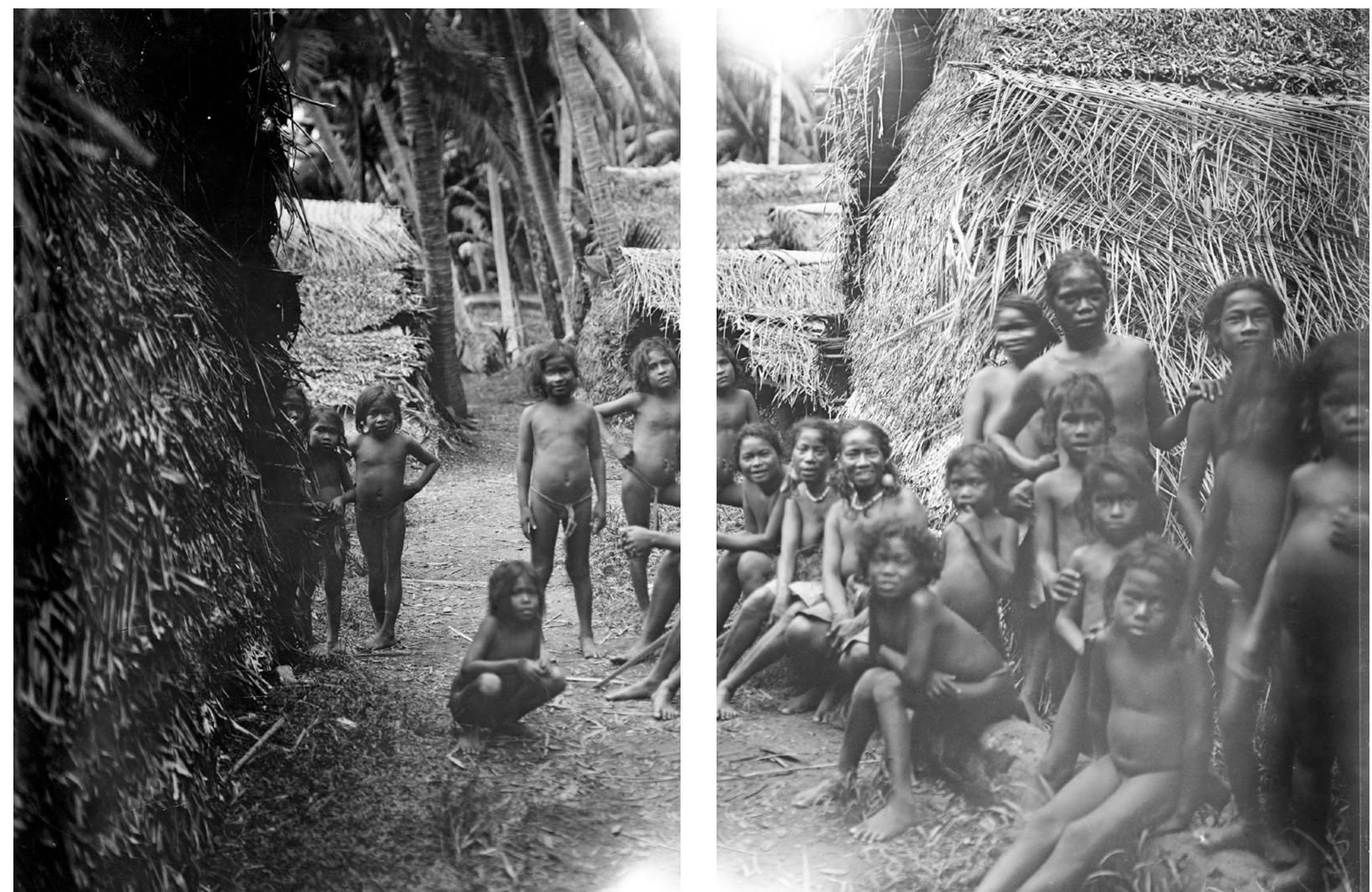
1 According to Hambruch: village = raniem; house = him; chief's house = emi e neim; bachelors' house = emasil; girls' house = neida;

Begigeramar, male	2 wives 8 children (5 from one, 3 from the other)	1 living house 1 cooking house 1 canoe house 1 materials house 1 ren house	Varub Ateperik Variki Arinamog	13 15 9 <u>10</u> 47	14	5	l large 1 small
Takitokonoma, male	1 wife (3 wives dead) 13 boys (1 st marriage 5 2 nd marriage 5 3 rd marriage 4 4 th marriage	2 living house 2 living house 1 cooking house 1 fish cooking house 1 ren house 1 materials house 1 canoe house	Fariuegitsik Fariachat Fariferibogus Lugutuuomots Lugeriotseremotz Lugeriomon Uasiseregotuk Uanimerat Uatumach	$ \begin{array}{c} 10 \\ 12 \\ 9 \\ 10 \\ 5 \\ 10 \\ 8 \\ 10 \\ \underline{7} \\ 81 \end{array} $	10	10	 2 large 1 small
Vovitikan, male	1) 1 wife 7 children (4 male, 3 female)	1 living house 1 cooking house 1 ren house 1 fish cooking house	Fano Anutseniuan	10 <u>20</u> 30	14	3	 3 small, kept in another's canoe house
Iatifa, male	1 wife, dead 7 children (4 male, 3 female)	 living house cooking house fish cooking house ren house materials 	Apuiuit Fariuuenen Lugerioman Farigamanagataifil	3 4 10 <u>10</u> 27	20	2	 2 large 1 small
Mochonugar, male	2 wives, the third dead 27 children: 16 male 11 female 1 st marriage: 3 male, 2 female 2 nd marriage: 4 male, 3 female 3 rd marriage: 9 male, 6 female	house 1 living house 1 cooking house 1 fish cooking house 2 ren houses 1 materials house 2 canoe houses	Taua Metaripitsu Fatsuma Garinemog	$ \begin{array}{r} 10 \\ 5 \\ 15 \\ \underline{10} \\ 40 \end{array} $	10	6	1 large 2 small

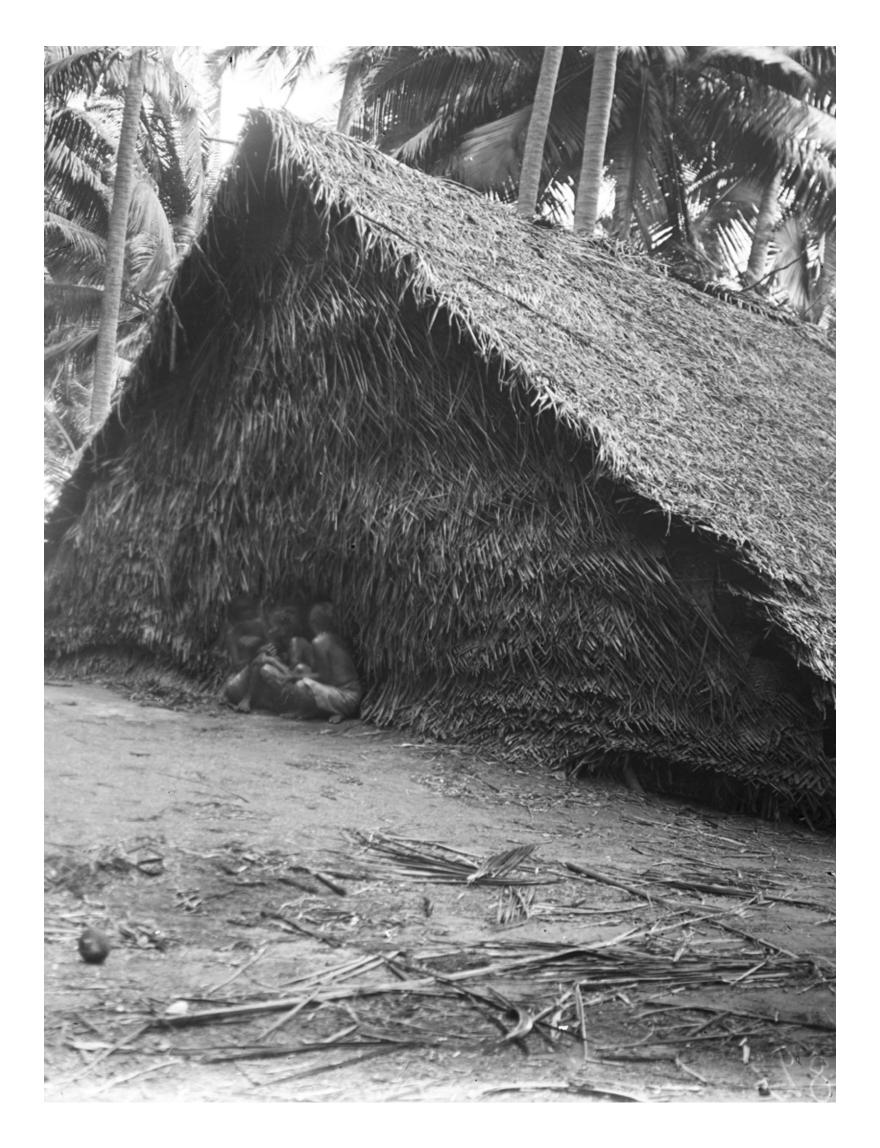




Fig. 11. Houses with windscreens. Sketch by E. Krämer.







Women house Imaribar. Glass plate scan, Hamburg Museum.

Tsigeitsegagan, male	1 wife, dead 4 children: 4 male, 4 female	1 living house 1 cooking house 1 ren house	Farep Fereguapitemots Farifeniier	$10 \\ 10 \\ \underline{6} \\ 26$	10	2	_	l small
Paparatuk, male	1 wife 6 children: 3 male, 3 female	1 living house 2 cooking houses 1 fish cooking house 1 ren house	Enirögi Falimeliro	$10 \\ \underline{10} \\ 20$	10	4	_	none
Zriuolülemat, male	2 wives 5 children: 2 male, 3 female	 living house cooking house fish cooking house ren house ren house materials house canoe house (guest house) 	Uorimer Faligererau Farap (half)	12 12 <u>10</u> 34	10	3		1 large 2 small
Torumar, male	2 wives 6 boys 2 from1 st , 4 from 2 nd marriage	2 living houses 1 sleeping house for boys 1 cooking house 1 ren house 1 materials house 2 canoe houses	Luguuuripis Matatsimitz Faifilemangarap Matariap	20 13 10 $\underline{8}$ 51	5	4		2 large 2 small
Nooreitsa, male	1 wife 8 children	 living house cooking houses fish cooking house materials house ren house canoe house 	Falemerisera Matataega Varigigirech	20 15 <u>10</u> 45	13	3		1 large 1 small
Tiseigamar, female	Husband dead 9 children: 5 male, 4 female	1 living house 1 cooking house 2 ren houses 1 materials house	Lügeruuinar Faripitoua	25 <u>13</u> 38	10	4	_	none
Aueseiiar, female	Husband dead 5 children: 3 male, 2 female	2 living houses 1 cooking house 1 ren house	Matarianotsetsik Uanopenech	10 <u>20</u> 30	20	2	_	none

Concerning the external appearance of the natives, the photographs taken at the time of the expedition provide a certain clarity. Of great importance, however, are the appearance-based judgements of the various visitors, some separated by long stretches of time. They demonstrate to what extent physique and psychological state depend on the external conditions of life. Douglas, the first to describe the Tobi natives, calls them stout and robust. Barnard and Holden encounter them 50 years later during a period of deprivation that intensifies during their stay. To Barnard, the men seem strong, the women weak and wretched. Holden even speaks of a "degenerate" condition, which-revealing his outlook-he ascribes not to the people's temporarily poor nutritional status, but to their isolation from the outside world and low level of culture. He provides the first detailed description of their appearance: the skin color is almost copper, but not as dark as that of the Malays or Palau natives, to whom they bear a strong resemblance due to the broadness of the face, the prominent cheekbones and the flattened nose. Their teeth are so strong that they can husk coconuts in an instant. In 1889, Captain Walsen thought these islanders resembled the Kanaks of the Samoa Islands but were less strongly built; their body tattoos, too, were similar. At any rate, he remarked that they were distinctly different from the inhabitants of the Asia Islands. They have straight, very attractive black hair.... They are no match for the typical European in height and physique. Among the approximately 200 men that approached the ship, most were of small, weak build. "I had the impression of confronting a degenerated race, although there were a few stately specimens among them..." The fact that this miserable state was due to a time of deprivation that had already ended is attested to by the fact that he was able to purchase over 1,000 fresh coconuts from the natives.

The German regional officer Fritz was able to observe the population under the aftereffects of the typhoon of 1904, which also devastated the islands Pur and Merir. In his report of 1906, he speaks of derelict people who are nothing but skin and bones, and in their filth and stench, with their stupid ugly faces, present a picture of screaming, starving misery. Some men and women are as small as dwarfs and stunted; the larger part do not attain average height, which suggests similar natural disasters before 1904. These apathetic people with their straight black hair and wide, bony faces reminded him of South American Indians.¹ Like Walsen, he noticed a number of strong, well-nourished, even portly men among the victims of deprivation, which causes him to surmise that they are a sort of foreign ruling caste of nobles.

Hambruch's description of appearances does not always correspond with the typical results of his **anthropological investigation**. This could be due to the fact that while the number of inhabitants is close to 1,000, he was able to thoroughly examine only 26 people; his first-hand impressions, based on appearances alone, therefore gain special significance. The people are small to medium in build; on average, they measure 1.6 m. The head is moderately long, the forehead narrow and domed, the face broad. The cheekbones are not especially prominent. The set of the eyes is straight in some, slanted in others, and the epicanthus is present. The eyes are large, with a light to dark brown iris. The nose is of three types without transition, but is always broad and also has a broad bridge. In two cases, extreme broadness of the jaw was noted. The mouth is wide, the lips thick, the upper lip is turned up. The hair is dark brown, straight or wavy, occasionally perhaps slightly curly. In general, the skin color corresponds to numbers 20-22 of the Luschan color scale; there are many quite light specimens among the women, due perhaps simply to the abundant use of turmeric powder.

5. Population

¹ He also does not believe in connections between the Tobi natives and the Carolines and acknowledges at most a weak linguistic influence, but he contests the linguistic similarity of Tobi to Songosor and Merir. Hellwig found that the appearance of the Tobi natives strongly reminded him of the inhabitants of Wuwulu and Aua.

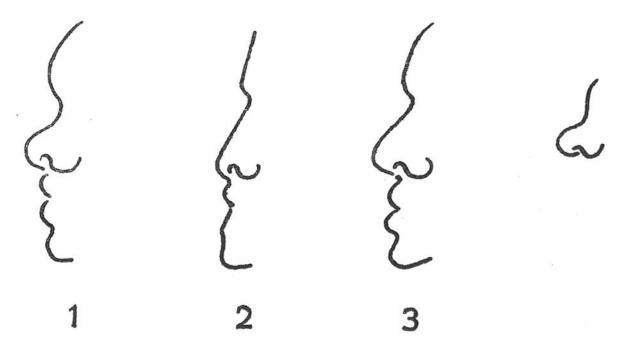


Fig. 13. Types of the Tobi nose after Hambruch.

On the basis of the anthropological investigation, the following picture emerges: of 18 men, 8 are fat (44.4%), 5 are moderately well nourished (27.7%), and 5 are thin (27.7%). Of the 8 women examined, 5 are fat (62.5%), 3 are average (37.5%), and 1 is thin (12.5%). Thus, the observation made by Barnard that the women were particularly wretched does not apply here. But it seems as though they suffer disproportionately in times of deprivation, since Fritz too saw some well-nourished men in spite of the famine, but no such women. About half the individuals are of average build, 8 men and 5 women. 3 of the men and 2 of the women can be described as tall: 16.6% and 25%, not even one-fifth of those examined. 7 men and 3 women were short: 38%. The skin is soft and dry, and lighter in the face in the women than in the men. Body hair is very sparse or altogether lacking. But it should be noted here that in Holden's time, the natives carefully plucked out all their hair and forced their captives to do the same. Even now, they have a special word for this procedure: a vosa (E.K.). The lack of hair is therefore probably artificial. The head hair is straight to wavy; curly, let alone kinky hair is extremely rare. The shape of the skull is generally in the range of mesocephaly (50%) with a tendency toward moderate long-skulledness (38.4%). Only three individuals (11.5%) are short-skulled, and even these are on the borderline (Index not over 84). Gender plays no role in this case, but the extremes are found only among the men measured. The crown is more or less domed, the back of the head usually flat, more rarely convex, the face as a whole is moderately long and wide, in the shape of an ellipse or oval and usually narrowing at the bottom. The cheekbone protrude slightly, the jaw shows slight prognathy. The eyes are set in at a slant and have moderately wide openings. The sclera is usually yellowish, and discolored in the area of the lid opening. Almost half of the persons examined had an epicanthus; eye color corresponds to numbers 3-5 of Martin's eye table. The medium-sized, protruding broad nose for the most part possesses a straight bridge, downturned tip and flared nostrils, short septum and large openings. The moderately wide lips, whose upper edge forms a compound bow, are reddish brown, the teeth are strong, straight and white. The arms and legs are frequently turned inward. Most individuals have small, thin hands and feet with short, broad nails. The genitals of all the men are small and short; the breasts of the women are half-spherical and later sagging, with small nipples and a well-defined edge. The women have many children during marriage, shortly after their wedding, and age rapidly.

Health: healthy Skin color Forehead 25 25 Cheek Region of sternum 26 28 Belly, above navel Region of shoulder blades 28 Upper arm, inner 28 29 Upper arm, outer Palm 13 29 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 4 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair texture: tightly curled 27 Head hair: 27 Beard hair: Body hair: lacking Head Forehead: high, straight, narrow, full Top: slightly convex Back: flat Face Shape: moderately long, elliptical, narrowing at bottom; moderately broad and flat Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Bridge: medium, flat, moderately high Ridge: medium, straight Tip: downturned Flanges: thin, low, flared Septum: short, narrow, narrowing to a wedge in front Nostrils: lengthwise oval, large Jaw, prognathy: 1 Lips: medium, fleshy, seamed, upper edge a compound arc Teeth: straight, large, pincer bite Ears: close-lying Earlobes: small, attached Piercing in earlobes: right and left Hands: large Fingers: thin, short Nails: small, short, narrow Calves: thick, long, firm Feet: large, long, wide, protruding big toe Longest toes: 2nd r. and l. Special remarks: tattooed.

No. 1 Sinis, male

Nutritional status: fat

Nr.	Name	Age	Body height	Width between the acromion	Arm span	Entire length of the arm, right	Greatest length of the head	Greatest width of the head	Smallest width of the forehead	Width above the ear canal	Width of the cheekbone	Width between the inner corners of eyes	Width between the outer corners of eyes	Width of the nose	Width of the mouth opening
1	Sinis ♂		167.5	37.1	178.9	77.5	190	154	112	135	112	30	109	41	61
2	Tonimar 👌	35	162	35.7	159.1	68.7	187	154	119	139	119	24	99	43	59
3	Moropetremoz♂	20	165.3	32.4	159.4	74.5	191	143	133	123	133	22	99	53	57
4	Peterixa 👌	28	158	30.8	163.7	71	193	151	114	133	114	27	104	40	61
5	Sagitorinama 👌	30	160.2	33.9	170.8	72.9	191	131	107	124	107	22	106	46	57
6	Tiritoxor 👌	35	172.1	35.2	166.1	74.3	183	152	116	137	116	25	102	46	52
7	Moruporumar 👌	18	149,9	30	150.9	67.1	179	141	104	127	104	27	97	39	57
8	Maroreomasox		167	30.3	170	72.7	179	140	104	126	104	30	94	40	57
9	Mamubiu 🕈	25	156.5	31.3	146.1	70.2	189	142	110	129	110	30	97	37	59
10	Tororenumar 👌	30	168.6	35.2	165.3	73.1	184	140	106	125	106	27	104	50	55
11 12 13 14 15	Logenimar & Vitzeraun & Oveizigei & Amoreta & Manieietax &	30 45 30 20 20	167.5 166.2 167 151.9 152	30.7 31.2 32.5 30.4	167.5 162.4 166.6 151.9	70.2 72.5 69.7 68	186 194 186 191 187	147 136 143 138 135	99 104 101 103 119	130 133 100 130 123	99 104 101 103 119	23 26 32 31 25	98 97 102 95 94	46 49 45 43 43	60 69 63 60 61
16	Materenoma 3		145	29.6	149.4	65	180	130	105	123	105	27	97	40	57
17	Maisin 🕈		147.3				183	136	110	128	110	29	91	40	52
18	Meras 3	30	160	29.2	161.3	72	176	136	106	126	106	30	91	43	57
19	Uauoderu ♀	25	143.8	28.5	137.2	62.2	182	133	103	118	103	20	98	36	45
20	Uoronaniar ♀	25	153.3	27.6	153.9	70.6	186	143	109	126	109	27	98	40	52
21	Moroifaifil 🍳	20	158.4	28.5	151.2	73.5	185	139	109	127	109	24	95	35	46
22	Hatetamitsek \bigcirc	20	158.1	25.3	150.7	73.2	180	143	102	123	102	25	95	30	53
23	Aganiuor \bigcirc	20	157	27.5	152.6	68.8	187	142	106	123	106	27	93	37	52
24	Kanguneiumar $\stackrel{\bigcirc}{\rightarrow}$	20	142.3	26.6	137.6	63.2	169	134	103	123	103	23	84	36	53
25	Botanaranamium	20	135.3	24.8	127.9	59	175	137	102	122	102	25	93	36	51
26	Teranigau ♀	18	137.6	21	133.7	63.2	181	142	101	131	101	27	86	34	53

Ears height of the head	Physiogn. height of the face	Morphol. height of the face	Physiogn. height of the upper face	Morphol. Height of the upper face	Height of the nose	Depth of the nose	Frenulum labii	Front height of the lower face	Intertragal point to the tip of the nose	Intertragal point to the Alveolar point	Intertragal point to the chin	Horizontal circumference of head	Sagittal circumference of the head	Transversal circumference of head	Length and width index of the head	Length and height index of the head	Width and height index of the head
186	186	117	79	68	56	53	55	40	108	132	147	55.3	38.2	36.1	81.053	97.890	120.771
135	191	119	80	67	45	32	27	45	110	128	142	60.5	39.1	38.2	82.352	72.193	87.662
119	158	100	63	59	46	30	20	33	105	128	140	61.3		34.2	74.869	62.303	83.216
132	175	114	74	63	50	29	21	40	111	130	143	59.3	41.4	36.1	78.238	68.393	88.476
124	191	110	81	67	56	40	22	37	105	128	140	61.3		36.2	68.586	64.921	94.656
139	203	116	75	64	53	35	23	37	110	131	145	57.7	39.2	35.1	83.060	75.956	91.447
141	167	102	68 70	56	43	33	27	41	105	126	133	56.2	36.9	33.2	78.771	78.771	100
121	176	115	70	62	51	35	22	45	105	133	150	56.9	38.5	34.2	78.212	67.598	86.429
123 129	178 203	108 121	68 75	60 64	51 54	34 35	14 20	42 41	110 107	123 125	138 144	 54.7	38.3	 32	75.132 76.085	65.079 70.108	86.619 92.142
12)	205	121	15	04	54	55	20	71	107	125	144	54.7	50.5	52	70.005	/0.100)2.172
128	190	118	75	62	53	37	22	45	109	132	146				79.032	68.817	87.074
132	179	109	72	63	53	31		40	97	126	139	56.3	40.6	35.6	70.103	68.041	97.058
125	177	112	75	64	52	37	23	45	112	133	147	55.1	37.2	34	76.881	67.204	87.412
116	173	105	71	62	52	35	25	44	107	125	135	53.5	35.7	31.4	72.251	60.732	84.057
122	168	102	71	60	50	35	24	45	100	130	138	53.4	37.7	31.2	72.192	65.240	90.370
118	160	98	65	55	46	33	20	37	92	122	135	51	36.9	30.4	72.222	65.555	90.769
115	170	108	67	55	43	30	23	33	87	114	127	53.2	38.3	30.6	74.316	62.841	84.558
117	183	120	75	66	53	32	21	45	93	126	148	52.3	34.3	32.4	77.272	66.470	86.029
109	165	101	61	55	46	28	20	37	92	116	134	52.5	36.7	31.6	73.076	59.890	81.954
127	167	107	70	60	53	34	23	40	105	114	123	58.7	39.7	34.2	76.881	68.279	88.811
129	171	113	72	61	53	31	22	41	109	128	141	55.5	39.2	33.7	75.135	67.027	92.086
122	171	105	62	55	41	28	27	36	103	112	123	52.4	37.5	31.3	79.444	67.777	85.314
122	167	113	70	58	41	31	23	42	92	122	134	55.9	39	31.3	75.935	65.240	85.915
119	162	100	71	60	51	31	28	40	92	116	122	52.3	38.1	33.1	79.289	70.414	88.805
132	154	98	65	55	45	27	25	39	97	122	135	70.7	36.3	30.2	78.285	75.428	96.350
137	156	90	60	50	43	28	22	40	110	134	152	54.3	37.4	33	78.453	75.690	96.478

The men 13-18 were photographed and measured on Palau.

No. 2 Tonimar, male, chief, 35 years old Nutritional status: very fat Health: healthy Skin color Forehead 16 Cheek 16 Region of sternum 22 Belly, above navel 23 24 Region of shoulder blades 25 Upper arm, inner 25 Upper arm, outer Palm 17 26 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 4 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair texture: tightly curled 27 Hair color: Head Forehead: low, narrow, straight Top: slightly convex Back: convex Face Shape: moderately long, elliptical, angular, moderately broad and flat Eye opening: slanted, wide, almond-shaped Cheekbones: moderately flat Nose Bridge: narrow, flat Ridge: medium Tip: down-turned Flanges: thick, low, flared Septum: narrow, narrowing to a wedge in back Nostrils: lengthwise oval, large Jaw, prognathy: 1 Lips: medium, seamed, upper edge a compound arc Teeth: crooked, large, pincer bite Ears: close-lying, top helix edge seamed Earlobes: small, attached Piercing in earlobes: right and left Hands: large Fingers: thick, long Nails: small, narrow, short Calves: thick, long, firm Feet: protruding big toe Longest toe: 2nd r. and l. Special remarks: tattooed. No. 3 Moropetremoch, male, 20 years old Nutritional status: medium Health: healthy Skin color Forehead 10

Cheek 10 Region of sternum 20 Belly, above navel 23 21 Region of shoulder blades Upper arm. inner 24 Upper arm, outer 26 Palm 14 Inner thigh 26 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: very sparse Head Forehead: low, narrow, straight Top: slightly convex Back: convex Face Shape: moderately long, elliptical, moderately broad, narrowing at bottom Eye opening: slanted, wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Bridge: medium, flat Ridge: narrow, wide, slightly curved Tip: upturned Flanges: thin, low, flared Septum: short, wide, narrowing to a wedge in back Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium Teeth: straight, large Ears: close-lying, seamed upper and lower helix edge Earlobes: attached Piercing in earlobes: right and left Hands: moderately large Fingers: thin, long Nails: small, wide Calves: thin, long, loose Feet: large, long, narrow, close-lying big toe Longest toe: 2nd r. and l. Special remarks: tattooed. No. 4 Petericha, male, 20 years old Nutritional status: fat Health: healthy Skin color

Forehead

Region of sternum

Belly, above navel

Region of shoulder blades

Cheek

24





Man Matogor with Hernandia apple bloom. Glass plate scan, Hamburg Museum.

Upper arm, inner 25 24 Upper arm, outer 11 Palm 27 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 4 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: very sparse Head Forehead: low, narrow, straight Top: slightly convex Back: convex Face Shape: moderately long, elliptical, moderately broad, moderately flat Eye opening: straight, almond-shaped Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, slightly angled Tip: down-turned Flanges: thick, low, flared Septum: short, wide, narrowing to a wedge in back Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium, fleshy, seamed, upper edge a compound arc Teeth: crooked, large Ears: close-lying Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thick, short Nails: small, short, narrow Calves: thin, long, loose Feet: small, short, narrow, protruding big toe Longest toe: 2nd r. and l. Special remarks: tattooed. No. 5 Sagitorinama, male, 30 years Nutritional status: fat Health: healthy Skin color Forehead 15 18 Cheek 23 Region of sternum 26 Belly, above navel 28 Region of shoulder blades 25 Upper arm, inner 20 Upper arm, outer 15 Palm 29 Inner thigh

Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 4 Sclera: vellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: very sparse Head Forehead: high, wide, straight, full Top: slightly convex Back: flat Face Shape: moderately long, elliptical, moderately wide, narrowing at bottom Eye opening: straight, wide, spindle-shaped Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, wide, narrowing to a wedge in back Nostrils: round, large Jaw, prognathy: 1 Lips: thick, seamed, compound arc Teeth: crooked, large Ears: close-lying Earlobes: attached Piercing in earlobes: right and left Hands: large Fingers: thick, long Nails: small, short, wide, flat Calves: thin, short Feet: small, short, wide, 2nd toe left and right the longest Special remarks: tattooed. No. 6 Tiritochor, male, 35 years Nutritional status: very fat Health: healthy Skin color Forehead 15 13 Cheek Region of sternum 18 21 Belly, above navel Region of shoulder blades 22 Upper arm, inner 23 Upper arm, outer 24 9 Palm Inner thigh 16 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 5 Sclera: yellowish

Conjunctiva: discolored in the region of the eye opening Hair color: 27 Hair texture: straight/wavy Body hair: very sparse Head Forehead: low, wide, straight, full Top: slightly convex Back: flat Face Shape: moderately long, elliptical, moderately broad, narrowing at bottom Eye opening: straight, wide, almond-shaped Cheekbones: moderately protruding Nose Bridge: narrow, moderately high Ridge: medium Tip: down-turned Flanges: thin, low Septum: short, wide, narrowing to a wedge in back Nostrils: lengthwise oval, large Jaw, prognathy: 1 Lips: medium, seamed, upper edge: compound arc Teeth: straight, large Ears: close-lying, seamed upper helix edge Earlobes: attached Piercing in earlobes: right and left Hands: large Fingers: thick, long Nails: small, short, narrow Calves: thin, short, loose Feet: long, wide, longest toes: 1st r. and l. Big toe close-lying No. 7 Moruporumar, male, 18 years Nutritional status: fat Health: healthv Skin color Forehead 19 20 Cheek 22 Region of sternum 23 Belly, above navel 23 Region of shoulder blades Upper arm, inner 21 23 Upper arm, outer 8 Palm 22 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, oily Color of iris: 5 Sclera: yellowish Conjunctiva: discolored in the region of the eye opening Hair color: 27 Hair texture: straight/wavy Body hair: sparse Head

Forehead: low, narrow, full Top: slightly convex Back: flat Face Shape: moderately long, widely elliptical, narrowing at bottom Eye opening: slanted, moderately wide, almond-shaped Cheekbones: strongly protruding Nose Bridge: medium, moderately high Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, wide Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium, seamed, upper edge: compound arc Teeth: crooked, large Ears: close-lying, seamed upper helix edge Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin, short Nails: small, short, wide Calves: thin, short Feet: small, short, wide Longest toe: 1st r. and l. Special remarks: tattooed. No. 8 Maroreomasoch, male Nutritional status: fat Health: healthy Skin color Forehead 23 24 Cheek Region of sternum 26 Belly, above navel 26 Region of shoulder blades 28 Upper arm, inner 26 26 Upper arm, outer 9 Palm 29 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 2 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: corkscrew curls Head Forehead: high, wide, straight Top: convex Back: flat Face Shape: moderately long, broad and flat, elliptical, narrowing at bottom

Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold, epicanthus Cheekbones: moderately protruding Nose Bridge: medium, high Ridge: medium, curved at an angle Tip: down-turned Flanges: low, flared Septum: short, wide, narrowing to a wedge in back Nostrils: narrow, small, large Jaw, prognathy: 0 Lips: medium, fleshy, seamed, upper edge a compound arc Teeth: straight, large Ears: close-lying Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin, long Nails: small, short, wide Calves: thin, short, firm Feet: small, narrow Longest toes: 1st r. and l. No. 9 Mamubiu, male, 25 years old Nutritional status: thin Health: healthy Skin color 19 Forehead 5 Cheek 24 Region of sternum 24 Belly, above navel Region of shoulder blades 22 23 Upper arm, inner Upper arm, outer 22 5 Palm Inner thigh 24 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 4 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: wavy Body hair: very sparse Head Forehead: low, narrow, straight Top: slightly convex Back: flat Face Shape: moderately long, elliptical, moderately broad and flat, narrowing at bottom Eye opening: slanted, wide, almond-shaped Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, slightly concave

Flanges: thick, low, flared Septum: short, wide, narrowing to a wedge in back Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium, upper edge a compound arc Teeth: crooked, small Ears: close-lying Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin, short Nails: thin, short, narrow, flat Calves: thin, short, loose Feet: small, short, narrow Longest toes: 2nd r. and l. Special remarks: tattooed. No. 10 Tororenumar, male, 30 years old Nutritional status: thin Health: healthy Skin color 20 Forehead Cheek 18 24 Region of sternum Belly, above navel 26 28 Region of shoulder blades 26 Upper arm, inner 24 Upper arm, outer 5 Palm 27 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Color of iris: 4 Sclera: vellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: wavy Head Forehead: high, wide, straight, full Top: slightly convex Back: flat Face Shape: moderately long, elliptical, narrowing at bottom Eye opening: straight, narrow, almond-shaped Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: narrow Tip: straight Flanges: thick, low, flared Septum: short, narrowing to a wedge in back Nostrils: lengthwise oval, large Jaw, prognathy: 1 Lips: medium, seamed, upper edge a compound arc

Tip: straight



Favorite boy Marapetake. Glass plate scan, Hamburg Museum.



Above: girls with leaf covers and "big-headed girl". Below: women in front of their house. Glass plate scans, Hamburg Museum.



Teeth: straight, large, pincer bite Ears: close-lying Earlobes: small, attached Piercing in earlobes: right and left Hands: small Fingers: thin, short Nails: small, short, wide, flat Calves: thin, loose Feet: small, narrow Longest toes: 1st r. and l. Protruding big toe Special remarks: tattooed. No. 11 Logenimar, male, 30 years old Nutritional status: thin Health: healthy Skin color Forehead 18 16 Cheek 24 Region of sternum 26 Belly, above navel 27 Region of shoulder blades Upper arm, inner 26 24 Upper arm, outer Palm 5 28 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 4 Sclera: bluish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: wavy Body hair: very sparse Head Forehead: low, narrow, full Top: slightly convex Back: flat Face Shape: moderately long, wide, elliptical, narrowing at bottom Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Bridge: narrow, moderately high Ridge: medium, straight Tip: straight Flanges: high, flared Septum: short, narrow, narrowing to a wedge in back Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium, seamed Teeth: crooked, large Ears: close-lying Hands: small Fingers: thin, short

Calves: thin, short, loose Feet: small, short, wide Longest toes: 1st r. and l. Protruding big toe Special remarks: tattooed. No. 12 Vitzeraun, male, head chief, 45 years old Nutritional status: thin Health: healthy Skin color Forehead 16 Cheek 17 Region of sternum 2.2 Belly, above navel 24 26 Region of shoulder blades 23 Upper arm, inner Upper arm, outer 21 9 Palm 23 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: very sparse Head Forehead: low, narrow, straight Top: slightly convex Back: flat Face Shape: low, oval, moderately wide, narrowing at bottom Eye opening: straight, narrow, spindle-shaped, Epicanthus Cheekbones: moderately protruding Nose Bridge: wide, flat Ridge: medium, highly convex Tip: straight Flanges: thin, low, flared Septum: short, wide, narrowing to a wedge in back, protruding at bottom Nostrils: narrow, lengthwise oval Jaw, prognathy: 2 Lips: fleshy, seamed, upper edge a compound arc Teeth: crooked, large Ears: close-lying with seamed upper helix edge Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin, short Nails: small, short, wide, flat Calves: thin, short, loose Feet: small, short, wide Longest toes: 1st r. and l.

Nails: small, short, wide

	No. 13 Oveizigei, male, 30 years old
Nutritie	onal status: medium
	healthy
Skin co	olor
	Forehead 14
	Cheek 13
	Region of sternum 21
	Belly, above navel 23
	Region of shoulder blades 23
	Upper arm, inner 26
	Upper arm, outer 24
	Palm 4
	Inner thigh 14
	Mucous membrane, upper lip: reddish brown
	Mucous membrane, lower lip: reddish brown
	xture: soft, dry
Color o	of iris: 3
Hair co	lor: 27
Hair te	xture: shaved
Head	
	Forehead: low, narrow, straight, full
	Top: slightly convex
	Back: flat
Face	
	Shape: moderately long and wide, elliptical ¹
	Eye opening: straight, wide, spindle-shaped
	Cheekbones: moderately protruding Nose
	Bridge: medium, moderately high
	Ridge: medium, straight
	Tip: down-turned
	Flanges: high, flared
	Septum: short, wide, hourglass-shaped, protruding at bottom
	Nostrils: lengthwise oval, large
-	ognathy: 1
-	nedium, seamed, upper edge a compound arc
	crooked, large, pincer bite, white
	protruding, seamed upper helix edge
	es: attached
	g in earlobes: right and left
Hands:	
-	s: thin, short
	small, short, wide, flat
	thin, short, loose
	mall, short, wide
Longes	t toes: 2^{nd} r. and l.
	No. 14 Amoreta, male, 20 years old
Nutriti	onal status: medium
	healthy
Skin co	
	Forehead 12
	Cheek 13
	Region of sternum 18
	Belly,above navel 24

1 Lower face very broad in relation to the upper part.

	Region of shoulder blades
	Upper arm, inner
	Upper arm, outer
	Palm
	Inner thigh
	Mucous membrane, upper lip
	Mucous membrane, lower lip
Skin tex	sture: soft, dry
Color of	
	yellowish
	ctiva: stained, discolored in the
Hair col	
	ture: shaved
Head	air: sparse
	Forehead: low, narrow, straig
	Top: slightly convex
	Back: flat
Face	
-	Shape: moderately long and
	Eye opening: wide, almond-sl
	Cheekbones: moderately prot
	Nose
	Bridge: medium, me
	Ridge: medium, slig
	Tip: down-turned
	Flanges: high, flared
	Septum: short, hour
	Nostrils: lengthwise
law pro	ognathy: 1
-	nedium, fleshy, seamed, upper e
	crooked, large, white, scissor b
	lose-lying, seamed upper helix
	s: attached
Hands:	g in earlobes: right and left
-	thin, long
	small, short, narrow, convex
	thin, long, loose
	nall, short, narrow
Longest	t toes: 2^{nd} r. and l.
	No
Nutritio	nal status: medium
Health:	influenza
Skin co	
	Forehead
	Cheek
	Region of sternum
	Belly,above navel
	Design of shoulder blades

Region of shoulder blades

Upper arm, inner Upper arm, outer

Palm

Inner thigh

s 23 24 24 4 27 r lip: reddish brown r lip: reddish brown

n the region of the eye opening 27

traight, convex

and wide, oval, narrowing at bottom nd-shaped, Mongolian fold / protruding

n, moderately high , slightly concave

flared hourglass-shaped, protruding at bottom wise oval

per edge a compound arc sor bite nelix edge

No. 15 Manieietach, male, 20 years old

4

25

Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: bluish Conjunctiva: discolored in the region of the eye opening Hair color: 27 Hair texture: shaved Body hair: lacking Head Forehead: low, narrow, straight, full Top: slightly convex Back: flat Face Shape: moderately long and wide, elliptical, narrowing at bottom Eye opening: slanted, narrow, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Ridge: broad, straight Tip: down-turned Flanges: thin, low, flared Septum: short, wide, narrowing to a wedge in back, protruding at bottom Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium, seamed, upper edge a compound arc Teeth: straight, small, pincer bite, white Ears: close-lying Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin, short Nails: small, short, wide Calves: thin, short, loose Feet: small, short, narrow Longest toes: 1st r. and l. No. 16 Materenama, male Nutritional status: fat Health: healthy Skin color 20 Forehead 21 Cheek 25 Region of sternum 25 Belly, above navel 24 Region of shoulder blades 23 Upper arm, inner 22 Upper arm, outer Palm 4 Inner thigh 26 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: bluish Conjunctiva: discolored in the region of the eye opening

Hair co	lor:	27
	cture: shaved air: very sparse	
Head		
	Forehead: low, straight, fu	ıll
	Top: slightly convex	
	Back: flat	
Face		
	Shape: short, elliptical, br	oa
	Eye opening: narrow, alm Cheekbones: strongly pro Nose	
	Bridge: medium,	, m
	Ridge: medium,	
	Tip: down-turned	
	Flanges: thin, low	w,
	Septum: short, w	
	Nostrils: narrow,	la
Jaw, pro	ognathy: 1	
	hick, seamed	
	straight, small, scissor bite,	
Ears: c	lose-lying, seamed upper he	lix
	es: attached	
	g in earlobes: right and left	
Hands:		
	: thin, long	
	small, short, wide	
	thin, short, firm	
	mall, short, wide	1
	t toes: 2 nd r. and l. Big toe c	210
Special	remarks: dwarf.	
Nutritic	onal status: medium	
Health:	healthy	
Skin co	lor	
	Forehead	
	Cheek	
	Region of sternum	
	Belly,above navel	
	Region of shoulder blades	
	Upper arm, inner	
	Upper arm, outer	
	Palm	
	Inner thigh	
	Mucous membrane, upper	
C1 · · ·	Mucous membrane, lower	11
	xture: soft, dry	
	f iris: 3	
	yellowish	
	ctiva: discolored in the regio	
Hair co		27
	cture: shaved	
Head	air: very sparse	
пеаd		

27

ad, narrowing at bottom nd-shaped, Mongolian fold ruding

moderately high ightly concave

flared de, hourglass-shaped, protruding at bottom large

hite ix edge

ose-lying

No. 17 Maisin, male

6 6 21 24 23 25 24 4 27 ip: reddish brown ip: reddish brown

of the eye opening 7

Forehead: high, narrow, straight, full Top: slightly convex Back: convex Face Shape: short, oval, broad, narrowing at bottom Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose: saddle nose Bridge: broad, completely flat Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, wide, hourglass-shaped, protruding at bottom Nostrils: narrow, large Jaw, prognathy: 1 Lips: thick, fleshy, upper edge a compound arc Teeth: crooked, small, white, irregular Ears: close-lying; seamed upper helix edge Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin, short Nails: small, short, wide Calves: thin, short, loose Feet: small, short, wide Longest toes: 1st r. and l. Protruding big toe No. 18 Meras, male, 30 years old Nutritional status: thin Health: healthy Skin color Forehead 5 Cheek 5 20 Region of sternum 22 Bellv.above navel Region of shoulder blades 26 Upper arm, inner 28 Upper arm, outer 26 4 Palm 25 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: bluish Conjunctiva: discolored in the region of the eye opening Hair color: 27 Hair texture: shaved Body hair: sparse Head Forehead: low, narrow, straight Top: slightly convex Back: convex

Face

Shape: moderately long and broad, elliptical, narrowing at bottom

Eye opening: straight, moderately wide, spindle-shaped Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, wide, narrowing to a wedge in back Nostrils: narrow, large Jaw, prognathy: 1 Lips: medium, fleshy, seamed Teeth: small, white, pincer bite Ears: close-lying, seamed upper helix edge Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thick, short Nails: small, short, wide Calves: thin, short, loose Feet: small, short, wide Longest toes: 2nd r. and l. Protruding big toe Special remarks: Deviates from the Tobi type and seems to have European blood mixed in. No. 19 Uauoderu, female, 25 years old Nutritional status: fat Health: healthy Skin color 10 Forehead 10 Cheek Region of sternum 21

Belly, above navel 22 Region of shoulder blades 21 Upper arm, inner 21 20 Upper arm, outer Palm 5 Inner thigh 24 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: vellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Head Forehead: low, narrow, straight Top: slightly convex Back: flat Face Shape: moderately long, oval, broad, narrowing at bottom Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose

Bridge: medium, moderately high Ridge: medium, straight

Tip: down-turned Flanges: thin, low, flared Septum: short, narrow, narrowing to a wedge in back, protruding at bottom Nostrils: narrow, large Jaw, prognathy: 0 Lips: medium, fleshy, seamed, upper edge a compound arc Teeth: straight, small, white Ears: close-lying Earlobes: attached Piercing in earlobes: right and left Hands: small Fingers: thin Nails: small, short, wide Calves: thin, short, loose Feet: small, short, narrow Longest toes: 1st r. and l. Special remarks: hands tattooed, body colored with renga.

No. 20 Uoronaniar, female, 25 years old Nutritional status: fat Health: healthy Skin color 5 Forehead 5 Cheek 9 Region of sternum 14 Belly, above navel Region of shoulder blades 16 14 Upper arm, inner 14 Upper arm, outer 5 Palm Inner thigh 24 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, moist Color of iris: 2 Sclera: bluish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: lacking Head Forehead: high, narrow, straight, full Top: slightly convex Back: flat Face Shape: moderately long and broad, oval, narrowing at bottom; moderately flat Eye opening: slanted, moderately wide, almond-shaped Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, broad, narrowing to a wedge in front, protruding at bottom

Nostrils: lengthwise oval, large

Jaw, prognathy: 1 Lips: medium, fleshy, seamed, upper edge a compound arc Teeth: straight, small Ears: close-lying, seamed upper and rear helix edge Earlobes: attached Piercing in earlobes: right and left Body: Breasts: pendulous, nipples small, diameter 35 mm,¹edge well-defined Color: 23 Hands: small Fingers: thin, long Nails: small, short, wide Calves: thick, long, loose Feet: small, short, narrow Longest toes: 1st r. and l. Big toe: close-lying. Special remarks: legs and hands tattooed. No. 21 Moroifaifil, female, 20 years old Nutritional status: fat Health: healthy Skin color 5 Forehead 5 Cheek Region of sternum 21 Belly, above navel 18 Region of shoulder blades 23 23 Upper arm, inner 18 Upper arm, outer 5 Palm Inner thigh 26 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: yellowish, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: lacking Head Forehead: high, narrow, straight Top: slightly convex Back: convex Face Shape: moderately long and broad, oval, narrowing at top Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, wide, narrowing to a wedge in front, protruding at bottom Nostrils: narrow, large Body: Breasts: pendulous, low nipple, diameter 30 mm, edge poorly defined

1 The areola is meant.

Color:

28

Hands: thin, long Nails: small, short, narrow Calves: thin, short, firm Feet: small, short, narrow Longest toes: 1st r. and l., big toe close-lying

No. 22 Hatetamitsek, female, 20 years old Nutritional status: medium Health: healthy Skin color Forehead 5 5 Cheek 21 Region of sternum 20 Belly, above navel 24 Region of shoulder blades 23 Upper arm, inner Upper arm, outer 24 5 Palm 24 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: bluish Conjunctiva: stained, discolored in the region of the eye opening Body hair: none Head Forehead: low, narrow, straight Top: slightly convex Back: flat Face Shape: moderately long, broad and flat, oval, narrowing at bottom Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Bridge: medium, moderately high Ridge: medium, slightly concave Tip: down-turned Flanges: thin, low, flared Septum: short, broad, narrowing to a wedge in front, protruding at bottom Nostrils: lengthwise oval, large Jaw, prognathy: 1 Lips: thick, fleshy, upper edge a compound arc Teeth: crooked, large, white Ears: close-lying, seamed upper and rear helix edge Earlobes: attached Piercing in earlobes: right and left Body: Breasts: pendulous, nipple diameter 40 mm Color: 22 Hands: small Fingers: thin, long Nails: small, short

Feet: small, short Longest toes: 2nd r. and l. Special remarks: hands and legs tattooed.

Nutritional status: fat Health: healthy Skin color 5 Forehead Cheek 6 Region of sternum 21 Belly, above navel 26 Region of shoulder blades 24 23 Upper arm, inner 21 Upper arm, outer Palm 6 Inner thigh 24 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: bluish 27 Hair color: Hair texture: straight Head Forehead: low, narrow, straight Top: slightly convex Back: flat Face Shape: moderately long, broad, flat; oval, narrowing at bottom Eye opening: slanted, moderately wide Cheekbones: moderately protruding Nose Bridge: medium, flat Ridge: medium, slightly concave Tip: down-turned Flanges: thin, low Septum: short, broad, narrowing to a wedge in front, protruding at bottom Jaw, prognathy: 1 Lips: thick, seamed, upper edge a compound arc Teeth: straight, small Ears: close-lying Earlobes: small, attached Piercing in earlobes: right and left Body: Breasts: pendulous, nipple diameter 34 mm Hands: small Fingers: thin, short Nails: small, short, wide Calves: thin, short, loose Feet: small, short, narrow Longest toes: 1st r. and l. Big toe: close-lying

Nutritional status: fat

Calves: thin, firm

No. 23 Aganiuor, female, 20 years old

No. 24 Kanguneiumar, female, 20 years old

	healthy	
Skin co	lor	
	Forehead	5
	Cheek	5
	Region of sternum	8
	Abdomen, above navel	18
	Region of shoulder blades	24
	Upper arm, inner	20
	Upper arm, outer	22
	Palm	4
	Inner thigh	25
	Mucous membrane, upper lip: rec	
Calaria	Mucous membrane, lower lip: rec	iaish brown
	f iris: 3	
	yellowish	ion of the ave opening
-	ctiva: stained, discolored in the reg	ion of the eye opening
Head	air: none	
incau	Forehead: low, narrow, straight, f	
	Top: slightly convex	un
	Back: flat	
Face	Duck. Int	
1 400	Shape: short, very broad, moderation	tely flat, narrowing at bottom
	Eye opening: slanted, moderately	-
	Cheekbones: moderately protrudi	=
	Nose	8
	Bridge: medium, modera	ately high
	Ridge: medium, wide, st	
	Tip: down-turned	-
	Flanges: thin, low, flared	
	Septum: short, broad, na	rrowing to a wedge in back, protruding at bottom, high
Jaw, pr	ognathy: 1	
Lips: n	nedium, fleshy, seamed	
	crooked, small, white, pincer bite	
	lose-lying, seamed upper and rear h	elix edge
	es: attached	
	g in earlobes: right and left	
Body:		
		all, diameter 15 mm, edge well-defined
TT 1	Color: 24	
Hands:		
-	: thin, short	
	small, short, wide	
	thin, short, loose	
-	ointing inward; small, short, wide	
	t toes: 1 st r. and l. Protruding big too	
Special	remarks: not yet tattooed.	
	No 25 R	otanaranamium, female, 20 years old
Nutritio	onal status: medium	
	healthy	
Skin co		
	Forehead	13

13
12
14

Abdomen, above navel 25 22 Region of shoulder blades 21 Upper arm, inner 23 Upper arm, outer 4 Palm Inner thigh 25 Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: yellowish Conjunctiva: stained, discolored in the region of the eye opening Hair color: 27 Hair texture: straight Body hair: lacking Head Forehead: low, narrow, full Top: slightly convex Back: flat Face Shape: moderately long and broad, elliptical, narrowing at bottom Eye opening: slanted, moderately wide, almond-shaped, Mongolian fold Cheekbones: moderately protruding Nose Bridge: medium, flat Ridge: medium, slightly concave Tip: down-turned Flanges: thin, low Septum: short, broad, narrowing to a wedge in back Nostrils: narrow, large Jaw, prognathy: 1 Lips: thin, seamed, upper edge a compound arc Teeth: straight, small Ears: close-lying, seamed upper and rear helix edge Earlobes: attached Piercing in earlobes: right and left Body: Breasts: half-spherical, nipple diameter 20 mm, edge well-defined, nipples small Color: 22 Fingers: thin, short Nails: small, short, wide Calves: thin, short, loose Feet: small, short, narrow Longest toes: 2nd r. and l. Big toe: close-lying Special remarks: hands tattooed. No. 26 Teranigau, female, 18 years old Nutritional status: medium

Health: healthy Skin color Forehead Cheek Region of sternum Belly,above navel Region of shoulder blades

14

Upper arm, inner 14 Upper arm, outer 13 5 Palm 20 Inner thigh Mucous membrane, upper lip: reddish brown Mucous membrane, lower lip: reddish brown Skin texture: soft, dry Color of iris: 3 Sclera: bluish Conjunctiva: discolored in the region of the eye opening Hair color: Hair texture: straight Body hair: lacking Head Forehead: low, broad, full Top: slightly convex Back: flat Face Shape: moderately long and broad, elliptical, narrowing at bottom Eye opening: slanted, wide, almond-shaped, Mongolian fold, epicanthus Cheekbones: moderately protruding Nose Bridge: medium, flat Ridge: medium, straight Tip: down-turned Flanges: thin, low, flared Septum: short, narrowing to a wedge in front, protruding at bottom Nostrils: narrow, slanted oval, large Jaw, prognathy: 1 Lips: medium, seamed, upper edge a compound arc Teeth: straight, small, white, scissor bite Ears: close-lying, seamed upper helix edge Earlobes: attached Piercing in earlobes: right and left Body Breasts: half-spherical, nipples small, diameter 23 mm, edge well-defined Color: 23 Hands: small Nails: small, narrow, convex Calves: thin, short, loose Feet: small, short, wide Longest toes: 1st r. and l. Big toe: close-lying Special remarks: not yet tattooed.

Body grooming. The natives of Tobi are considered a dirty people by the Europeans, but they have their own standards of cleanliness which are followed with great rigidity. Little care is spent on grooming of the body; their head hair is their source of pride. They let it grow, wash it nearly every day and rub oil obtained from coconut palm juice into it to make it shine. Afterward they braid it, and some have hair down to their hips (Holden). They also maintain the vermin on the children's heads and consume the lice as a delicacy. As the American further reports, the body hair must be plucked out everywhere, and every ten days he was obliged to pluck out his beard hair, which grew back stiffer every time-a most painful procedure for him. According to Krämer, the underarm and pubic hair is bent over with the help of a piece of pumice stone, uar, and then plucked out with the fingers. This procedure is called a vosa (E.K.). On a few individuals, Krämer saw thumbnails 2-3 cms long, but it is

claimed not to be a special custom among them. They relieve themselves on an uninhabited stretch of beach. Only children are allowed to do it anywhere. For the privy they use the word ninieripag. When the women menstruate, they catch the blood in a piece of coconut leaf sheath inserted into the vulva. They also use coconut fibers, *tsagag*, to clean themselves.

If they have catarrh, they blow their nose into a coconut husk, which is placed tidily in front of the door of the hut after each use. They are very clean concerning their wells, tsav. Because of the danger of contamination, children are not allowed near them. If someone urinates in one anyway, the well is no longer used; nothing further happens to the perpetrator-he is merely resented.

tongue mouth upper lip lower lip nose septum nostril nose flange eye iris pupil eyelid ear earlobe hole in earlobe ear canal upper edge large indentation—helix edge face forehead head skull eyebrows eyelashes head hair tooth incisor canine molar beard mustache sideburns goatee pubic hair armpit hair cheek

1 According to A. Krämer, if not otherwise noted.

Terms for body parts.¹

neneseri (hesai-mein) rau; zeu Ham. iouar: iouuei Ham. trioarivor, triovara; drioa Ham. trioarifar; drioa zefar Ham. bauti, bautura; bold Ham. iorubaut; dala bold Ham. ronibaut; dane bold Ham. bekeribaut; dügeru bold Ham. metai, metara; matar He.; mazai Ham. tsororimetar; baitser Ham. gar roat Ham. baurimetar; pagariti mat Ham. teringerai; talinar He.; darin Ham. ioi teringar; kouateri Ham. biobiarteringar; bui iar Ham. roni teringar; tigeri, apiti; dane teri Ham. tsevar bogousi teringar uoi mongai, mongöto; moon Ham. tsimai; uasig Ham. mitch'eemum P.; metsemam Ha. tagakitsim a mar; tsil Ham. vati; ians pineri mat Ham. eanbekengerimat; mazai li mat Ham. eanitsimai, metzimoatz, metchimoatch; ianitsin Ham. chim P., Ha. ngi, mengidz, far; ni Ham. ngi metare bugotar; otor Ham. ngitsei; nitse Ham. ngitsa; nitoporuch Ham. goomor; geüb Ham.; koosum P.; kusam Ha. cheoba; eueriiau Ham. rsars cheob g_0 ogori faripei lekutabar, metabadz; zapai Ham.

chin	<i>ieter; ietei</i> Ham.	outer thigh
shoulder	<i>iafagar; iafa</i> Ham.	inner thigh
arm	pei, paum; pai Ham. kay'muk = arm, hand, finger P., Ha.	waist
upper arm	tseberi paur; tapiri pog Ham.	penis
lower arm	metseri paur; metari pog Ham.	glans
elbow	abiri biri paur; bugaeri pog Ham.	foreskin
hand	kumotsi; humuets Ham.	scrotum
back of hand	tageri pog Ham.	testicles
palm	rani pei; dani pog Ham.	semen
knuckle	segangir; achoechoror Ham.	vagina
finger	atripei; ateri pog Ham.	hymen
thumb	atrioune pei; ateriünop Ham.	outer labia
index finger	atir; atinme Ham.	inner labia
•	atir atinnu Ham.	clitoris
middle finger	atir; atuuets Ham.	
ring finger	atrioitsik; atriötsi Ham.	intercourse
little finger		anus
fingernail	keripei, ker; krupoin Ham.	fart
leg	kupei, ietedz; pitser Ham.; petchem P., Ha.	burp
thigh	tsepire kupei, tsapita; tapiri pitser Ham.	skin
lower leg	metsere kupei; metari pitser Ham.	bone
knee	tsimare bogigei; achoechorerugu Ham.	blood, menstrual blood
calf	siaeguuei Ham.	afterbirth
foot	betsabetsar kubei; patapata logu Ham.	artery
top of foot	gueuei Ham.	pulse
sole	<i>farekub; farogu</i> Ham.	flesh
heel	apiripinekub; chapiripi Ham.	lung
toes	atiri kupei; aterogu Ham.	stomach
toenail	kruegu Ham.	saliva
body	gegei; urutoar Ham.	urine
neck	ug; ulgei Ham.	sweat
nape of neck	taperöch; daburiügei Ham.	tear
throat	uogan; oarangei Ham.	feces
armpit	faripaur; faripog Ham.	breath
armpit hairs	hochor fari pog Ham.	
shoulder blade	bugunupa; buginipog Ham.	
ribs	kirifarekotogot; fil Ham.	The first estimate of the po
breast	<i>ubei; atau</i> Ham.	and this number remained a
nipple	tut, maimatare; ti, tut Ham.	at the time, however, and it
female breast	dut, düd (E.K.); tir Ham.	all of the inhabitants that ga
female nipple	<i>matatut; mata tir</i> Ham.	who lived among the peop
belly	siei, meseiach; siei Ham. mish'eeum P.; mitsiam Ha.	1832 (which is reduced by a
navel	ubut, moubut	already been reached, if not
umbilical cord	iorubut	
side	farigotogot	men came out to his ship al
back	tageg; dachug tukkalek P.; takalek Ha.	number that agrees quite we
seat	gabik; hapini meg Ham.	officer Senfft encountered
hip	gogam	at 500-600 people. Since Fr
front of thigh	legutan	about 1,000 heads, it is to b

rani tan metan mos piser, gai megemek kein, gin sor fasusor uet bia, rene biar gumugur bar fekir, fik boun fefe bag singoto; iön (E.K.) tagita megarat (E.K.) kein, gin; hin Ham. tsi Ham. cheel P. *tsa; etafa* Ham. pes oag; uach Ham. iangngangas fiti rei ugsug tar gutuf garei moror denimat; ietai Ham. bugor, beag ngas, uguk

population was undertaken by Captain Douglas in 1878. He assumes only 200 souls, ad authoritative for the sailing guides for a long time. It seems very low. He did not land d it is clear from later reports that at the approach of foreign ships, it is not by any means t gather, and it is always just a fraction of the men that travels out. Barnard and Holden, cople for an extended period of time, indicate 300-400 inhabitants for the time around by about half by the famine of the following two years!)—a number which probably had not far exceeded, by the time of Douglas. When Captain Walsen saw Tobi in 1898, 200 p alone, and thus the number of inhabitants at this time can be estimated at 900-1000, a well with Hambruch's count. On the first official visit of the Germans in 1901, regional ed well-nourished, healthy people and numerous children; he estimated the population e Fritz still estimates the strongly weakened population after the devastating typhoon at o be taken as certain that Senfft's estimate is too low. Hambruch's count in 1909 totaled 968 people as follows: 150 married men, 175 married women. 75 nubile young people of both genders 568 children.

There are a few other details about further **population trends** as well: six months after the visit of the "Peiho," Dr. Buse¹ came to Tobi on behalf of the government to examine the state of health there. What he could ascertain was rather regrettable: according to the firm belief of the general population, the Peiho had introduced a devastating epidemic that was said to have carried off around 200 men, women and children in a short time. Only a few natives showed themselves at all, and he succeeded in bringing 52 men and 1 woman to Yap, including the secondary chief of the island. For the rest, the people gave the impression of being healthy and well-nourished and denied having sick individuals on the island at the time. The last report is taken from official records of the British government, which are based on the counts of the Japanese, currently masters of the island. According to these, there were only 183 people on Tobi in 1930, including 3 Japanese: a sad testimony, indicating as it does the loss of almost 800 people in a good twenty years. From this report, incidentally, it is not clear whether this is due to a continuation of the peaceful, voluntary or forced migration to other islands that the German government strove for and began, or whether declining fertility and massive deaths are to blame.

The health of the population on Tobi must have been excellent in all periods. Through this alone, and the multitude of births, was the emergence of such a numerous people possible in spite of repeated natural disasters. Moreover, the typhoons and consequent famines were the only enemies in the history of these people: wars, clan warfare, raids and epidemics-aside from the case reported by Buse-did not exist: a notable case of good luck for a South Sea island! The diseases noted among the natives were tuberculosis and influenza. The first affected only individuals; influenza may have been the epidemic supposedly imported by the Peiho. Incidentally, at the time of the expedition's visit, the Merir wife of the translator Sisis (who was a Tobi native) was ill, and he himself had a severe cold; Krämer's translator, too, was already taken ill during that time. -The fertility of the population was indestructible. In spite of famine and deprivation, visitors at all times encountered an astonishing number of children. To be sure, the children suffer terribly from the deprivations; the numerous children's graves testify to the high mortality, but the volume of births renders the gap almost imperceptible. Dr. Buse reports an average of two births per month, and on this basis foresees a better future for this strong, industrious, and abundantly reproducing people than for the Songosor natives, who are gradually dying off. This makes the Japanese report all the more tragic. - According to Hambruch's investigation, all the families would be considered large by European standards. He encountered family men with 27 children, all well-fed and cared for. Polygyny may have contributed to this situation: men with two wives simultaneously are common, and some men were married four times in succession, fathering children in each marriage. An abundance of children is considered desirable, and the little ones are always lovingly treated and well cared for.

In good times, the island supplies enough food for all, even when the population approaches 1,000. Even then, a superabundance of coconuts exists to support the highly valued trade with passing ships. But the least disruption of the vegetation, even a single windstorm, is capable of upsetting the balance, and a famine becomes inevitable. High mortality results. The natives themselves view these conditions as inevitable and are entirely content if they are blessed with good years, suffering the times of deprivation as punishment meted out by higher powers. They never consider giving up their home and seeking a place to live that would offer them more security. Their

love of homeland strongly resists any transplantation. If for one reason or another they end up somewhere else, they see this as a temporary change and are happy to return home. In this sense, Holden is doubtless correct when he reproaches them for their satisfaction with their isolated and meager home. The German government repeatedly attempted to relocate Tobi natives from their home, too small by European standards, to other islands with better nutritional conditions and less danger of typhoons, and always encountered strong resistance from the people and their chiefs. Thus, they unanimously rejected the suggestion made by Krämer on behalf of the regional officer in Yap, giving as a reason "that where they were born, there they also wished to die." Finally, five young people went to Palau with the Peiho, apparently joining the Merir chief Maian, who had already settled there. When Captain Walsen's ship was visited by natives, two young men attempted to hide on board unnoticed by the others. They were, however, discovered by their countrymen and strongly reprimanded by the older men for their flight attempt; apparently, the Tobi natives consider every compatriot an essential member of their community who may not at any price be lost. Incidentally, a similar attitude is shown regarding their captives on the "Mentor," whom they did not want to relinquish even in the face of the famine, in which every morsel of coconut is precious. Regional officer Senfft brought a few Tobi natives to Yap on the "Stephan" in 1901, including Sisis, later Hambruch's translator. In 1907, it was only with the help of many fine words, and not without a reimbursement sum, that Fritz was able to take away 48 men and 2 women.¹ Of these, he took 39 to Yap to work for the regional office or enter into the service of Europeans. 10 others came to Saipan and ended up working for Spanish settlers. At the time of the Hamburg expedition, there were also individual Tobi natives on Palau: the men Oveizigei, Amoreta, Manieietach, Materenoma, Maisin and Meras. They returned to their homeland on the Peiho. Dr. Buse, too, attempted to recruit emigrants. The approximately 200 men gathered around him claimed to be willing to go to Yap with him, but later 10-20 of them fled in boats and ran away into the bush when it was time to go on board, and finally he was able to take away with him only 52 men and 1 woman. Most of them were young, strong men.

The other relations of Tobi natives with the outside world are due only to chance. In spite of their skill as boatsmen and the often-praised seaworthiness of their vessels, they have not been enterprising voyagers, restricting themselves to "snaring" passing European ships. In doing so, they have certainly dared to go out of sight of their island, but did not generally extend their pursuits much further. It is telling that they know next to nothing about other islands: the Palau natives that were captured along with the Americans were as foreign to them as the whites, and on Palau itself, Tobi was a completely unknown island. According to Krämer, the Tobi natives knew at least the names, if not much more, of the following islands: Mekieg (Merir), Bur, Songotsor, Yap, Ngoruk (Ngulu), Mogemog, Voreai (Oleai), Saiper (Saipan), Suk, and Pupua (New Guinea). According to Hambruch, however, they prefer to call Yap "Jor," the name of the Yap hero in the founding legends of that island. However, all indications are that even the knowledge of these names is of quite recent vintage. They seem to feel a certain connectedness with Songosor, Pur and Merir, which however appears to be cultivated more on those islands than on Tobi.

The Tobi natives know no founding legends as developed as those that have been passed down on Merir. Not being seafarers, the ocean was an insurmountable barrier to them; even in times of deprivation, when the people on Songosor sought and found help and food on neighboring islands (Davids Islands), they had to try to survive on their own and wait it out, which probably made them into the isolationist fanaticists Holden came to know. In spite of their aversion to long voyages, individual cases of going astray did happen: at one time, three Tobi natives are said to have gone off course and ended up on Merir, and Hellwig heard that several of them had been on Manila. The only evidence the expedition found of foreigners straying onto Tobi was the abandoned house of a "Dogerana

dren came and only two women. But I had to pay 8 bars of tobacco for each of them..

¹ Dr. Buse, Report on the Voyage of the Government Steamship "DELPHIN" (February 19 - March 8, 1910) to Songosor and Tobi. German. Colonial Newsletter 1910, p. 937.

¹ Fritz writes: ... I saw that some of them did it secretly and that they were going against the orders of their parents and masters. No chil-

man." It had a stone foundation and a bed of masonry inside.

This man was said to have come from Menado, Ternate and to have later left the island on a British schooner. A brother of his was said to be on the island still, but he did not catch anyone's eye because of a foreign appearance; probably this man is simply a guest.

European influence began early. The location of the island was very conducive: not too far from the course of the ships sailing from India to China; one can estimate the history of relations with whites at 200 years or more, for when Douglas encountered them, they already possessed bartered goods. So his vessel will not have been the first to approach the island. But in his opinion, they had never seen firearms or iron, and he believed that his ship was the first of its kind that they had had occasion to board. A few decades later, according to Holden, they already knew the words "sombrero" and "chappo" for hat, and iron was a desirable trading item. Hale, the linguistic researcher of the United States' Exploring Expedition, sought out Holden in order to learn more from him than had been published in his book; he heard about a certain "Pita Kat" (or Peter Kart), who lived on in the traditions of the Tobi natives: "...copper-colored like themselves, who came from the island Ternate many years ago and gave them their religion and such simple arts as they possessed...."¹ In spite of Holden's apparent misunderstanding-the Tobi natives trace their culture back to an ancestral mother-and Hale's speculations about this Pita Kat, which surely serve only to increase the confusion, it is nevertheless probable that this man from the Spanish-Portuguese colonial territory taught the Tobi natives the value of iron and the foreign terms for "hat," for they deny ever having had any white person on their island before the Americans. -Around the end of the previous century they already possess firearms in abundance, which they do not hesitate to use against whites; and when Fritz arrived on Tobi, they knew expressions in pidgin and traded not only in rope and foodstuffs, their traditional wares, but were already offering the wooden figurines carved after European models, such as steamships and other trivial items that were produced solely for the tourist industry. A certain Captain Strong was a frequent visitor; he dropped by the island on his trips to Helen Reef to catch shellfish and snails. It was said that there were Tridacna, Cassis and Trochus and Triton horns in abundance there. Perhaps the men Bukrema, Guman and Ueiriiangoz, who knew the great reef from personal experience, visited it with this captain, though their knowledge of Helen Reef, which they call Osariki, must be much older. They have the same name for it as the neighboring islands, which indicate it on their sea maps.

After the transition of the Carolines from Spanish to German rule, the German flag was raised on Tobi on April 12, 1901. The location *garingemog* was chosen for this purpose, and the mast was erected in front of one of the chiefs' houses. No missionary effort was undertaken during German rule, or previously.

The **character and mental disposition of the natives** is judged negatively by most witnesses. Holden is very derogatory about them. There can be no doubt that he not only applies a false measure and dismisses everything that does not conform to the culture familiar to him, or seems too foreign, as inferior, but also that his sufferings as a prisoner, and perhaps even more his grief over the deaths of his companions, bias him against the Tobi natives. Hale also received this impression, and therefore said much to rescue their honor. Holden almost cannot find the words to adequately express their baseness and detestability. For him, they are a people on the lowest mental level and cannot be surpassed in moral corruption. The general cruelty and boorishness of which he accuses them reaches a pinnacle in the "women like Furies." He calls the natives awkward and stupid, their culture wretched, their condition deplorable, in which he is correct; but he blames their isolation and indifference. Barbaric, cowardly and submissive, lazy, shameless and immoral: in his eyes, they possess not one good quality. Captain Barnard's judgment is much more lenient. Holden clearly never realized that fate had placed him among a people who were driven to sheer desperation by extreme deprivation.

1 Hale, op. cit. p. 78.

Any people whose number famine has reduced by half would demonstrate similar conduct—hardly any better. Fritz encountered the natives in a very similar desperate situation, and his impression, too, is one of great apathy. Their self-sufficiency and contentment with little, strengthened by a great love of home, and their aversion to longer journeys and anything foreign are doubtless characteristic traits. But laziness, of which Holden accuses them, is certainly not the vice of the Tobi natives. According to him, one would think they hardly worked at all and, as cruel masters, forced only their poor prisoners to do so. But there can be no doubt that in good times as in bad, they tend their own little plot of earth with the greatest imaginable industriousness, skill and thoroughness, and manage to produce an astonishing amount from it. Otherwise, their very existence would not be possible. The economic misery described by Holden was due to natural catastrophes, and the damage caused could only be repaired by time and long years of arduous work.

Their bad reputation among seafarers is without question due to the impetuous, excited behavior they exhibit in front of foreigners. Their loud cries and wild gestures, persistence and aggressiveness in pursuit of the trade ships made it all too easy to assume bad intentions, and it is hard to say to what extent they may have let themselves get carried away when the situation became serious. From the time of Holden to the visit of the Hamburg expedition nothing had changed in this regard: in fact, Hambruch had to show his carbine at one point to calm things down.

Captain Walsen is the only seaman of his time who regarded the Tobi natives as harmless and acknowledges their modesty and well-mannered behavior. The others warn of them as a horde of robbers and call them the cruelest people of the whole archipelago. There are reports of ambushes, pursuits with rifle shots and casualties. The cause of all these excesses is their lust for European trade goods: tobacco, iron and cloth. This drives them to deprive themselves of necessities even in times of want in order to trade with them. On the other hand, they are extremely attached to their traditional customs and native objects, and averse to all innovation, primarily for religious reasons. In their opinion, anything foreign can all too easily bring bad luck upon them, and this conviction makes them suspicious, fearful and reticent.

Their fear of anthropological, photographic and phonographic recordings is telling. The first attempt resulted in general flight; women and children were altogether impossible to convince. Only many fine words, promises and trickery persuaded them to keep still. Records of the 20 natives living on Tobi—the other six were living on Palau—were able to be made only by luring them onto the Peiho through trickery. Only Sisis, the translator who had been on Yap, dared the phonographic experiment, notwithstanding the fact that even the women listened to the gramophone with great delight.

When they are not in the grip of fear or suspicion, they are friendly, modest, obliging and generous. They also gave Hellwig, who had many dealings with them, an impression of intelligence. For the rest, it is difficult to determine to what extent awkwardness and unwillingness to understand played a role, since all they expected from whites was the anger of the gods or other disaster. In fact, relatively little has been learned of their ideas, manners and customs.

The women behaved very reticently toward the white men, and the young girls avoided them altogether when possible. Though they were generally interested and curious about every activity of the whites, they always disappeared immediately when food was served, clearly considering it improper to watch them eat. They express their wonderment by a curious inhalation of air with a slight popping sound and pursing of the lips. During religious ceremonies, this gesture admonishes them to silence. On the other hand, it is strange that Holden was not able to teach the natives to whistle. As a prisoner, he liked to delight in their clumsy efforts.

Special Section

I. Society and Intellectual Culture

1. Origin

A long time ago, the childless woman Ramakaparek (A.K.) or Maleparu (Ham.) came from Sorol (Ihochor Ham.) near Mogemog to Tobi with her husband Ean in a canoe without a sail. Her route is also supposed to have taken her via Fais. In those days, there were neither people nor trees on the island. Everything was water. Only a single tree stood in the middle of the island on the place *Fariataifo*. It was a *mag*, and is no longer there.¹ The woman was pregnant. Ten days after her arrival she bore a son, and afterwards bore ten more children. According to Hambruch's inquiry, she bore thirty boys and thirty girls: here, the old founding legend seems to have been merged with a moon myth.² The children intermarried, and it is from them that the Tobi natives trace their origin. The sons of Maleparu first made the island as good and large as it is today. The large sea-bird Gataf (Frigate bird) brought the first taro. According to Hambruch's version, the ancestral mother brought it from Sorol. The bird dropped the taro on the beach, and Ramakaparek took it and planted it. Already after a month it sent up many shoots, *in e uot*. Since it was too dry for the plants, she had some earth dug out and the others (presumably the daughters!) imitated her. This is why the plantations are so extensive, the Tobi natives say. She also planted the coconuts gathered from the seashore, and as the trees grew (and bore fruit), she planted new nuts.

One day she collected pandanus leaves, vats, sewed them together and built a house out of them, the fare kikak for the spirit Sagits (Holden's Yarits?), whom she had brought with her from Sorol. The house in which Hambruch lived during his visit is said to have been built by the sons of Maleparu. She herself first lived under the single tree and gave birth on the site par, where she later erected the birthing house *imeripar*. In the beginning, she herself is also said to have lived in the spirit house she built, at least at times; it was finished before the birthing house. In comparison with the current one, the *imeripar* was very small, and Maleparu did not give birth there; only her daughters did, when there were already other houses round about. The loom, too, she brought from Sorol. Furthermore, Maleparu and her husband carved the first spirit boat like the one that now hangs in every spirit house, and named it oanugeiren.³ When it was finished, they said, "Here, Rugeiren, is your canoe. Protect our children and give them fish and food!" The husband Ean is also said to have invented the coffin boxes, which he fashioned from driftwood, menima.

2. Government

The rule lies in the hands of a head chief, *tamor*, now also called king by some, who is assisted by lower chiefs. Among these is also a female chief. In 1909, according to Krämer, the names of the thirteen rulers and their territories or homesteads were:

Vitseraun, head chief in Vo	tsenekabi
Begigeramar in Fai	nerikeroi
Tokitokonoma in Fai	regenitsaro
Mogonagir in Ga	ringemog
Tsigeitsegagen in Var	nim
Mogoreitsak in Fai	rimekenasarai
Torumar in Ril	kerivongar
Vovitika in Fai	rigagat
Etive in Vo	rimag
Truveinemar in Ma	itasires
Tubumar in Ril	kerivongar and Farik

1 Compare the characteristic tree of Carteret.

2 Hambruch had one old man and two young people relate this legend.

3 oa Rugeiren.

Avesaiei, female Triesomaker

Their power, including that of the head chief, seems rather limited. He has jurisdiction primarily over the building of the boathouse (probably the gathering place) and the rebuilding of the spirit house fare kikak. Since the people's memory is seemingly not very good, as the gaps and contradictions in the founding legend show, they can barely indicate the names of a few of the ancestors of even the head chief.¹ His father's name was Senap, his grandfather's Vai tamor; the rest are already entirely in the realm of legend, and one of them has some connection with the moon which could not be clarified.

When a young man wishes to marry, he first speaks to the girl. If she agrees, she herself tells her parents, and he speaks with his. If they are against the union, it is not made. On the other hand, the consent of both parties is also essential. They do not know compulsion. The discussion is generally held early in the morning. In the evening, the groom brings ten to twenty coconuts into the house of the bride; she, in turn, gives his parents a basket or two of taro. A further exchange of coconuts and cake takes place, and then the marriage is considered completed. According to circumstances, the young couple then lives either with his or her parents. They merely build themselves a small sleeping house. This custom probably explains the notable closeness of the buildings in all the settlements on the island.

Divorce is easy and commonplace. If the married couple do not get along together, they separate, and in such a case the children all belong to the woman. Consequently, one can posit matrilineage for Tobi, and the numerous children that Hambruch found in the households would not be the children of the man by his current and past wives, but children of the women by him or their previous husbands. This hypothesis is supported by the natives' remark that the father of the wife, if she dies and he likes the son-in-law, will give him one of his younger daughters as a wife, and the children appear to remain with the widower. There are no special marriage laws, but marrying among relatives is forbidden, and child engagements are said to be common.

Sex life. When Holden says, "Intercourse among the sexes is not bound by any law, and modesty is almost completely ignored," it is without a doubt an exaggeration or misinterpretation of the situation. He probably took offense at the freedom of premarital sex and the erotic dances. Most men have two wives, who age rapidly due to the frequency of births. After every birth, sexual intercourse ceases for a year. Each wife has her own house, and the husband sleeps with them alternately in their house. A menstruating woman goes into the blood house for three or four days; the men, of course, are never allowed inside. Coitus is called *fefe*; if the woman lies on the bottom and the man on top, he is called ri; if she sits on his thighs, *fefemot*. Cunnilingus is called *gotsots*. The expression for whipping with a rope for sadistic purposes is *tibakiri*. Pederasty is apparently known to them in name only, fefe boguk. Masturbation is known only to women and is called gasegusek. Men do not practice it. If a girl is still untouched by the time of her first menses, deflowering her is undertaken with pleasure; the mother then uses a medicine, *sekup*, for ten days both internally and externally; this is a blood-stanching preparation used also in other contexts. It is administered in coconut shavings.

Family life is peaceful. The children, who are highly desired, are treated with equal rights by the parents, as Holden says. They are handled very gently and punished only if their demands for the sparse food grow all too wild. Their importunity annoyed Barnard. Hellwig, on the other hand, found that the children were kept under strict control. They were never allowed to push themselves into the forefront, and had their places behind the rows

in Farikir in Rikerivongar.

3. Family

1 Holden gives very scant information on these matters and without further explanation fixes the range of transmission at 100 years, so it

would thus reach back to about 1730

of adults. If they were too noisy, greedy, or disobedient, they sometimes received blows. The men also have the right to discipline their wives, and criticism is not spared. Older men seem to possess a certain authority. Only with great effort was Krämer able to ascertain the expressions for the various family relationships. According to Holden, each person has only one proper name; family names are unknown. The parents, too, are addressed by the children with their proper names, and words corresponding to our "father" and "mother" are foreign to them. The same name is never used for two people (cf. Hambruch's list of inhabitants and Holden). Avoidance laws have not been observed. A brother may speak to his sister in public without impediment. The greeting among them is called *gobis*. To greet each other, they hug and rub noses. The only insults are said to be: *kire meruesin* = you married your mother! and *boutamau*, which means stink.

Vocabulary according to A. Krämer.

	Vocabulary according to A. Krämer.	
	vocabulary according to A. Kramer.	old woman
birth	iegaiei	chief
twin birth	ribe	female chief
man	mar; zama, tama He.; mah 'ree mah P.; amare Ha.	friend
many men	moiere mar	enemy
parents	tamatsemesirats	people
child	garieits; ruas E.K.; mah P.	carpenter
toddler	lah 'bo P., Ha.	war
infant	gaga; merauidz E.K.	dance
boy	iariued He.; gabari mar E.K.; uereuedza mare Ha.	game
little girl	igerai uaivi He.	festival
girl	gabali faivil E.K.; pah'chik vay-ee-vee P.	funeral celebration
woman	faivil; uaivi, uaifil He.; vay-ce'vee P., Ha.	medicine man
many women	moiere faivil	medicine
young woman	soer 'ree-wedg-vay-ee-vee P.	disease
father	temei; miiangei Ham.; sour 'teemum P. uatimam Ha.	pain
mother	sirei; rimar enin Ham.; mish'erum P. miseram Ha.	coffin
brother (of brother) ¹	pisir; uesi ierau Ham.; biz'sheem P. biziam Ha.	spirit boat
brother (of sister)	moi engar	grave (for children)
older brother	<i>tamats; erab</i> Ham.	children's cemetery
younger brother	ielimat Ham.	putrefaction
sister (of sister)	pisir; euueis Ham.; mee'-ang-um P. mianam Ha.	lament for the dead
sister of brother	moi engar	soul = demon
older sister	erabauaue Ham.	land of souls
younger sister	euaio Ham.	dream magic, love magic
husband	gi mar	prophecy
wife	gi faivil; megiri moanai; megigch fevi tivid, tega feivil E.K.	taboo
pregnant woman	faivil a sie E.K.	shadow
son (my)	<i>rai mar; eiar</i> Ham.	name
daughter	<i>rai faivil; eraur</i> Ham.	what is your name
paternal grandfather	tema temei; tamar sin Ham.	sleep (sleep sitting, sleep lyi
paternal grandmother	sinetemei; iiemar Ham.	God
maternal grandfather	<i>tema sirei; famar</i> Ham.	murder
maternal grandmother	sine sirei	thief
youth	<i>rueis</i> , young people = <i>gabaritsiriket</i>	property (my possessions)
father's brother	pisi tamei; meian Ham.	penance
father's sister	meiangei tamei	witness
		greeting

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pisisirei; neida Ham. meiangei sirei rauinei rare busi tamei tamarikik sine kik oats maningis uasera marenap, irekeri mar irekeri faivil tamor faivire tamor meuisi tai uisi pee'peeah mah'ree P. senap He. maur vagek gokom kotoragei gene tugutarei tafei magakes gametak bag oari bugurog ribar repei ioba dedan, maugar iares getek tar gourobuk tsiep tabu, ietap Ha. iaingar it meta itom masek, masek uor iares lii geibikaf gapitiki tangakir gataik kimeian; kideian He.

ying down)

mother's brother

mother's sister

daughter's child

son's child

wife's father

wife's mother

wife's brother

white person

old man

native foreigner

cousin

Birth. During the first four months of pregnancy the woman may not have intercourse; from the fifth month on it is allowed again. As soon as labor pains begin, she goes to the birth house, *imeripar*. The birth occurs in a squatting position. The laboring woman drinks hot water, pants through her nose and has her body pressed from behind by other women. The umbilical cord, *iorubut*, is cut with a piece of shell. To staunch the blood, very finely scraped coconut is applied. The afterbirth is buried outside in front of the house. After the birth the mother wears a body girdle, tagari faivil (A.K.), a strip about 20 cm long made from pandanus leaf. According to E. Krämer, there are two kinds of mothering girdle: the strip, which she heard them call *unebego*, and a mat woven from pandanus strips, *tagari faivil*, which is distinguished from other mats by a small rectangular extension that is woven on.

After the birth, the young mother continues living in the women's house, where she always finds companionship, for a certain period of time. The infant stays with her. If a childless woman desires a child, she takes another's small child to her breast, which they consider very good magic. The child is laid in a basket-like cradle hung from the ceiling. The rectangular framework with low sides, fashioned out of several slats, is somewhat wider at one end. For children who have already begun walking, they have a kind of walking fence: a framework fastened around or to a tree, which the child can grasp. Fig. 15.



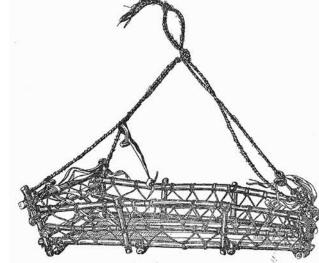
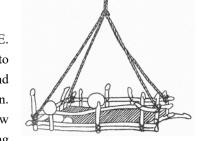


Fig. 15. Walking fence, meuar. After a sketch by E. Krämer.

Fig. 14. Cradle, *ürarerigaga*, 4839^{II}. Width of the top end 38 cm, width of the bottom end 31 cm, l. 71 cm, h. 15 cm.

Fig. 16.

The women's house, imeripar, also called imega faivil, according to E. Krämer, is a very large house located on the beach with a roof reaching to the ground and a very low entrance. It is only for menstruating, pregnant and recently-delivered women, and is strictly taboo for men and other women Only a few old women in charge of keeping order and caring for the new mothers spend time there as well. In front of the house is a spacious clearing



and a cooking house. Inside, the floor is covered with many sleeping mats. The beams are decorated with phallic figures. In approximately the middle of the room, a fire is tended. Above it hangs a rectangular wooden frame with a bottom made of slats and phallic rods that are fastened to it in an upright position. It is called *taum* or *samorungo* nen im and is taboo. One of the old women keeps watch over it, being called mesin in this capacity. A part of the large room behind the frame is set aside for recently delivered women alone, and is taboo for the other women.

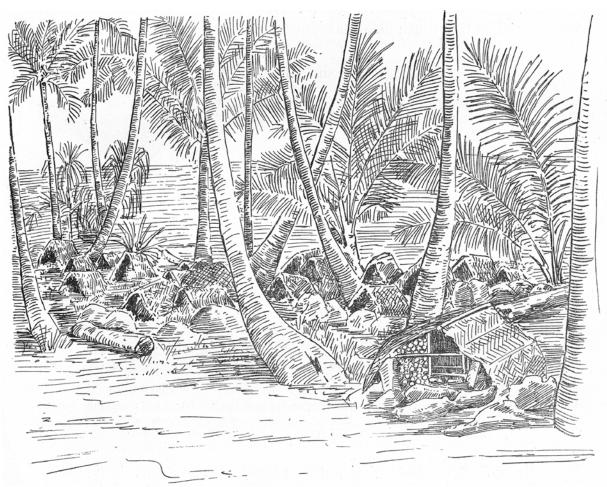


Fig. 21. "Children's cemetery." After a sketch by E. Krämer.

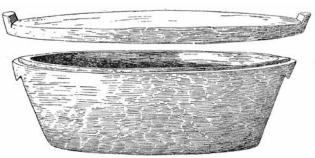


Fig. 17, 3988^{II}. Length 183 cm, height 59 cm, bottom diameter 130 cm. Coffins, bag, of mangrove wood.

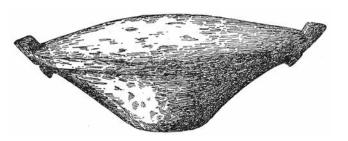


Fig. 18, 4362^{II}. Length 54 cm, width 25 cm, height 22 cm, bottom diameter 17 cm.



Fig. 19, No. 4310^{II}. Length 128 cm, width 63 cm, height 35 cm.



Fig. 20, No. 4818^{II}.

Death and burial. If men or women are taken ill, which is always caused by the influence of spirits, they or their relatives bring a gift, *gapitek*, to the spirit boat in the spirit house so that healing might be granted. If the person dies nonetheless, they lay the corpse, *matagori*, Ham., on a coconut mat, *iaso*, on the ground, with the head facing inland, and men and women begin a loud wailing and intone the songs of the dead. These are apparently already a dying cultural relic, for the six people living on Palau no longer knew them. The process of mourning the death of a chief was described to Krämer as follows: "When Vitseraun (the current head chief) dies in his house one day, his friends and relatives will bring his wife presents: ropes, bowls, mats and coconut bottles. After this, his corpse will be brought into the boat house, where his widow must tie his lower jaw shut, *fogorierter*, with a shell necklace, *vatari bur*. At noon, twenty-four hours after death, his face and body will be rubbed with turmeric powder and coconut oil, and his head will be turned sideways. The body, curled up tightly and wrapped in three or four mats, will be tied and laid on its side in the coffin, *bag*, which is shaped partly like a box (cf. p. 101, Fig. 17-20) and partly like a bowl. The pairs of handles on it will be tied fast. It is made from *relouel, meli, safan*, or *fariep* wood.

The oval coffins shown here are made from mangrove wood and consist of a tall lower part with a flat lid that rests on a ridge of the lower part. The slightly convex sides rise from an almost round bottom at nearly a right angle; from an elliptical bottom, the ends have an angle of about 65 degrees. The lid, curved over its length and width, has upright pegs at the ends, which together with those carved out of the bottom half form handles that are sharpedged on the outside, rounded on the inside. It hardly seems possible that a corpse can be fit into these vessels, but the natives demonstrated this difficult task using a live body. The individual parts of the coffin are called: lid = *uor*; handle = *chomor*; edge = *notor*; convexity = *ran*; interior, bottom and apparently also the ends = *dugere*.

Coffins, *bag*, of mangrove wood. On the beach it is tied onto a canoe, paddled far out to sea with another boat, and without further ceremony set adrift. Only men and married women receive such coffins, however; single women never do. The Tobi natives do not know themselves to where the corpses drift. On Palau, however, the canoes of the dead occasionally wash back up on the shore. The people then take possession of the usable boats and throw the corpses back into the sea. Concerning this custom, Hambruch further learned that they use the dead person's own canoe as his death canoe, and that they push it into the sea in the evening, along with gifts of coconuts and taro. He does not mention a coffin. It appears that the use of coffins is a privilege or a more recent custom. Holden knows nothing of it. With the prisoners, they did not even wait for death to set in but left the dying to drift off to sea in boats. It is interesting to note that the prisoner clubbed to death for stealing food was thrown into the ocean without a canoe. Holden also says that when the situation of their own sick (those who have succumbed to famine) seems hopeless, they simply chase them into the bush and allow them to perish without any aid. –According to Krämer, a funeral meal with song, *gene*, is held. The funeral songs, *dedan*, are intoned by the relatives during the preparation or setting afloat of the corpse.

An exception to this type of burial is made for the infants who die without teeth; these are buried in the ground in a special **children's cemetery** located near the imeripar. Among scattered palms, small funeral huts on grassy ground stand over the graves; they consist of low roofs resting on four posts. The site is strewn with small coral rocks and fenced round with stones. One finds wooden bows, necklaces, and flat, wide tortoiseshell armbands there as funeral offerings. Apparently, however, no further care or maintenance takes place.

Besides the cemetery, there also appeared to be individual graves between the dwellings. Here, too, they were covered over with a low, small roof. Several indications allow the conclusion that the somewhat older children are buried here. Otherwise, older children are committed to the sea in boats like adults, but without a coffin.

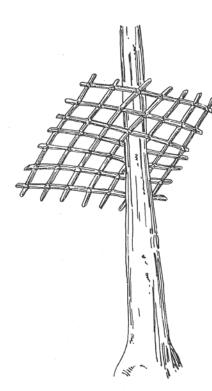


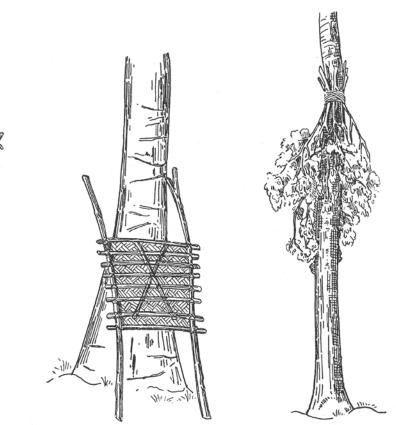
Fig. 22. Magic against theft from fruit trees, hatsinetsin. After sketches by E. Krämer.

The **property**, *gapitiki*, of a man consists of his house, fields and coconut palms. The native terms for them are: *imerimeritama, imarchapin, iserak, feriafen, asaieen* and *iagurab.*¹ His wife and children are considered the heirs, the women only insofar as they, like other unmarried family members, are sustained by the family head, the oldest son. The sons inherit all the father's possessions except the taro and turmeric fields. This is also why men bring coconut palms into a marriage, while women bring taro fields. Another result of these inheritance laws is that several families share ownership of one piece of land. The yield from certain fishing expeditions is considered common property. Any man can perform the distribution. Everyone, men, women and children, is entitled to their share. These distributions are the only way they have of estimating their population; they do not know the number of dwellings, since this is irrelevant to their communal life.

They are very obliging toward one another. The owners of boat houses allow those without to use them without payment. One repays the help of friends with one's own help or with food. They try to protect themselves against **theft** through several kinds of magic. They wrap a rope around the trunk of fruit-bearing coconut palms under which they place twigs or bundles of pandanus leaves. This magic, which can replaced by woven coconut leaf pinnae, is called *hatsinetsin* and is supposed to protect the nuts and palm juice (for toddies).

They seem to handle **criminal law** in various ways according to the circumstances. Thus, in times of deprivation they punish a trifling case of food the ft very severely, but in times of plenty they do not pursue the perpetrator any further; they merely harbor a grudge against him, as they say. This is the same attitude taken towards the polluter of the well. It is also possible that their punishments have become less severe in the course of time. Holden reports that for the theft of a few coconuts, they tied the hands of his fellow-sufferer, the Palau native, behind his back, threw him into a canoe and set it adrift. He adds that this is how the natives punished offenses of various kinds.

1 according to v. Heinitz.



4. Laws

They beat his white companion to death with clubs on account of a minor offense; this was accompanied by an outbreak of general public rage against the prisoners as a whole which probably had its roots in hunger. –They assured Krämer that there had never been a murder, *lii*, among them. While they merely hold a grudge against a thief, *geibikaf*, and attempt to protect themselves from him through magic, in the case of a habitual thief they turn to his relatives in order to have them punish him. A blow with the hand is termed *bikiki*, and with a stick, *uouti*. If they get into a fight, no weapons are used.

In the case of **adultery**, the two men wrestle each other, *beoban*, and others generally immediately attempt to separate them, *gamatsi*. If the adulterer is caught in the act, the husband scolds him, and the guilty party pays him a fine, *tangakir*, that may consist of palms, land, bowls and rope. Witnesses are called *gataik*.

5. Tradition and Religion.

The **kingdom of the dead** is called *tauoar*¹ and no one knows where it is located. However, their souls, *earusi*, dwell in the holy grove, *getik*, in the northern part of the island, which is strictly taboo for women and children and entered infrequently, reluctantly and only at certain times even by men. They believe that the spirits wander about there, so that it is haunted. They act frightened and keep to the narrow paths, incessantly murmuring prayers and looking around; they are afraid of having coconuts thrown at their heads and do not dare to speak; and they are happy once the grove is behind them. They were most reluctant to lead the white researchers through it and entreated them urgently not to shoot there. Krämer noticed that a section of the grove consisted of *Eugenias*, called *fariep* on Tobi. –The names of the dead are not spoken.

It is extraordinarily difficult to get a clear idea of the Tobi natives' idea of divinity. Holden only heard of a cult of Yarris. Sagits is the divinity in whose honor Maleparu built the first spirit house and whom she is said to have brought with her from Sorol, her home. But even in this foundation legend, the spirit boat inside is sacred to Rugeiren. Krämer received the impression that *Iares* was only a kind of daemon, and that the lord of heaven Rugieren, who was considered the highest god on other islands as well, was worshipped as the sole divinity. It is notable that the natives of Yap know the word *yarif* for spirit. Now it is eminently possible that the cult of a founding divinity coexists with worship of the god of heaven, but it is just as likely that both refer to the same god, and that Iaris simply expresses the idea of divinity, while Rugeiren is the name. After all, Holden heard mention only of the one god, upon whose anger and grace everything depended. According to Krämer, Rugeiren rules over the sea and the typhoon, and according to Holden, during an earthquake the people say sebi too Yarris, Tobi Yet-tah men-Yarris is coming, Tobi will be devoured! During thunder and lightning, they say Yarris ti tri-Yarris speaks!² In the founding legend, Rugeiren is entreated for fish and food; in Holden's account, the anger of Yarris is feared if they do not retain the traditional shape of their fishhooks. All of this clearly shows how closely linked the realms of these divinities are, so that their conflation in the minds of the Tobi natives is highly likely. They consider Yarris to be subject to human characteristics, and imagine that he is moody and vengeful. Any bad luck they experience is blamed on his anger. Thus, he caused the coconut and breadfruit trees to bear poorly and the fishing expeditions to yield so little. They reject the acceptance of cultural innovations etc. out of religious considerations. They would not use the American sailors' very usable fishhooks, as Holden tells it, before they had warmed them and bent them into the traditional shape, which made them ineffective at holding the fish. But Yarris would be angry at them if they used the hooks in the form they were given to them by the whites.

The parents of Rugeiren are Arizarap and Idamariu. Inagi is a sister of Arizarap. Rugeiren has two wives, an earthly one and a heavenly one: Idamelu and Idamega. The earthly wife Idamelu is the mother of Olifat, who is also named as one of Arizarap's numerous children, and whom they denied all knowledge of to Krämer. The brothers of Rugeiren are Zorauii, Guda, Marinarelao, Zizilele and Rios; his sisters are Idazabiu, Riganan and Itariu, and a further child of Arizarap whose gender was not indicated: Rizerau. These ideas are clearly very vague. Concerning other mythic traditions of this people, it was possible to garner only fragments. They have a special guardian spirit for coconuts, *Daulen*, and another for palm wine, *Moeilari*. Female daemons include *Maredeizei*,¹also called *Malemale*. Further, *Krial*, *Runimar*, *Idazin*, *Idagilerain*, *Mezuzu*, *Meiuoror* and *Zimeizap*.

Religious activity is the sole province of various **priests**, whose power and influence are considerable. As mediators between divinity and humanity, they control it through their suggestions, inspirations and commands. In 1909, the priests of Rugeiren were Mantrüior and Veitop. The former, a fanatical and nearly blind priest who was not inclined to tolerate the whites and their work, caused the expedition great trouble by badly frightening the people, so that they tried to induce the visitors to depart by offering them many gifts. How triumphant he must have felt when the pestilence that appeared after the departure of the Peiho justified his dire predictions!

All religious rites are performed in the **spirit house**. In Holden's time, only one of these existed on the island; the expedition encountered two. The ancestor Maleparu is said to have built the first one, the fare kikak, which must be rebuilt at the command of the head chief whenever it becomes dilapidated. This is the house in which Krämer lived. The second spirit house, called *galis*² was assigned to Hambruch as lodging; it is said to have been built by Maleparu's sons. As their central focus, both spirit houses contain a spirit boat dedicated to Rugeiren (Fig. 23). It was not ascertainable why there were two spirit houses, and whether they served different functions. Holden calls the spirit house simply *Tabhou* and describes it as a crudely built hut measuring 50 x 30 feet. When, in another place, he speaks of a gathering house, it is possible that he is referring to the spirit house again, if not to a large boathouse. In our time, men and women are allowed to sleep in these houses, under certain circumstances at least; at any rate, this is where the whites were housed. At one time, Holden and his companions were concealed there from the raging populace under mats by some women who took pity on them. According to Holden, in the middle of the spirit house there was a kind of altar that hung from the ceiling (the spirit boat!), upon which, according to the people's belief, the deity would alight to speak to the priest. Twelve fairly formless carved statues are set up in various spots to personify the deity, "as far as we could ascertain." Mrs. Krämer, too, saw wooden figures called sen in the spirit house, which, however, were said not to be sacred to Rugeiren. While Holden's description of them as "formless" should be taken with caution, these old deity statues should not be confused with the secular carvings depicted here. These are modern works created for the tourist trade. However, their similarity is not to be denied on this account.

The interior of the spirit house farekikak, which had a roof reaching to the ground and a floor of planks, was divided into three sections by 2 cross-beams: the first section, facing inland and abutting the entrance, was empty and assigned to Krämer to live in; the other two sections were taboo. A transgression of this ban would anger the gods and call down a typhoon or illness upon the people or the foreigners. The spirit house galis, inhabited and described by Hambruch, also had a roof that reached to the ground and was covered with palm-leaf mats; it was about 8 m high, and its sides measured 15 by 8 m. It lacked a designated entrance, and the people crept in through the corners. The roof rested on 8 large central beams and 6 side beams on each side, which are significantly shorter than the ones in the middle.

1 This female deity as ascertained by Hambruch is of Malemale is not identical to him, but a female deity. 2 In one place, Krämer calls Hambruch's spirit hous ing the names of the house and place. It is very prof

¹ Hambruch mentions this name according to the statement of the interpreter Sisis. One is tempted to connect the name with the word for boat, oa, and to think of the death boat of the neighboring islands. However, Hambruch mentions a second tabu site, tauoer or dauer, which may not be entered by young people and must always be kept very clean. It is apparently the spot numbered 58 on the map, cf. Fig. 8., and part of the grove getek.

² On Yap, dira means thunder.

¹ This female deity as ascertained by Hambruch is doubtless a man, Mareteizai, known from the legends of the neighboring islands, and Malemale is not identical to him, but a female deity.

² In one place, Krämer calls Hambruch's spirit house Beitomar; it is located about 50 m north of the Farekik. Here, he is apparently confusing the names of the house and place. It is very probable that Yarris, Sagits, Iares and galis are different versions of the same word.

The sides and gable areas of the roof consist of light rafters. The interior was divided into two sections, one of which was taboo and contained the spirit boat. Strangely, there was a small altar in the empty section.

The **spirit boat**, first built by the ancestress Maleparu, is found in every spirit house and dedicated to Rugeiren; in the farekikak it was a double boat, in the galis a simple outrigger boat hung from the ridge beam by four ropes. The watercolor in Plate 1 shows the double boat of the farekikak, painted by Mrs. Krämer from a precisely prescribed distance. The natives believe that during a wind it is moist inside. The boat in the galis was festooned with plants, bottles, tin cans and decorative necklaces: offerings in return for which the deity is supposed to bestow fish and food. The edible gifts filled the air with an awful stench. Bowls with turmeric powder and oil vessels were hanging next to the boat. Its pointed ends were painted with ren strips. As Krämer learned, a festive painting of the spirit boat takes place each year. It is called *gapisingeri* and is done by the chiefs, who must provide a large feast for the populace on this occasion. While young men and women stand outside the spirit house, the chiefs take a long-necked bottle, *böeg*, filled with oil and mix it with turmeric powder, saying: "brei, brei." Later, a belt, *tagar*, is hung up as a dedicatory offering, *gopita*. Also, men returning from foreign parts are supposed to hang an offering there; most choose knives, *apolitsek*.

The worship service is held at the altar by a priest while a large part of the population is present in the spirit house; the rest wait silently outside. Inside and in front of the house one may speak only in a whisper. Holden's description in valuable in that it includes the cult of the divine statues, which have now disappeared. The priest first paces around the altar, where he takes up a mat designated for this purpose, spreads it on the ground and sits down upon it. After this, he utters cries and assumes various poses to call the divinity to the altar. Meanwhile, the gathered people sing with interruptions, stopping when the priest begins to say prayers. Next to the altar is a large bowl containing six coconuts. When the invocation is complete, it is assumed that the deity is present. Four coconuts are now cracked open and thrown into the bowl, the other two are for the priest alone, who is also called Yarris (!?). As soon as the nuts are broken, one of those gathered utters cries, runs to the middle of the spirit house, takes up the bowl, and drinks the coconut milk, generally spilling a great deal onto the ground. At the same time, a little is sprinkled on the twelve statues, while the rest is consumed by the priests. With this, the ceremony is ended, and they give themselves over to entertainment... Fritz experienced such a ceremony as an audience member standing outside before the dances began: he saw the priest, clearly already in a trance-like state, his gaze empty, striding through the crowd which drew back fearfully. A curious element is the loud snorting through the nose, which Hellwig too observed during the ceremony enacted by the priests, apparently to banish the evil influences emanating from the whites or threatening them. Accompanied by loud snorting, they enter an ecstatic state and slide toward the whites with menacing gestures.

Shortly after Hambruch had moved into his abode, the *galis*, the head chief and priest appeared there to commune with Rugeiren and if necessary to soothe the anger of the deity because a white man had come into his house. After they had commanded all to silence by means of the above mentioned "plucking sound" of their lips and asked the whites to remove their hats, they all squatted down. The chief pointed heavenward, and the priest sat down upon a large overturned bowl near the altar and began a sort of litany or alternating chant with the chief, accompanied by loud groaning, panting and hissing. The only comprehensible word was *tobaco*. When everything seemed to have ended, the other, nearly blind priest was led in, and the hissing began afresh. Sliding on his knees and remonstrating loudly, a third priest moved toward the whites and the Palau natives accompanying them. The chief indicated to them that Rugeiren had now occupied the priests. Meanwhile, the screaming kept getting louder and finally culminated in jerking of the muscles and snorting that lasted about three minutes, while all those present kept complete silence. Krämer learned of a ceremony called *mongo*: "When the deity has come, the priest asks him for many fruits and fish, turtles and whales. He places cake and breadfruit on the spirit boat. After about an

hour, these offerings are taken off again and consumed. Besides these "official" invocations, the priests and people do not perform any sort of spirit calling, and seeing spirits in any form is unknown to them. They also do not believe in dreams, *tar*. **Prophecy**, *tsiep*, concerning fishing and sea-voyages, is performed with the help of woven coconut. They also know of **rain magic**. A **love magic**, *gaurobuk*, using the bush-tree *iag*, is known to certain individuals. A man who is now dead is said to have been proficient at it. They call their fish magic *mangolil*. Before and after their large communal fishing expeditions no offerings are made in the spirit house, at any rate not on the occasion of fishing for sea cucumbers, when the yield is publicly distributed.

They have great fear of thunder, lightning and earthquake. Children are not allowed to speak. According to Hambruch, the incantation for typhoons is *iomokeion*; according to Krämer, *baga sarien*, "be still!" However, ceremonies are never performed in this context. As a defensive magic against illness, the natives all together beat the side of the boat with their paddles as they distanced themselves from the whites' ship.

The **main festival season**, *iorigarat*, falls in the time *masirap*. This is when the sun is at its zenith, and there is an abundance of fish, coconuts and taro. Large bowls are filled with taro cakes and brought to the spirit house, where men and women are allowed to sleep, and dances, *vagek*, and celebrations, *kotoragei*, are held. The dances are performed in front of the spirit house after the priest has performed an invocation with the people waiting outside.

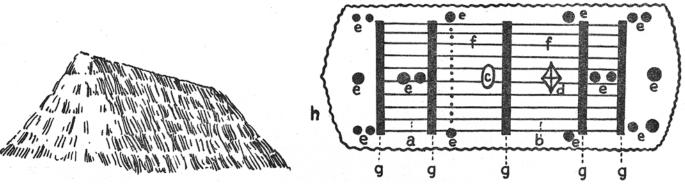


Fig. 23. Floor plan of the spirit house *galis* after Hambruch. a) free space b) tabu space c) altar d) spirit boat e) post f) crossbeam on the floor g) lengthwise planks h) house and roof edge.

Time is calculated	ated by moons, and ac
The year const	ists of ten months:
Neheki	Matsisik
	Masirap (sun in zen
	Touta
Sauiefan	Rag sunrise end of A
	Chuch
	Ur sun in north, sun
	Ierier
	Mar
	Iits
	<i>Tumu</i> sun in south, a

1 Krämer received only very vague and contradictory information about these matters. They also perhaps appear to count the Merir months Mai and Eremaus, here called Tegobor and Iekemaus, which are also called "Neheki" and bring "smooth water," in some way or another. During this time, there is said to be an abundance of breadfruit and Jambosa malaccensis (apple fruit).

6. Time calculation and medicine ¹

ccording to Holden, they express time only in stretches of two or three days.

nith)

August to September

nrise in March in the constellation Maur

around November.

A three-day-old moon is called serubon; a bright, waxing moon is seigetü i magam and fabon i magam, depending on its size. The names of the months are derived from the constellations in which the sun is located during these times: Bup is the star to the south; when the sun reaches its height, the wind swells. When the sun is to the north, in Maur, the wind is from the west. In the constellation Masirap the sun is at its zenith, and in Tumu, in the south.

The **illnesses** known to the people are mainly cough, *fagafag*, headache, *gameteka tsimar*, and gonorrhea, *atsis*. This only occurs rarely, and they know no treatment for it. They do not have yaws, tinea and syphilis. They use only botanical medicines, tafei, they do not know of incantations for sickness. Treatment is performed by a medicine man, tugutavei. Only a few treatments were ascertained:

Terminalia: The bark and blossom, the former scraped off, the latter crushed, are both squeezed out and drunk together with another juice (ailrot?).

Eugenia: Used like Terminalia.

Trionfettia: The crushed blossoms, topped with whole leaves warmed in the fire, are laid on wounds. Something called situ, which could not be identified, is also used.

They also have a treatment for injuries caused by the belone.

7. Dance, Songs, and Games

On various occasions in the course of time, Europeans have been allowed to witness the dances of the people on Tobi. Krämer received the impression that all dances are of an erotic nature and are linked to their religion. They are always performed in front of the spirit house, and probably individual forms have an apotropaic function: thus, upon the arrival of the foreigners, they performed a welcoming dance without being asked. In connection with the "command performance" requested by Fritz, he noted that first an invocation of the deity was performed in the house by the priest.

The entire population participates in some dances, but a particular order in which the dancers must appear can always be observed. The welcoming dance, clearly performed especially for Mrs. Krämer, was performed only by old women. Standing in a stooped position, they knocked their knees together, gesticulated with their arms and performed movements that looked obscene. This characteristic is common to both the dance movements performed by each gender separately and to those performed by both together, in which the men embrace the women or make thrusting motions toward their private parts with their hands.

According to Hambruch's description of the great dances, first the men line up to the right and the women-at first, only older women participate-to the left in two disorganized groups. The song and the dance both follow a 4/4 rhythm. It is only later that the young girls also join in the dance, while the men drop out. They dance partly alone, and partly with other women. The dances consisted of the following sections:

1. Men and women sing together, stopping suddenly with the voices going up.

2. The dancers slowly come out from behind the spirit house and finally return to their starting position with a jerky motion. Embraces and imitations of coital movements take place.

3. The mass of women is at some distance from the men. Individual women, including the leader, dance with the men. Finally, both groups approach each other and perform leaps and mutual bows.

4. The women form four circles and dance a belly dance, which is embellished by leaps, bows, and all kinds of coital movements. At the end, they disappear.

1 Yap: falai.

5. The men form a row in front, the women in back. While the men perform deep knee bends, the women, without moving from their position, spread their legs. They step in rhythm to the music and sing a low, monotone song. At the end, they clap their hands and twist and turn their upper body to the right and to the left. All the dancers slowly move forward, the women take positions behind each other in groups of three and five and form a circle, turning their backs on the men. Finally, the women face each other in pairs with the men flanking them.

6. Both men and women form a circle and twist and turn, constantly rhythmically lifting their hands, step in place, stand behind each other and suddenly perform the most forceful coital movements, utter ecstatic cries such as va asm va as zorou, bend their bodies and strike their breasts and hips.

7. Walking slowly forward, they form a circle.

8. After the men disappear, the women finally dance alone. For about a quarter of an hour, they perform very calm movements to a monotone song in a soporific tempo; this is followed by a pause, and then they leap from the dance arena with lively movements.

This long dance in many sections is followed by a completely new dance, a circle Fig. 24, 4306¹¹. Wooden dance of the young girls and women. All the dancers form a circle and make coital phallus for worship and movements, beckoning with their hands. Then they form a double line, and finally dance. Length 291/2 cm, form a simple circle again at the end. During these female dances, phallus figures width 4¹/₂ cm. carved out of wood are held out to the women by young boys, accompanied by laughing and lust. All the dances seem bacchanalian, wild, and full of joie de vivre. The songs and cries are very animated and loud. In singing, the unison of the voices is excellent. The children have their own round dances, which they perform for their pleasure. Besides this, they participate in the dances of the adults: the great dance in front of the spirit house, according to Hellwig, was introduced by a children's round dance.

In spite of their love of music, the musical talent of the Tobi natives seems meager. Holden could not discover any sort of musical instrument among them. On the other hand, Krämer noted that they did make flutes, which they call *fasafasarien*, of bamboo that had drifted ashore. With much effort, Hambruch succeeded in recording a song performed by these shy people.

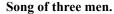
Choral song of men or boys.

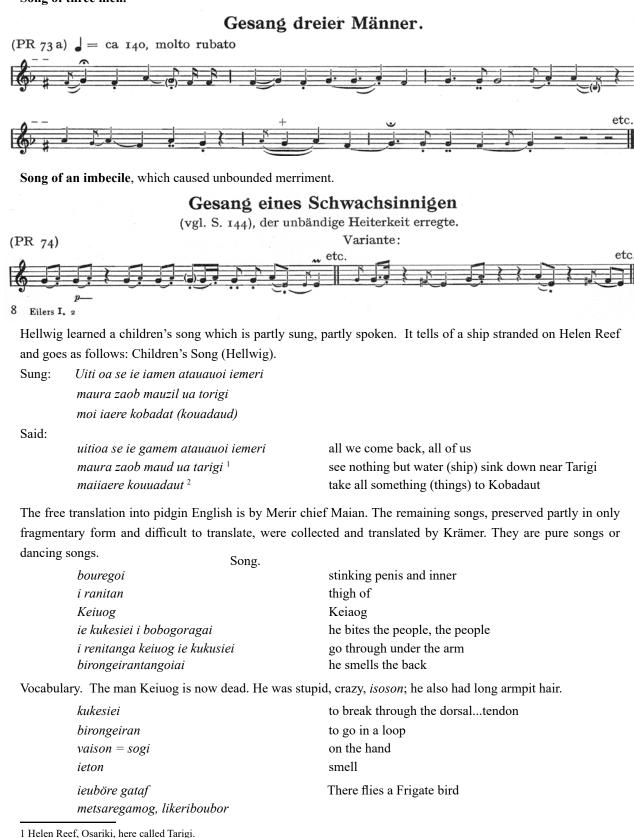
Chorgesang von Männern oder Knaben. (PR 72) $\mathbf{a} = \mathbf{ca}$ 92, rubato, Intonation sehr schwankend



Songs







2 The ship mentioned in this song was stranded, and its more valuable parts are said to have been confiscated by an English Captain Strong from Kobadat (Cooktown?); he is said to have gone to Singapore. He took Tobi natives with him to Helen Reef from time to time. In doing so, they sometimes encountered wrecks.

Matari beri bukos ngeïchobochonikomaki gosa prito riair rigore faisoueia, siuore uom

eiog bonon rigor ogobangeiai songek chamagei

ngseabakai(k) buritexeregar maribugau maniuore farik asaam xate smooth sea, we like to go fishing, island people decorated with leaves. Let us go back to our lover tafar(i) xatauaxeai siai banganga marina tive axau no one sees me with the woman. I am small like an animal, we sit and faivireia uari mirengar taxa simevotsamai vatoxak movoi chat, as if we were the same sex; a girl with stiff breasts sits on my side sibaxamaga rimir(e) sivoro bafar gamekiretarema nga he would like to stick her on his head, that's how he loves her; we sit and fix our hair baisaxa metsar(i) batin uairutoreiefan umone *bairetaigafir(e)* and sleep leaning on the tree that floated in from Gamakar; and take off our clothes parefir sasexari goiafer(e) rigotse xater abangirivor(o) the woman was on the north side of the island, the man lost her skirt, he lost the knot to tie the wrap ubetabaungarigo batiroriatauasaxar(i) refarax iketere repar(a) iketara ratsob irema from around her thighs, they tie it, he turns her toward him, they sit and sleep on the mat, fabungu ngaxaba fitaton baxaro ngasoxo xoigar(i) she says he should return the next day, he says she should go in the forest with him early in the morning beiangixaxotox isi mesaetau exobaiexa exa tsimexa xeitsou basexas fisiuaxaierei she thinks she should be in the house. We want to make torches. They leave still by daylight. tiakarimaxax ngaxau axaparoir(a) marikexauben The wind blows and settles. He stands across Mebalau, and scratches his head, because he does not want to go. ngetsaumuriair xarixupau fakir Tauari mirengar farekamuriair they get the fish hooks, and go with torches, and see small and large puddles, high and low flying fish siasiari efen semire mateiatei vaiketsa biebor(o) they forget to return to land; leaning together the lovers go hand in hand. The pair plays in the northern area remonekamakai uien saxatirugarei sikivor bunaiegan reagon thick ankles spread, painted with ren, and my lover with a fat fish, my catch, white filet meat iagagamai irorai iasaueiarimei atsieerei fagaf i tumaki moigapere i soborinifagafi esetsik tastes good in my insides. Coconut wine at night, for dinner the liver.

to M. (place on Tobi) Sweetheart sees the catch full of admiration come everyone! (lies in the lap) I go with you.

Vocabulary.

sweetheart catch woman embrace each other in a sitting position

Song I, *gom*. Sung by Patakir and Arpatip.

	Vocabulary for <i>buritecheregar</i>	asiasia	piece of land		
aseam = Pal. samanar	desire greatly	imir	to stay		
sibobugau	put the boat in the water, ride out	marikech	to forget		
iangiar	to put leaf decorations on one's head	bon	to go around and come back to	the starting point	t
eapakar	break (e.g. leaves)	iefen	northern part		
•	sweetheart	ielor	fat thighs		
songek = chamagei vigi = faivil	pendulous breast	iebugan	ren		
riai = faivil	•	remor aiar	fish fat		
mirengar	little place = female <i>susututu</i>	sachat	fingers to count with		
tachafaivil		gugagat, seniget	two fingers, three fingers		
iesumevotsumar	to have something on one's head	gelsik	my fish catch		
fefe	coitus	gorei?	Tobi		
vatochi	to have something on one's head, movoi	iegon	fish		
sivoro	to sleep	oiki	soft skin		
bafar	leaning against a tree	iegog	good-tasting		
ma	washed ashore	vor	the filet pieces		
gamakar	sm. tree Tourefat	gamai	fish		
uoriar	female bath mat	fegif	to cut toddy in the evening		
iep, charimar	dress mat, dress mat with ren	tumoki	to lick one's plate		
rut	fence (from house to house, so that the woman is safe)		to wipe oneself off (e.g. after ba	ath)	
bais(i)	to loosen the knot, <i>chanimar</i> , on the female mat = take her dress off	apari esetsik	liver	auii)	
atam	crossbeam on the door				
bugobu	knot	ietir	gall bladder		
iefan	north		Song.		
rigolaf	loop	manenge teron meuor machaker m	angi e takingakin memetari choubots u	eieuoriechom me	eroue machuou faifir e
sivar, sivöro	to clasp with arm and leg	foetaki uchacha ramarama ieuocho	piakutior chetemarimouai uechache ma	roiaron ranikotor	r e vats vatengiemuker
rigou	calico	-	ts chonoitsaniouome perimotouatur and		-
sesechi	to loosen				
tsebarefir = tsapitsepar = faivil	her upper thigh	Welcome-dance $bon = dance$.		Vocabulary.	
ateri	to pull something through, here her leg	goupato firakara	come here women	maiou	halves of village
bangiri atsevor	to entwine, sleep	finimeio hakara	from both sides	matei	men
tsob	sleeping mat	goupalo firakara		iep	dress mat, female
uarasu	tomorrow	sibo baia	mats	sökö = sikin	stamp
tiror, titinap	two people talk together	libakafe ieieitagat	dress yourselves well	tsiketsik	hole in ear
uosurog, uasichari	a couple goes together	uaiethek	Men, put on a good <i>matsi</i> !	toronga	ear adornment
gofabungu	another day	sikier ekupei	stamp the ground	lorongu	ear adominent
fitatur	both	barier e fataiis	Men, go onto this path!		
nigar	daylight	mouats gokik, besitsi kemam	ear adornment		
gachotog	to crawl, go hunched over	sokifirariefan	woman from the north!	Vocabulary.	
tou, Meetatau	the passage of a work house			Uaniog	name of a taro hill
icheach, baiegeeche	to rub, scratch (the scalp)	tenetsimobog	2 heads. \bigcirc and \Diamond bow.	iag	there stands a
sibachasi		Dancing song.		marue	someone
	to go out torch	isabukok	Go home!	fafaket	run
fis	further	marue Uaniochoue	someone goes onto the Uhill	kus	louse
ierei maashau		ueiefafahet e kus	there the lice delouse themselves	киз sabi	make a hole
ngachau	to see	tebaiesarengen	they have no holes in their ears yet	taibi = tibaie	not hole
röi, apar	pool of water	buna	(they are still too young)	bunom	your clitoris
tiak	to rise and				-
tsaum, nesau	sweetheart	A few children's songs are included	l at the end, sung during games of tag ar	nd circle dances.	Such games are called
riair	couple	gokom, and they enjoy playing the	m by moonlight. The game <i>gatarit</i> is a	ring-around-the-	rosy. They join hands,
Tauor	piece of land where women wash themselves	singing in 4/4 time and jumping on	ce for the first half-measure, then restin	g on one foot for	the second half. Text:
				-	,

ititik otsag	hanging sticks
fekire mage ketsau	the labia on both sides
irene ma pari firer	the inside (member) of a girl
taretsir ramesukubun	he breaks off the young coconut
terengek ia retog	the dam breaks
	Vocabulary.
itititiok, ititik	hang
itsatsangak	to lie horizontally
eaunaur	to swing
fekir, —begal?	?
parifirer	young girls
iegom	knee
iebong	to row with one's hands
tagaur	drawer
taretsirog	to tear off a piece
sukubun	very small coconut
bun	clitoris
dor iaratog	dam (of the penis)
teringek	to break
merine mapiri firer	groin
taretsir ramesukubur terengekiaratog	glans

Another version of the song is as follows:

ititiko tsoag fekirem aggetsau merene ma peri firor firer taretsiru mesuku bur terenge kiaroto.

Another playing song of similar type called *totepitag* is as follows:

sopisitsore uamam	a few friendsto me
gotsigenate berigau	girls look for their posterior loincloth
fari uagare magam eia	now under the beautiful moon

Vocabulary:

sopis	some
tsoruat	our friends
berigauvorigar	leaf decorations on one's bottom
uogeri magam	beautiful moonlight
tsigena	to look for
far	under
eia	now

In another version: totepitog sopisistor euomam gestikena teberikau tariuagare megemeia.

Other songs of similar type begin as follows: isabukok marueuan iegoue veietataketekith sebaiesarengan punom. bouregai irenitonga keinag iekukesiei birongoronotengoai. ieboregetat mestaregmog likriboubor matribare bukor ngeigobogonikuakie gozabutoriai rigoretaiseneia sinereuom.

For the game called *roitsim*, they sit in a line and fall alternately toward the outside or the inside. For the game called *nunut*, they place both hands on their neighbor's shoulders and form a circle, singing:

berengeri nge e babach i e mei ogere uet imorai ie

The obscene text is clear, obviously describing intercourse.

berengari	
babach	
uat	
mei	
imoai	
iog	

For ringasei, they form a long, figure-eight-shaped line; the first couple clasps hands and the others squeeze underneath, singing saugaro! (Pull!) and roitsimou! (Duck your head!).

To play *maibitog*, some of the children lie on the beach, forming a long line. Another child comes and pulls the arm of one of them, crying ganero, ganero, ganero!, that is, Get up!, and all the others lying down jump up and run after it. Maibitog is supposed to mean: they don't come yet, although they are called.

is not a necessity for the Tobi natives. The professional production of wooden figures for passing European ships is all the more surprising. The figures shown are such sculptures. Their similarity to the works from Yap (Müller, Yap I, Plate 52/2) is unmistakable. One should not forget, however, that already in Holden's time they possessed cultic, primitive wood sculptures to whom the priests made offerings. The nature of the sculptural works painted by Mrs. Krämer in the spirit house cannot be determined. Their cultic function cannot be questioned, although A. Krämer did hear that they were not sacred to Rugieren. Presumably his question was misunderstood, or they belonged to the national deity *Iaris*, about whose nature more has been said above. -The profane sculptures for trade, though primitive, are nevertheless quite artful three-dimensional carvings. The head, including nose, ears, and teeth, is carved onto the torso. The arms and hands are carved out of one piece and are fastened to the body with a nail or peg. The feet are hollowed out and take up the pegs of the legs. Although the figures are quite naturalistic, they, like the related figures from Yap, lack sexual organs. No explanation for this exists. However, the Yap figures are clothed with a loincloth or leaves, which perhaps should also have been done with the Tobi figures for the sake of completeness. Whatever the case, this fact presents a strong contrast in idea and execution with the carvings of the Songosor natives, who strongly emphasize the sexual parts. -The stance of the Tobi figures is strictly frontal; the feet stand side by side with their soles flat on the ground. The arms are slightly bent; on the figure in the Berlin collection, they came out a little too short. The faces show varying features, especially as regards the nose. Eyes and teeth are embellished with a thick white lime overlay and black paint. The one figure in Berlin is furnished with a wig-like hairpiece.

The language of Tobi has elicited the strangest assessments over the course of time. Captain Douglas receives credit for noting the first word, tellingly that for iron axe-heads or iron. More detailed knowledge became available only after Holden's return. The most useful bit of information is the observation that the Palau natives had as

They work so hard there's a slapping noise, the seed comes, they sit facing each other...

Vocabulary:

to ride a woman it makes a slapping noise seed from front when seated rapid

8. Art

9. Language

much difficulty understanding the language as the American sailors. But later he claims to have discovered two or three words similar in both languages. Senfft thought the language of Tobi seemed similar to those spoken on the eastern and southern islands of the region. His Malayan police sub-officer, on the other hand, claimed it was like that of Gilolo. Fritz determined that the language was no longer the same as that on Songosor and Merir, and his Saipan natives could not make themselves understood. From all of this it can be concluded that a dialect is spoken on Tobi which differs not insignificantly from that of the neighboring islands and makes it difficult for lay people, whether white or native, to recognize the relatedness of the words.

There are already two recorded attempts to analyze the language of Tobi. Both were undertaken following the publication of Holden's book. John Pickering, president of the American Society of Arts and Sciences in Boston, met Holden when the latter was in dire financial straits and in extremely poor health. He says, "I advised him to publish his experiences in order to obtain some money. Someone helped him to write the small volume, and I saw it through and added a small vocabulary list of the native language, which I compiled as best I could from the words that Holden himself provided. The character of this seaman and the separate interview I had with one of his companions in suffering convinced me that his testimony is completely trustworthy..."

With regard to the words, Holden remarked to Pickering "that he had spared no effort, in spite of the obstacles associated with his work, to make it useful for clarifying the relationship of these natives to their neighbors, since scholars today agree that language is the best means of recognizing the interrelationship of peoples..."

Pickering considers the language of Tobi as a new dialect, previously unknown in the family of Polynesian tongues. "It was completely incomprehensible to the chiefs of Palau....Judging from the names of numbers and a few other words, this dialect shows a relationship with those of the islands of the Caroline archipelago, which are only a short distance from Tobi."

In selecting the words, he mainly used Keate's index (Account of the Pelew Islands), and also added a few from the "Vocabulary of the Empress Catherine," marking all the words contained in the latter with an asterisk (*).

He also adds that his list does not contain words directly provided by the natives, and that one should take them as approximations, rather than precise examples of this language. He did believe, however, that they were just as accurate as the words of related dialects gleaned from similar sources. "Two years' sojourn on the island of Tobi thoroughly engraved the language of the natives in the memory of the unfortunate captives." Horatio Hale, the second researcher of the language, was forced to acknowledge that the state of knowledge was not so good. He met with Holden two years after his return, and in several conversations received from him some information about points that had not been included in his published narrative. Furthermore, he enriched the vocabulary by the addition of a number of words "that he was able to recall from time to time." Hale had very good intentions: armed with a list of words and a series of sentences that were meant to illuminate the grammatical structure of the Tobi language, he attempted to interrogate his source. "It soon became clear, however, that this was expecting too much. The situation into which the captured seamen had come (on Tobi) was such that any motivation to obtain a better knowledge of their inhuman masters' language than was necessary for communication was lost. And even if the desire had not been absent, the opportunity was lacking, since they were constantly plagued with heavy labor....They learned only the most common words and strung them together to be understood without any regard to the linguistic niceties of the language. Thus, they had no knowledge of the affixed personal pronouns, though in light of the fact that all the expressions for relations (*vatimam* = father; *miseram* = mother; *biziam* = brother; miangam = sister) and the names of body parts (metsemam = head; petsem = foot; kusum = beard; tsim = hair), as indicated by Holden, end in m, which signifies the pronoun "your" in the other dialects of the region, we can hardly doubt that this class of affixes is indeed present in the Tobi dialect. But despite these flaws, the vocabulary is valuable, as it shows without a doubt that this small community is a branch of that ethnographic family that extends from Yap to the Gilbert Islands of the Kingsmill group. It is not impossible that through this, the subgroup of this family to which the Tobi natives belong will be discovered at a later date and its origin determined."

Word Index after Pickering and Hale.

canoe

ship

paddle hut fishing net fishhook rope cord iron iron ring copper, brass men's belt women's belt fishing line food knife box cloth axe remain come, go drink sleep sit eat speak tattoo kill come back converse understand dance dig fish go away laugh lie, rest see

Word list (compiled by Pickering and Hale according to Holden's information)

Objects. prah-oo P., prao H. waw'ee P., uoue H. vettel P., H. *yim* P., H. chibbo P., tsibo H. kah'-oo eekah P., kauorika, kau uor ika H. tah-ree P., tari H. kreel P., krel H. pahng-ul, pishoo P., panal, pitsu H. *cheepah* P., *tsipa* H. mullebah'dee P., molabadi H. tappah P., vetivet H. vetiveti iao H. akram H. uose H. tovetiv H. ligo H. tapoi H. Verbs. *mamatidi* H. *mo'rahbeeto taitu; bitu* = come H. *lim'mah limi* H. mus 'see, mummah mase H. *matitu* H. muk'kah maka H. *tee'tree titri, titinap* H. verree-verree man'tee mate H. batsi, bitu H. titinap H. gora H. kokom H. *katsap* H. vizivits a ika H. *mora bitu* H. mimi H. retu H. miagi H.

go under, sit down carry wash wait weave throw weep large small small as a grain of sand good bad white black yellow red strong short cold warm ill I am not ill dead old (over 20 years) very old dead dirty far very far hungry nearby pregnant absent here there close by tomorrow yesterday in the evenings at night = night yes no away and

uahogi; uohogi uatuti H. tapai H. rau H. katsivara H. tan H. Adjectives. *yennup* P., *ienap* H. pah tehik P. pah tehik gitehi-gee; patsik P., H. yissung P., iisan, mapia H. tuhmah P., tama H. butch'ee butch P.batsibuts H. way zer 'ris P., uaizeris, uaizaris H. arrang P., aran H. *ienana* H. *yuhkayl* P., *iakaila* H. yuhmoat, yahmoa P., iamot H. makkrazm P. makrazm H. *uabats* H. makkah'kes P., makakes H. nang tay makah'kes P. pooh'ruk mah-zoo-ee P., mazui H. nah-zoo-ee ahva butchee-butch P.¹ purak H., mazui a ve H. aba H. *iataü* H. iataü ve H. та Н. *iapateo* H. iisei P. iatamen Y Adverbs, pronouns etc. atid'dee, ettid'dee P., atia H. a-tur-nah P., etanai H. yah peteh'to, petetto P. waro'rah-zoo'rah P., uarazura H. rollo P. ralo H. rollo neebo P., nibo H. nee bo' P. eelah P., ila H. taio, tah-oo P., ta and u P.; to; tai H. mora H. *ma* H.

moribo H.

far in very that one why I you (singular and plural) many, several my what is your name what is this

gradually

Hale also remarks: "*sa* or *za* is a very common verbal particle which is used in all tenses. For example, "*gaza iatamen*" = you were away; "*nan sa bitu*" = I will come; "*ga a nan sa maka*" = you and I eat; "*ga za miagi pipi a prao*?" = do you see many canoes? But such sentences, as has already been mentioned, can hardly be considered reliable to show the true idiom of the language."

1 yaht P., iat H. S 2 guhloo P., glu H. 3 *yah* P., *ia* H. S 4 vahn P., van, aan H. v 5 neem P., ianim H. 6 yah-woar' P., iauor H. 7 yah-veesh P., iavits H. v 8 yah-wah'P., iaua H. 9 yah-too P., iatu H. tit 10 yah-saik P., iasek H. S 11 sa-kum ah soo P. S 12 sa-kum ah goo P. S 13 sa-kum ah saroo P. S 14 sa-kum ah vah'oo P. S 20 15 sakum ah leemo P. 16 sah-kum ah wahroo P. 30 17 sah-kum ah wenshoo P. 18 sa-kum ah wahreeo P. 19 sa-kum ah tee-o P. 20 sa-kumah gloo-o'P. 7

Pickering's completely illogical division of numbers is confusing. Ma means and. For example, the number 111 should have been written seke ma su. Furthermore, Hale already noted the difference in counting certain things like coconuts and fish: "There are three classes of names for numbers, the first of a general nature, the second used for counting coconuts, and the third only for counting fish..."

1 the hair is gray.

tapai vai tat (= wait) H. iataü H. uor H. kloo, ve H. mena H. ba H. nang P. gur P., ga H. pee-pee P. kahrah 'pah ah nang P. verameta ga? metamen a mena?

Numbers according to Hellwig.

						50	1
1	seiau	seau	seiau	samar		50 60	limeik uoreik
2	iuia	ruo		gumar		70	fisik
3	serio	soru		serimer		70 80	jisik uarik
4	zaiiau, zaiio	uau		uamar		80 90	tiuerik
5	lima	limo		limer			
6	oreiau	uoro		oromar		100	
7	visio	visu		visimer		200	
8	uariu, uariiu	uaru		uorimeri		300	0
9	tuuay	tuuau		tuomar		1000	0 0
10	sey	sey		sey, seyei	nar	2000	
10	seye ma seiau	seie maseau		sej, sejer seiiamar		3000) senigngengas
12	seye ma iuga	sele museuu		seiyuema	v		
20	huiei			hugey, hu			Adverb
30	serii, zerii			nugey, nu	geyeman		Adverb
30 40	vaii					yester	day
50	limei					tomor	
50 60	oreii					the da	y after tomorrow
00 70	visiy						y before yesterday
80	uarii					(1 day	/ before)
90	tuuei						after the day after tomorrow
100	sauuy, tauuy			tauuyema	IF.		s after the day after tomorrow
110	sauuy, tauuy sauuye ma sei			<i>icitity</i> enite		today	-
200	guauuy, yuauuy					alway	
300	seruuyu					now	
400	uabuye					imme	diately
500	limabuye					in the	past
600	orabuye					right	-
700	visebuy					left	
800	uaribuy					here	
900	tuuabuy					there	
1000	seienes					near	
2000	vuavenes					far	
	according to A. Krämer					to the	re
1.0000000						(go) fe	orward Imperative!
1	seu		thing		gapitek	(go) b	ackward Imperative!
2	chuou		a part		togoitot	go the	re
3	soru, serou		small piece		gorotot	in from	at of
4	vau, fau		much		pipi	in from	nt of me
5	limou		many		biepi	in from	nt of the boat
6	uorou		a little		taipipi	above	
7	visu, fisu		half		setap	over	
8	uaru		full		ioug	under	
9	tiuou		1) everything (it is he	ere!)	pipiar	below	(at ground level)
10^{1}	seu, seigeteu		2) everything		iesag	outsid	le
20	chuei		3) all		<i>= arasege; iebi</i> E.K.	inside	1
30	serik		the first		samar	yes	
40	faik		the second		rumar	no	
	$\frac{1}{2}$ ers 11-20 are the same as 1-10	~	the third		serimar	maybe	e
I The numb	erc II_/II are the came ac 1_1(1					

1 The numbers 11-20 are the same as 1-10.

the fourth	famar
the last	letagug
alone	samar;
I alone	ngan samar
you alone	kere samar
he alone	ie samar
we	se umoi
you (pl)	uou umoi
they	soru umoi
together (people)	pipi agamata
together (things)	pipi gepitek
how much	fitou E.K.

erbs and other words according to A. Krämer.

rarou uarasuira, uarasu meiseyarire, meiseyarire yanaue bungeri ganaue yenerae mesagari rigenerae ikera, yanei anove ikera ikera masue yoroimaga yoroitsegir ioueie iou eirae iekakep etao tona goberog uokitog, birau soborouitoy biraitonae mouer imouai i mouarivarae uenen ivor ifar uobotar niketam ran ngou tog, nauer itaguratsag

	<i>,</i> .	1:	. 1		
not	tai	dirty	iebor		
with	taitoiogoi, ibobueiiegom (I go with you)	red	iaganga		
	biraobobugug menai (I go with him)	blue	iemaisö		
through (I go through the house)	ngangebebukohmakaraseke im	yellow	uetau, r	neiour	
in (in the house?)	ranim	brown	iemis		
from	me mara	sweet	ienau		
Done!	iratsag	swift	matang	atan	
A	Adjectives according to A. Krämer.	slow	tongang	gat	
large	ierap; maitagiök Ham.			ouns.	
small	<i>iebatsik, bati iti</i> He. <i>merai fasik</i> Ham.		Personal	pronoun.	
high	ietegiet; garetach Ham.	ac	cording to A. Krämer	acco	ording to Ha
low	<i>pita tich</i> Ham.	Ι	nan	ngan	Ι
long	<i>meiarei; zaunof</i> Ham.	you	ker	ger	yo
wide	<i>daurop; zeiian</i> Ham.	he, she, it	ii	menai	he
fat	iobetei; ibetei Ham.			merie	sh
thin	iokuen; iagun Ham.	we	naniam, keikukomar;	geremonam	Ia
heavy	ietsou; totog Ham.		<i>kar me nan</i> Ham.	0	
light	<i>ieper, itaitau</i> He.			gereneraiie	I a
heavy	<i>ietau</i> He.; <i>ieper</i> Ham.			marakaraiie	W
old (also in the past)	mame masune; marenup Ham.			titinief	yo
young	nueis Ham.			uuasanie	the
straight	<i>iouer, matar</i> (blade of an axe) He. <i>tagiiufa</i> Ham.				
crooked	<i>matarai</i> He.		Possessiv	e pronoun.	
round	<i>iekau; atogunu</i> Ham.				1.
cold	<i>fen; bua</i> Ham.		according to A. Krämer	according to Hambru	ucn
warm	ibets; bagebuch Ham.	my	imei eai	iai	
dry	ieper; iepereig Ham.	your	imam eamo	metsumak	
wet	<i>ienau; iumoch</i> Ham.	his	imar eava	metsumenaik	
sick	magakis	their		metsu me merir	
healthy	itaigametach	example according			
strong	imoso E.K.	our house = <i>au imi</i> i			
dead	<i>mourimes; iimes</i> Ham.	their house $= au imates$	i manaseuch		
blind	ueiaug; gietep ietaup Ham.			1	
deaf	iepön E.K. ton etonon Ham.		Demonstrative pronoun	according to A. Krämer.	
mute	<i>ietakare titir</i> E.K. <i>taititi</i> Ham.	<i>ie</i> this	ira	e that	
lame	<i>iepupun</i> E.K. <i>zogizoch</i> Ham.				
pregnant	iesiar E.K. erepaizia Ham.		Verbs accordir	g to A. Krämer.	
good	ienimo A.K. iemo E.K. iemoch Ham.			6	
clever	isenap E.K. ietsim Ham.	work	ga	pitek E.K.	
stupid	iebuts; iemut E.K. nan i togera Ham.	breathe	ng	as E.K.	
bad	tomai	get up	tai	tou	
brave	iemerat	have intercourse	uo	refangan me faivil E.K.	
cowardly	iemetak	touch	uri	og E.K.	
white	iebetsebots	move (negated)		tomagetikit	
black	iemaiseis	bind		fau E.K.	
dark	iegotsogots	blow	uki		
uun					
light		stay	ga	ehoras E.K.	
light clean	iauek ieteibor	stay burn	_	ehoras E.K. ur E.K.	

Hambruch Ι you he she I and you I and he we all, excl. you all they all

huing		المتساء
bring	gasitog E.K.	drink
think	gamangimen E.K.	pick (teeth)
eat	manga, mongale E.K.	push away
fall	iepungetu C C.	tattoo
braid	fasifes	kill
fly	eeiar	grieve
rejoice	iemogotipei	drink
fear	metak	turn around
yawn	iemor	weep over, lament
give me	gariei	show
give him	gari	show me so that I can see it
give birth	bukoiroior	pull
go (I go)	irouro feveta E.K.	
hit	uouti	
hear	gasiserin	
be hungry	isun, imag	OK, all right
sneeze	misi, iemusi	I don't understand
cough	fagafag	I don't hear
defecate	iebag	I'm getting wet
chew	iemangau, iagusu	finished, done
come	patog	I'm going
crawl (of children)	gagoroch E.K.	Exclamation upon pointing out a
laugh	memer	it itches (a bite)
lay	uorotu	he is going out of the rain
lay (it) down!	itetiuh	it is falling
make	machapitek	
mumble	machabachaparog	
sew	ietiet	I go
urinate	gareiroi	you go
chat	ugochongogon	he goes
whistle	ugug	we go
chirp	<i>iakamangungu (ngungupa</i> = cricket)	I go with you
speak	ditir	I eat
speak loudly	kareparemom	you eat
tell me	gobagaiei	I want to eat
smoke	agugu	I don't want to eat
clean	<i>irevi</i> He., <i>pirau</i> , <i>puraro</i> = wipe off table with hand, He.	I do want to eat
smell	ianguog	but he goes yesterday
row	fatir	I go
see	meiaki; mamase E.K.	bring me
sit, be seated	mot	show me so that I can see it
sing	maugar	what's your name
sleep	masul; masek, masuk E.K.	what's that called
drag	daidei	I want
be silent	totitir E.K.	I don't want
snore	uengesipag	you want
stand	sutag	I want to see
push, bump	tukuk	come here!
1, r		

boir, borür E.K. tibiti mabag E.K. tingaro farifer lii, ieli iefogog iorur gobovehitog teten ganagaro (garo = give) ganagarog bei bagaba gamo iavisi

Various verbal forms and expressions

according to Hellwig.

gamog

i togonogon iautouur maurigad, iratsag A.K. girarog ut a mosquito bite iacha medag me a pau i sanoroch ie puetug

according to A. Krämer.

begirauro, i rourog goborauro ibaro = keirourog goba begiei nan i beu manga ker beu manga igamogog mei bomanga tai tipei bomanga igamogog mei ibaur begiraro iberai tonai ivoifetar ivoitsik ipevabuirok kasitog = ganagarog bei bagaba gamo meta itom? meta itar? igamogog isongakir gogam mogog i bomeiaka taito

go! no fear! where do you come from where are you going wait! what's the way to X? tell me where? give me later I will give you a present (the prize) do that! keiraro, tsike maitona imarat = brave; tai metag (metag = fear) go pito maia iago berairen uetiei iaierer (mesiberog = we go) X. gobagaiei ia gariei mo uetiei i bagararig ötai ferigeri.... kobo faichi

According to E. Krämer.

quiet!	tokore poremam
finished	iratsag iakat
I'm going with you	ibebokuk
you're going with me	gobabagiai
what's your name?	meda itom
what's that called?	meda itar
I want	igamogok
I don't want	isongaker
bring it here!	gasito
come here!	taito
go away!	keiraro
where do you come from?	kopito mai ia
where are you going?	ia go berairen
wait!	ue tiai
I'm coming back tomorrow	uara theïra i sapito
I'll see	ibomaiaki
do that!	kobofaichi
I'm coming	ipito
in front of my house	nara imei
tell me	gobachaiai
where way to	iaiarär
I'm going	irourog
we're going	keilorog
give me!	gariai
be seated!	matotu
get up!	(sitek) basütach
throw away!	atzauaro
yes	ngoi
no	naoer
not	tai

II. Economy and Material Culture

1. Economic life

General observations. In the past, the island of Tobi proved large and fertile enough to provide adequate sustenance, keeping the people strong and healthy, for a population of about 1,000 in normal circumstances. This required a population that was very modest in its needs, the most intensive agriculture possible, and no failed

crops. In practice, however, hurricanes or floods are unavoidable from time to time in the South Sea, and the food supply on the island is so scanty that such natural events cause the gravest famine, with severe consequences. If one takes the food situation in times of deprivation as a measure, the latest reported population count of 180 must be considered sufficient, and the former population size of almost a thousand must be seen as much too high. The German government was quite justified in its repeated efforts to implement migration to more favorable areas.

Agriculture. The main sources of food for the inhabitants are the cultivation of coconut palms and taro, and the catching of fish. Pigs and chickens, which they know, play an altogether subordinate role. They eat the eggs. Even the fish catches uncertain: there are times when there are no fish at all, or they are very scant. Turtles, too, are a rarity. If flying foxes are stranded there, they are cooked and eaten. Storm floods and hurricanes are constantly threatening the plantations. Though the palms are not always broken, they lose their buds and fruit; the cultivated fields are flooded with seawater, and the fertile soil is covered over with ocean sand or carried away by floods, which causes poor harvests for years and requires endless labor to restore to the previous state. This is the explanation for the meager nature of the taro plants found on Tobi.

In order to have some protection against the floods, the natives had Holden and his companions build stone walls and carry the sand off the cultivated fields. In other spots—as is the custom even today—they had to add fertile soil back to the land. For this purpose, they use sieves made of wood in the style of the ren sieves, which are sealed with leaves. They also know how to fertilize their fields (*uar*, which means leaf), using rotting plants, leaves, grass, hibiscus, ficus, pipturus, cerbera and thespesia. They are industrious about weeding, *usater meremer*, and they are constantly mounding up fresh soil, *gamoiere*. They have a good understanding of the usefulness of letting the fields lie fallow for a time, and make a distinction between cultivated land, *upeig*, and fallow fields, *eratsapa*. In many spots, tended wells have been located near the plantings.

The fertile land is entirely divided up. The large area in the interior of the island planted with taro is subdivided into countless small parcels of land, each with its own name, which may be shared among several families due to the laws of inheritance. While the men help in preparing the fields, the women alone, who are always the owners of the fields and can leave them to their daughters, are responsible for the planting and harvest.

To work the fields, they use simple digging sticks of coconut palm wood, *doudou*. They cultivate the largeleaved taro, *bura*, and the small-leaved taro, *uot*, and distinguish about 14 species in all. Holden's *korei*, a plant similar to the yam (*Dioscorea*), probably also refers to taro. It seems that it is the main source of food in normal circumstances, eclipsing even the coconut palm. Besides taro, they cultivate sweet potatoes (Ipomoea batatas), yams (*Dioscorea*) and Manihot utilissima.¹ They usually plant bananas between the houses and at the edges of the taro fields, when necessary protecting them from the wind with large mats set up in a circle.

The **coconut palms**, which are generally abundant, belong to the men. Hambruch estimated their total number at about 48,000; of these, about 16,000 or one-third bore fruit, which they came nowhere near using up.² Each family owns 30 palms, on average. Since 142 families were counted, there would be about 4260 palms in use, according to Hambruch. Krämer reports the number per family as varying between 1 and 100. When the German officials came to Tobi for the first time in 1901, the palms grew densely and were healthy. In 1906, as a consequence of

¹ The confusion in the use of terms for these cultivated plants is great, and it is therefore never possible to say with certainty which plant in the botanical sense the informant wishes to refer to with names such as arrowroot, yams, batatas etc. For example, tapioca does not refer to a plant, but to the starch from several plants, i.e. Manihot, and is called arrowroot by others. The yam (French igname) is botanically 1 1 *Dioscorea batatas* or another representative of this family belonging to the lily plants. Christian (The Caroline Islands, p. 333), however, uses the word yam to refer to *Arum costatum*, presumably taro or another edible representative of the *Arum* plants. Hambruch thought half of the palms were not used, a percentage which seems very high considering the very large population at that time.

the typhoon of 1904, they bore meager fruit, but scale insects had not yet been imported. In 1910, Buse noticed a slight infestation of this pest. -The coconut palm, its role as provider of food and building material aside, has special economic importance for the natives, since the people craft lines which are highly valued everywhere from the fiber; these are almost their only trading item, and certainly the most valuable.

Trade. In spite of their modest needs and their tenacious clinging to tradition, the desire for European goods is very strong among the people. They prefer iron and tobacco above all. Even in times of deprivation, they withhold food from themselves in order to trade it with passing ships. Day and night they keep watch for them, and the unbelievable persistence with which they pursue the ships is telling. They offer rope in all sizes and of excellent craftsmanship as well as hats of raffia and tortoiseshell, fruits and wooden carvings.

Diet. When they have enough taro, they consume only modest amounts of coconut. In times of want, when the root vegetables are scarcer than coconuts, they are forced to use them in greater amounts, but it is at just these times that the abundance of coconuts, too, tends to decrease. They do not put great stock in it as food and claim that overindulgence leads to stomach pains. They hold breadfruit in much higher esteem. They like to eat fish and enjoy a lot of it, when they can get it. There are only three meals a day, and all family members partake of them together.

Cooking is done by the women. Normally, each family has its own cooking house. When Senfft reports that their fireplaces are in the huts, he is presumably referring to the cooking houses. Those fireplaces also found frequently in the dwellings are hardly used for cooking. A small cooking house consists merely of four posts supporting the roof, which does not reach as far down toward the ground as that of other houses. It contains a stove fashioned from small coral stones which are heated in a fire made from wood or coconut waste. The food is cooked or baked using these hot stones. Coconut shells serve as cooking vessels.

Fire is created through rubbing, but they hardly ever need to perform this task, since they maintain the fire and in an emergency ask their neighbor for help. Fire is always to be had in one place or another. For this reason, the young people are no longer familiar with the skill of fire-rubbing. The taro is roughly cleaned, i.e. the roots are cut off, while still in the field. It is peeled in the cooking house. Today, small knives are used exclusively. Mrs. Krämer did not see shell blades in use anywhere. If the roots are very small or still young, a piece of the stem is left on. The waste matter, the peel, has no special use except perhaps as fertilizer around the trunks of the palms.

The peeled and chopped taro is pressed into coconut shells, a little water is poured over, a taro leaf is placed on top, and a second coconut shell is placed over it all as a lid. These half- or three-quarter shells are called pog. They rarely mash the taro. To serve it, they use a turtle-shell scoop, fetifet eri uor. They drink salt water only out of necessity at sea. In cooking, they only use it when preparing breadfruit preserves. They consume breadfruit primarily at feasts, beri geri mag, in order to satiate themselves. They also make palm wine and have special methods of protecting it against theft.

Terms for agriculture and plants in an economic context after E. Krämer.

taro field, enclosed field	medzoch
plantation for fertilizer	katzefas
fertilizing plants in general	pipieri för, atoap, uari
grass as fertilizer	neti
well	dare He.

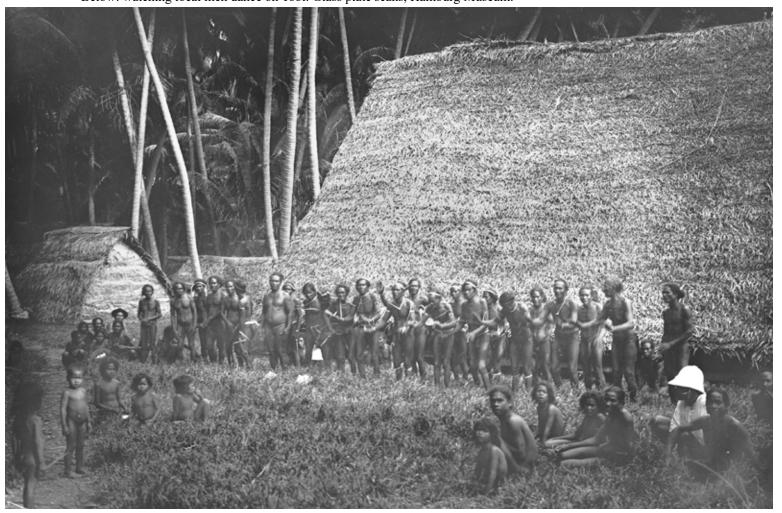
1 It is a telling witness to the popularity of the ropes from Tobi that during the visit of the expedition the Palau natives who came on land secretly traded for as many as they could get, even though the leader had strictly forbidden this and they had to do it in secret.

drinking water stone boundary salt water dig out fields wooden mesh sieve to transport sand taro taro leaves pura leaves whole taro plant small taro with stem taro stem types leaf taro till a field pull out plants taro root taro seedling seedling plant a taro seedling cut off a seedling scrape roots peel taro peelings taro peel coconut bowls for taro squeeze taro into the bowl filled bowl prepare a taro leaf wrap taro cook coconut palm coconut, drinking nut old nut stick for nut shell I rip off the husk make a hole for drinking old nut smashed in the middle toddy raw nut cooked nut seed juice banana breadfruit dish eat not cooked through cooked through

tianürü vaserüboar ded kikik A. Kr. airibek uod bakoru uod bakoru pura тера ba me uodagengagan, bamogu, arieres, uodenen, terimegan önuuod atöapa, atzap usu; usous uoagag, uageg bagora uod bag bovotogü bagag iemögo, ioso ietete uod giniu uodapisitete; gumuoda pisitete ietete uod poig tignaro poigeriuetoch meun a bakure mapoigera notogo bomuri sagam or sagani; bogeri uod uan bük or lük tuou iauoir tagach beia i otem buiengi gepie atsi totu muri moruua iongögü uits mai, bekerieu mangöu mangan toto muri ieua



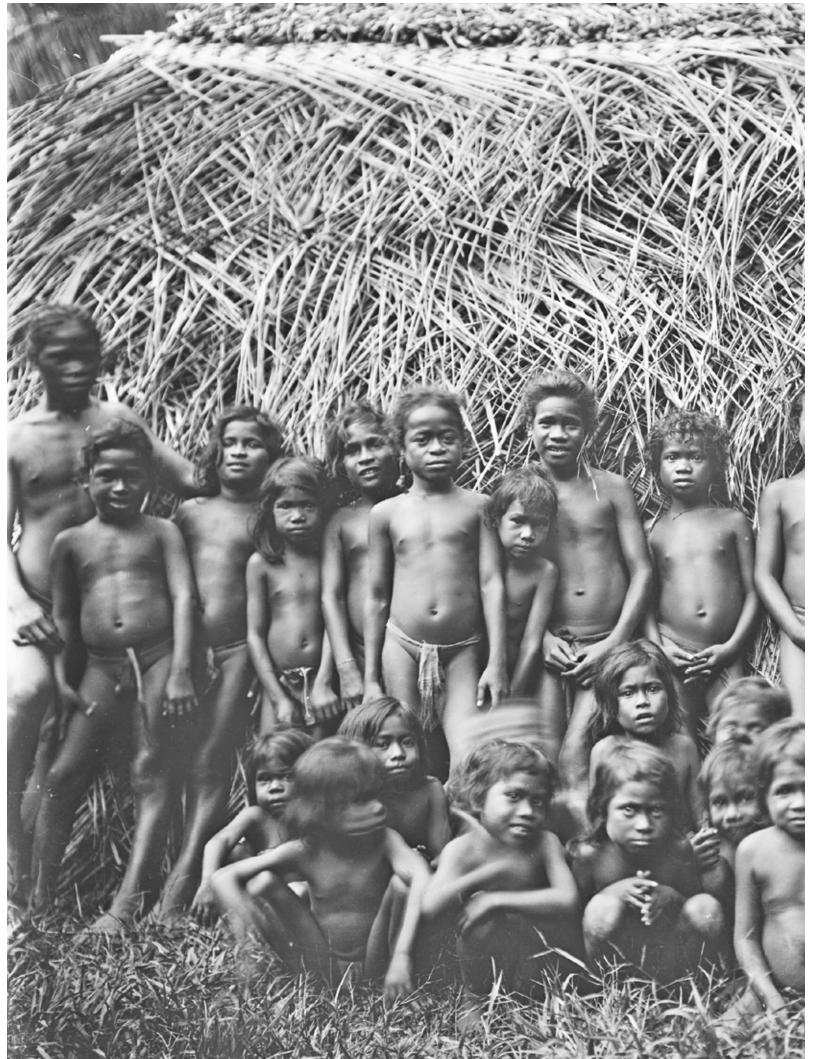
Above: Dancers on Tobi Below: watching local men dance on Tobi. Glass plate scans, Hamburg Museum.

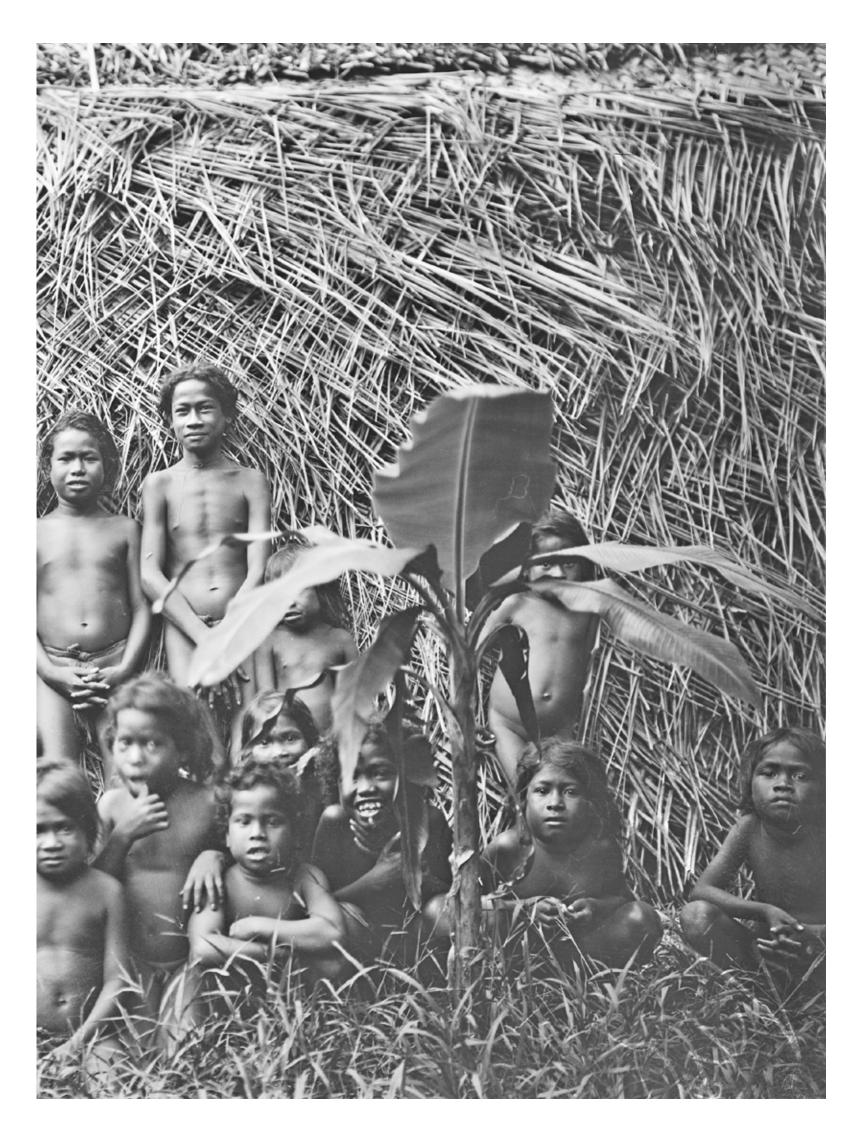






Above and below: weaving wraps and leaves. Glass plate scans, Hamburg Museum.





Local kids. Glass plate scan, Hamburg Museum.





The interpreter Pita (right) with an unidentified older man. Glass plate scan, Hamburg Museum.

Local women wearing woven wraps. Glass plate scan, Hamburg Museum.

it has a bite	iakat
knife for peeling	dzeren, zer
knife piece	buaie
cook house	um
oven	um
stone	uaas
small oven stone	masumach
hot	i ebuedz
leaves for pressing	davegi
sugar	ienag
driftwood	<i>menima</i> A.K.

2. Clothing, Tattoos, Jewelry and Weapons

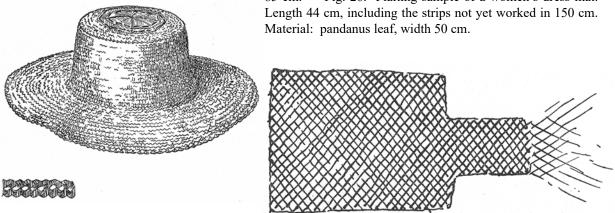
Notwithstanding trade contacts with Europeans, the clothing has not changed significantly since the time of Holden. Senfft did see many European articles of clothing in the natives' possession, but these were individual purchases, and one cannot say that they have permanently taken on foreign dress. Holden says that all the children go completely naked. In 1909, the boys, after they had grown out of earliest childhood, were all wearing narrow hip belts with the ends hanging down in front or wrapped around the penis in the style of the men's belts.

The men's clothing consists of a narrow loincloth, matsi or madzi. For maro they also have the name vitevitike. According to E. Krämer, they use this term for cloth when it is being worn, and apparently also for maro made from cotton. Holden says that their only article of clothing was a belt made of tree bark, so that it can be assumed that they knew how to make fabric out of bark, a technology of which there is no trace today. The woven belts are crafted only by the women. The material is always banana fiber; the black pattern is created by the addition of hibiscus threads dyed black. On average, they measure 175 x 15 cm. The technique and style of the patterns is the same as on Songosor. They make very simple sashes with more or less wide decorated ends. The patterns on each piece are the same at both ends. In comparison with the Songosor belts, the variety of patterns is infinite. Although only a few design elements are used (see Plate 3), they are constantly combined in new ways. The warp threads are left as a fringe. The belts are worn by folding them once lengthwise and wrapping them around the body so that one end is pulled through in front, the other behind; the penis is concealed in the process.

Grown girls wear a body cord, nigek, made of twisted or braided plant fibers or pandanus leaf. It can also be made of hair, in which case it is called *enidzim*. The cord is wrapped around the hips once or several times, and a bundle of leaves or twigs is fastened to it in front of the pubic area. In back, the buttocks are covered by a fairly long tail made of about 17 split coconut pinnae (umipani = leaf, bagasai uarigat = strip, E.K.) lined up on a cord. It usually hangs down as far as the knees and often to the calves. According to A. Krämer, the pubic bundle is called vorikari nemoats, according to E. Krämer uorigari me monata; the rear tail according to A. Krämer tagaki, according to E. Krämer tochuba iemoch.

This dress also seems to be worn after marriage. When a pregnancy commences, the woman wears the pregnancy belt, tagari faifil, a pandanus leaf strip, unebego, about 20 cm wide. After childbirth she puts on a strangely shaped braided pandanus mat, distinguished from ordinary dress mats by a small additional braided rectangle. The typical female garb is the short wrap skirt, vorior or iep, made of a finely braided pandanus mat about 40 x 100 cm large. It is already worn over the pregnancy belt and corresponds exactly to the Songosor skirt. In this context, Holden states that the girls begin to wear such a mat skirt upon reaching maturity. Married women who have already given birth wear an additional fiber skirt, gabariteh, over the wrap skirt; it is made from split coconut leaf pinnae that are fastened onto a cord. There also seem to be braided mats on which a fringe has been attached or left protruding which also signal motherhood.

Fig. 29. Modern brimmed hat with repaired base of pandanus leaf. Width of brim 9 cm, height of headpiece 10 cm. The headpiece gets narrower toward the top. The patch consists of eight pandanus leaves, folded once and overlapped. It is sewn on with black hibiscus yarn.



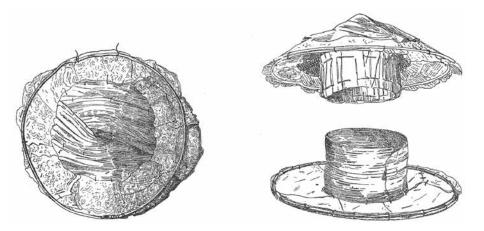


Fig. 28, 4621^{II}. Old hat of tortoiseshell, bochomen. Diameter about 40 cm, height 15-16 cm. The lower edge is reinforced by a sewn-on reed hoop. The tortoiseshell plates are sewn to each other and to the hoop with raffia and yarn. The natural seams of the tortoiseshell are re-sewn with yarn. —A wide band of pandanus leaf strips, folded once and laid side-by-side, is attached to the cone's underside. The strips are sewn through with basting stitches of coconut twine. Diameter of the headpiece 16 cm, height 8¹/₂ cm. No. 4622^{II} hat of the same material.

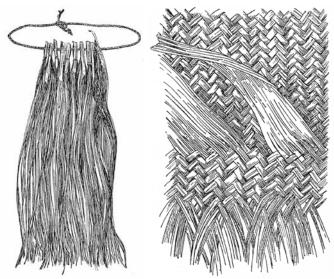


Fig. 25, 4297^{II}. Rear apron for young girls, *tagaki*. Coconut leaf pinnae strung on a cord. Length 75 cm, circumference 85 cm. -Fig. 26. Plaiting sample of a women's dress mat.

Fig. 27. Pregnancy mat after E. Krämer.

In Holden's time the Tobi natives already had **hats**, which they called *chappo* or *sombrero*, and in recent times they are among the items offered to ships for barter. The expedition found two types of hats in their possession: brimmed hats braided of fine pandanus leaf strips worked after the European model, and the native conical hat of tortoiseshell and pandanus leaves. The latter are distinguished from those of the neighboring islands by the wide headband attached to the underside, and by the unusual and valuable material, since turtles are not caught with any frequency. The hat no. 4621 in fig. 28 has a headband 8¹/₂ cm wide made out of pandanus leaves, which overlaps at the edges like a stiff European men's collar. The edges of the leaves are folded over once, so that the head is made of two layers which are sewn together with basting stitches of coconut twine. The edge of the hat cone is reinforced with a circle of reed. The tortoiseshell is pierced, and the individual plates are fastened to each other and to the reed with raffia-thread seams. Where necessary, the natural seams of the tortoiseshell have also been resewn with sturdy thread. They also make hats of the same shape out of pandanus leaves alone. They are used as fishermen's hats, decorated with fishhooks and tied under the chin with a cord.

The hats made according to the European model are sewn from woven pandanus strips. Presumably it is hats of this type which, according to Hellwig, they learned to make from Manila natives, perhaps on Yap or Palau.

They have not gone very far toward mastering this craft; if the form is not as desired, they pull them together with coconut cord until the hat fits the wearer. Fig. 29 shows the technique of the strips and an old hat notable for the well-crafted repair work at the crown. Originally, this surface too was made from strips, and when they became faulty, a six-sided patch of pandanus leaves was inserted.

The **hairstyle** of the natives is dominated by their custom of letting the hair grow freely for both sexes. In the case of small children, it is more or less long, often discolored by the seawater, and hangs loose about the head. They do not make a part. Grown girls and women gather the hair loosely behind or on the right side and put it up there in a loose, disheveled bun. The men make a knot on the top of the head or on the left side. A bun at the back of the head is rare among them. On Palau, they have adopted the custom of cutting their hair, and one of the emigrants has grown a beard. On Tobi, both are completely unheard of.

Tattooing, varibori, was already being practiced in Holden's time, and they found this practice so essential that they forced their white captives to undergo the procedure. It is striking that at that time, they wished also to tattoo the face and were prevented from doing so only with the greatest effort. This is a custom that is now no longer practiced. In 1909, all the adults were tattooed. Holden describes the procedure in detail: While the patient is held fast on the ground, the figures are drawn on the skin with a pointed stick. After this, they are pricked with a tool made from sharpened fishbones, similar to a miniature carpenter's adze but having teeth instead of the continuous sharp edge. This tool was held one or two inches from the skin; then it was driven in with great rapidity by blows from a small piece of wood, so that it rebounded immediately after each stroke. In this way, the arms and chest were worked over, and immediately the pigment,¹ which is prepared from the pigment of the plant called *savan*, was applied to the pricked surfaces. The operation causes such an inflammation of the body that only one surface can be completed at a time; as soon as the burning of the sore abates, a new section is begun.... His comment that the oldest among them are most richly tattooed and the younger ones the least allows the conclusion that over the years more and more designs are added, and that the creation of this highly valued body ornamentation requires a very great span of time.

Among the men, Hambruch saw two types of pattern: one strongly resembling the patterning on Yap, Songosor, Pur, Merir and Mogemog, and another, much rarer, that shows only wheel-like figures (ues He.) instead of the 1 Savan is Calophyllum inophyllum.

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Fig. 34

Right- and left-hand tattoos of a woman after E. Krämer.



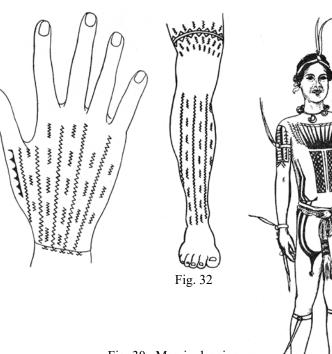


Fig. 30. Man in dancing dress with tattooing. After a watercolor by E. Krämer.

Fig. 33

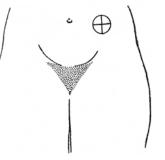
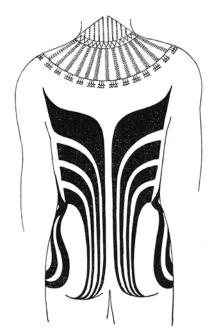
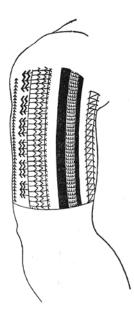


Fig. 31. Man's tattooing after Hambruch. -Fig. 32. Woman's leg tattoos after E. Krämer. - Fig. 33. Woman's belly tattoo after E. Krämer. - Fig. 34.





stripes, squares and spirals (reri batiiti He.). Krämer names only the parts of a single design, a pyramid of steps symmetrical on both sides: from bottom to top, the steps are called setar, gukatar, seriteri and fatar. According to Hambruch, small boys were tattooed on the legs as well. Fig. 30 and the carved and painted wooden figure in Plate 5,3 show the normal male pattern. The division of the surfaces, the decoration of the chest, the back and the thighs is the same as on the neighboring islands. As a strange specimen, and with much laughter, Hambruch was shown a man who appeared a little simple but otherwise quite healthy, with female tattooing. He seemed used to the derision of his countrymen and was married with children, although according to the marriage laws in force they were not necessarily his offspring.

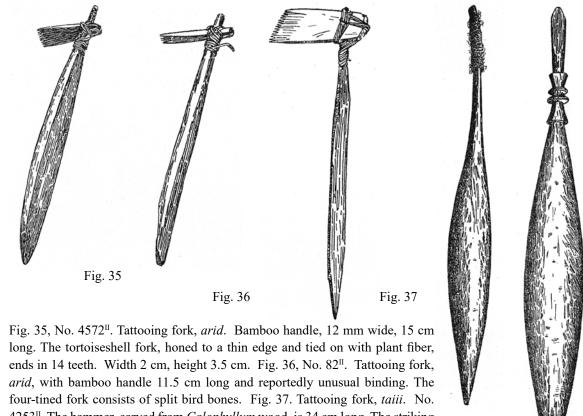
The women's tattooing is much more sparse than on the neighboring islands, and one never finds the richer patterns of the Merir women on their thighs. They decorate only their calves and hands, and even here, much less richly. The back of the hand is covered with zigzag lines, and a sign similar to a y appears on the first and last digit. The top of the wrist is adorned with a line having x-shaped pendants. The pattern on the right hand shown is somewhat richer: a filled-in zigzag line runs from the first thumb joint to the wrist. The other fingers are bare. On the back of the hand, rows of continuous zigzag lines alternate with interrupted ones.

The patterning of the legs begins above the knee, leaving the patella bare and running down the shins to the ankles. The same design elements as on the hands are used: the zigzag line is called vaseri bori gerik, the short zigzags above the knee are called gugetari and those below siarifeidze.

tattooing tools consist of fork and hammer. The fork 4572 II in Fig. 35 consists of a bamboo handle 12 mm wide and pointed at both ends. The top end is stuck through the hole in the tortoiseshell fork so that it protrudes as a point 5 mm long. A plant fiber wrapped several times around the handle and fork horizontally and vertically holds the latter at a slight inward angle. The other end of the fork is honed to a thin edge and furnished with fourteen teeth. The other fork on Fig. 36 No. 82 II differs from the previous one in form and material and the apparently unusual binding. It consists of a piece of split bird bone and has only four tines. According to Hambruch, the handle is called *bug arid*, the fork *metag arid*, the teeth *tsirikopo*, the hole *tobol*, and the binding *ianu uts*. (*uts* = banana fiber).

The simplest **adornment**, and one always used copiously by both genders, consists of leaves and blossoms. Young girls twine wreaths and vines around their neck, breast and hips. The men stick a rolled-up leaf in their earlobe, which is always pierced; this custom was already prevalent in Holden's day. The women fasten entire bunches of leaves and blossoms to their ears. Children are rarely seen with this sort of adornment, and their loose hair usually completely obscures their ears. The women use turmeric powder very abundantly: they color their mats and belts with it and rub their faces and bodies with it, especially when they are getting themselves ready for dancing. The main element of the dancing costume is the coconut pinna leaf.

Men wind it around their forehead, upper arm, lower arm, calf underneath the knee, ankles and wrists. For this use, they take the leaves of young fronds, *ubut*, which they tie together if necessary, for example for the headbands, ubut tagata or meker; the knots are called bukobuk. The ends stick out stiffly and sometimes protrude significantly from the body, so that this type of leaf decoration is quite striking. It is notable that for dances, the men also decorate the index finger of each hand with them, so that the possibility of a sexual meaning for this adornment suggests itself, all the more so since young girls also decorate their fingers with them during dances, while the men put on a little skirt of coconut pinnae over the maro. This knot-decoration was also seen on the fingertips of the chief and the priest (see Fig. 30).



4253^{II}. The hammer, carved from *Calophyllum* wood, is 34 cm long. The striking surface measures 5 cm at its widest. The end of the handle is flattened and wound around with coconut cord. Fig. 38, No. 83^{II}. Hammer of mangrove wood. The striking piece, sorobu taiiu, is 11 cm long. The handle end is called patsa.

In order to better fasten the flowers and leaf bundles, cords are very popular among them, which they run from the shoulder to the opposite hip and tie. It appears that originally, plants were the only known ear decoration. The expedition found only a single earring, and this consisted of European glass beads with three red *Spondylus* triangles. It is fastened to the ear by a tortoiseshell hook, which is pushed into the ear hole. It has a pierced opening through which four strands of glass beads have been strung, alternating two white beads with two black ones. Besides the Spondylus pendants, a common European glass button finishes the piece.

Necklaces, strands of various lengths with or without pendants, are found mainly among women; men wear them sometimes, children more rarely. The simplest pieces of this type are cords of coconut yarn, to which single beads or pendants are added. In recent times, European buttons have become very popular. In the past, pendants usually took the form of fishhooks and were made of tortoiseshell (of Chelone imbricata, boat) or shell. Often, the hook shape is only implied. They are called *aprietoch* or *aprietau*. Fig. 40 shows a piece of this type, which was worn together with four others. The kidney-shaped disc is pierced to allow fastening. Fig. 41 shows a hook of unusual shape. It was worn alone on a cord hanging down as far as the chest and is made from a piece of tortoiseshell almost 10 mm thick. Real fishhooks are very popular as pendants with both men and women. The necklace No. 4004 II in Fig. 42 is a typical piece. The leaders, *cholochol*, of two large tortoiseshell fishhooks, *chat ma chama*, are knotted together and form the necklace, with the hooks on the ends as the fastening. 5 pairs of small fishhooks, knotted together in pairs by their leaders, are fastened to the necklace at intervals. —Conus bottoms, mes or metz, are used in a very similar way. They are knotted to the necklace, twisted from pandanus leaf or coconut fiber, by small loops that are passed through a hole. They use the tips of these snails in the same way.

Fig. 38

The sea urchin provides a similar type of neck adornment, called *nach*. The bulbous ends of the greenish or violet spines, similar to porcelain and shimmering like velvet, are pierced and they are lined up on a cord twisted from coconut fiber. About 20 legs with a length of 3-8.5 cm are needed for a rich piece. But for a piece of jewelry, they prefer to collect legs of similar length if possible, which they use without piercing by catching the end in a cord loop. —Small sea urchins are used whole; they are pierced at the top and threaded onto a cord. The necklace in Fig. 46, No. 4591 II, consists of four pecten shells whose hinges are pierced and fastened at intervals to a braided coconut fiber cord.

The pieces that follow are necklaces of coconut and shell discs. Of course, snail shells can just as well be used for these. According to the material, they are called kim or bure. The first word is used to describe snails or shells in general, the second is said to mean Conus. The beads or discs are strung on coconut twine, daga. For the necklaces themselves there are various names, each no doubt having its own limited meaning, but these were not determined. The general name seems to be *mugeri*. However, it was also given for men's necklaces of large Conus, mes, with tortoiseshell hooks. Women's necklaces are called pare geenoch; mother-of-pearl shells they call para goenan, plain shells uaiteo. The small conus snail is collected during low tide, then polished on stones and pierced with a shark tooth. Frequently, the shell beads and discs are already being replaced by European glass beads. The necklace No. 4347II in Fig. 47 is still unfinished. The discs are very thick and still unpolished. They are pierced through from both sides and clearly show the boring ridge that is created by this piercing method on their edges. The necklace No. 4342 II, 64 cm long, consists of thinly ground coconut discs with a thickness of 5 mm, between which European glass beads are inserted at regular intervals; the two outer ones are white, the center one is blue. A thin breadfruit raffia cord was used for stringing. In necklace No. 4344 II, coconut and shell discs of 5 mm thickness alternate with each other. They are threaded onto coconut twine.

Necklaces of this sort are also worn as multiple strands and enriched with bridges. In this manner, they resemble the belts that Fritz saw being used, of which one of the Palau natives was allowed to select one out of those kept in the spirit house.¹ (See Fig. 51.) The necklace No. 4343 in Fig. 50 is made of coconut discs interrupted by two European beads between which is another coconut disc. It is double-stranded. 16 cm from their ends, the strands run through the holes in two bridges consisting of two shell plates and one coconut plate. The ends hang down over the chest and back.

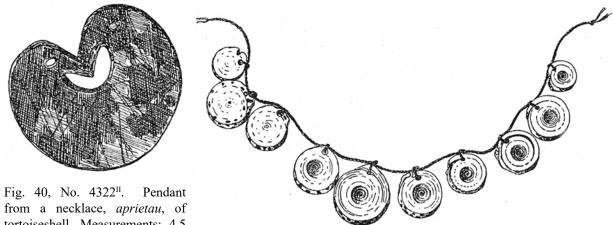
For belts, Fritz saw simple strands of beads. A rarer piece, and one that is valuable to the natives as well, is the wide belt with bridges No. 4480 II on Fig. 51 from the spirit house. It consists of nine alternating strands of coconut and shell discs connected by seven wooden bridges. In front of and behind each bridge, each strand begins with a shell disc followed in the second position by a coconut disc.

This pattern has the effect that each coconut strand has a shell disc in the first position, and each shell strand has a coconut disc in the second position. This pattern has the effect that each coconut strand has a shell disc in the first position, and each shell strand has a coconut disc in the second position. Behind the last bridges, the stringing threads of coconut cord are woven together in a braid-like fashion (see Ngulu).

Their **bracelets** are rings of Trochus, tortoiseshell or coconut; this was already customary in the time of Holden. E. Krämer found tortoiseshell bracelets similar to those on Songosor as frequent grave gifts in the children's graves. They like to wear multiple Trochus bands around their wrists. They are found with and without the epidermis. They are made as follows: the shell is made so brittle by fire or glowing coals that the bottom and turns of the raised areas are whitened with coral lime. The pattern shows only slight variation from one side to the other.



black and white European beads with Spondylus pendants and tortoiseshell hook. Length 9 cm.



tortoiseshell. Measurements: 4.5 x 3.5 cm.

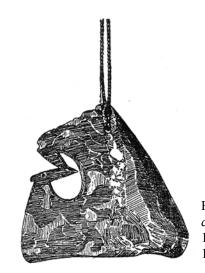




Fig. 39, No. 4303^{II}. Earring of Fig. 42. Necklace for men and women, *chal*. The leaders of the large tortoiseshell hooks, *chat ma chama*, form the necklace, with the hooks acting as fasteners and the small hooks, knotted together in pairs, used as pendants. Length of necklace 48 cm; dimensions of the large hooks 3 cm x 2.5 cm.

> Fig. 43, No. 4332^{II}. Necklace of coconut cord and ten Conus bottoms, polished on both sides. Length of the cord 38 cm, diameter of the discs 18-38 cm.

Fig. 41, No. 4282^{II}. Chest adornment, chab, of tortoiseshell. Measurements: 10 cm x 4.5 cm, depth of tortoiseshell 10 mm.

¹ Max, a servant on the expedition and a Palau man, obtained the permission of "a great man" to select such a belt from among many others in the spirit house. Besides this one, the expedition was able to obtain another. They are similar to the Bul belts of Ngulu.

shell can be cut away to such an extent that only a part of the lowest turn remains. The ring obtained in this way is carefully polished, and often the entire outer layer is removed as well. Fig. 53, No. 4850 II shows a bracelet of coconut shell. In contrast to the protruding, disc-shaped tortoiseshell band, it is cylindrical and almost 2 cm wide. Like their neighbors, the Tobi people value the black-and-white colored long wooden hair arrows, which are used solely for ornamentation. They differ from the combs of Songosor (Vol. I) mainly in that they have a single prong, so that they are more properly called arrows; those of Songosor have three or four prongs. The simple pattern is based on zigzags and is found on a small rectangular piece, the continuation of the prong.

In Holden's time, weapons consisted solely of spear and club. They used the latter against whites on a number of occasions and killed a few people in this manner. They carved the spears out of palm wood. They were 10-20 feet long, and their tips were furnished with sharks' teeth. For war, Tobi natives have the word maur. Since 1882, the natives have been reported to possess firearms, and probably they had them for some time before that. Moreover, they were well-versed in their use, and are said to have carried them when they approached passing ships. In 1909, there was no sign of firearms and the people insisted they had no knowledge of shooting, which is certainly not entirely consistent with the truth.

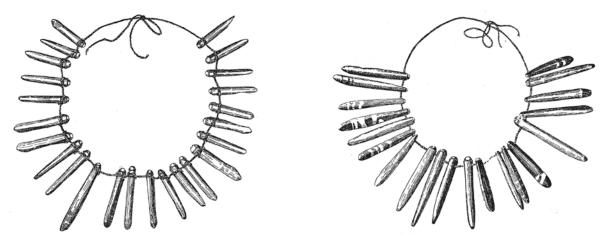
Terms for clothing etc. according to A. Krämer.

hat	bokin; pagun Ham.
wooden comb	gameteratsin, erueren Ham.
ornaments for forehead and neck	ubutemakemak
head knot	bukobuk
female leaf headdress	maker
ear ornaments	tsiketsik
neck ring	<i>megemag, maigel</i> Ham.
neck ring of bur shell to tie the lower jaw	bur a magemag
Trochus bracelet	iagog
finger ring	legelipög
belt	tatag
coconut arm bracelet	tagag
to tattoo	tarifer
color	bolob Ham.
spear, arrow, fishing spear	gasik
bow (hunting)	rasir
stone slingshot	gats
shield for spear battle	garekuk

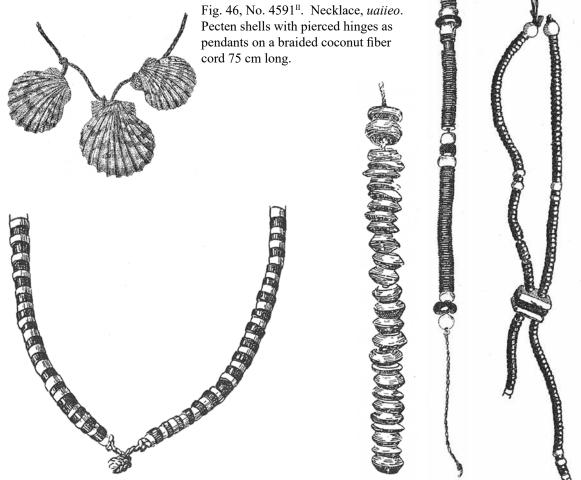
3. Household and Household goods.

With respect to building style, the **houses** show the same style throughout as those of the neighboring islands. They are square edifices with gabled roofs extending almost to the ground. Those that are not open houses to begin with are sealed very tightly and therefore very dark and close inside. The gable areas and walls are densely hung with mats; the door hole is so small-it is usually passable only by crawling-that neither air nor light can enter through it. Moreover, the houses are built extraordinarily close to each other-as close as two feet-and their interiors are rarely if ever cleaned. Even the houses of the great chiefs are no exception.

The sketch made by Mrs. Krämer (fig. 55) of the interior of the women's house provides information about the beam pattern of houses on Tobi. Seen from the outside, the roof of the house, which is densely hung with mats, extends to the ground, so that the gable area seems to rest on the ground. The interior demonstrates a strong



pierced, but fastened onto the 40-cm-long coconut cord with loops.



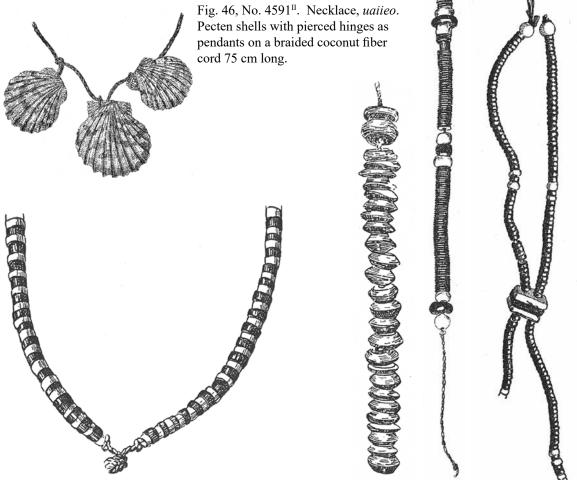


Fig. 47, No. 4347^{II}. Unfinished necklace 56 cm long of coconut discs measuring 9 cm in diameter. They are pierced from both sides and show the boring ridge created in the process. Fig. 48, No. 4342^{II}. Necklace 64 cm long of very thinly cut coconut discs 5 mm in diameter with European beads inserted at regular intervals. The middle one is blue, the outside ones are white. Thin breadfruit raffia cord was used for stringing. Fig. 49, No. 4344^{II}. Necklace of coconut and shell discs 5 mm in diameter, strung on coconut twine. Fig. 50, No. 4343^{II}. Double-strand necklace of coconut discs, among which two European beads and one coconut disc are inserted at intervals. 16 cm from the ends, the strands are run through a bridge consisting of two shell plates and a coconut plate. Length of necklace 64 cm, bridge measurements 1x2 cm.

Fig. 44, No. 91^{II}. The twenty sea urchin legs, 6.5-8.5 cm in length, have their ends pierced and are strung onto a twisted coconut fiber cord which is 45 cm long. Fig. 45, No. 4348^{II}. The sea urchin legs, 3.5-5 cm long, are not

relationship with the buildings on Songosor, Pur, and Merir. Because of its special function, the strong framing beam is decorated with phallic carvings and a zigzag line.

The floor of the cult house consisted of planks. The birthing house was completely lined with mats, and probably the common houses have no wood floor at all. In Holden's time, the Tobi natives built houses with wooden floors elevated to such a degree that they can be thought of as two-story buildings, since the upper room was large enough to contain a man. On one occasion, Holden found it necessary to flee; he ran into a house, swung himself up into the upper room through an access hole, and blocked the entrance with a crate. He described the houses in even more detail to Hale. Hale writes: The houses of the natives are built of small trees and rods, and thatched with leaves. They have two stories, a ground floor and a loft, which is entered by a hole or scuttle through the horizontal partition, or upper floor.¹ In our century, this building style was rarely found, and then only in a weaker form. The moderately high upper space is used to store nuts etc. It is entered through a hole with the aid of a line that hangs down. In the course of his inquiries about expressions, Krämer also encountered a word for stairs, *ieretak*, and upper floor, *gomag*. The customary roof covering is coconut fronds that are usually woven into mats.

A special feature of Tobi houses is the rain roof, bat, baz or vasik, and the water trough (Fig. 56 / Fig. 57). Due to this and to the thick covering of mats, no water enters the interior even during heavy rains. As house decoration, snail shells hung on coconut cords are used. A foreign structure on the island was an abandoned house on the west coast belonging to a man who had come from Ternate, according to the testimony of the people. It was in ruins, but the columns and posts still stood. The roof was significantly lower than those of the Tobi houses. Inside, there was a bed of masonry.

Expressions for the house and its parts.

village	gasogosog A.K.
spirit house	fare kikak A.K.
hut, dwelling	im A.K.
sleeping house with plank floor	imari masek A.K.
cooking house	murum A.K.
fish cooking house	<i>im epat ig</i> Ham.
taro shed	<i>murum</i> Ham.
boat house	far A.K., varet Ham.
canoe shed	palachalach Ham.
house without walls	imaseka A.K.
ren house	imotsorion A.K.
blood house	imaripar A.K.
hen house	imeri koko A.K.
supply house	imera pitek A.K.
taro houses on the plantation	imeri nibor A.K.
porch, round piece	<i>morupan ipiiar</i> Ham.
corner post	bin A.K. asusi, sug, siguri Ham. sök, suk A.K.
middle post	sumoniar Ham.
roof	eas A.K.; morupan, iusur Ham.
mat covering	daberiei; amuts mach Ham.
roof mat	eiasor Ham.
roof side	totoru Ham.
gable wall	<i>lugerum, toberam nani</i> Ham.

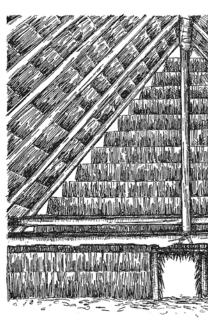
1 Hale, op. cit. p. 79.

Fig. 51, No. 4480^{II}. Wide belt with bridges from the spirit house. Nine alternating shell and coconut disc strands are held together by seven bridges. Before or after each bridge, each strand begins with a shell disc that is then followed by a coconut disc. The stringing cords of coconut twine are braided together after the final bridges in the manner of a plait. Total length 132 cm; length between first and last bridge 66 cm, width 6 cm.



Fig. 52. Bracelet of Trochus nilot., *lekerek*. No. 4350^{II} and No. 4855^{II}.

Fig. 54. Decorative wooden arrows. No. 4356^{II}. The ornamental continuation of the solitary prong consists of a rectangular flat piece of wood 16 cm long and 3.5 cm wide, whose edges are decorated with an ornamental band consisting of triangles carved into the wood to so that they recede (a). To fill out the pattern, rhomboids have been carved into the middle at intervals and colored black like the edging. The raised areas are whitened with coral lime. The reverse has a shallow groove instead of the rhomboids (b). Total length 26 cm, decorated portion 16 x 3.5 cm. No. 4357^{II}. Pattern the same on both sides. Length 23 cm, decorated portion 14 x 3.5 cm.





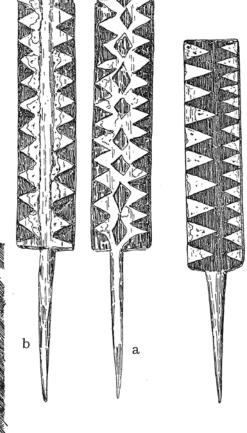


Fig. 55. Interior of the birthing house, imeripar. After a sketch by E. Krämer.

Fig. 53, No. 4850^{II}. Arm bracelet of coconut shell. Width 1.8 cm, dia.7 cm.

roof beam floor purlins purlins (roof) slats and trough wind protection rafters (roof) rafters (wall) decorative slats (?) attic planks attic slats attic space attic entry hole climbing line to the hole stairs door, door hole door (tied) binding yarn door lock house wall toilet fence well well walls fireplace oven Polynesian oven ash heap trash heap fire fan torch roof for rain protection frame with rack of slats ledge for sleeping mats sleeping mat bed

um Ham.; ungorap A.K. tafei Ham. aitom, auitom, hoitsom Ham. igaga pangek A.K. uariket, iiagrofat Ham.; igarevorovat A.K. dugeroto, igailofob, uarikel Ham.; igagasusu A.K. soaries, atit, titiripin Ham. bor A.K. bosar A.K.; itor, posobos Ham. *meiüfen, meiuch* Ham. iet, ba,b iiapengach Ham. gomag A.K. pitratumoch Ham. tari Ham. ieretak gatam A.K.; gato Ham. beritari, pirepireregatam A.K.; chatam Ham. kat A.K. katkateri gatam A.K. tit A.K. erügür Ham. ninieripag A.K. rut A.K. tsar A.K. gatavas A.K. muruot Ham. um A.K.; ninieripag Ham. main Ham. bör Ham. moiara A.K. gipoi A.K. tor A.K. paragarag A.K. pasots, pasobos Ham. pin Ham. tsoobo, tsoob, tasabari fagak A.K.; sob Ham. bosobos A.K.; piie Ham.

In general, the wooden containers are carved out of a single piece of breadfruit wood. Older pieces show great meticulousness in their crafting; newer ones, worked with European tools, are treated more cursorily. The containers break down into dishes and bowls, pots with lids and lidded boxes.

The dishes are sometimes so shallow that they should really be called coarse wooden plates. Thus, No. 4805II in Fig. 62 is a flat, perfectly round plate with an edge 11/2 cm high. Hollowed out inside, on the outside it has a pronounced slant that merges into the bottom. Fig.s 63-73 show narrow dishes of somewhat irregular shape. No. 4817 is boat-shaped and meticulously crafted. The sides of the container are gently sloped on the outside and merge with the flat bottom, which ends on either end in a sharp ridge going all the way to the edge. The dishes 4399 II and 4821 II are more trough-like, the former oval, the latter almost square. No. 71 II is a special piece

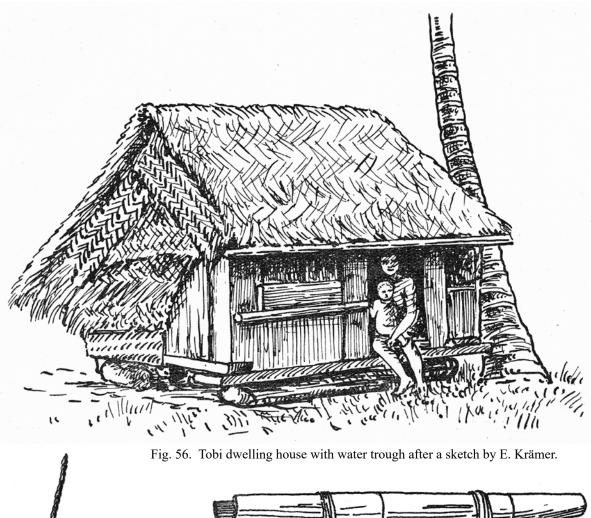


Fig. 58, No. 4279^{II}. House decoration, a Cypraea tigris fastened to a coconut cord.

Fig. 59. Stone bed in the house of the Ternate (Dogerana) man, after A. Krämer.

Furnishings. Among the furnishings on the island, wooden utensils occupy the principal place. The richness of forms among bowls, pots and boxes is astounding and much greater than that of the neighboring islands. According to the natives, the manufacture of the wooden utensils, especially the large chests and coffins, lies in the hands of certain woodworkers, the so-called senapes. In 1909 there were supposedly only two of these artists, and they were on Yap at the time. The fact that the natives sold great quantities of containers of all types to the visitors without difficulty of any kind, apparently in the knowledge that they could easily obtain more for themselves, speaks against this assertion.

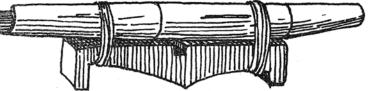
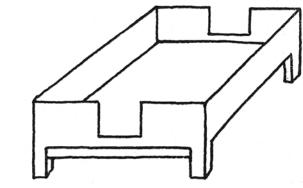


Fig. 57. Water trough after E. Krämer.



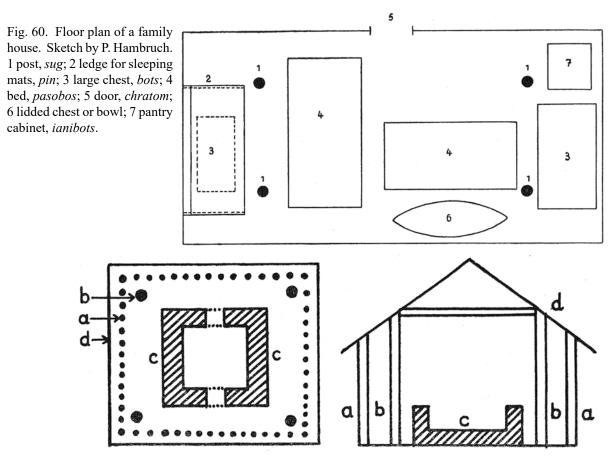


Fig. 61. House of a shipwrecked man from Ternate, after a sketch by Hambruch. a) palisade posts, b) posts supporting roof, c) masonry bed of stone, d) cross section of roof.

with its triangular form.

The **bowls** are produced with and without handles. Fig. 74 shows one without a handle. Fig.s 75, 76 and 77 show narrow, moderately high bowls with small handles and rounded or steep sides. The bowl No. 64 II is meant for the preparation of turmeric powder and is called *tabi ren*. The boat-shaped vessel is the lower part of a lidded bowl as shown in Fig. 78. Crude and irregular in workmanship, it is colored gray-brown on the outside, black-brown inside. The bottom shows ren sediment. From the bottom, shaped like a flat oval, the sides rise steeply, almost perpendicular, while the ends rise at an angle of about 60° to an elliptical edge whose sides come together in two points. A rebate of 1¹/₂ cm runs around the edge, which is 3 cm thick. Two triangular protrusions, the points facing down, form the handles. The two tall bowls in Fig.s 79 and 80 are made of mangrove wood. No. 4816 II is a wide oval, irregularly worked vessel. The sides are convex near the top, slightly concave near the bottom. The bottom is relatively small and flat inside and outside. Two flat, thin handles are attached to the ends of the vessel, of which one broke off along with a piece of the side and was repaired with lashing. The high-sided bowl No. 72 II has a terrine-like effect due to the form of the handles and the pleasing flare of the sides. The following vessels are round, the bottom being smaller than the upper edge. No. 4056, Fig. 81 also has sides that rise from the bottom at a slant and incline slightly inwards at the edge. The bottom, which is flat inside and outside, forms a sharp angle with the sides. The bowl No. 4007 II has convex sides that rise from a bottom 22 cm in diameter to an opening with a diameter of 38 cm. The bottom, which is very thick and rounded inside, has a foot all around its bottom edge that is ½ cm high. The bowl No. 4619 in Fig. 83 has a bottom that is ½ cm thick and perfectly circular; it has a perpendicular edge where it meets the sides, which rise in a rounded shape. The edge of the vessel is rounded off to about 1 cm thick, making the sides seem to curve inward and appear very thin. The round bowls No. 4815 II and No. 4053 II are distinguished from the previous ones by their handles. Similar to each other in form, they differ only in size and handle shape. On No. 4815 II they are on opposite sides and protrude like noses, while on No. 4053 II only a single protrusion is found on the rounded-off edge. It is pierced and furnished with a cord for hanging.

Very large, heavy lidded vessels with a bottom portion similar to No. 72 II have served as coffins since ancient times and have already been described, cf. p. 100. The following large rectangular chests, whose build occasionally already suggests European influence, serve the same function in part. In general, the natives use them to store valuables: woven belts, dress mats and rope, and other fragile objects. However they are used, all these chests are called bag. Fig. 86, No. 129 II is a coffin, a rectangular box with a lid placed on top and only one handle (remaining?). The chest No. 4244 II in Fig. 87 is a very well-crafted old piece of mangrove wood. The long sides, perpendicular to the bottom, are curved along their length, giving the chest an expanded midsection. 2 cm underneath the edge of the lid there are remnants of pegs. The bottom, too, is bent lengthwise and curves slightly; the lid is slightly curved along its width. Fig. 88 shows a chest of breadfruit wood with a rather complicated build after a European model. According to Hellwig, it serves to store perishable goods. It consists of a bottom and a lid. The bottom is crafted of three parts: the midsection, carved from a piece of tree trunk, with curved bottom and long front and back sidepiece, and the two opposing side pieces. The lid consists of a midsection and two wide end pieces, attached to it by pegs and joints and, in addition, with a copper band and coconut yarn lashing. The lid rests on the rebate of the lower section. Both have carved fastening ledges all around their perimeter. In each, there are square peg holes in exactly corresponding locations, through which long tapered pegs are pushed. These pegs are pierced to allow coconut line to be pulled through.

The individual parts have special names:

lid	1
rebated edge	1
long sides	ł
short sides	ł
bottom, inside	1
bottom, outside	(
wedges, pegs and plugs	i

A strange creation of native carpentry is the crude, moveable chest in Fig. 90. It consists of the boxlike lower part, furnished with wooden wheels and having a fixed lid around the edges, and the smaller lid to close it off, which is precisely fitted to the opening. The opening of the fixed lid and the edges of the closing lid have complementary rebates. The closing lid consists of four wide edge boards, rests on four stout, long legs, and is mortised and pegged at this juncture. The sides are formed of wide, horizontal boards that are dovetailed and pegged into the legs. The feet continue down about 20 cm beyond the sides and are furnished with wooden wheels on the short sides. They are connected by an axle whose rebated ends run through the long sides of the legs, which have openings for this purpose. The closing lid, made from three boards and two narrow side strips, is furnished on the inside with a wooden latch that can be opened from the outside by turning with a key-like tool.

The following pieces are medium-sized square boxes of varying shapes with handles and lids. They are used for storing all kinds of valuable small items such as fishhooks, jewelry and turmeric makeup. One of the biggest containers of this kind is No. 4377 II in Fig. 91. A large, crude box with perpendicular sides. One of the short

Wooden vessels crafted with modern tools and little care.

uor notor parnanil ninar ram chapi tivan

sides has been broken and replaced with a board inserted in the European way; it is fastened to the box with crossnails. The lid, which is strongly rounded on its long sides, has large, flat protrusions carved into its short sides and rounded off at the ends. The box No. 4825 II in Fig. 92 is trough-shaped and is semicircular in cross-section. Unlike the other containers, the bottom part consists of three parts: the body with a slightly flattened underside, carved from the trunk piece of a breadfruit tree, and the two ends, which close off the body in front and behind. The end pieces with their rebated edges and the body, which fits into this rebate, are connected to each other with nails. The lid is carved out of one piece and has two pegs on the ends. The large lidded box No. 4548 II of breadfruit wood has sides that are slightly curved horizontally and vertically; they rise outward from the bottom, only $21\frac{1}{2}$ cm wide, to the lid, 32 cm wide; this gives the box a cross-section shaped like a trapeze. The pegs on the lid are pierced vertically, those on the box horizontally.

The box No. 4570 in Fig. 94 shows very clean workmanship. The long sides are curved horizontally and vertically, forming a container with narrow sides and a convex middle. The edge of the lid, which has the same measurements as the bottom, is strongly rounded off in the middle. A carrying cord runs through the holes in the handles carved onto the lid and ends of the box. The flat-lidded, sharp-edged, rectangular box No. 4567 II is carved of mangrove wood. The long sides are slightly curved and, like the ends, are perpendicular. The sharp-edged lid rests in a rebate. Flat, vertically pierced protrusions with rounded-off fronts have been carved onto the box and lid on their short sides. A breadfruit cord, pulled through the holes and knotted underneath the box protrusion, serves as a carrying handle. The flat box with no number has a rectangular shape with slightly curved long sides and straight short sides that rise at a slight angle. Its bottom is flat and covered inside with a piece of palm leaf sheath. The lid, which is curved along both its length and width, has two pegs carved onto it below the rim, partly to anchor a fastening cord that runs horizontally around the box, and partly as handles for opening the lid. No. 4487 II on Fig. 97 is a strikingly narrow rectangular box with limited space, for storing fishhooks or jewelry. Here too, as on most boxes, the lid rests in a rebate 1¹/₂ cm wide and 1 cm high. On one of the short sides of the box, 1 cm above the bottom, is a flat, somewhat rounded peg whose purpose is unclear due to the lack of other pegs. Fig. 98 shows a small lidded box with a trapezoid shape. The long and short sides form wide angles with the bottom. The lid has been fitted tightly into the rebate of the bottom. Small pierced pegs on the ends of the lid hold the carrying cord. The difference between the short sides is 3 cm. In No. 4561 II, Fig. 100 shows a box whose bottom is similar to No. 4487 II with regard to the peg near the bottom.

The old blackish brown almost rectangular box of *Calophyllum* wood is a special piece. The sides, 4 cm thick, are carefully smoothed on the outside, but on the inside they are rough and uneven and, like the bottom, clearly show signs of recent work, giving the distinct impression that newly acquired iron tools were tried out on this piece. A rebate 2 cm wide and 2 cm high runs around the edge for the sides of the lid, 2 cm thick, to rest in. Our description of containers of this type ends with the delicate small boxes that have been collected in extraordinarily varied shapes. They are called *devidevi*, a term that also seems to be used for the larger containers described above. Among others, there are coffin-like shapes (Fig. 101), but only 7 cm high and 22 cm long. No. 4502 is a delicate small hexagonal box with straight edges and a rebate. The lid rises toward the middle, which is bisected by a sharp ridge. Fig. 102, No. 4552 II is a container for tattooing equipment with a flat inset lid. A cord is fastened onto the middle for lifting up the lid. The double box No. 4479 II is a special piece. It is new and crafted very carefully, and unique in the Hamburg collection. The remaining small boxes serve to store small fishhooks. The smallest of its type is a flat box with handles, 7 cm long, 4½ cm wide, and 3.1 cm high. The small box No. 4595 has an exceedingly strange shape. Like the one following (Fig. 106), it too looks like half a small "coffin."

The remaining **containers** are fashioned of coconut, snail or sea shells, drift bamboo, or whatever else seemed suitable. In this context, vessel No. 65^{II}, Fig. 109 is worth mentioning: it is made from the center piece of a

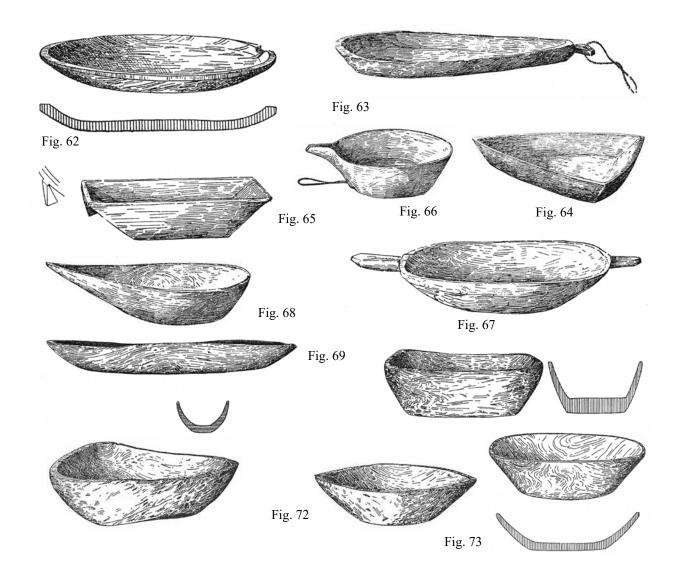


Fig. 62, No. 4885^{II}. Plate-like shallow dish with a rim $1\frac{1}{2}$ cm high; strongly hollowed out inside, rounded off outside. Diameter 37 cm, height 3.5 cm, bottom diameter 25 cm. Fig. 63, No. 75^{II}. Old fish bowl, *tabi ig*, of breadfruit wood. The carved handle is pierced and furnished with a hanging loop of coconut cord. An image of a fishhook is engraved on the bottom. The edge is straight, the bottom is flat outside, slightly rounded inside. Length 46 cm, width 16 cm, handle 3.5 cm, bottom 13 x 42 cm; height 4 cm. Fig. 64, No. 80^{II}, tabi e segar. Triangular dish of breadfruit wood with smaller bottom and inward-tending sides. Crude work. Short side 25 cm. Diameter 26 cm. Fig. 65, 4050^{II}. Bowl of breadfruit wood with straight long sides, slanted short sides and small rectangular bottom. It has a small triangular handle on each end. Height 7 cm. Interior measurements: 30 x 35 cm, bottom 11 x 15 cm. Fig. 66. No. 4064^{II}. Tabi a jauar. Dish with pour spout of breadfruit wood for drinking and filling water jugs of coconut. Hanging loop of coconut cord underneath the spout. Height 4 cm, diameter 16 cm, bottom diameter 10 cm. Fig. 67, No. 4605^{II}. Trough of breadfruit wood with long, straight, flat handles. Inside is round and outside is tapered. Length 35 cm, width 21 cm, height 8¹/₂ cm, handle lengths: 8¹/₂ and 5 cm, bottom: 8¹/₂ x 14 cm. Fig. 68, No. 4610^{II}. Egg-shaped dish, especially suitable for pouring. Breadfruit wood. Height 8 cm, length 28.5 cm, width 18.5 cm. Bottom rounded inside, flat outside. Diameter 18.5 x 13.5 cm, flattened edge. Careful craftsmanship. Fig. 69. No. 4817^{II} . Dish, tapa ua ieirai. The gently rounded sides of this very carefully crafted vessel merge with the flat bottom on the outside; at the ends, it finishes with a sharp ridge that runs all the way to the edge. Length 83 cm, width 17 cm, height 10 cm, length of bottom 50 cm. Fig. 70, No. 4399^{II}. Wooden dish. Length 29¹/₂ cm, width 17 cm, height 9 cm, bottom 19 x 10 cm. Fig. 71, No. 4883^{II}. Shallow wooden dish. Length 37 cm, width 26 cm, height 9-10¹/₂ cm. Fig. 72, No. 4813^{II}. Wooden dish. Length 26¹/₂ cm, width 15 cm, bottom 13 x 9 cm, height 5-6 cm. Fig. 73, No. 4821^{II}. Wooden dish. Length 30 cm, width $23\frac{1}{2}$ cm, height 6-7 cm, bottom 16 x $12\frac{1}{2}$ cm.

washed-up drum from Wuwulu or Aua. The eight pegs on the lower end served to anchor the bottom. The lid, about 2 cm thick, is fashioned of two pieces of breadfruit wood that are fastened together by tying with coconut twine and sealing the seam with Calophyllum resin. On the inside of the lid, a groove has been carved out that corresponds exactly to the edge of the vessel. Coconut cords that run through two holes in the lid and two loops of coconut cord attached to opposite sides of the vessel ensure a tight seal when knotted. Fig. 110, No. 4291 II is a water scoop of coconut. A coconut cord is passed around the base of a breadfruit tree branch which had to be shortened for transport; the cord is knotted 22 cm beneath the stick, and its ends hold a coconut shell. A container for Calophyllum resin, essential as a sealant, is shown in Fig. 111, No. 4366 II. Three pairs of coconut fiber cords encircle the lower half of a coconut and are knotted above its open end. A loop for hanging is pulled from the knot through a hole in another coconut half-shell that serves as a lid. Fig. 112, No. 117 II shows a water container of drift bamboo, baubau. The only alteration is a hole in the side through which a cord for hanging has been fastened. Fig. 113, No. 110 II, shows a Nautilus pompilius shell used as a drinking vessel; it is also furnished with a cord for hanging.

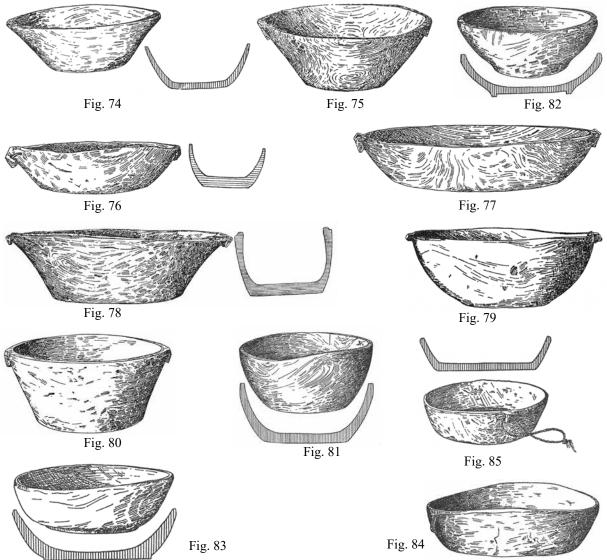
The heavy taro pounding boards are made without care or art of breadfruit or mangrove wood. Fig. 114, No. 71 II shows a pounding board in the form of a half-circle with a 2.5 cm high ledge around the rim that meets the bottom sharply at a wide angle. The pounding board No. 4238 II is trapezoidal with gently curved sides. The edge, 1.5 cm high, tapers inward and merges with the bottom almost imperceptibly. For pounding and grating they use coral stones, fatifit chruot, which do not differ significantly in shape from the wooden pounding tools, vor, Fig. 116 No. 4236 II, once they have been fashioned.

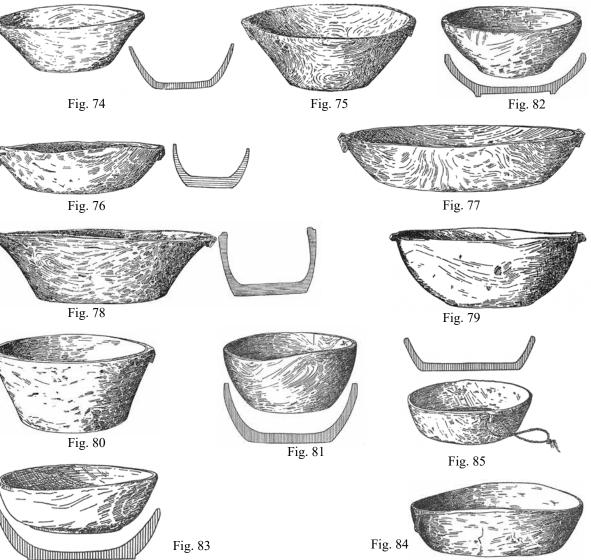
To help with cooking and eating they have spoons and spatulas or knives of wood, shell, or tortoiseshell. Of the wooden spoons, No. 4617 II is the simplest in shape. The sides of the ladle-like, oval bowl taper inward to the bottom, which is flat on the inside and outside. The handle, coming off the upper rim of the bowl, is curved, and the widened end is tapered off. The bowl of spoon No. 4618 is similar to that of the previous one, but the handle seems to be carved after a European model. It comes off the middle of the bowl. Fig. 119 shows a ladle in No. 4627 II. The walls, tapered inwards, are rounded to merge with the bottom, which is flat inside and out. The handle, which begins 1 cm below the ladle rim, is flat on top and semicircular on the bottom, and ends in a downward hook-like extension. The spoons of sea and snail shells¹ show nothing new and correspond to the previous pieces. They are called tit.

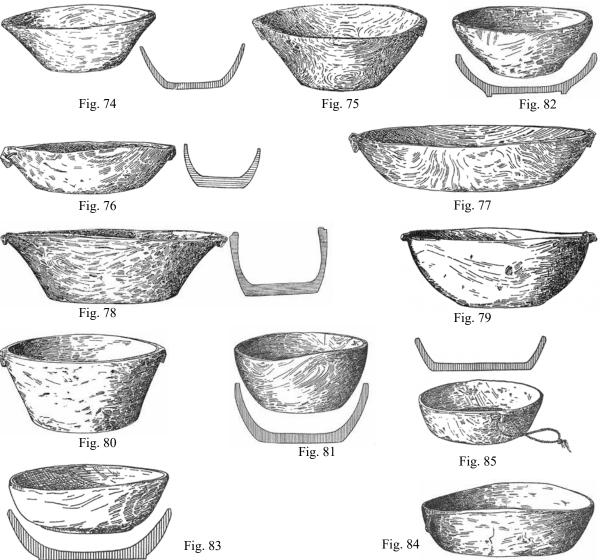
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The taro spatulas of tortoiseshell are called tzirua or tzirik. No. 4025 II in Fig. 121 is an eating spatula of naturally curved tortoiseshell. The long sides taper inward, the ends are rounded and furnished with a long, sharp blade. No. 4026 II is similar to the previous, but it is smaller and the ends are straight. The spatula No. 4396 II has its blade on one of its long sides. The large spatula in Fig. 124 has a handle. It is made from the side of the shell and shows the natural rib-like reinforcement in the center, which tapers off in the handle. One side has been honed to







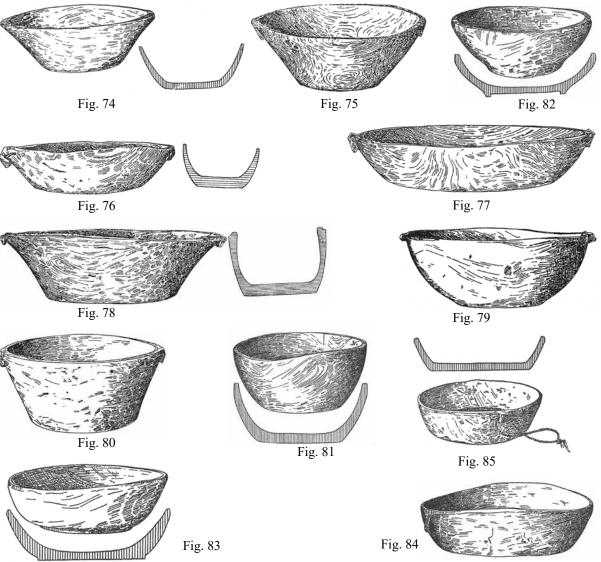


Fig. 74, 4609^{II}. Wooden bowl. L 24¹/₂ cm, w 17 cm, h 7 cm. Fig. 75, No. 4610^{II}. L 32 cm, w 19.8 cm, h 8¹/₂ - 9 cm, bottom 14 x 10¹/₂ cm. Fig. 76, No. 4616^{II}. Boat-shaped wooden bowl with sides sloping up and curving in at edge. The sides and bottom, flat inside and outside, meet at a sharp angle. On the edges small handles, pierced horizontally. L 40 cm, w 19 cm, h 9 cm, bottom 11¹/₂ - 23 cm. Fig. 77, No. 4058^{II}. Similar in shape, this bowl differs only in its width, its handles and its very careful craftsmanship. The handles are trapeze-shaped and very functional. Some indented carving runs parallel to the handle all the way to the edge, creates an edge band on the handles about 7 mm wide. L 56 cm, w 33 cm, h 11 cm, bottom 37 cm. Fig. 78, No. 64^{II}. Wooden bowl for the preparation of ren, tabi ren. It is the bottom part of a lidded bowl with a rebate of 1¹/₂ cm. L 73 cm, w 32 cm, h 22 cm, bottom 37 x 24 cm. Fig. 79, No. 4816^{II}. Irregularly worked tall bowl, mangrove wood. Bottom is flat inside and outside. One handle broke off and has been repaired by lashing. L 47 cm, w 37 cm, h 16 cm, bottom 22 cm. Fig. 80, No. 72^{II} . Well-crafted bowl, mangrove wood. Tall sides end in an edge $1\frac{1}{2}$ cm thick. Bottom, worked and slightly hollowed out at the ends, flat inside and outside. The handles are square, but triangular from the side. L 52 cm, w 40 cm, h 22 cm, bottom 32 cm. Fig. 81, No. 4956^{II}. L 47 cm, h 21 cm, bottom 30 cm. Fig. 82, No. 400^{7II}. Upper dia. 38 cm, bottom dia.22 cm, h 13 cm, bottom has a foot running all around ¹/₂ cm thick. Fig. 83, No. 4619^{II}. Thin-walled, round, convex vessel, edge tapered to 1 cm. Bottom set off against the side. Poor craftsmanship with modern tools. Dia. 29 cm, bottom dia. 19 cm, h 8.5 cm. Fig. 84, No. 4815^{II}. Round vessel with two nose-shaped handles. Dia.54 x 48¹/₂ cm, bottom dia.39 cm, h 15 cm. Fig. 85, No. 4053^{II}. Round vessel with a peg whose hole is furnished with a cord for hanging. The sides, tapering inward from round edge, meets the bottom, flat inside and outside, at a sharp angle. The edge is tapered off. Dia. 31 cm, h 8 cm, bottom dia.24 cm.

¹ They like to use the shell of Turbo olearius Gmel (Hellwig's "Burgos").

² They like to use the shell of Turbo olearius Gmel (Hellwig's "Burgos").

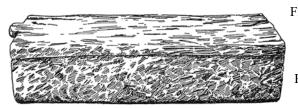


Fig. 86, No. 129^{II} . Coffin, *bag*. Length 123 cm, width 35 cm, height 30 cm. Fig. 87, No. 4244^{II} . Old chest of mangrove wood with curved bottom, horizontally curved sides and slightly curved lid. Length 98 cm, width $28\frac{1}{2}$ cm, height 25 cm. Fig. 88, No. 4233^{II} . Large chest of breadfruit wood, *mai*, with ledges and lashing for storing perishable goods. Length 124 cm, width 42 cm, height 44 cm.



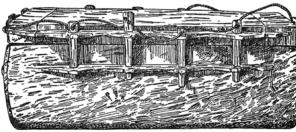
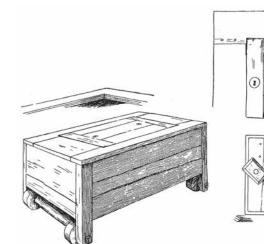


Fig. 88



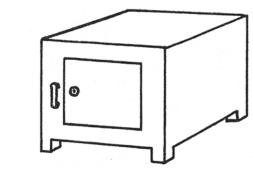


Fig. 89. Storage cabinet. Sketch by P. Hambruch. Fig. 90, No. 130^{II}. Moveable chest, *bag*, with wooden wheels. Length 144 cm, width 87 cm, height 66 cm. Inset lid *uor*, lid pegs *susur*, long side *pauangi*, short side *piga*, edge *igatomo*, wheels *tungo*.

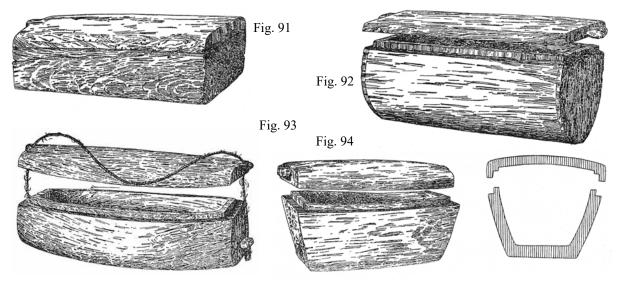
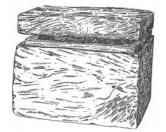


Fig. 91, No. 4377^{II}. Wooden box with repaired end. Length 71 cm, width 44 cm, height 23 cm. Fig. 92, No. 4825^{II}. Trough-shaped lidded box of breadfruit wood with three-part bottom that is nailed together. Length 63 cm, width of the flat lid 32 cm, height 28 cm. Fig. 93, No. 4584^{II}. Lidded box of breadfruit wood with trapeze-shaped cross-section. Bottom: length 52 cm, width 21.5 cm, width of lid 32 cm, height 24 cm. Fig. 94, No. 4570^{II}. Lidded box with carrying cord, of breadfruit wood. The walls are convex, the edges rounded off, the bottom flat. Length 44 cm, width 14 cm, height 13 cm.







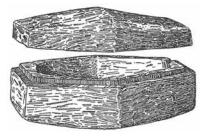


Fig. 95, No. 4567^{II}. Box of mangrove wood with carrying cord. Length 34 cm, width 19 cm, height 11 cm. Fig. 96. Flat box without a number. Length 34 cm, width 25 cm, height 11 cm. Fig. 97, No. 4487^{II}. Narrow box for jewelry or fishhooks with only one peg. Length 32 cm, width 6.5 cm, height 13 cm. Fig. 98, No. 4566^{II}. Small box with trapezoid shape. Length 30 cm, width of lid 15 cm on one end, 12 cm on the other, height 9 cm. Fig. 99, No. 77^{II}. Old rectangular lidded box of *Calophyllum* wood with a rebate 2 cm high and walls 4 cm thick. Length 37 cm, width 29 cm, height 26 cm. Fig. 100, No. 4561^{II}. Wooden box with 4 pegs. Length 36 cm, width 22 cm, height 12 cm. Fig. 101, No. 4502^{II}. Hexagonal wooden box with fishhooks. Height of the bottom plus the lid 4.5 cm, without lid 3 cm. Length 12 cm, height of the ridge on top of the lid 23 mm, the corner edge is 13 mm. Fig. 102, No. 4252^{II}. Small wooden box with inset lid, cord to lift it and a tattooing fork inside. Length 16 cm, width 6 cm, height 7 cm.

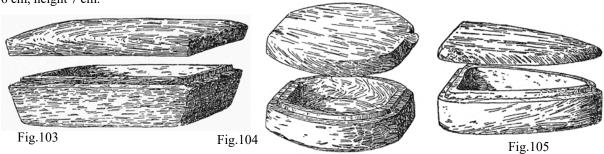
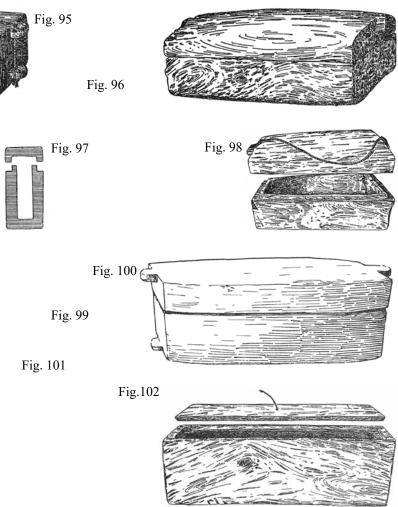


Fig. 103, No. 4213^{II}. Small wooden box for fishhooks. Length 11¹/₂ cm, width 4¹/₂ cm, height 3¹/₂ cm. —Fig. 104, No. 4080^{II}. Small wooden box, *apa devidiv*, of breadfruit wood for fishhooks. Length 8.3 cm, width 5.8 cm, height 2.5 cm. —Fig. 105, No. 4795^{II}. Small wooden box. Length 8 cm, width 5.5 cm, height 2 cm. —



a blade. To sip water they use a simple tool that is hardly altered. They use the hollow bones of birds of any sort.

To hang the various containers up inside and outside the houses, they usually use simple, plain hooks cut from branching twigs. Thus, the hanger No. 125 II in Fig. 127 is a special piece bearing the name *azenimerach*. It is carved from a thick piece of breadfruit wood. The block, originally rectangular, is tapered from the middle to one end, creating an almost round peg. It, as well as the wide end, are pierced with holes that are conical from both sides; the holding rope from the house roof passes through the peg hole, while the hanging rope of the vessel or basket is fastened to the hole in the wide end. To guard against rats, a board with a hole in the middle is placed over the peg and rests on the wide lower end. In other cases, the rat guard is attached to the holding rope.

pestle (of coconut wood) inner lid surface outer lid surface side and lid ledges holes in ledges lip of lid lashings zuzu, dudu ran (i me uar) uar talinar uia uiar piretar chorochoro

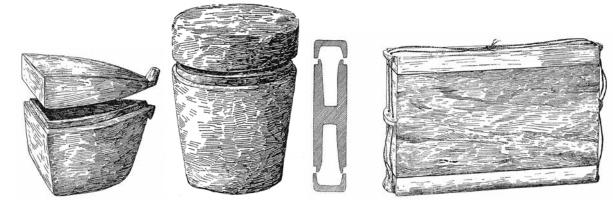
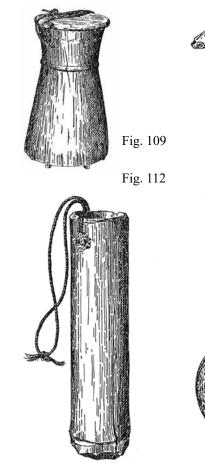
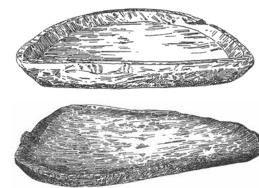


Fig. 106, No. 94^{II} . *tabi meri uor*. Box of breadfruit wood for fishhooks. Height 10 cm, length 15 cm, width 9.7 cm. —Fig. 107, No. 4268^{II} *tabi tabi tachul*. Box of breadfruit wood with shell discs. Height 12 cm, lower part 9 cm. Diameter of the lid resting in the groove $11\frac{1}{2} \times 9\frac{1}{2}$ cm, of the bottom 8 x 8 cm. —Fig. 108, No. 4479^{II} *beg*. Double box of breadfruit wood with two lids resting on a groove, six perforated handles and cord closure for snails, shells, and discs made from them. Dimensions: $19.5 \times 28 \times 4\frac{1}{2}$ cm, height of lid about 2 cm, depth of compartments in central section (height 14.5 cm): 7 and 8 cm.



unique features as the wooden utensils. In their techniques and shapes they are so close to those of the neighboring Fig. 109, No. 65^{II}. Vessel made from the center piece of a washed-up drum from Wuwulu. Length 49 cm, lower diameter 30 cm, upper diameter 28 cm, diameter at the narrowest point 22 cm. Fig. 110, No. 4291^{II}. Water scoop, *boiötir*. Length of branch 19 cm (breadfruit tree). Length of coconut fiber cord 38 cm, height of coconut vessel 12.5 cm, width 8 cm. Fig. 111, No. 4366^{II}. Container for Calophyllum resin made from two halves of coconut encircled with coconut fiber cord. Diameter 11 cm. Fig. 112, No. 117^{II}. Water vessel of bamboo driftwood, *baubau*. Length 25 cm, bottom diameter 6.5 cm. Fig. 113, No. 110^{II}. Drinking vessel of Nautilus pompilius, *amegech*.

islands that the objects described there, as well as their depictions, can be referred to. The mats correspond to Fig. 114, No. 71^{II}. Taro pounding board of breadfruit wood. Greatest width 57 cm, diameter 43 cm, height 6 cm. Fig. 115, No. 4238^{II}. Taro pounding board of mangrove wood. Length 92 cm, greatest width 62 cm, narrowest width 43 cm, height 5 cm. Fig. 116, No. 4236^{II}. Taro pounding tool, *vor*, of breadfruit wood. Old and slightly damaged. A slightly curved cone with flat pounding surface. Height 19.5 cm, bottom diameter 9½ cm.



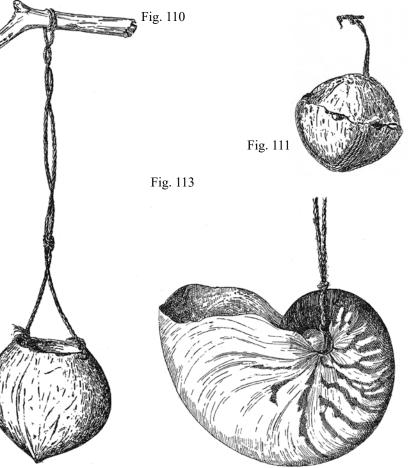
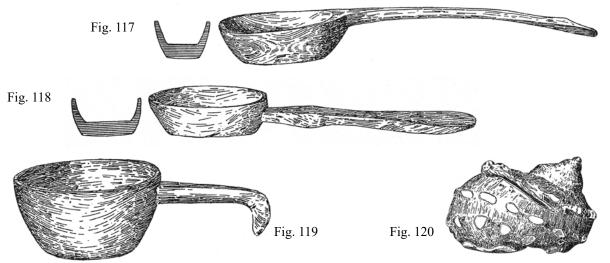


Fig. 114

Fig. 115



Fig. 116



The **mats** and **baskets**, the other significant component of the native household, do not show nearly as many Fig. 117, No. 4617^{II}. Spoon of breadfruit wood, *tit*. Length of handle, 41 cm, length of bowl 13 cm, width of bowl 3.5 cm. Fig. 118, No. 4618^{II}. Spoon of breadfruit wood, *tit*. Total length 30 cm, length of bowl 11 cm, width 6.3 cm, depth 3 cm, width of handle end 3 cm. Fig. 119, No. 4627^{II}. Ladle. Handle length 10 cm, diameter of ladle 14 cm, depth 7 cm. Fig. 120. Turbo olearius, "Burgos," partially worked.

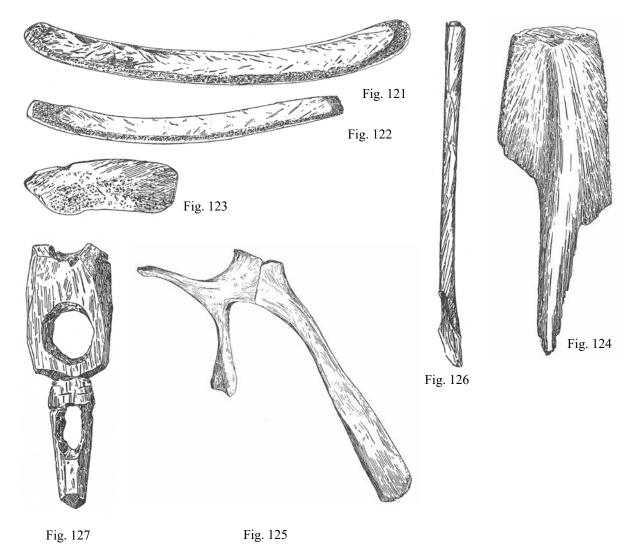


Fig. 121, No. 4025^{II}. Eating spatula of tortoiseshell, *tzirua* or *tzirik*. The ends are rounded and have a sharp blade. Length 33 cm, width 4.5 cm. Fig. 122, No. 4026^{II}. Eating spatula of tortoiseshell, *tzirua* or *tzirik*. L 27.5 cm, w 2.8 cm. Fig. 123, No. 4396^{II}. Eating spatula of tortoiseshell, *tzirua* or *tzirik*. The blade is located on the long side. L 10 cm, w 4 cm. Fig. 124, No. 108^{II}. Spatula made from the side of the shell with rib-like continuation. Blade on the short side. L 22 cm, w of blade 6.5 cm. Fig. 125, No. 92^{II} *tsirua*. Taro spatula made from the undamaged right shoulder bone of the large sea turtle. L 28 cm, h 14 cm. Fig. 126. Hollow bone of a bird for sipping water, *pau uet*. L 15 cm, dia. 7 mm. Fig. 127, No. 125^{II}. Hanger of breadfruit wood, *azenimerach*. Length 27 cm, thickness 5 cm, dia. of the hole 6 cm, w of the wood 8.5 cm.

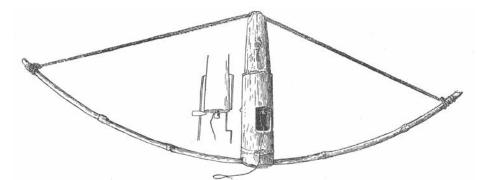


Fig. 128, No. 278^{II}. Rat trap, *teziz iri ga touei*, (collected on Pur). Length of bamboo cylinder 24 cm, diameter $7\frac{1}{2}$ cm; the rectangular opening measures 4 x 5 cm. The piston of *Premna* wood is 25 cm long, and is 5 cm wide at the bottom. The bamboo bow is 1.30 m long. The string is formed of two coconut cords.

Fig. 128 No. 278 II. This trap consists of three parts: a bamboo cylinder, a piston of premna wood, and a bow of bamboo with a string of two coconut cords. At the lower end, the ground surface, the bamboo cylinder is closed off by an internode. The protruding part of the cylinder is deeply grooved to accommodate the bow when the trap is set. Halfway up the cylinder a rectangular opening has been cut out. Two small holes are bored on the opposite side. (One hole is enough for the functioning of the trap. A new hole was made because the first had become unusable). The piston has a significantly smaller diameter than the cylinder, and therefore is extremely loose. Its upper end is sharpened into a wedge and has a V-shaped incision, in which the bowstring rests when the trap is set. When setting the trap, a small wooden plug is placed into the above mentioned hole; it is placed very loosely and prevents the piston from going past. The bottom of the piston is positioned just at the upper edge of the rectangular opening in the cylinder. A piece of bait is fastened to the bottom of the piston by a thorn and hangs down into the opening. By pulling the bowstring up over the piston's top, the trap is set. The least disturbance of the piston is enough to push the loose wooden plug aside and send the piston shooting downward with extraordinary force. The rat, which caused the disturbance and pushed aside the wooden peg by tugging at the bait, is crushed.

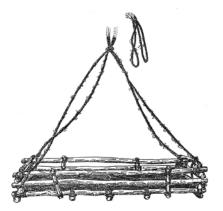


Fig. 129, No. 4840^{II}. Hanging basket of slats (bamboo strips and hibiscus sticks) with coconut cord for hanging. Length 68 cm, width 34 cm, height 11 cm, with a cord of 150 cm.



Fig. 130, No. 76^{II} . Child's toy of breadfruit wood. Thickness 5 cm, diameter 10 cm, diameter of the center hole 3 cm.

those shown; the weaving in of the strips is the same as in the sailor's jacket shown. In contrast to the neighboring islands, Tobi has the crude, simple mats of coconut palm fronds that have already been described on Nukuor. (See: Results of the South Sea Expedition vol. 8, Nukuor, Plate 1/1, No. 7230 II.) The middle ribs lie in the center of the mat, the weaving is closed by small braids at two corners, the weaving pattern is the same as in the basket 1472 II.

The baskets in Plates 3/1, 2 and 4 and the net bag in Plate 5/2 from Songosor are also found on Tobi. The strongly tapering basket of coconut leaf in Vol. II, however, is a different piece. Besides these woven baskets, they also have some made of slats and wooden sticks that differ from the child's cradle, whose one end was a few centimeters narrower than the other, only by their regular rectangular shape. The pictured hanging basket No. 4840 II has a grid-like bottom formed from 5 round cross-sticks (hibiscus) and 8 bamboo strips that are laid over them at right angles and wrapped with coconut cord at the crossing points. On each of the long sides, the bottom is closed off by a round stick that is tied over the 5 cross-sticks. On the short sides, a cross-stick is tied onto the ends of these two sticks to form the sides in combination with the alternating lengthwise and crosswise sticks. Two short sticks attached vertically over the long sides (14 cm from the corners) reinforce the sides. Coconut cords fastened to the corners are knotted together 50 cm above the bottom and serve as a hanging cord.

The fire fan, *ipoich*, shown in Plate 18 is almost the same as on Merir. It is woven in a single-woof pattern of folded coconut leaves. The middle rib forms the handle and reinforces the surface. The shape is triangular. The short side measures 24 cm, the two long sides 34 cm. It is also used as a fan and fly-chaser.

Against infestation by rats, they use large rat traps whose construction is unique to Tobi. They have been encountered on Pur as foreign objects, and there they were specifically designated as Tobi traps, teziz iri ga touei.

To transport fruit, the people like to use a carrying stick, *chamauri*. A collected piece measures 190 cm with a diameter of about 2 cm and is made of coconut palm wood, dug. It seems to have been a spear originally.

Although not belonging to household furnishings proper, a child's toy will be mentioned here-the only one observed and brought back. It is a kind of wheel, a round, thick, cylindrical piece of breadfruit wood with a hole in the middle. The thickness is 5 cm, the diameter 10 cm, that of the center hole 3 cm.

basket torch tor large basket cooking pot, dish tagak, lau Ham. wooden bowl tabi small basket large wooden bowl ierap mat small wooden bowl togoutol loom food ladle, spoon *itit; perik* Ham. weaving mat needle teet (?) iron blade wooden roof needle toutou Tridacna blade bukabuk, (bagangere biobi) rope cord, coconut keake tere; tauofil Ham. fishing line weaving garamal aus iagoma, fasifes

Terms for household items and technology after A. Krämer.

tsög; ereis Ham.

tangaik

gerais

tsob

teg

matsi

basuk

gorogor

tar

iao

tebeseke

Fig. 131, No. 4765^{II}. Toy canoe, *tegak*, with half-spherical outrigger gear. Canoe length 117 cm, height 9 cm, width 5 cm. Outrigger beams 38 cm, short crosspiece above the boat —here the mast step -4.5 cm, crosspiece in front of the boat 9.5 cm, large lengthwise brace 55 cm (including its curvature), outrigger arc approx. 98 cm, pontoon, length 46 cm, height 7.5 cm, width 8 cm, height of forks 2 cm, height of mast 68 cm.

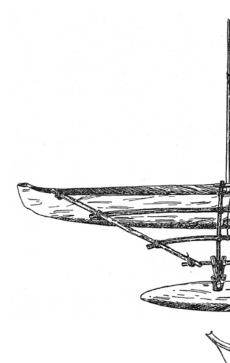


Fig. 133. Outrigger gear of a Tobi canoe. Sketch by E. Krämer.

drill

file

axe

Fig. 132, No. 4766^{II}. Toy boat with mast of poplar wood. Length 86 cm, width 5 cm,

height approx. 8 cm, length

of beams 32 cm, angled poles

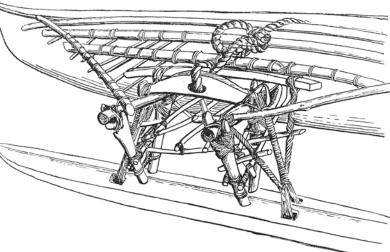
40 cm, mast step 4 cm, 1st lengthwise brace 49 cm, 2nd

lengthwise brace 27 cm. 3rd

lengthwise brace 11¹/₂ cm, pontoon, length 39 cm, width

approx. 6 cm, height 7 cm, fork

length 4 cm, mast, length 35 cm.



4. Canoes and Fishing

The canoes of Tobi are extraordinarily seaworthy, well-built and agile vessels that draw little water. They can hold 12 to 20 people and are fitted with sails as needed. In this case, they can reach quite high speeds. Holden claims that they were created with great effort from washed-up tree trunks, since there were no trees sufficiently large on the island itself. If his report is not entirely based on a misunderstanding, it must refer to an exceptional situation brought about by a natural catastrophe, because none of the later visitors ever doubted that the canoes were built of native woods. In addition, the abundance of vessels at all times speaks against this suggestion.

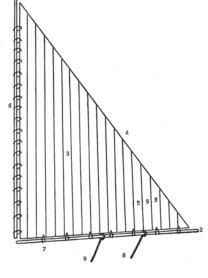
The canoes are one-trunk vessels with outriggers and a rail matched to the thickness of the trunk. On average, the canoes are 9 m long and 80 cm high. The outrigger is firmly attached to the canoe hull and unlike on Palau is not removed when the canoe is pulled ashore. Regarding the form of the outriggers, two types can be distinguished among the toy canoes obtained on the island. The half-moon shape seems to be the more common on utilitarian boats, and Hambruch mentions only this one.

The toy canoe No. 4765 II in Fig. 131 has an identical bow and stern. The outrigger beams are attached so that they protrude significantly over the rail. On the outside of the canoe's shell facing the outrigger, a short lengthwise piece of wood is found under the outrigger beams. About midway down their length, the long, strong outrigger pole is attached lengthwise; it is lashed fast under the beams. Not far from bow and stern, the bent angled poles that form a half-circle arc to the middle of the pontoon are attached to the edge of the canoe. On the toy canoe, this arc is made of a single piece of wood and lies under the beams and the long cross-brace. At the center of the canoe, the beams are connected by a short, lashed-on crosspiece. The pontoon has four forks, which are held in a notch and hold the ends of the outrigger beams. The mast is let into a short crosspiece that is attached to the side of the canoe opposite the outrigger. The second toy canoe, No. 4766, Fig. 132, possesses a slender body with a sharp keel running all the way to bow and stern, and is well sprung. The outrigger gear consists of two outrigger beams, three crosspieces and two angled poles. Eight pegs, let into the pontoon, form the forks and hold the beam ends. They are lashed on with coconut yarn. The other ends of the beams rest on the rail, where they are also attached with yarn that is pulled through small holes in the hull. To prevent shifting of the outrigger gear or loosening of the lashing, two angled poles are added which are fastened onto the rail on the lee side on one end, and onto the crosspiece in front of the pontoon on the other. The short crosspiece above the canoe serves as the mast step.



Fig. 134. Sketch of a Tobi sail after A. Krämer. 1. Mast = gosugos, 2. boom = nim, 3. sail = uch, 4. leach = danimat, 5. fabric = uras, 6. loops = bobu, 8. large sheet = morirap, 9. small sheet = *moritsi*.

Fig. 135, No. 78^{II}. Paddle, uatir, of breadfruit wood. Total length 137 cm, shaft diameter 3.5 cm, blade length 80 cm, width 25 cm.



The mast is supported by a forestay, aft stay and luff stay. Sometimes they make do with only two stays. The luff stay runs through a wooden holder, *uariengalap*, located on the end of the outrigger beams. But by no means all vessels have such equipment. Some canoes also have a top attachment, og sibir. The luff stay and forestay are knotted together at the mast.

The triangular sail is sewn together from 19 mat strips whose weaving techniques are identical to those usual in the women's dress mats. The material is pandanus leaf. The seams run parallel to the mast. The free edge of the sail, the leach, is called *danimat*. It is tied to the mast with short lines, *faufaur*. Individual loops, called *bobu*, also run from the sail around the boom. Here there is also a small and a large sheet, morirap and moritsi. The Tobi people use paddles,¹ uatir, of simple shape and without any kind of decoration. The paddles visible on the pictures taken by the expedition seem to have significantly narrower blades than the collected paddle pictured here. Thus it is uncertain whether this one is an exception, or whether those on the picture are a bit distorted, but this fact should be pointed out. The paddle No. 78 is made from a piece of breadfruit wood. The short, cylindrical shaft, ezar, ends in an unusually large blade, tobur. Center ribs, with the profile of a low ridge, reinforce the blade, which is concave on the inside and convex on the outside, on both sides. Bailers were neither collected nor described.

boat
small one-person canoe
toy canoe
boat hull
inside
bow
stern
bow attachment
stern attachment
keel
middle part of the canoe space for
rail attachment
lattice between hull and long lengt
paddling seat
pontoon
outrigger beams
small lattice between canoe hull an
short lengthwise outrigger brace
outrigger half-moon
long lengthwise outrigger brace
large lattice between the 1st and 2nd
short outrigger crosspieces above t
pontoon fork
fork holes
trusses between outrigger crosspie
sail
sail strip, dress
leach
I In addition, a richly carved paddle washed

hoat

Description of a canoe and its parts after A. Krämer.

fish

thwise outrigger pole, often with fireplace

nd first lengthwise outrigger brace

^d lengthwise outrigger brace the pontoon

ece and pontoon

oa oa tsosamar tegak uatir aub moar, tsimar a baug mugir or moar poeg eri moar poeg eri mugir gapir far diran vagaf do dam, tam kio tsoriba rongoninieremot matakafan eobata rot *iganot* and *tsa* ngiri veten bie bie tam iapit oa sibir, uch uras danimat

1 In addition, a richly carved paddle washed up from New Guinea was obtained. The richly decorated blade and the shaft which ends in a standing human figure are made of one piece. The shaft ends on both sides of the blade in a center rib. Length 190 cm, blade length 45 cm, thickness at the joint 35 cm, diameter of shaft 25 mm, length of the figure at the end 15 cm.

mast boom line for tying to the mast line for tying to the boom large sheet small sheet mast mast hole fall =line that goes through a pulley to raise sail (halyard) luff stay forestay, aft stay holder for luff stay on the outrigger paddle

nim faufaur bobu morirap moritsi gans bie bie ngans ugach iengalap tagets uariengalap oatur, uatir

gosugos

The natives know the following types of **fishing**:

- 1. fishing with rods
- 2. fishing with nets
- 3. fishing with a fishing kite
- 4. fishing with traps
- 5. fish driving

Fishing with rods is quite developed on Tobi. The simplest form is fishing from the edge of the reef during the incoming tide. For this, they apparently use primarily, if not exclusively, the compound or spoon hook, bari fetür. This is how they catch flying fish, gataf, for example. The line is usually made of hibiscus raffia. The spoon is made from Tridacna, Conus, Cassis, Meleagrina or slate. This work too was supposedly done by the woodworkers, but one must assume that others are also capable of it. According to the material, the following terms are used for the spoons depending upon the material:

sobotor	of black stone, washed up in roots, for bonito
bagai	
ringeivats	probably Strombus for fish about 11/2 cm long, one type called ael
sineriau	Conus marmoratus for ael
mets	Conus millepunctata for ael (Conus bottom is apiri mets)
borutog	Tridacna for the fish tagu (bonito)
animor	shell
banietam	mother-of-pearl for the fish <i>ietap</i> .

Also, they are often named for the fish they are used for. Spoon hooks, bari fetür.

The small hooks, *chau*, attached to the spoon by lashing, are usually carved of tortoiseshell, *boat*, bones, or black mother-of-pearl, sachu. For the fly they use human hair, split hibiscus raffia, or a feather. The length of the spoon varies between 3 and 10 cm. The terms for the individual parts are:

	Hambruch	Hellwig
spoon with hook	aseruch	azun
	parütoch angab	bari
	pautoch	
spoon body	parutoch	borudoch (of Tridacna!)
hook	bau	chau, (of tortoiseshell)
		botam
		chaubon

hook tip with barb

side surfaces top end lower point, opposite the tip holes fly

lashing (crosswise) leader supporting sticks

For a fishing rod they use a bamboo pole. The pole in the Hamburg Museum is 3.64 m long and has a diameter of 5 cm on the handle end, and 1 cm at the tip. Two fishing lines of breadfruit raffia 4.80 m long are wound around this fishing rod. A compound fishhook, its spoon broken, is tied to the end of one. The hook of the other line is completely lost. The people call the rod uao or vaur, and the line gau.

The simple fishhooks are used on the open sea. The natives go out with their boat, preferring to set a sail. The small tortoiseshell hooks are used for catching kio at a depth of 3 to 4 meters. In this case, hermit crabs are used for bait, *umen* or *bar*. The other fishes caught with hook and bait generally live at a depth of 100-500 fathoms. Spiderweb bait, *lito bogaga*, is very popular; it serves mainly to catch the highly feared garpike (belone). It often causes injuries during a fish drive, and some are said to have died, while others were saved by a medicine. They say that even the great whale, gas, fears the large belone, called mag. Other bait fish are:

choukos¹ varag iogon mataitsa mos vachaubir

According to Hellwig, the last three most prefer to take the tortoiseshell hook. The shape of the hook corresponds to that of the decorative hooks already described. The main difference lies in the fact that those not destined for practical use are not completely cut out. On the fishhooks, the end is furnished with a groove for easier fastening of the leader, and the sides are widened. The tip, which is bent inward, is found with and without a barb. The material is tortoiseshell or shell. In the past, they also used wood (coconut shell) and as early as Holden's time, iron as well, though with little skill (cf. p. 13). The tortoiseshell hooks are called gau boat or gau bos (Hellwig); the large ones with barbs, bauk (He.) or gau bot (Kr.). These are used for catching the kerangep togu. The small, triangular, pointed hook gae is used for all kinds of fish. Aperietau is purely a designation for an ornamental hook; gau tike tagag is a hook of coconut shell.

The use of dragging hooks, called egeg, is unique to Tobi. A single man in a boat suffices to practice this method of fishing. While paddling slowly forward, he drags a large tortoiseshell hook on a longer line in the water behind him. The bait is simply the end of the leader. The fish caught in this way are the foot-long red mar, the magabu, black with white stripes, the *lipau* and *tsepotam*.

long line, eau, of eroma, an Urticacea. 1 According to A. Krämer. 2 According to Hellwig.

matari pae	chamaturu
kano ueri zon	chonil
	matarai
	duchur
iachach	biabiar
zuari pa	<i>irarimar</i> (of feather)
	timon (of hair)
	gagage ia a ar
	ioar
	rogo, chogo

gafis	dochu ²
vororum	ariuoro
igeraro	mor
gausik	
legareg	
chanap	

The simple, larger hooks are also used with a sinker. Using short cords, a few hooks are fastened at intervals to a

The sinker is at the end of the main line. Smaller fish serve as bait. The line is let down to the bottom; they catch the 1- to 2-foot-long red *bare* this way, probably the Pomocentus. They call this kind of fishing *eau tsio*. See Fig. 141.

In the same way they also use large individual hooks of wood or tortoiseshell with barbs, called *kamtserigon*; their fishing line also has a sinker. This fishing method is called *firon*. The **fishing kite**, Kr. *atseig* or *gatseig*, He. *dori gaiieik*, is also frequently used on Tobi. The rod is a bamboo pole, *bohau*, 2.60 m long, that is further extended by a stick of breadfruit wood 1.30 m long stuck into the opening. The joint is firmly wound around with coconut yarn. In the same way, cracks in the rod are held together at four separate places. The fishing kite is used from a boat or standing on the edge of the reef, and it catches the large and small belone, *mag* and *gafereika*. The kite, Kr. *tsae*, He. *dao*, is a breadfruit tree leaf prepared in the usual way.¹ A long coconut cord, Kr. *eanigots*, He. *iau*, goes through it. One end is fastened to the rod, the other carries the bait, Kr. *lito bogaga*, He. *to ni dobuage*, the spiderweb. A long cord encircles the rod, forming long loops, *tongon*, at intervals. The cord running through the kite now runs through these. According to a sketch by Krämer, there also seems to be a hand hold, *sirara*, tied to the rod. When the pike lunges up for the spiderweb bait, the saw-teeth on its sword get entangled in it. Since the line is extremely long, the kite dances at a great distance from the towing boat. When the fish has taken the bait, the line must be taken in very rapidly.

Fishing with nets, *ug*, is done from a boat with throwing nets of various sizes, in shallow water with handheld nets e.g. during a fish drive, and in deep water with sinker nets.

Fishing with the large **throwing net**, *ua rei*, is done from a boat. It is made of coconut twine and has a mesh of 5-8 cm. It can measure 1½-2 x 100-200 m. The net edges are called *gatig*, the holes *aveid* (He), *matamatar* (Ham.), the net knots *bugebuge*, the edges *chorochor*, the wooden floats *apes*, the coral sinkers *vaser*. With these, they hunt the foot-long *gor* and the 2-foot-long *geniki*. They say it is also used to catch Mugil, *iaok*, and *bachi*. The small **stationary net**, *parasagid*, is only 50 cm wide but 5½ m large. The mesh size of this net, knotted of breadfruit raffia, is about 1 cm. The coral sinkers are 1-5 cm long, the small floats have an average size of 5 cm.

Handheld nets occur in all sizes. They are called *tsou* and in addition the name of the fish for which they are intended. Except for fish drives, they are used mainly for torch fishing at night, *terimet*, where they are manipulated either while wading or from a boat. The frame has three or four parts. A fork is attached to the handle—either a tree crotch or two bent sticks. It extends to the middle of the oval frame. The other half is formed by two bent sticks that overlap at the upper edge of the frame and are firmly tied together; their other ends are tied to the ends of the wooden fork. The net attached to the frame has a relatively fine mesh and one or two corners. The knots are executed without craftsmanship and rather sloppily. These nets correspond exactly to the Songosor and Pur nets in Plates 5/1 and 4. The net itself is made of breadfruit raffia.

According to their function, which also determines their dimensions and mesh size, the natives distinguish various types whose names in part agree with the designations used on the neighboring islands.

Terms:

handheld nettsou Kr., huuchfine-meshed handheld net with narrow holes for small fishtsou tir A. Kr.net for catching mangag, Exocoetus.tsouri mangagnet for catching mag by torchlighttsauri gou A. Hthe same for small fishtsou tirimata Anet with two cornerskapiri He.netirivau, girivau.

tsou Kr., huuch Ham., tieu, ieu, to nanu uhare He. tsou tir A. Kr. tsouri mangag A. Kr. tsauri gou A. Kr. tsou tirimata A. Kr. kapiri He. irivau, girivau, gochoma He.

1 According to Hellwig, the coconut leaf ribs that are stuck through are called rog.

hole handle frame knotting tying

The **sinker net**, *ven*, *fen*, is manipulated from a canoe. It is swung overboard on a line that is fixed around the mast or in some other way, or even simply held fast in the hand, and is sunk underneath the surface of the water. As soon as a fish touches the bait, it must be pulled up again with a jerk. If the fisherman is not quick enough with this maneuver, or misses the right moment, the fish escapes. It consists of a round frame. A cord is attached in two places on each side; it is knotted together farther up, and is tied to a very long sinker line of coconut yarn. The net is very wide-meshed and has two corners. A cord is stretched over the frame with a loop to hold the bait above the middle of the net at the height of the frame. Two lines drop down from the frame; they are knotted into the net, hang freely, and carry the sinker on an extension. See the fig. in Vol. I, Fig. 15.

sinker net frame frame lacing net hole hanging cord bait bait loop sinker sinker line

The Tobi natives use astoundingly large **fish traps**, *garaits* or *bieu*, Sarf. *ueb*. See Plate 15/2 and Plate 19/1. Until they are used, they are left to stand free on the beach under the shade of the first trees, and they are sunk into the deep out in front of the reef on a very strong line. They are put together from very strong wooden poles of Eugenia, *fariep*, with coconut yarn lashing. The entrance is under a protruding roof and walls that slant outward and also protrude significantly from the entranceway. It is much wider at the bottom than at the top, and gets narrower toward the back. The roof is shallowly vaulted. They are furnished with an anchor when they are sunk. The measurements of the trap depicted in Plate 15 are: total length 255 cm, front 114 cm, rear 120 cm, height in front 64 cm, in back 66 cm, height of side wall midway down its length 67 cm, height of the front midway down its length 76 cm, protruding part of the roof 27 cm in the middle, diameter of one wooden pole 12-15 mm.

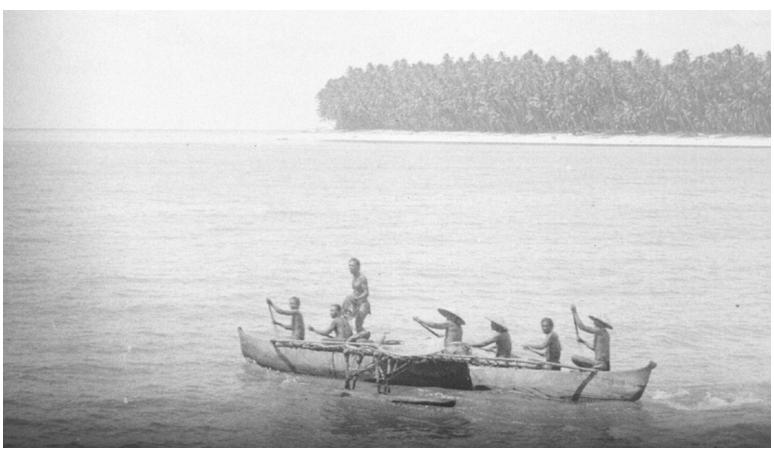
To recover the traps from the deep they have a special tool, *haruuenigech*. A pole, *mesid*, of about 40 cm, flattened in front, has three just slightly longer wooden tines, *ureaugor*, placed around it and encircled with a few loops of line, *uep*; they are bound tightly to the pole. The tool is tied to a thick, strong rope, *tari*, and when it is let down it catches in the rough wooden poles of the trap.

From time to time the natives organize a great **fish drive**. The old people call together the young folks, armed with driving clubs. At the time of the expedition's visit, everyone gathered at 9.30 pm on the west side. About 200 people participated. Around 2 o'clock the tide had gone out. The people had surrounded a fairly large area of the

irumar (Ham.) *ibar, iubar, ebare, vauvaure* He., *favol* (Ham.) *chati, vauvaure* (He.) *chapar* (Ham.) *vauvaure* He. *monoro, patapatar* (He.)

Terms:

ven, fen, zen Ham. atri ven He., atrienem Ham. patapata He., vauvaure He. ven He. matare He., lani fen Ham. pitieri ven He., iorigon Ham. bat Ham. chorichor He. vasirigipri fan Ham., vas He. iori fed Ham.

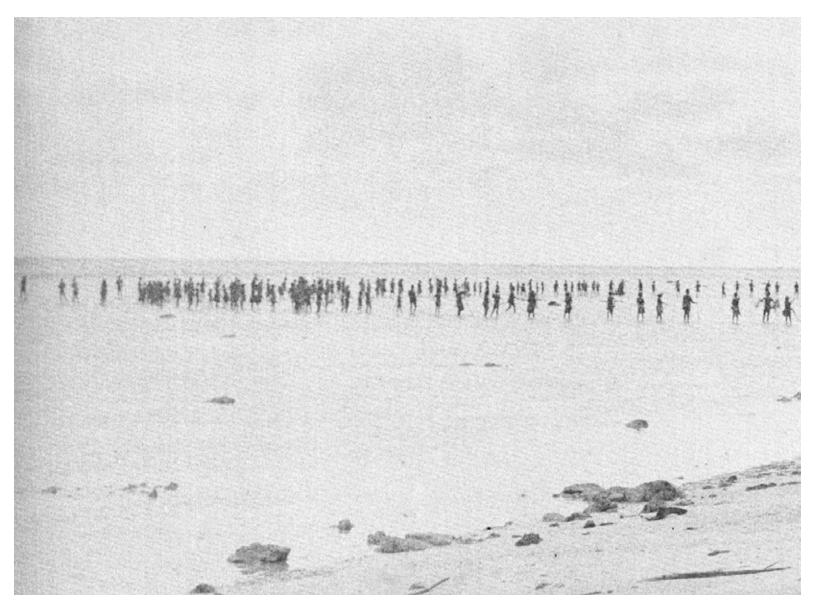


Above: local canoes around the island. Photos A. Krämer. Glass plate scans, Hamburg Museum.

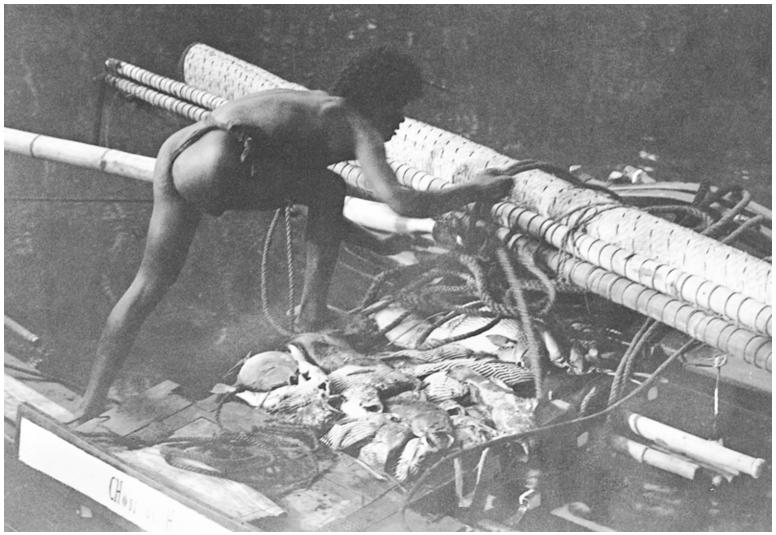


Below: Village people participating in the great fish drive, on the west coast of the island. Photos A. Krämer.

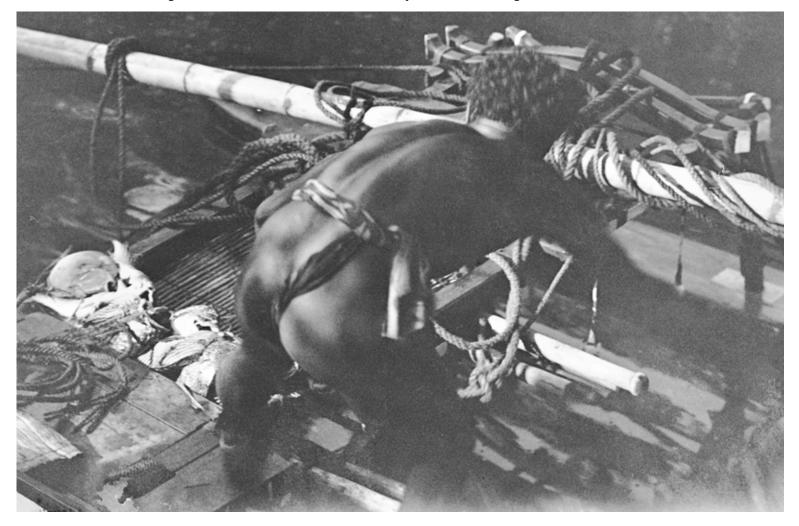
1







Fish catch on Tobi, using a Palauan canoe. Photos A. Krämer. Glass plate scans, Hamburg Museum.







the large hand-held nets described above. They do not have, or no longer have, fishing spears, cham meri or gasik. They say they were made only by the woodworkers, and the missing tool is due to their absence, or dying off. The spear found by Hambruch is supposedly the only one of its kind. It is made of coconut palm wood, 2.95 m long, diameter 2 cm, smooth, broken in one place and repaired by wrapping with cord. The catch is usually very abundant and is distributed to all inhabitants. For the most part, Caranx, Mullus and Belone are caught.

Turtle hunting brought very few results in Holden's time and currently does not seem frequent either. Nothing more could be learned about sea cucumber fishing than the native name, periper.

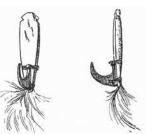
5. Tools

Plaiting is completely in the hands of the women. They do the same work as on the neighboring islands. As is the case there, coconut and pandanus leaves are their only material. The objects created are mats of varying types: roof mats, sleeping mats and the women's dress mats; further, bags and baskets, of which some are plaited in a single-woof pattern (1a over 1b) and some in a double-woof pattern (1a over 2b). The angle at which the strips cross can also vary: it can be right, acute, or obtuse. The only aid they have are plaiting boards. The strips are obtained by splitting the leaves with sharp knives of shell. The roof mats are fastened to the lattice with large needles (according to Hellwig). The roof mat needle collected on Tobi is carved from hibiscus wood and is 21 cm long and 13 mm in diameter at its thickest point. At its head, there is a notch aimed at preventing the "sewing thread" from slipping off.

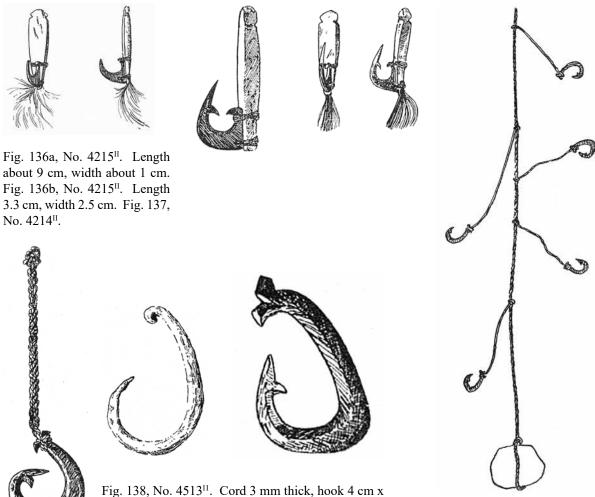


Fig. 144, No. 99^{II}. Roof mat needle, *totirim*, of hibiscus wood with a notch to prevent the thread from slipping off. Length 21 cm, diameter 13 mm.

Terms having to do with plaiting: plait uasuuas E.K. bend *iemaugudz* E.K. split esai E.K. man E.K.,¹ fats Ham. pandanus hibiscus girifag, gilifai E.K. banana raffia uits E.K. coconut leaf umipami, merogar breadfruit raffia iochoma He. plaiting board bab E.K. roof mat needle totirim Ham. top of plaiting muvura E.K. edge bogararo E.K. mengite plaited strips running parallel to the edge mevase, vasureiios giriie E.K. single-woof plait mevasevase ike bore E.K. basket edge menedie E.K. braided closure in baskets megi egire E.K. scraping knife buaie E.K. shell for splitting kiri E.K. dü E.K. bags and baskets



about 9 cm, width about 1 cm. Fig. 136b, No. 4215^{II}. Length 3.3 cm, width 2.5 cm. Fig. 137, No. 4214^{II}.



beach, and as the water receded they killed the fish that had been chased back with the clubs, or caught them in



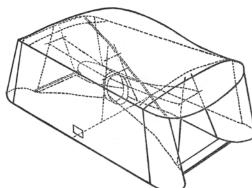
Fig. 143, No. 107^{II}. Tool for recovering large fish traps, haruuenigech of wood and rope. Length 40 cm.

Fig. 142. Schematic drawing to explain the construction of the fishtrap.

1 According to E. Krämer, vats is the non-edible, boku the edible pandanus, and man is the type whose leaves are used for plaiting.

3 cm. Fig. 139, No. 4507^{II}. Length 3¹/₂ cm, width 2 cm. Fig. 140, No. 4600^{II} . Iron hook, 3 cm x 2 cm.

Fig. 141. Fishing line with sinker stone and hooks.



pandanus-leaf basket tugudob E.K. finely plaited basket zugouuud E.K. roof mat ias E.K. pandanus sleeping mat bob, tuop, tob E.K. coconut-leaf sleeping mat souari, iroiie E.K. from one half giri E.K. from two halves dabochan E.K. ribs in the center mesovor E.K. double-woof mat *iapeoueri* E.K. single-woof mat vasivasietag E.K. woman's dress mat iamai E.K. small mat piece on a pregnancy mat

vitiviti E.K., iep vitiviti, vorior A.K.

Weaving is done only by the women. As on Songosor, the only product is the men's modesty belt of banana fiber (more rarely hibiscus raffia) with black patterning by incorporating hibiscus threads.¹ The loom consists of loose pieces of wood. The warp is held under tension by the worker, who squats with her legs pulled up, holding the breast-beam, which is attached to the weaving belt, on her lap and moving so far away from the warp-beam, which is fastened to the house wall or placed behind two posts rammed into the earth, that the warp becomes taut. She sits on a mat, the loom is also placed on a mat underneath, and she spreads another mat over her lap, on which the breast-beam and the warp rest. For the production of the plain, simple, single-woof belts, a loom is sufficient that consists of:

breast-beam heddle-rod 4 separating rod 5 cross-rod 6 warp-beam 7 sword 2 shuttle guiding pieces 8

For patterns, four further pieces 3 are necessary. They go between the separating rod and the cross-rod. They warp the threads over a coconut mat. 5 stakes are rammed into the ground (through the mat). To keep them in a line, at the beginning a cord, *dzidzere*, is wound around the first and the fifth. During warping, the pieces of wood for the breast-beam, heddle-rod, separating rod, warp-beam, and cross-rod follow as they are listed here, so during warping the cross is at the end. The warp begins at the heddle-rod, and the cord is pulled over it with a heddleeye. For example, the cord is laid under the warp thread to the left of the heddle-rod piece. Coming around it, it is pulled to the front. In the next round, the warp thread does not get encircled. In the following round, the cord is laid under the warp thread to the right of the heddle-rod piece, brought around it in the same way, and brought back to the front over top of it. Another round without encircling by the cord follows. In this way, the cord goes back and forth, always staying in front of the heddle-rod piece and grabbing the warp threads alternately from the right and the left. The warp runs in front of the breast-beam piece, behind the heddle-rod piece, in front of and behind the separating rod piece, in front of the warp-beam piece, behind the cross-rod piece, runs around it, and on the return, crossing over itself and forming the cross, it now lies behind the warp-beam piece, separating rod piece, heddle rod piece, and breast-beam piece. This way of warping is sufficient for the plain belts or belt parts.

Now the warping pieces must be replaced by the loom pieces, and the warp is then moved 90° and brought into the horizontal position.

1 The plain belt that was obtained, He. 674, has warp and weft of hibiscus raffia; the patterned belts, with the exception of the black weft threads, have only banana raffia weft.

First, a wide, flat board, the warp-beam, 7, is inserted in place of the first wooden piece. Then the board that is deeply notched at both ends, the breast-beam, 1, is inserted between the separating rod piece and the fourth piece, and then the fourth piece is pulled out and then the third piece is replaced by the separating rod, 5. Special care must be used when replacing the second piece, the heddle-rod piece, with the round heddle rod, 4. During the setup and preparation, the separating rod and heddle rod are tied together at both ends. The last piece is replaced by the cross-rod, 6. The weaving belt is looped around the notches of the breast-beam, and the weaver can begin her work.

Before she begins the weft, she opens and closes the heddle and separating compartment and places three or four thin, flat sticks, 8 (leaf ribs or bamboo strips) crosswise into the warp. These rods, over and under which the warp threads run, alternating singly, are there to prevent the warp threads from shifting sideways, and also serve the weaver as guiding pieces as she now puts in the first woof threads of white raffia. After a white, single-woof piece about 1 cm wide has been created, the weaving of the patterned section, which is found at both ends of the finished belt above the fringe, begins; the fringe is formed by cutting open the last bit of the continuous warp down the middle, rather than filling it with weft. The loose ends of the warp threads, which are not fastened on Tobi, form the fringe. Now, according to the type of patterning, two kinds of weaving processes can be distinguished. The continuous black-and-white sections are woven, ateig, while the open ones are plaited in, with the black plaiting thread covering the woof thread. Plaited weaving is called *tiuetip*. All black-colored material is hibiscus raffia, even in belts of banana raffia. As the individual pattern requires, simple single-woof parts alternate with blackwhite weaving and plaited weaving. In every case, however, the patterned sections lie at the beginning and end of the work; the middle is formed by a long, plain section. To produce the *ateig* sections, new compartments, 3, and a fine, sharp rod, the *tinetip*, are necessary. It is used for bringing up the required warp threads. The stitching thread is threaded through a needle with a hole and pulled through with its help.

loom to weave to plait-weave to weave from the left to weave from the right to tie on to split raffia breast-beam peg on breast-beam weaving belt loops on the belt warp-beam posts for holding small wood pieces before the woof is put in heddle-rod heddle separating rod cross-rod sword shuttle auxiliary wood pieces

Terms regarding weaving, after E. Krämer:

töach
bosun
liuep, tiuetip
mauorei
magöitei
bugosi
tara
bab
meiauar
denitoch dazi He.
meior chomon He.
bab a netaguk papaneto He.
dzitoch
asouasop
<i>uaringün uarinu</i> He.
ngün
<i>topan tapan</i> He.
uarürü anitor He.
<i>aupope</i> He.
asap
ateig uarinu? uarulut He.

pointed stick	tiboimera, tinetip
hibiscus raffia	girifog
banana fiber	uidz
black hibiscus raffia	dziem
warp	obomogeri toach
weft	iuach
patterned section	tib, egisau
smooth section	toach
needle for plait-weaving	<i>atei tibatiba</i> He.

Ropemaking is done only by the men. It is unclear to what extent they are also involved in the preparation of the material. Probably they are usually relieved of this task by the women. To separate the fibers, especially the fibrous layer surrounding the coconut, a beating stick called *susurügot* is used. The one pictured here is a flattened cylinder and tapers toward the handle. It has two beating surfaces, one flat, the other half-round. The notch at the handle end serves to hold the hanging cord. The more delicate fibers, such as banana and hibiscus raffia as well as breadfruit raffia, are prepared with shell knives and scrapers.

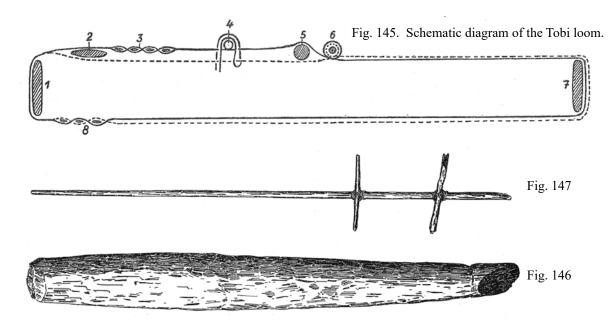


Fig. 146, No. 93^{II} . Beating stick, *susurügot*, of coconut wood to beat coconut fibers. L 45 cm, w 6 cm. Fig. 147, No. 55^{II} . Ropemaking utensil, *sereioch*. Two hibiscus sticks, *seriöch*, are tied to a coconut wood stick 119 cm long, *chemen*, with coconut cord. L of the stick before the first piece 18 cm, between the 1^{st} and 2^{nd} piece 21 cm, dia.1.5 cm, l of crosspieces 18 cm.

Three different pieces of equipment are used for ropemaking. For heavy rope they use the cross-shaped wooden pieces with cylinders that are described in detail for Songosor, and that are customary on Yap.

	Hambruch	Hellwig
utensil	eburifigifin	aiteripiripit
rod	taberigach	bauba (bamboo)
cylinder	uarubar	
crosspiece	saritigifin	ераи
tip	seuupu	toboi, sugubur (button)

lashing

The second ropemaking utensil is called *sereioch*. It consists of a cylindrical, tapered pole of coconut palm wood, onto whose thick end two small sticks of hibiscus wood 18 cm long are lashed crosswise with coconut cord. The cords are wound onto the crosspieces, the end of the rope is attached to something, and the ropemaker, walking slowly backward, slowly unwinds the rope while turning the tool, so that the cords wrap around each other. The third tool is shaped like a butterfly and is called *sreitech*, which presumably is the same term as *sereioch*. Each half of the flat wooden piece has three holes, through which the cords are probably run during ropemaking. Two such utensils have been collected. Their use could not be observed. The tines on the lower edge are called *batur*, the holes *biabia*, the grooves in the center *etoporozig*, the notch at the top *etopor*.

The finished yarn or line is wound neatly into balls and is also traded this way, a very desirable article for trading with ships. The ends of the thick coconut lines are prevented from unraveling by encircling them with hibiscus raffia.

ball of light rope hibiscus cord breadfruit cord as a ball ball of thin coconut cord

The **technique of knotting** also seems to be entirely in the hands of the men. They produce their own fishing nets and in addition produce net bags exactly like the Songosor bags in Plate 5/2. Here they are called *terev*; the edge loops are called *talinar* (ear). The material for the fishing nets varies depending on what they are to be used for. Usually it is coconut yarn for rougher nets and hibiscus cord for fine ones. To create a net, the yarn is wound onto the netting needles, *iaaf*, which are notched at both ends and have a rectangle carved out of them. The forks are called *aouief*. The one pictured is 40 cm long and only 12 mm wide. The flat netting wood, *metatuor*, which determines the gauge of the mesh, is 18 cm long and 12 mm wide. The technique is the same as has been described previously.

The weaving belts show a completely different kind of knotting technique. Unfortunately it is not known whether they are produced by men or women. The material is coconut yarn; the knotting is the same as on the Nukuor weaving belts. A very long strip is knotted, with several loops along its long sides. Behind these, the belt is cut for use, so that several belts are created. The strip pictured here is 3 m long and 13 cm wide. It is long enough for four belts.

Dyeing. As far as is known, the natives use dye for tatttooing, to color hibiscus threads for woven mats, and for body decorations and painting the spirit boats. The color yellow takes first place both in amount used and in perceived value. They call it *gen* or *ren* and obtain it, as elsewhere, from the Curcuma root, which is grown by the women in great quantities. It is always in great demand, and the yellow color is also the usual payment for the special work of the craftsmen who produce wooden utensils and jewelry. The women especially use large amounts to color their bodies and their clothes. According to Hellwig, they distinguish between a reddish and a yellow color according to the type of root, and he says the red is considered more valuable.¹ The preparation is as follows: The roots are scraped on a grater over a mat. The grater, a block of coral, is called *vaseritach*. The gratings fall onto the mat, where they are moistened with rainwater. Usually a woman's dress mat is chosen for this task, since it has the finest weave. After it has been sufficiently moistened, the mass is wrung out over a <u>wooden dish (Fig.</u> 78) or is passed through a sieve, *fegerigan*, see Fig. 73, Part I of this volume. 1 In another place he says that the color looks yellow on light-colored objects, and reddish on the dark skin of the people.

vauvaure

A few terms:

a tuchum neteri He. gerivo He. chorochor; He.; iochoma or eachut He. tu un oro oro He. orugataii The frame is called *garifen*, the net *ranifen*, the handle *baurifen*. Then this pulp is poured into coconut bowls, and they are placed over a moderate fire. During cooking, frequent stirring is necessary. Gradually the superfluous water evaporates. For final drying at the end, the bowls are placed in the sun. To use as a dye, the yellow powder extracted by this means must be mixed with the juice of young coconuts. This is obtained by scraping the meat, which is then wrung through coconut fibers. The mass is simply applied with the hands to the objects, mats or fibers to be dyed.

According to Hambruch, they also use a sieve for this process like the one described and pictured on Songosor for producing mogemog flour. A few terms:

unprocessed Curcuma root	parach Ham.
ren bowl of coconut	<i>tabi ren</i> Ham.
finished dye	ren Ham.
ren press	<i>fegerigan</i> Ham.
frame	<i>garifen</i> Ham.
net	<i>rarifen</i> Ham.
handle	<i>baurifen</i> Ham.
pressing the ren	<i>ur</i> Ham.

The black dye to color hibiscus raffia is an earth color. From time to time, usually in May and June, it is washed up in the roots of the sago palm, saksak, from the Philippines or the rivers of New Guinea. They call it podz. According to Hellwig, they soften it with rainwater and mix it with the expressed oil of old coconuts. The dyeing is done either by immersing the hibiscus fibers in the liquid, or by applying the colored earth by hand and following this by pouring the oil over. According to E. Krämer, the dyeing process for the fibers is much more complicated: The leaves of the kiri (red Terminalia and red fruits of the Cornelian cherry are both called kiri!) are ground between stones and pressed in water. First, the fibers to be dyed are placed in a dish full of pounded coconut husks and kiri, leaf water, for three days, then for four days in water of podz, pounded agariburodz (a type of bean) and *taoeripotz* (leaves of a plant). Finally, they are hung in the sun to dry.

They obtain the dye for tattooing, boroto, through the gradual charring of good, fresh nuts of Calophyllum inophyllum, savan. Many of them at once are placed underneath upended coconut shells over a wood fire. They burn for one day. On the next day, the soot of the charred nuts is scraped out of the shells. This dye must be mixed with water.

Woodworking, which according to the natives is practiced only by certain workers, the senepes, but is most probably also understood by other men, is done with the help of axes, hatchets, chisels, etc. For smoothing surfaces they also use shells. The material is native trees: breadfruit tree, coconut palm, Calophyllum, poplar, and others, and any washed-up wood that is at all usable, especially bamboo and cork, asanap. Wooden utensils that wash up are also re-worked. They make a cut all the way around the native trees and then get them to fall by means of a wedge cut halfway around the perimeter. In the past, when only the shell axe was known, the tree trunks for making canoes and chests were hollowed out with fire, but they claim that felling trees with the aid of fire was never practiced.

The old hatchets have a handle at an acute angle, onto which is fastened a blade of *Tridacna gigas*. For this purpose, the hinge section or one of the convex shells was selected. The natural concavity was formed into a triangular 1 When two young men made this statement, an old man disagreed. But they were not swayed: fire make hole, wiawiar; wor (axe) work finish

Fig. 148, No. 118^{II}. Ropemaking utensil, sreitech.

Fig. 149. No. 4071^{II}. A roll of coconut rope for trading purposes. Height 30 cm, diameter 17 cm.

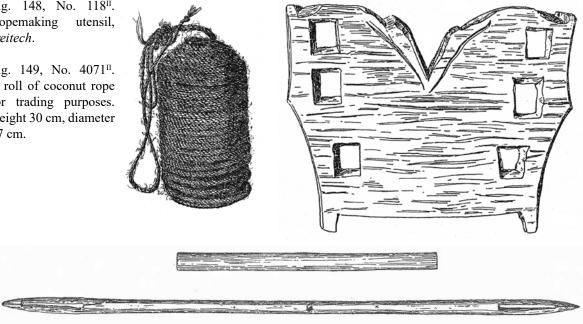


Fig. 150, No. 116^{II}. Netting needle and mesh rod, *iaf*, of bamboo. Length of needle 40 cm, width 12 mm; length of mesh rod 18 cm, width 12 mm.

Fig. 152, No. 4300^{II}. Strip, 3 m long and 13 cm wide, knotted from coconut yarn. When it is cut behind the loops, it yields four weaving belts, tanitoch.



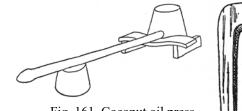


Fig. 161. Coconut oil press, uaroro, according to a sketch by P. Hambruch.

Fig. 160. Compass after a sketch of E. Krämer. the rod.

Fig. 151, No. 4300. Sample of work in knotted weaver's belt.

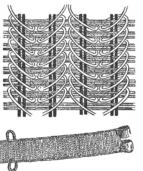




Fig. 159, No. 73^{II}. Boring drill, sireli buruch. The square vertical rod, 52 cm long and 12 mm in diameter, which is sharpened at the bottom and pierced at the top, has a crosspiece 18 cm long on its drilling cord. At the center of the flywheel (diameter 28 cm) is a carving in the form of flower petals enclosing the hole through which the vertical rod passes. A cord is wound around the rod under the flywheel to prevent its sliding downward. The drill bit, an iron nail, is lashed to



blade by further grinding. Usually, the handle consists of two parts, and the elbow is created by tying together two pieces of wood, the straight handle and the extension piece. The blade carrier, usually made of a harder wood—mostly *Calophyllum*—than the handle, lies in the groove of the extension piece. The people distinguish between blades with flat and convex cutting edges. The collected pieces display little careful workmanship.

Terms:

-1-11 1-4-1-4	
shell hatchet	uor
handle	<i>ietar, iezada, hiebag</i> He.; <i>ezato</i> Ham.
elbow	buch Ham.
extension piece	<i>bungere</i> He.
end of the handle under the extension piece	ieta, sechasecha He., the latter an obscene expression, He.
carrier	to He.
head of carrier	tochotocho He. or mata He.
general expression for blade	tere He., Ham.
convex blade	<i>uor</i> Ham., He.
flat blade	<i>iebar</i> He.
blade with triangular cross-section	<i>uorigut</i> He.
cutting edge	<i>meteiri</i> Ham.
lashing of the handle	<i>vauvau</i> He. <i>foifoi</i> Ham.
lashing of the elbow	<i>machapi tiumor</i> He.

Old Tridacna hatchet blades

According to their own reports, they have had iron for five generations already. In Holden's time they were already familiar with it, but their greed for it was greater than their skill in handling it. They say they first obtained it from an English ship and named it *kapbol* after it. They themselves say that later captains laughed at this name, and that they did not know the real name. According to Holden's pronunciation, Pickering gives this mysterious word as *pahng ul* and *pishoo*; Hale circumscribes Holden's expression with *pangul* and *pitsu*. In more recent times, iron is delivered to them by British ships and O'Keefe. They obtain iron in bars, sheets and strips and are very adept at creating chisels, hoes and other tools for themselves with the help of fire and stones. Old files make very sharp boring chisels. In general, they are very skilled in making functional tools for themselves. The necessary wooden handles are rather crude, it is true, but functional. Axe handles having older forms are also furnished with homemade or European blades, and every house possesses the requisite number of tools of this kind. For fastening and protecting iron parts they use the skin of a ray, called *chin m'tete*.

For **the production of jewelry**, they need drills, cutting instruments and compasses. The drills on Tobi are the boring drills already described in more detail in other places. They can pierce not only tortoiseshell and coconut shells, but also snail shells such as Conus. The drill bit is an iron nail or a shark's tooth. The Tobi drill pictured here is interesting on account of its beautifully decorated flywheel. It should probably not be assumed that the natives fashion them in this manner for such a purpose; it is more probable that it originally had another function, perhaps as a lid. But here, too, no example of this can be found among the gear on Tobi, and so everything speaks for it having washed up. The simple drills with bits of iron or sharks' teeth are the same as on Ngulu. To press coconuts, *zebuuton*, for their oil they have a large wooden **press**, *uaroro*, which was described and sketched by Hambruch. A wooden block, part of a tree trunk, serves as a pressing block onto which the shredded coconut is placed on a bed of coconut fiber and taro leaves.

drill rod drill bit drilling cord crosspiece flywheel

The taro leaves are supposed to catch the expressed oil, which is immediately poured into vessels. A strong, long lever, *uaroro*, is used for pressing; one end is rounded off and protrudes quite a bit beyond the pressing block, the other is placed into the opening of a hollowed-out tree trunk, *tsitsil*. The opening is large enough for the lever to be moved up and down inside it. In front of the opening is a support, *irabor*, a strong board whose ends rest on two coral blocks, *faz*.

Fig. 153, No. 4287^{II}. Old shell hatchet, *uor*. The hatchet handle of breadfruit wood has a short knee-shaped extension extending from the handle at an acute angle at its upper end. A shallow round groove has been hollowed out along the top. Into this is placed the hatchet lining of *Calophyllum*, which is spindle-shaped and flattened a bit towards the blade; it is attached to the handle by coconut cords running over two wide grooves in the lining. The crudely worked blade of *Tridacna* has a straight blade running at right angles to the handle and is tied to the lower end of the lining, which is carved out to match the shape of the blade. Length of handle 57 cm.

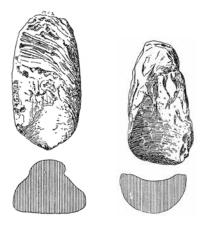
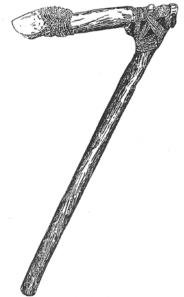
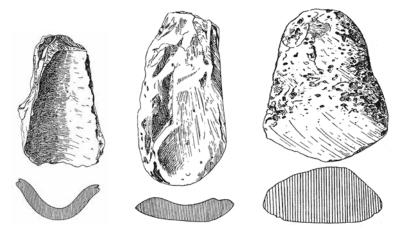


Fig. 154, No. 4294^{II}. Length 10 cm. The natural convexity has been formed into a triangular cutting edge by further grinding. Fig. 155, No. 123^{II}. Length 12 cm, width 7 cm. Roughly worked from the hinge. Cutting edge strongly convex. Fig. 156, No. 4395^{II}. Length 14 cm, width about 8 cm. Fig. 157, No. 4393^{II}. Hinge section roughly broken out, not worked over. The slightly convex cutting edge was created by diagonal grinding of the upper section. Length 16 cm, width 9 cm. Fig. 158. Length 12¹/₂ cm.

Terms:

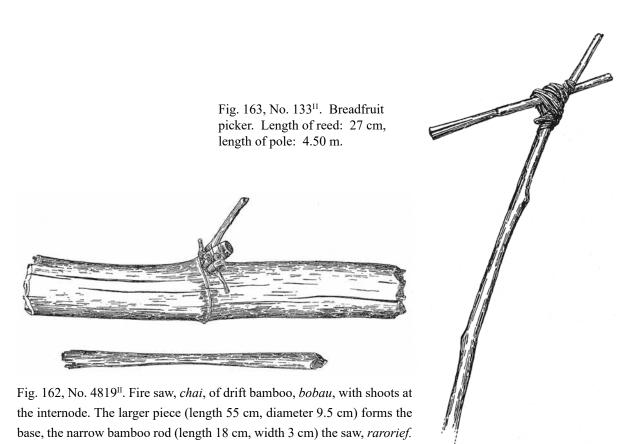
sireli buruch Ham., buobu He. sirela Ham., igar He. biabia Ham., viaviar (hole) He. atochronu Ham., ior He. sirera He. tomum Ham., chatachonu He.

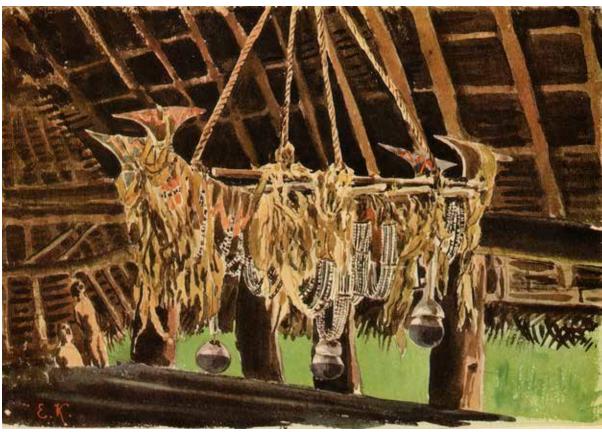




If they ever get into the situation of having to produce fire, they use a **fire saw**, *chai*. The piece pictured here is made from drift bamboo. The shoots at the internode have been left standing. The large piece serves as a base, the narrow bamboo rod as the saw, *rarorief*. The work is not easy; it requires three men: one to hold the base, the other two to saw back and forth. Frequently the effort fails, since the bamboo may be rotten or not quite dry. The large bamboo piece is placed on a bed of dry leaves. Then its surface is scored with two crosswise grooves and then a lengthwise one crossing over them. For this they use a piece of shell or hard wood. First the bamboo is sawed through with great pressure on the first cross-groove; smoke is produced, and the glowing sawdust falls onto the dry leaves, where it is fanned to a flame by careful blowing. Usually, however, the second cross-groove must be sawed through also.

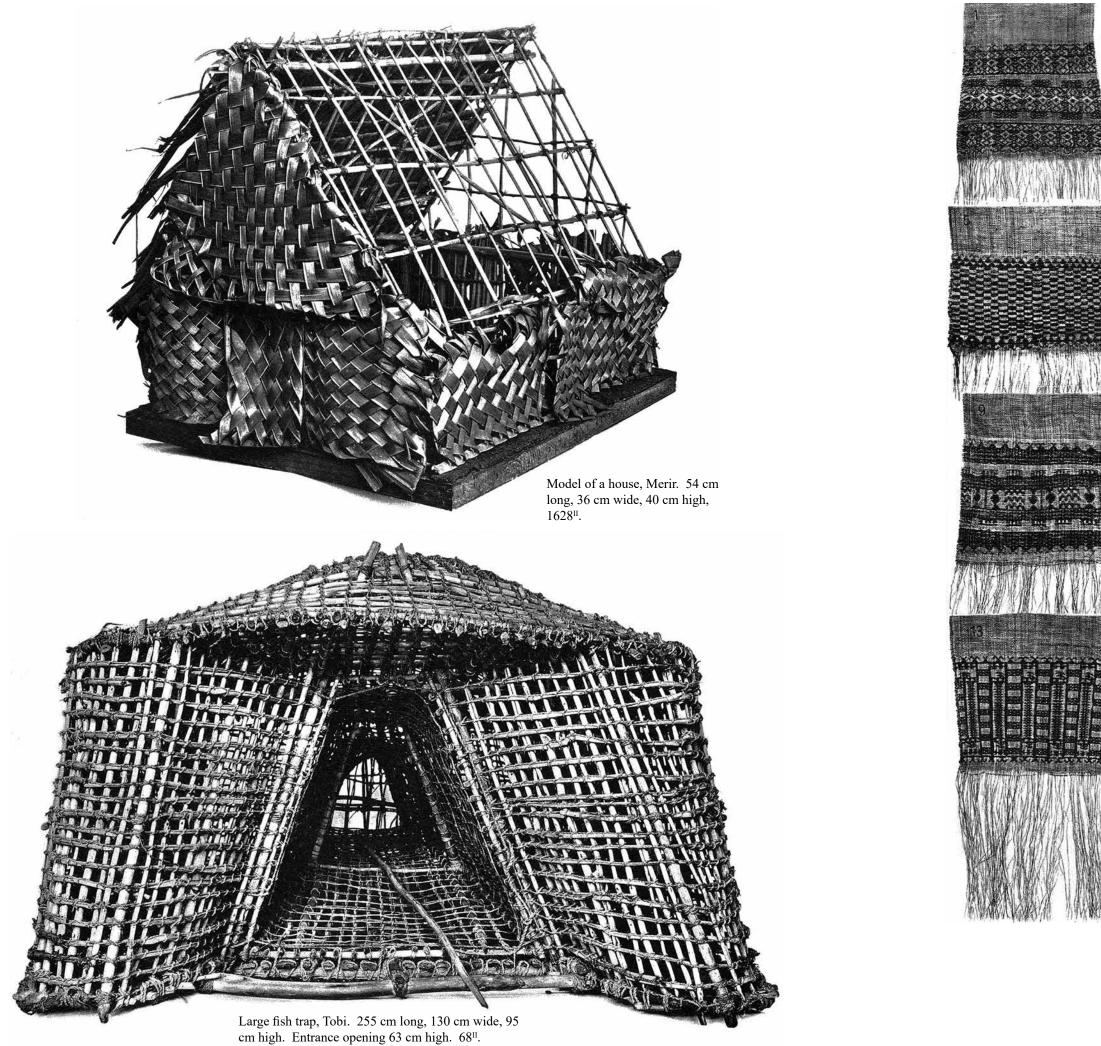
A tool to aid in harvesting should be mentioned: a breadfruit picker of breadfruit wood, 4.50 m long, onto whose tip a piece of reed has been lashed at an acute angle. They climb the palms by means of steps hewn into the trunk, using foot bands as aids.





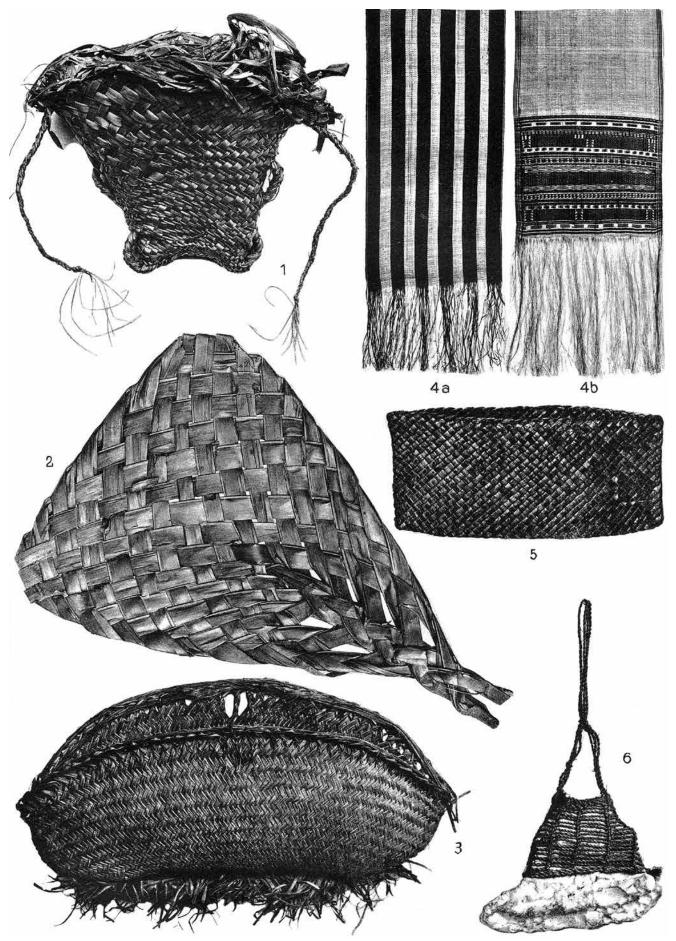
Above, aquarelle by E. Krämer, spirit canoe in spirit house *fare kikak*. Below: Tobi men starting a fire. Photo A. Krämer. Glass plate scan, Hamburg Museum.





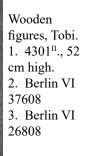


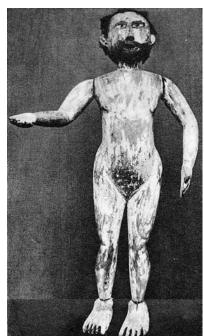
woven me	n 5 00ns, 100n	11)4438 ⁿ
1) 4453 ^Ⅱ	6) 3993 ^{II}	12) 4450 ⁿ
2) 4010 ^{II}	7) 3990 ^{II}	13)4441 ⁿ
3) 4444 [∏]	8)4013 ^{II}	14) 4436 ⁿ
 4)4431^π 	9)4414 ^{II}	15)4437 ^{II}
5) 4442 ^{II}	$10)4417^{II}$	16)4011 ⁿ



- Basket of coconut leaf, Tobi. 25 cm high, 36 cm at the top, 12 cm wide at the bottom, braids 31 cm long.
 Fire fan of coconut leaf, Tobi. 43 cm long, 30 cm wide, 4367^{II}.
 Basket, "*oai*," of coconut leaf. Ngulu. 53 cm long, 27 cm high, 5013^{II}.
 Woven men's belt of black hibiscus raffia and white banana raffia, Ngulu, 5015^{II}.
 Woven men's belt of banana fiber with black hibiscus woof, Ngulu, 5016^{II}.
 Plaited bag of pandanus leaf, Ngulu. 19.5 cm wide, 9 cm high. 5036^{II}.
 Dye pot made of the barnacle shell "*tochioch*" with hanging loop of coconut yarn "*neuit*," Ngulu. 9 cm high. 4995II.





















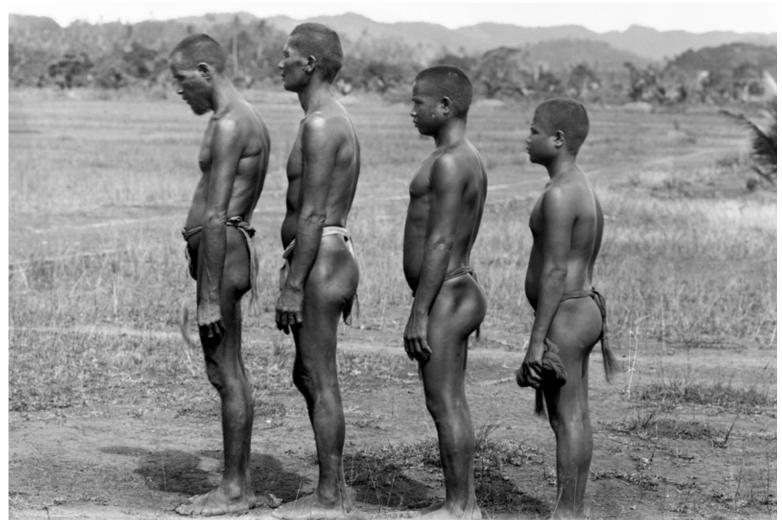


Tobi word index German	Modern outbography	begigerar begirauro
German	Modern orthography	beia I ote
aaru	waruw	beioog
aba	eboru	bekien
abiri biri paur; bugaeri pog	7	benitafei
	hapiripini pou; buhuheri pou	berik
agariburodz	wahariborot	betsabets
agugu	hahuhu	betse
ahrah'oo	yarung	bi
airibek	hai ribehi	bia, rene
akim	hahim	biabiar
akram	haram hamaheber	bie bie ta bikabuk
amageber apari	hapar	binitog
aperifer	haperifer	biobiarter
apiripinekub	hapiripini hub	biraitona
apriubor	hapeiri boru	biraobob
arieres	rauri yarus	biz'sheen
aringemoch	haringemoh	boba
arrang	heng	bogeri uc
asiasia	hasiyesiar	bogousi t
atam	hatam	borutog
ati, asi	hatsi	bosar, po
atir	hatu	bosobos
atir atinnu	hatunuuh	boun
atir; atuuets	hatuh iyoutsih	bovatogu
atiri kupei, aterogu	hatiri hubei; tatirihub	buaie
atoapa, atsap	hatsopa, hatsop	bugobu
atri ven	hatur fen	bugor, be
atripei; ateri pog	haturi pei; haturi pou	bugosi
atririoitsik atsi	hatur iyoitsih hatsi	bugunupa
attrioune pei	haturi iyounepei	buiengi bukeriau,
atzauaro	hatsafaroh	bukobuk
auarei	hawareiya	bukonioi
aupope	haupoup	bukuron
aurun	yaurung	bungeri g
avesiaei	hafesaiyei	buni safa
ba	pa (wild taro with stem)	buogorie
bab	pap	bur a meg
bafar	ba ifar	butch'ee
bag	pah, pahu, baho	chabek, g
bagag	pahuh	cham me
bagasarien	pahasariyengi	chamage
bagora uod	pahuruwot	chamatur
bagueri	pahuweri	chapi
bais	baisi	charimar
bakoru pura	pahuru burah	chati
bakoru uod	pahuru wot	chaubon
bamogu bamogu	pamahu pamohuw	cheob, eu chorocho
bangiri atsevor	bangir hatsebor	chorocho
bannuot	bonuwot	chorocho
bar	bah	choukos
batsi, bitu	bito	chuei
	patsihitsihiri teberika; tsirihet	chugovog
bau	hau	chuou
baubau, baubou	hauhou	daidei
baurimetar, pahariti mat	pouri matar, paharimat	danimat

amar ro; I rourog tem tsar kubei biar tam eringar ae bugug menai em ıod i teringar osobos gu beag pa; buginipog u, mai oitsik ganaue an ef, buochor egemag butch gabuek eri ei uru r eueriiau nor; iochoma; eachut oro oguk

behiheramar behairouroh; irouroh behi hotemi peiyewoh bihin bonutafeiya perih patsapatsari hubei bets piye biye, rani biyar biyebiyar, biyebiye biye biye tam buhobuh pouri toh biye biyeri teringar bira itonaie bira puhuh menaiye bisimu роро pouheri wot pohousi teringar pouritoh posor, posopos posopos bun bofatohi baiye buhobuh bohor, peah buhosi hihinipou biyengi behiriyou/ mai buhobuh tsingisohur buhorong bongiri hanewe bunsafang buhohoriyefi; buhohor bouri mehemeh betsebets habeh hameri hamehei kamatsur hon hapir har imar hatsi haufong heb, iyeuweriyau horohor; yohoma; yohots horohor hauhos huheihe huhebuhuh huwouw seiysei tenimat





Tobi men. Photos taken on Palau by Paul Hambruch. Glass plate scans, Hamburg Museum.

1	4	6.11	-1-1-1		1
dare	tsaru	faribuch	ri buhuh	gatam	hatam
dauer	tawar	fariep	riap	gatavas	hatsafas
daurop; zeiian	tsaurap; seiyang	farifer	ruforu	gats	hatse
ded	tati	farigagat	rihahat	gausik	hausih
dedan, maugar	tetengi, mouhar	farigotogot	ri hotohot	gegei	hehei
denimat	tsanimat	farik	uruh	geibikaf	hei pihaf
denitoch dazi	tanitoh	farimekenasarai	nrimeheriyaserau	geisas	haisas
ditir	titiro	faripaur, faripog	ripaur; fari pou	gene	haneh
do	fao	fariuirurch	irhaurur	generae	haneraiye
du	tsuh	fariuoruor	riworuwor	gepie	hapiye
dut	tut	farup	urub, faruub	ger	her
dzitoch	tsitoh	fasifes	isufos	gerais	haraits
eafivoi	yafiwou	fasinetet	isunetet/yarang	geremonam	her ma ngang
eamokoribon	yamuh	fasitsor	isutsor	gereneraiie	herma iye
ean eri gotuvafen	yangiri hotuofang	fatir	itur	getek	hateh
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eangian	yangiyeng	fatorurch	ıtororihiye		faifir hihi; mehi
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eapakar	yapakar	fekir; fik	h	gipoi	hupou
ear	yaro	fis	S	girarog	hairouroh
eas	yaso	fisier	siyeri	giri	hiriye
eburifigifin	iberi fingifing	fisik	shihe	girifag, girifog	hirifou
eeiar	eyari	fiti rei	tiho	girivau, gochoma	hirifau, yohoma
een	yangi	fitou	touw	gluo	huouw
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eip	yep	gue un tart i, par enni ta	hapari feifir; patsih faifir	go pito maia	hoboto maiya
eobata	yopetsa	gabik	api	goba begiei	hobe puhuiyei
erabauaue	bisirweyerap	gachotog	ahotoh	gobabagiai	hobe puhuiyei
esai	yesahi	gafis	afiro	gobachaiai	hobe hauiyei
esetsik	iyeser	gaga, merauidz	aha, merauts	gobagaiei	hobe hauiyei
etao	yetaw		ahahah	goberog	hoberoh
Etive	Etifo	gagagag	aheh	goborauro	hoberauroh
euaio		gagage	amahar	gobovehitog	hobewehitoh
	iyewaitsi fahafah	gamakar			
fagagag		gamangimen	amangimeng	gofabungu	hosa bongu
fagep	fahapi	gametak	ametahi	gogam	hapi
faik	faihe	gameteratsin	amatsuritsim	gogam mogog	hohamahoh
faivil	faifir	gamog	amoh	gokom	hokom
faivil a sie	faifir siye	ganagaro	anaharoh	goomor, geub	homor, heb
faivire tamor	faifir tamor	ganagarog bei bagaba gar		gora	hura
fani fene burar	rani feni burau		anaharaho bei behabauhamo	gorei	horei
fanurigerau	fanuruharau	ganagarog bei bagaba gar		gorogor	horohor
far	fare, for		anaharoh bei ibehabauhamo	goroimaga	horoumeha
fare kikak	farehuhehi	ganaue	anewe	goroitsegir	horoutsehir
fare mesusur	farimeisusur	gans	aus	gorotot	haratot
fare sesusur	fari meisusur	gapir	apir	gosugos	hosuhos
faregenitsaro	farihentsarawa	gapitek, gapitiki	apitehi	gotomagetikit	hotomahutuhut
farekub	farihub	gar	ar	gotsar	hotsari
fari bugik	fari buhuh	garei, gareiroi	arourou	gotsou	hotsou
fari fosumach	fari fosumah	garekuk	aruhuh	gourobuk	hauri buh
fari getsouari	fani hetsewareya	gariai, gariei	ariyei	guagenes	huhahanges
fari gezazich	fari hetsetsih	gariei mo	ariyeimo	guauug	huhebuhuh
fari kepinen	fari hapineng	garieits	ariweitsi	guek	huheih
fari mekeriasarau	fari meheri yasarau	Garingemog	aringemoh	gug	huh
	geriviripis, materi feniaro, vato-	garingemog, farikir, fage	naringemoh, farikir, fahepi	gugagat	huhehat
	gerau, rikeruvongera, matari fe-	gasik	asih	gugagh	huhau
	ag, matari fitogan, mauer, matari	gasiserin	asitering	gugengengas	huhahanges
maripar	<i>c, c, , ,</i>	gasitog	asitoh	gugug	uhuh
-	sarau, materi feniyaraho, siyare-	gasogosog	asohosoh	guhloo	hur
bau, fanuriharau, mater		gataik	atahayats	guimal, gumar	huhomar
saa, maranaraa, mator	<i>,</i> 8°,	0		Barrier, Barrier	

iaf ang mehiri meyangai ohoma ian aiya uiyei uiyei iao yei iar ias tuhut ie

gumugur gutuf hochor fari pog hoitsom hugeg, huiei i bomeiaka i ebuedz i mouarivarae i sanoroch i togonogon ia go berairen iabur iafagar; iafa iagangagan iago beraiern iagog iaiarar iaierer iaik iaingar iakamangungu iakat iakiag iangiar iangngangas ianguog iapateo iapit iares iariued, gapari mar iatamen iatau iauek iaungar iavisi ibar ibaro ibebokuk ibets ibomaiaki icheach, baiegeeche ie puetug ie samar iebag iebatsik iebetsebots iebi iebor iebuts iefan, iefen iefogog iegaiei iegoma iefogog

humuhumur hutuf hohori faripou hautsau huheih ibe meiyahi yebets imouwari waraye isanouroh itohongohong iya hoberaireng iyebur yafi yafahar, yafah iyehangahang iya hoberaireng yohoyoh iya yerar iya iyerer iyaihe iyaungar ihamangungu iyehat yahuyoh yangi yangiyar toborungas tongu iyaw iye hahapato yapit yare yarus yariweits, hapari mar yaso iye taimir iye taw iyeweh iyaungar yafisi ibar iberaho ibepuhuh ibetsi ibe meiyahi iheiha, baiheih iye iyepuhutuh iye semar ipah iyepatsih iyebetsebets yepiye iyebor iyebuts iyefangi, iyefeng iyefohoh hafasafas yohoma iyefohoh

iegaiei iegoma iegon iegotsogots iekakep iekau; atogunu ielat ielimat iemaiseis iemaisois iemangau, iagusu iemaugudz iemerat iemetak iemis iemogo iemogotipei iemor ienag ienana ienau ienegogar iengalap ienimo iep ieper; iepereig ieper; itaitau iepungetu iepupun; sogizoch ierap ierei ieretak ierier iesag iesiar; erepaizia iesumevotsumar ietakare titir ietau ieteibor ieter, ietei ietete uod ietiel ietiet ietir ieton ietsingtsin ietsou; totog ieua ifar igaga pangek igai igamogok igamagog, igamagog mei ibaur igamogog mei bomanga iganot and tsa igaut igeraro ii iiapengach iisei

hafasafas yohoma yohong ivehotsohots iye hahep iyekau, hatatunu iyemohor yahamat iyemaiseis iyemasois iyemangau, iyehusu yemanguts iyemarat iyematah iyemis iyemoho ivemohotipei iyemor iyenau iyehangahang iyenau, ynau mohohari yengarap iyemoho yep iveper; ihapereih iyeper; etaitau iyepungutuh iyepupung; sohosoh iyerap iyerei iyeretah yariyeri iyetsah iyesiar; iyerap siyar iyesu wotsimar iyetahura titiro iyetau iyetaibor iyeter, iyetei ive tete wot ivetiet teitei yetir yatang tsingitsing ivetsau: totok iyewa ifar iha pengehi iha ihamahoh ihamahoh me ibe uur ihamahoh me ibe mangau ihanot ihout iheraro iye iha pengehi iye sii

Iits ikera ikera, ganei im epat ig imam eamo imarat; tai metag imari masek imaripar imaseka imauai imei eai imera pitek imeri koko imeri nibor imir imoso imotsorion ingetsich ioba iobetei; ibetei iochoma iogeruk iogog ioi teringar ioik iokuen iongogu ior iori fed iorigon iorubaut iorubut iorur iou eirae iouar. iouuei ioueie iouer, matar ioug ipito irae irarimar iratsag iratsag iakat irekir faivil irevi;pirau; puraro irotou irouro, feveta irourog iruk isenap isongaker, isongakir isun, imag it itaguratsag itaigametach itetiuh itit; perik iuia ivor kamagag

Its ihera, iheratsah ihera, haneiye ime patsih imeivamu imarat; tei matah imari masuh imeripor im sehe imouwai meiyai imeri pitehi imeri koko imeri nibor emir emosou imetsoriyong ingetsih iyeba iyebatai; ibatai yohoma yeuut yohoyoh, yohong youteringar iyouhu iyehun yangohu yor yori fen yorihon sahengeri bout iyoribut iyerur iyouwe iraye iyawar, iyawai iyouweiye iye uwer; matar yeuho ibitoh iraiye urerimar iratsah iratsah iyehat irekiri faifir urefi; peuru; peuraroh irotowa irouroh. fefetar irouraho iruh iyesenap isongahiri isung; imaho ite itohuratsah itaihametehi itetuh itit; perih huhau iwor hamahah

kangitsir marekengitsir kapiri kareparemom kasitog kat katkateri gatam katsap katsivara katzefas keikukomar kein, gin kein, gin keiraro; tsike maitona keiraro; tsike maitona keirourog ker ker beu manga kere samar keripei, ker, krupoin kikik kio kiop kiri kiri kirifarekotogot kirifoi kirio klo wayzer'ris kobo faichi kobo faichi koharu kokom kopito mai ia kororun kos. kus kotoragei kreel kreel kruegu kumotsi; humuets kuou masirap kupei, ietedz, pitser, petchem legelipog legutan legutauuamets lekutabar lepei letagug lii lima limabuge limagh limei limeik, limek limer lim'mah limi limo, limou lipagar lugerum

hapir haraparamamu hasitoh kati katiri hatam hatsop hatsafaraho hatsefash heihuhomar hin hin hairaroh hairouroh; tsuh maitona heirouroh her her hobe mangau her semar kuripei, kuu, kurpoum keri hio hiop hirihir kir. uwatsirihet tsirifarihotohot hirifou hiriyo nihotsopos hobe faita hobe fauhu kokorung hokom hobito maiya kokorung hus hotorahie hauka (palauan word) kuruhub humotsi; humots huwou masirap reheripou ruhur tsapiri hub ruhutowamots rukur tapar repei retehuh riiye, riye rimau rimobuhuh rimau rimeihe rimeihe rimar rumi rimouw ripahar ungerum

luk ruh rihatabuhaha lusa bagaga ma, maho ma machabachaparog mahapahaparoh maham macham magakes, magakis mahahus maham magam magoitei mauhoutei maker maher makkah'kes mahahus makkrazm (palauan) hahifou mame masune; marenup mani mosuwe; marenap man mang manga, mangan mangau mangou mangau maningis maningis maniren marureng or hotsou maniworifetir manivetiri faiyn man'tee mate manuur imenur mapoigera notogo mepouri notoho mar mar marehahau(sor) maragagau; (salt) marakaraiie marakara ihe marenap, irekiri mar marenap, irekeri mar marikech maruheh merihir marikir masaruh masarug masuh, masuh ivwor masek, masek uor masirap masirap masul masuh fasumah masumach mataitsa metetsa matakafan matehefang matane sirei matametsurei matangatan matangatang (not Tobian) palauan word matare matar matari baraki matari parahi matari betsur materi petsur matari feniaro materi feniyaro matari fenieran materi fenivarang matari feri bugos materi ferebuhos matari feri burau materi feniburau hupei, iyets, pitser, patsam matari feri burau, beioog, legutauuamets, aperifer materi feniburau, peiyewoh, ruhutawuumots, hapirifer matari feri gasafa materi ferehasafa materi ferehefits matari feri gevitsi matari feri tsamag materi feretsamah matari ferigasafa, materi feri bugos materi fenihasafa, materi fenibuhos matari fitogan materi pitohang matari gesuch materiheso matari kesa matari hesa matari kesa, mesarug materi hoso, masaruh materi meriporu matari maripar materi songoroh matari songorogo matatut; mata tir metetut mototihu matitu matotuh matotu matsi metsi

matsisik	masitsih	morikar	morihari	oreii	woreihe
mauer	mauweri	morimarch	werimah	oromar	worumar
maugar	mauhar	moro	moror	otaran	watarangi
mauorei	mauwerei	moruua	mouri uwa	otsapi	hotsapi
maur	maur	mos	mos	ouse	wasei
maurigad, iratsag	mourihat, iratsah	mosue	mosuwe	pah tehik	patsih
me	me	mot	mot	pah tehik getehi-gee	patsihitsih
me mara	meira	mouer	mowar	pahng-ul	pahang
meda itar	meta itar	mourimes; iimes	mourimes; imes	palachalach	paraharah
meda itom	meta itom	mugir	mihir	parach	parah
medzoch	metsaho	muk'kah maka		1	-
			mangau	paragarag	paraharah
megemag; maigel	mehemeh; meher	muruot	umuru wot	parnanil	panangir
megemek	mehemeh	mus'see	masuh	pasots, pasobos	posots; posor
meiaki	meiyahi	nan	ngang	patog	patoh
meiangei sirei	meyanger sirei	nan I be manga	ngang ibe mangau	pee'peeah mah'ree	pipiyeh mare
meiangei tamei	meyangari temei	nan tay makah'kes	ngang tei mahahus	pei, paum	pei, poum
meiarei	meyarai	nara imei	mata rimei	peian, paiian	peiyon
meiauar	meyawar	natu	hureiye	perem	pehem
meima	menima	neem	nim	pes	pes
meisegarire, meisegarire	meiseharire	neheki	nehehi	peuuor	peiyewoh
meiufen, meiuch	meiyefeng, meiyouh	neneseri, rau	nunusuri, rewa	pin	ping
memer	memeri	neti	fetir	pinar	pingar
menai	menaiye	ngan	ngang	pipi	pipiye
menetak	meneteh	ngan samar	ngang semar	pipi agamata	pipiye yahan
mepa	ра	ngangebebukohmakara		pipi gepitek	pipiye hapite
merie	meriye		ngang ibebiroh maiseke im	pipi iar	pipiyar
mesagari rigenerae	meisehariri heneraiye	ngas, uguk	ngas	pipiar	pipiyar
meseoro	meseyor	ngi metare bugotar	ngi mataribuhat	pipieri for, ataop, uari	ngang ibe ma
meta itar	meta itar	ngi, mengidz, far	-		
			ngii, ngiits, far	pirepireregatam	pirepireri hat
meta itom	meta itomu,	ngibon	nibong	piretar	piretar
metai, metara, matar	matai, matara, matar	ngiri veten	hiriyefeteng	piser; hai	pitser; hai
metak	matah	ngitsa, nitoporuch	ngitsepiruh	pisi tamei	bisiri tamei
metan	tangar	ngitsei, nitse	ngitseir, ngits	pisir	bisir
metaripi	mataripiye	ngoi, ngou	unga	pisir, euueis; mee'-ang-	
metau	matawa	ngungupa	ngungupah	pisisirei	bisisirei
metsere kupei, metari pit	tser	nibor	niboru	pita tich	peitatiho
	metseri hubei, matari pitser	nikari	nihari	podz	pots
metseri paur; metari pog	metseri paur; matari pou	niketam	nihetam	poeg eri moar	pauhuri mou
metsok	motsoh	nim	rim	poeg eri mugir	pauhuri mihi
meuisi	me bisi	nimal	rimar	pogun	pohung
meun a bakure	me uun burah	nimarier	namariyeri	poig	pouh
miagi	meiyahi	nimeretak, uore	nimeretahi; iwor	poigeriuetoch	pouheri woto
mimi	memeri	ninieripag	niniyeri pah	pooh'ruk	puhuraho
mish'erum	mesirom	nipa gar	pehem	popariuarimesori	popori wari r
misi, iemusi	misiye, imisiye	nivagaf	nifahafi	pororimezarach	popori meher
moa	mowa	not	natu	pula; burago	buroh
	imowar			purak	puhuraho
moar		notor	rotor	-	-
mogemog	mohumoh	nueis	riuweits	rabatut, dauu	raw
mogonagir	mohonuhur	nugeriuiripis	ruhuriweripes	rag	rah
mogoreitsak	mohoreitsahu	oa, oag	uwa, wah	rai faiil	rei faifir
moi engar	meyangar	oa sibir, uch	uwar biriye, uh	rai mar	rei mar
moiara	moiyar	oa tsosamar	uwa tsosemar	ram	iran
moiere faivil	moiyeh faifir	oari bugurog	wari puhuraho	ran	rangi
moiere mar	moiyeri mar	oats	bisiri hih	ran	rango P.
mongai	mongoi	oatur	fatur	ran	iran
mor	moru	ogori faripei	hohori faripei	rangerifoi	rangirifou
mora bitu	mori bito	on	un	rani pei	rani pei
mo'rahbeeto taitu, bitu	mori bito, taito, bito	onuuod	uniwot	rani tan	rani tang
moribon	miribong	orabuge	worobuhuh	ranirogi	rani rohiye
morig	moruh	oreiau	woreiyou	rao, pungunau	raw, punguno
5			-		

rigou rikerivognar Rikerivongar sopos rimoton are ringetogor rog, rogo rogutsari roi rongoninieremot roni teringar ronibaut rsars rueis; gabaritsiriket amat itehi rukereparibon rukurarimar rumar mangau ruo hatam saba sah-kum ah wahroo sa-kum ah goo sakum ah leemo sa-kum ah saroo weits; meiyengamu sa-kum ah soo sa-kum ah tee-o sa-kum ah vah'oo samar sarik ouwar ihir saru sasaribon Sauiefan otoh sauug sauug ma sei ri masauh se umoi heroh seau sechat seg, sek segangir; achoechoror sege ma iuga sege ma seiau segengas, seienes seiae ma seiau seiau seie maseau seiguemar seiiamar sek ma saru sek ma vau seka ma gluo

raroparap rarou

rauinei

ren repei

riair

ribar ribe

rigolaf

rare busi tamei rauri bisir tamei roroparap rarouw raunei heng repeiye riyaer ribar ribwe rihoyafi rihou ruhuriwangar Ruhurwahangar Rikerivongar and Farik Ruhurwahangar and Farikir rimotong ringetohor ruh, roh ruhutsoru meyahi rongori niniyerimot rani teringar rani bout yarsars riweitsi; hapari tsiriheti ruhuriparibong ruhurenimor, ruhurerimoru huhomar huuwou sebuhuh seik ma uwaruu seik ma huouw seik ma rimou seik ma soru seik ma sew seik ma tewou seik ma fauw semar serihe soruw sasaribong Tsouniyefeng sebuhuh sebuhuh ma seih sewa moiye sew sehat seihe, seih sehangiri, horohoror seih ma huhau seih ma seyau sahanges seih ma seyau seiau seih ma sewa seih ma huhomar seih ma semar seih ma soruw seih ma fauw seih ma huwouw seih ma sewa

sekama su

sene voguk	sorubuhuh	talinar	taringar	tsiketsik	tsuhetsuh	ue tiai	uwetiyei
senepes	senap	tamarikik	tamarihih	tsimai	tsimei	uenen	ueneng
seniget	soruhat	tamats; erab	tamats, erap	tsimare bogigei; acheoed		uet	wet
senigngengas	soruhangas	tamatsemesirats	tamats ma sirats		tsimare buhuhei; hahorohoror	uet enen	motoneng
serii, serik	serihe	tan	tangi	tsog	tsuh	uetiei	uwetiyei
serimar	sorumar	tangaik	tengaih	tsoobo, tsooh	tsob	ug	uuh
serio	soruiyou	tangakir	tangahir	tsoriba	tsoripa	ugoan, oarangei	wahang, wahangei
seruug	sorubuhuh	taoeripotz	tafeiyaripot	tsororimetar	tsorori metar	ugochongogon	uohongohong
sesechi	seseih	tapai	tepaiye	tsou	tseu	ugsug	fahawa
setap	setabu	taperoch	tsapiruuh	tsou tir	tsoutir	ugug	uhuh
seu	sewa	tar	tari, taringar	tsou tirimata	tsou turumat	uia uiar	biyebiyar
seu masirap	sew masirap	tara	tarati	tsouri mangag	tsouri mangahu	uidz, uits	wits, witsi
seu, seigeteu	sewa, seihetiho	tat	tati	tubumar	tuhaemor	uku	uhu
sevoguk	sebuhuh	tatag	tatah	tugudob	tsuhutsob	umipami	unpanu
siaeguuei	siyeri hubei	tativocharach	tatiwahahawah	tugutarei	tuhutafeya	un e pan	unpanu
siaruau	siyarebau	tauakiag	tawahiyah	tukuk	tuhuh		-
sibobugau	sibe buhou	tauariag	tawanyan	tumhah	tomau	ungorap	ungerap wahah
sieboro	bihin	teberika; tarapa	tsiriheti	tumoki, tumu	tumuhi	uoagag, uageg uobotar	uototar
siei, meseiach	siyei, mesiyats	tee'tree titri, titinap	titiro, titinap			uod	
sine kik	sin hih	· .		tumuto	tumutso		wot
		teg	toh	tuomar	tiwoumaru	uodagengagan	woto hangahang
sine sirei	sini sirei	tega faivil	tehi faifir	tuou	tsouw	uodenen	wotoneng
sinerisebagaga	siniritabuhaha	tegak	hahah	tut, maimatare	tut, matatut	uoi	woi
sinetemei	sin temai	tema temei; tamar sin	tema temai; temar sin	tuuabu	tiuwobuhuh	uokitog, birau soborouito	-
singoto	singo	temei, miiangei	tamei, meiyangei	tuuag, tuuau	tiuwouw		wehitoho, bira sabarabitoh
sirei	sirei	teringerai	taringar	tuuah	tiuwau	uor	uwor, wor
sirela; igar	sirar; ihar	teten	teteng	tuuei	tueihe	uorefangan me faivil	wor fangani ma faifir
sireli buruch; buobu	sireribuhobuh; buhobuh	tibiti mabag	tibeti mabohor	uaas	faas	uoreik	woreihe
sirera	sirar	tignaro	tingarong	uabats	ebets	uoremal	woromar
sitek; basutach	sutah; wasutah	tingaro	tingaroh	uabuge	waribuhuh	uoriar	uwori yar
sivar, sivoro	siwor	titiripin	titiri ping	uagag	wahah	uorik	uworoihe
soer'ree-wedg-vag-ee-ve		tiu	tiuwouw	uahogi	uahohi	uorimag	warimoh
sor, soru	soru, soruw	tiuemal	tiuomar	uaiio	faiyau	uorimeri	warimaru
soru umoi	soruw moiye	tiuerik	tiweihe	uamar	famar	uorimet	worimat
srimal	sorumar	tiuik	tiuweihe	uan	uun	uoro	worouw
ssibachasi	sibe hasi	tiuou	tiwouw	uar	uwar	uoroiau	woroiyou
su	sewa	tivan	tsifon	uar	uwor	uorotu	uworotuh
sug, siguri	suh, suhar	toach	toh	uara theira I sapito	uwarasura isabitoh	uorou	worouw
sutag	sutah	tob	tsob	uarasu	warasu	uosurog	uwosuraho
taberigach	teberiha	tog, nauer	toh, nauwer	uarasuira, uarasu	warasura, warasu	uot	wot
tabi	tapiye	togoitot	tohoutot	uaremal	uarimar	uota gangagan	woto hangahang
tabi ren	tapiyeri heng	togoutol	tohoutot	uari	uwari	uote rimagau	woteri mahan
tabu, ietap	tabu, iyetabu	tokere poremam	hote harapa ramamu	uaribug	waribuhuh	uou umoi	huwouw moiye
tabur'rah eek'ah	tsapitsiriheti	tomai	tomau	uariengalap	uwariyengarap	uouti	wautu
tachafaivil	tahe faifir	tomum; chatachonu	tongong; hatohunu	uarii	warihe	ur	maur
tafei	tafeiya	tona	itona	uariiau	waruw	usu; usous	usu; usus
tagach, tagag	tahahu	topan tapan	tapang	uarik	warihe	uuasanie	uruteh
tagak, lau	tahahu, hawa	tor	tur	uariket, iiagrofat, igarev	orovat	uungne	umen
tagakitsim	hahahutsim	tororo	toror	warike	et, iharihorofat, ihari horofati	vachaubir	wahabir
tageg	tahuh	torumar	tsorumar	uariki	farikir	vagaf	hahaf
tageri poh	teheri pou	totirim	toutourim	uariki	uwarihe	vagek	bahuh
tagita megarat	tahita	totitir	totitiro	uariu	uwaruw	vahn	fan
tah-ree	tari	toto muri	toutu umuri, tsotumur	uariu	waruw	vaii	faihe
tai	taiye	tou, meetatau	tau, metatawa	uaru	uwaruw, waruw	vamal	famar
tai tipei bomanga	tai tipei ibe mangau	touta	tauta	uasera	uwasora	vaniborivatsa	wani porufats
tai uisi	tai bisi	tovetiv	tafitefi	uasuua	fasufos	vanim	wanim
tainuru	tsaru ruru	trioarivor, triovara	tiriyawar wor, triyawarifar	uaterugeia	fater heya	vanimagat	wanimahat
taipipi	tai pipiye	truveinemar	trubenamar	uatuti	tutu	vanimagat, farebugik	wenimahat, faribuhuh
taito	taito	tsauri gou	tsouri hou	uau	fauw	vano	fano
taitoiogoi, ibobueiiegom	taitoiyohoi, ibebuhouiyohom	tseberi paur; tapiri pog	tobori paur; tsapiri pou	ubei	uubei	varag	farah
taitou	tautah	tsigeitsegagen	tsuheitsehaheng	ubutemakemak	ututeri mahemah	varik	faihe
		0 0-0	0				

vaseruboar vasirigipri vasugerigotugo vatanesegumar vatariara vati vatoberig vatochi vatou vats; bogu vau vauvau vauvaure vavi ven venaigeg verree-verree vetiveti vettel viiiemal viiik viiu vis visebug visig visimer visio visu vitseraun viziits vor vorieran vororum votokorima votsenekabi votsimarinam vovitika wanimerat waran warikel, igagasusu wasichari waw'ee way zer'ris wenieg yah-saik yaht yah-too yah-veesh yah-wah yah-woar yennup yim yuhkayl yuhmoat zauuau zer zuzu

fasuru bor fasur hapir feen fasuheri hotiho matanisuhumah matariyer fahu fateberih fohohi fatowa fats/ pohuwo fauw faufou faufour fafiye feen feniheh forufor fatifet fatur fisimar fishihe fisuwe fis fisibuhuh fisihe fisimor fisiyau, fisiyou fisuwe fitserauun fitsifits faoh weriyarang wororum wotohorima wotseneihepit rienitsimerinom; piye bofitihang wenimahat farang wariket, iha hasusu wase hari wai marisoris waniyoh yahseik yat yatu yah fis yahwa yahwor iyenap im iyekair iyemots faiyau tser sus



Women from Tobi. Glass plate scan, Hamburg Museum.



Girl Remezieleng. Photo by Sarfert. Glass plate scan, Hamburg Museum. (see also back cover)

MERIR.

1.History of Discovery.

For the first time Merir is mentioned in the Somera-Report, that describes the voyage of the "Santisima Trinidad" under Padilla in 1710. On Songosor the Spaniards hear about the Island Cemerideis, hat was somewhat larger than this and was about a days voyage away in S1/4 SE direction. However they did not visited that Island. Only in 1769 the name surfaces in the shipping reports again. Captain John Payne of the ship "Ponsborne" reports briefly, that he on the voyage to China, taking the route between Waigeu and the northern coast of New Guinea had passed by that Island.

In the year 1788 an English squadron under captain John Davy Foulkes set sail in Batavia on its way to China. Under the participating ships where the "Duke of Montrose" under captain Joseph Dorin and the "Asia" under Foulkes command. After they sighted Tobi on the outbound journey on January 1st 1789, they passed by Merir on their way home on June the 4th. The position was taken onboard the "Asia" and with 4° 20' eastern longitude and 132° 19' northern latitude logged.

Most likely at the same time the name of "Warren Hastings-Island" was given by the captain of the "Duke of Montrose. I seems to be that, by the "Asia" under captain Stone 1805 an other new positioning of the longitude was made. In between that time the Spaniards passed by this Island once more. The corvettes "Descubierta" and "Atrre vida" under Alessandro Malaspina had the orders, to undertake hydrographic surveys in the Pacific Ocean and passed on December 24th 1702 Merir. Although that ships had relatively often sighted and positioned the Island, exact records have never been published. The last published positioning was done by the Swedish steamer "Nippon" in 1912. The Hamburg Expedition recorded the position with 132° 19'E.

2. Name.

On Songosor, the Spaniards learned the name almost correctly. However, later on Ceremides became Pulo Merire. In doing so, Pulo was considered a kind of preposition, probably an approximation to Pur. Pulo Ana finally becomes Pulo Anna, just like Merir becomes Pulo Maria, so that the names of the islands appear to be entirely Christian. The term "Warren-Hasting's-Island" was supposedly coined by the ship Montrose. — The natives call their island Merier or Meliel. The peoples pronunciation of r and l is difficult to distinguish, so that one thinks to hear sometimes one sound, sometimes the other.¹ The e of the final syllable is so ephemeral, that it is only hinted at. The pronunciation of the second syllable can best be compared to with the pronunciation of the ending r in English. As a sound it only appears insofar as the position to articulate it is created, the sound however, is not executed. It only gives the preceding vowel its typical completion, which sounds like an extremely elusive e. Thus, the correct phonetic writing would be *meri*'. The *i* carries the sound. In the simplest writing this corresponds to Merir.

3. Location.

According to the information of natives, the journey from Songosor to Merir takes one day and the distance is about 30 sea miles in a southeastern direction. According to Rosser it was only 10 miles. Fritz reports that the government schooner, coming from Pur, reached Merir being pushed more by the current than by the engine.² On the other hand, the current next to Merir was so strong that the schooner had to give up on the trip from Merir to Tobi. It was the end of November.

Eastern Longitude	Northern Latitude	Author	Year
132° 19'	4º 20'	Foulkes, "Asia"	4. 6. 1789
132° 18'		Stone "Asia"	1805
132° 28'	4º 19'	Krusenstern	1819
132° 28'	4° 19' 30"	Horsburgh ¹	1826
130° 8'	4° 20'	Arrowsmith	
132° 28' 30"	4° 20'	Rosser	1879
132° 28'	4° 20'	Pac. Islands	1890
132° 29'	4° 20'	"Peiho"	25.8.190
132° 21'	4° 20'	D. Nippon	1912
132° 23'	4° 21'	Deutsch. Kol. Lexikon	1920
132° 19'	4º 19'	Pac Islands	1933

The low island, covered with trees, can only be sighted from a distance of 12 sea miles. From north to south it measures about $1\frac{1}{2}$ sea miles (2,281 km), the width (east west direction) is nearly 1 sea mile. (1,852 km). In the sketch, Fig.154, from Gollert another proportion is depicted. The islands is surrounded by a coastal reef that protrudes to the north and the south about $\frac{1}{2}$ a sea mile. The surf surrounds the entire island; however, it is stronger along the extensions of the reef. In the middle of the western side, where the settlements were situated, there is also an elevation, a hill about 4m high.²

Nearby there is a small bay, where the water is significantly calmer. Here the dinghy of the Peiho landed. Two dams follow along the beach sides which are fringed by a small sandy beach. Almost directly behind it, begins bush of 2—3m height, The northern part of the island is a little higher. In the middle, the terrain subsides and is covered by swamp. The southern tip has many tall trees, mainly coconut palms, which were all, without exception, destroyed by the devastating typhoon in 1904 that also ruined Pur. Many white, mostly broken trunks still stood tall and offered a sad impression. At the visit of the Peiho 5 years had passed since the catastrophe, but the island cannot yet be inhabited. The bush had become so dense and had everything completely over grown so that we could only fight our burdensome way to the old settlements with the help of machetes.

Two years after the catastrophe, the official report about the visit reads as follows: "Horrible destruction. Here, the sea must have flooded the entire island, with the exception of a few higher areas. Even now a salt water lagoon remains in the middle of the island. In my opinion, Merir is about twice the size of Pulo Anna. We found 20 women and seven men there, whom we took at once on board. — Among the poor and dirty houses was a taller building in better condition, thatched with mats and impressive columns made of calophyllum. A peculiar framework was attached to the middle column. Some coral stones where lying on the floor underneath the framework. This building was the meetinghouse. The apparatus mentioned above served cultic purposes.

The stones are said to have fallen from heaven. I learned the following from our new fellow passengers: That typhoon started at sunset with a storm coming from the north that turned via east to the south. The sea flooded the Island coming from the east however it did not reach the village because it is situated 10 m above sea

4. Geography.

¹The pronunciation of the natives according to Krämer: Melie; Sarfert: Mälie, Hellwig: Milie. 2 Horsburgh, p. 632: 132° 28' 15" E, 4° 22' N.

¹ Compare with Pac. Isl. Pilot 1933, p. 496; The island is surrounded by a fringing reef which extends about 6½ cables from its southern end and about half a mile from the northern end; the edges of the reef are steep-to, except at the northern end where a shoal, with a depth of 9 fathoms (12^m8) over its outer end, extends about three-quarters of a mile northward; it is reported that sailing vessels anchor here.

^{2 4}m according to Gollert, 5m according to the information of the Südsee-Handbuch, from which was cited the above description. According to the information in Pac. II. Pilot from 1933, p. 496, Merir is 92 feet = 28 m high (measured to the tree tops).

level. Before this event about 200 people are said to have lived here. Nobody died in this typhoon, yet afterwards a famine started. Many people died. Some, who had stolen other's provisions, were killed. An epidemic is said to have started because of the vast consumption of land crabs that killed many, especially children. 6 months after the storm nine boats left Merir with 50 people on board and sailed to Sonsol. Only 5 boats with 34 passengers arrived there. — A magician is said to have created the storm. . . . "

The fauna is the same one known to live on coral islands. What is important for the natives is clearly shown in the index of words. Hereto Sarfert investigated some closer details, however not all of the below species could be dedicated with certainty, because the writing of the Merir words contain here substential differences, respectivly the details may have been for fishes, that had not been named in the numbered list of the 53 species. The number behind the comments correlate with the species named in the numbered list.

 $\chi atik =$ a species of White-fish with red-brown dorsal fin and red strips on the upper rim of the mouth. 18 s geri = black, with yellow trim on side fins and its tail. At the beginning of the tail it has on each side a sting. 13 glou = blue-green. 42

reriek = light-brown with dark-brown, almost black spots. 26

leneki = blue, with black markings on the upper half; black-yellow with black on the side-rims. 27

pesemel = black back and belly, fins white/transparent w/ black trim; tail black-white-red; side fins greenish. 29 rigeleo = scales black, in the center with greenish rectangle; tail whitish, in front black, belly front blood-red. 49 $uura \chi ar e =$ black. Front of tail black red –yellow ring w/two stings each side, forehead yellowish, mouth to eye a yellow line, mouth red-yellow. 7

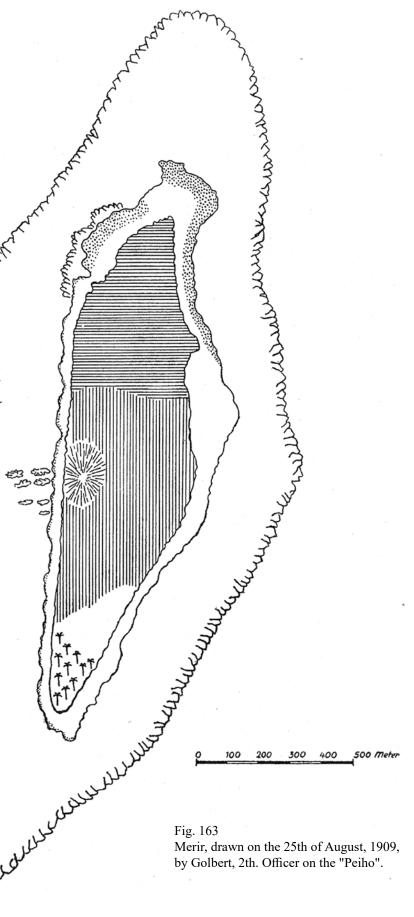
gole = Back red, belly red-yellow to yellow. 12

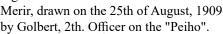
ri ri = 40 cm long, gray; forehead and front part of belly black, tail black-white-black. 16

ieuagl = 10 cm long, it looks like it has 2 pair of eyes, back gray with black horizontal strips, belly white with red horizontal strips. Dlante

		Plants.	
Tree	siriget	Palm wine	rasi
Leaf	saure	Mangrove	nalarare
Stem	χaχaite	Banana	fazol
Branch	lara	Taro	ueigl, uot(r)
Bark	gien	Yam	iam
Root	ualarar	Areca nut	ио
Flower-Stem	rareit	Betel-lime	uese
Flower	mougura	Betel-container	иаииаи
Flower-stem	iasare	Pumpkin	pamugen
Fruit knot	uare	Bush	niuar
Flower-petal	taurar	Maddow	fetir
Pollen-receptical	meteleri	Arrowroot (tapioca)	mogumog
Fruit	uar	Been	zep
Grass	fetiri	Pineapple	ngongor
Pandan	fuzole	Sweet potato	gmiet
Coco palm	ngaru		

Also the flora does not offer anything exciting. The most important crop plant are cocos palms, from which they harvest palm-wine, pandanus, Mangrove, Banana, Pineapple, two sorts of taro, yams, Areca-nut, pumpkin, arrowroot 3 (tapioca), sweet potato and beans. But we have to keep in mind that these accounts where given by the natives on Palau and it may be questionable, if they really knew all of these plants on Merir. It has been proven, that they learned about the betel-nut only when they came to Palau. It is interesting, that they have special words for specific plant parts, like flower-paddle, leaf, stamp, pollen-vessel, and fruit-knot.



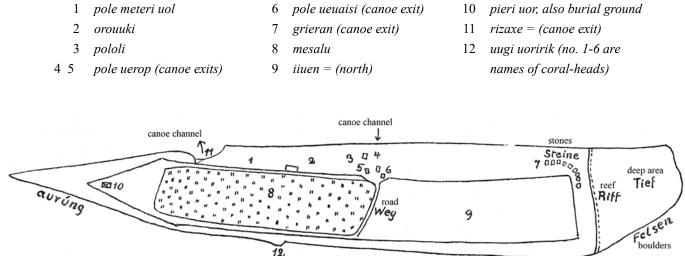


It is noteworthy that they have a name for crocodile: rauaig. They know more than 50 kinds of fish; as all other islanders they like also to include marine fauna, thus clams, snails, etc.

			Animals.			
dog		piriz		scales		ürar
pig		peik		gill		tapar
flying fox		uuarik		fin		ingite
rat		ges		tail fin		pasare
fur		gin		ventral fin		ingite
tail		ngure		dorsal fin		ingite
bird		mar		lizard		uzeri, gumaser
egg		sarai xaian		turtle		uar
feather		ürare		crocodile		rauaig
wing		paure <pei< td=""><td></td><td>shark</td><td></td><td>paro</td></pei<>		shark		paro
beak		iauar < iauuei		butterfly		giegi
bird's tail		ügure		caterpillar		ngar
swallow		iogoreen		fly		ran
wild dove		mar		mosquito		ramu
egret		χailau		louse		guz
rooster		marumar <i>xa</i>	ian	spider		rigatauzulox
hen		mariueiuiet	yaian	spider net		rigatauoragl
chick		raperi xaian		crab		lagun, ievi
duck		lan		clam		periperi
fish		iek				
			Fishes.			
1 γ _α	alangab	19	melauu		37	ualei
2	ales	20	ialan (other	side of reef)	38	rimauraure
3 ta	ıku	21	iazure	,	39	faramea
1	auvau	22	mangal (flyin	og fish)	40	uodadiri
5	namusik	23	uari (sea turt	-	41	perfau
6	nazoal	24	taiaua		42	loue
7 "		25			43	fizilimata
0 10	ari	26	oraisi		44	v
0	aule	27	leri		45	teteri
10 11	imelion	28	negi		46	iar (ü)
11 ¹	amazogiri	28	negilipauo		40 47	tiri
	ıami		pesemegl			turupu
	ите	30	gupari		48	rigelauueri
	asenger	31	putaf		49	rigeleua
	nesagoaχe	32	mangesure		50	gite
	naki	33	tarieri		51	zala
	ieri	34	tangarengari		52	<i>itoχoma</i> (shellfish)
17 m	iözo	35	ualauiri		53	periperi (shellfish)
10	atige	36	rigerau			,
<i>N</i> ²	0		0			

5. Settlements.

Because of the heavy overgrowth by vegetation of the dwellings it was not possible, to produce a detailed account of the settlements on Merier. However the Merir-people on Palau where able to give details about position and style of the buildings, fields and places. Two natives and the chief Peiloy and the man Malailan drew a map of their home island from memory. The orientation, which they gave the island has been kept. There was only one village on Merir it was divided in two parts, each headed by a special chief. It was situated on the western side and had three landing places, Meteri.

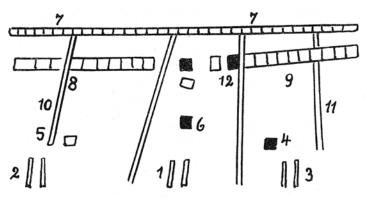


The big middle one, meteri meiiiuen, was used by everyone, both the smaller ones, on the right and left side, meteri geringimaco and meteri meiiog, were only used by women. In the south of the island, on the northern rim of the swampy area, a small path led across the island. Two other trails, just like the main path already described led to the landing places. The passages for canoes passed through the small bay rixace, where the water is usually calm. The southern tip of the reef is called *aurun* ("reef"); when the weather is fine one can barely see the bottom in the "deep water". The landing place pieri uor, situated just behind, has many turtles and was also the burial place.

of the compass. We also found the big meeting house caringimaco from Peilox's map Nr. 6. It was situated not far from the beach and was overgrown with vines. The original thatched roof was completely replaced by these tendrils. The rectangular wooden construction with its raised ground floor and gabled roof could still easily be recognized. The place, on which the meetinghouse stood, was called meteri geringimaco, the same name that Sarfert learned for the main landing place. As can be seen in Peilox's map, the house is situated right behind the landing place. Property was divided into individual places that have special names. A piece of land in general is called *uuray*.

Fig. 155. Island and Settlements on Merir as per Maleilan. Drawn on 19th. of Aug., 1909.

In-between the reef and the beach, there are many rocks. The dam, made of rocks, in the northwest of the island is called grieran. According to Peilox, the two village halves are called Meilogl ("southern village") and Meiiuen ("northern village"). These names we know already from Songosor and Pur, they indicate the points



1.--3. Landing places, 4. Meriteifau, 5. Faterazan, 6. caringimaco, meetinghouse, 7. Capiriem = blood-house in the bush, 8. Meiiuen = northern village, 9. Meiiogl = southern village, 10. and 11. female paths, 12. house of the 2nd. chief Rugovar.

Fig. 156. Settlement, according to Peiloy.

Names of Places on Merir.

1 Meteri gerin imaco 2 meteri maiol (place of the chief's meeting house) 3 farugur

There were over 100 house names listed, similar to those on Songosor and Pur. The foundations for 1-56 were located on the coast, the rest in the forest. As the name list shows, Merir must have been densely populated at some time, which matches with the current population count given. This consists of 87 names of households. On Merir they had in meiogl three birthing huts, *imeriper* or *raperiem* and at the same time women used them as menstruation-houses. Families erected the actual menstruation-houses, moruuungtoro, according to their need.

The inhabitants of Merir, dislodged by the famine to Palau, were settled on Goror in the village Ngarabodl.¹ Here they only named the houses, using the names of their old home island. They do not use a name for the land. As indicated in the map most of the houses are located in the north of the long path that traverses the settlement from E to W. The village continued to grow towards the north, as demonstrated by the two houses 19a and b, still under construction. In the west, the path turns to the south to the village Grorör, in the east it wanders off into the fields. The small pond in the curve serves people as a bathing place. As the index shows, the population has only two menstruation-houses (for about 25 women). People live in nuclear families. In many cases two couples use one house. Children, also the older ones, always live with their parents. Widows and frail persons stay with their relatives.

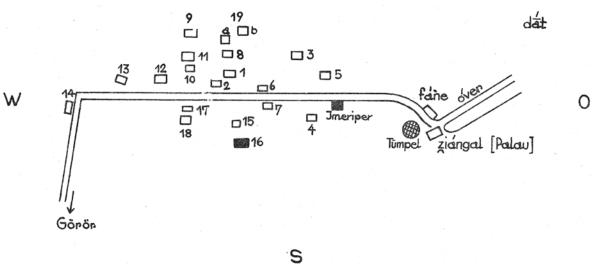
The Names of Houses on Merir:

1	Rezaugatiu	30	Fariaitaz	59	Meiriagl
2	Farogiriiagl	31	Peito	60	Imeriperip
3	Nitegl	32	Ruguraparim	61	Imearotor
4	Rezaradiu	33	Uauzuk	62	Ranogo
5	Farimok	34	Mailiogl	63	χapanonog
6	Repelelox	35	Lugunuguvari	64	Imopalung
7	Uauriuore	36	Riguriveri	65	Gamirin
8	Iaugere	37	Iareare	66	Malerigaz
9	Rapeliare	38	Rugeriagl	67	Imeagl
10	Farugrieg	39	Imeripue	68	Peigazoχ
11	Fariuorox	40	Uugolimaro	69	Malarieme
12	Megirimegl	41	Peimau	70	Uarieme
13	Farumau	42	Faregulugulu	71	Farorogo
14	Imoguiagl	43	Fareuoiie	72	χarameteg
15	Fauoriagl	44	Arutararo	73	Nipeterien
16	Farigeliuato	45	Meiriogl	74	Fanü
17	Imertueri	46	Fariseri	75	Farigiriva
18	Uauripazo	47	Fereugisi	76	Fariapogo
19	Imeiate	48	Iaulurapa	77	Іетерара
20	Imetaivo	49	Farifasa	78	Peimeri
21	Imotauteigi	50	Rariuatag	79	Uzeren
22	Peimaro	51	Terigezox	80	Rigiripala
23	Lagitaigi	52	Reremetiu	81	Peigoro
24	Peimagl	53	Imetegiete	82	Fariuoroz
25	Rugarab	54	Imeauala	83	Imezalau
26	Peitom	55	Feriaugl	84	Imerigou
27	Ruguvari	56	Urupau	85	Merigauro
	Tamürengi	57	Uararazora		Rugeriar
29	Farizauan	58	Razauzauriueri		Fatiriueg





1 Some Merir People were brought to Yap and Saipan, Fritz, as mentioned above.



Names of houses: 1. Terigazox, 2. Imoguiol, 3. caremetiu, 4. Farimorozik, 5. German, 6. Peimagl, 7. Goronia, 8. camauria (under construction), 9. Peizom, 10. Rugarap, 11. Leigitaco, 12. Imeriper or caperim (blood-house), 13. Peiiazox, 14. Ailirap, 15. Peimaco, 16. Imeriper or Raperim (blood-house), 17. Uoiligez, 18. Zauoiagl, 19. caisau (under construction).

House 1. Terigazocc House 2. Imoguiol House 3. caremetiu House 4. Farimorozik House 5. German House 6. Peimagl

House 7. Goronia

House 9. Peizom

House 10. Rugarap

N Fig. 157. Merir village on Goror (Palau), (according to Sarfert).

Index of Inhabitants of the Merir-Settlement Ngarabodl on Palau.

Tutamag \mathcal{J} - Aparuau \mathcal{Q} Uieizog \mathcal{J} - Metaizog \mathcal{Q} Veteretirur \eth - Gare \bigcirc (originating from Songosor) Etenitoz \mathcal{J} - Meziek \mathcal{Q} Sipon \mathcal{J} - camoruueli \mathcal{Q} child Fiz, 10 years old Sinai \mathcal{J} - Zangarog \mathcal{Q} Maniterore \mathcal{J} - Tonir \mathcal{Q} (originates from Songosor) Parimegl 3 Ianis \mathcal{J} - Imetiuegl \mathcal{Q} Fitopo \bigcirc - Maizela \bigcirc (originates from Songosor) Uaranga \mathcal{J} - Uotiegitaz \mathcal{Q} Ueien ϕ - Fororeitan \mathcal{Q} Irar
orinar ${\mathcal 3}$ - Faleilan ${\mathcal Q}$ young man camat, 18 years old girl Sau, 10 years old Sisie \mathcal{E} , old man Rumonelin \mathcal{J} - Mazangalar \mathcal{Q} Ratumai \mathcal{J} - Sain \mathcal{Q} (originates from Pur) Morifeil \eth - Tazitama \clubsuit boy Atuna, 5 years old Lukom \mathcal{J} - Uoitegi \mathcal{Q} (originates from Pur) girl Uimagura, 7 years old Peilox, δ , widower for a long time (see plate 12) Tugu, boy, five years old boy Tomiza, 7 years old

William δ - Reiizik Q		G
Eriselen 👌 - Roangei 🤤		
boy Zulap, 8 years old		-
girl Remezielan, 12 years old, daughter of the first	skin color	forehead
women, whom Eriselen had left.		cheek
Maropo δ - Gutumeri Q		region o abdome
4 month old child, still without a name		region o
Merigiore \mathcal{J} - Roilangei \mathcal{Q} (originates from Pur)		upper ar
Tom ♂ - Uazalopi ♀		upper ar
boy Neiimar		palm of
Tongamoru 2, widow		inside of
		mucous
boy Uainuar, 1 year old		mucous
Ualeirei \mathcal{J} - Uoitiru \mathcal{Q} (the husband was in prison, during that	character of the skin so	ft, dry
	color of the iris	nr. 2; sc
		slit of th
		hair of t
		slightly
	-	very spa
	nead	forehead
		part: slig back of
		entire fa
		slit of th
Mariano, an order orother of Edunope, sick since a long time.		cheek be
	 Eriselen ♂ - Roangei ♀ boy Zulap, 8 years old girl Remezielan, 12 years old, daughter of the first women, whom Eriselen had left. Maropo ♂ - Gutumeri ♀ 4 month old child, still without a name Merigiore ♂ - Roilangei ♀ (originates from Pur) Tom ♂ - Uazalopi ♀ boy Neiimar Tongamoru ♀, widow Guman ♂ - Tini (originates from Seneues or Nauru) 	Eriselen ♂ - Roangei ♀ nutritional condition: fs boy Zulap, 8 years old skin color girl Remezielan, 12 years old, daughter of the first skin color women, whom Eriselen hal left. Maropo ♂ - Gutumeri ♀ 4 month old child, still without a name 4 month old child, still without a name Merigiore ♂ - Roilangei ♀ (originates from Pur) Tom ♂ - Uazalopi ♀ Tongamoru ♀, widow Guman ♂ - Tini (originates from Seneues or Nauru) boy Uainuar, 1 year old character of the skin soc color of the iris ulaleirei ♂ - Luoitru ♀ (the husband was in prison, during that time the wife slept in a small house) (see plate 12) color of the hair form of a Ranizacoi ♀ form of the hair form of the hair Maleitar ♀, widow color of the slap body hair: Maleilen ♂ - Tipitop ♀ head head

Thus, 25 couples have 14 children. The children, with the exception of Remezielan and camat, are still young. The number of Merir-People is declining even more when we take into consideration that 7 of the 25 married women mentioned here come from other islands, thus almost a third. These marriages seemed to be the result of a longer residence on Songosor where the suffering Merir- and Pur-People first turned to, before the German government had them transferred to Palau.

6. Population.

According to the census on Palau in 1909, the number of Merir-People was only 73 souls: 29 men, 30 women (25 couples) and 14 children. As they said themselves, there were probably 100 more before the big typhoon. Most of them are said to have died of deprivation. As the survey showed, the state of health on Palau was good. Of the 22 adults examined 7 could be termed fat, 2 skinny and the others were characterized as normal. Their personal hygiene was effective. Especially their very strong teeth are well kept and even betel chewing has not effect affected their white color. They collect white sand from Ngarakobassang with which to clean their teeth. People go to the toilet in a squatting position in the bush. 22 of the 59 adults were thoroughly examined in an anthropological fashion.

The result was that people are of nearly medium height; the women a little taller than the men. Their limbs are generally slim and not long. The body hair is generally very spars or missing entirely. Their hair is simple or widely wavy. The face is generally moderately high, the forehead straight, the eye opening slanted slit, the epicanthic fold is common. The Merir-People have moderately protruding cheekbones, straight noses with big nostrils and its tip pointing downwards and usually close-fitting alar wings of the nose. The jaw-bones are strongly developed, their teeth are big and healthy. The ears are well formed and close to the head they have a European form. Knock knees are the rule, probably a result of faulty posture. When measuring the heads, seven of the measured men had long heads; the three other ones have medium long heads. 66% of the women have long heads and 33% medium ones.

hands finger nails calves feet longest toe body

Guuon ♂, Family Teiiasa, 25 Years, Merir.

health: healthy	
ead	19
ζ.	19
n of the breast bone	20
men (above the navel)	21
n of the shoulder blade	23
r arm, bent side	23
r arm, stretched side	22
of the hand	4
e of the upper thigh	25
ous membrane-upper lip	carmine white
ous membrane-lower lip	carmine white

sclera: yellowish; conjunctiva: discolored in the area of the open the eyelid, spotted

- f the head Nr. 27, hair of the beard Nr. 27
- ly wavy;
- parse
- ead: moderately high, moderately wide, straight, curved
- slightly domed
- of the head: curved
- face: high, elliptical, moderately wide, pointed at the lower end
- the eye: slanted, moderately wide slit, almond shaped
- bones: moderately in the back
- nose root; medium, moderately high
 - back: flared, straight
 - tip: pointed downwards
 - alar wings: thin, low, and expande
 - septum: short, wide, towards back wedge-shaped and tapered
 - nostrils: narrow, big
- jaw: prognathy Nr.1
- lips: thin

incisors

teeth: straight, big, white, and a gap at the bottom in-between the first

ears: close to head, helix edge on the top and in the back seamed earlobe: small, attached, pierced right and left

- big, worked
- thin, long
- small, short, flat
- thin, short
- big, long, wide
- right and left the second one
- tattooed

Nr.	Name	Body height	Height of the right acromion	Arm span	Entire length of the arm, right	Length of the right upper arm	Entire length of the right leg	Length of the burdened right foot	Width of the burdened right foot	Width in-between the acromia	Greatest length of the head	Greatest width of the head	Smallest width of the forehead	Width above the ear canal	Width of the cheekbone	Width between the inner corners of eyes	Width between the outer corners of eyes	Width of the nose	Width of the mouth opening
1 🖒	Guuon	164	133,8	160,4	72,2	31,3	97,1	23,2	11,4	36	19,3	14,3	11	13,5	13,2	3.1	9,8	4,8	7,1
2 🕈	Male ⁱ len	160,4	139,4	175,6	78,4	35,6	99	25,2	11	35	19,2	14,4	10,2	13,7	12,8	3,1	10,3	4,4	5,9
3 👌	Matiratira	157	129,4	158,7	70,5	32,4	94,2	25,1	11,5	31,5	18,7	13,8	10.7	12,9	12,4	3	9,2	4,4	6,2
4 👌	Eraselen	163,7	137,5	161,3	68,2	34	92,2	23,4	10,5	32	192	14,2	10,2	12,9	12,7	3,1	11,5	4,2	5,4
5 👌	Ue ⁱ ian	163,2	135	165,7	73	31,3	96,6	24,2	10	33,3	18,8	14,6	10,6	13	12,9	3	10,9	4	5,7
6 8	Ueese	155,5	129	152,7	71,6	33,3	96,9	24,3	9,2	28,6	17,9	14	11	13,3	11,4	3,2	9,6	3,9	5
7 8	Marapo	164,7	138,7	156,8	73	31	98,5	23,6	10,2		19,4	13,3	10,6	12,3	12,6	2,6	9,5	4,3	5,6
8 8	Iukam	162	135,1	158,3	71,5	31,6	96,2	25,1	10	28	19,1	14,3	10,7	12,8	12,4	3	9,6	4,2	5,3
98	Gumaiane	167,7	141,9	171,4	78,1	35,2	100,1	25,3	11,4	35,3	19,5	14,4	11,9	13,6	13,9	3,2	10,1	4,2	6
10 🖒	Menitorore	152,5	126,2	151,7	66,6	26,2	90,5				18,5	13,8	10,6	12,9	12,3	3,2	9,9	4,1	7,2
11 Q	Ta ⁱ ian	149	123,3	145,3	65,2	30,1	94,4	21,1	8,3	31	18	13,4	10,6	12,2	11,9	3	4,5	4,5	6,1
12 Ý	Ko ⁱ itek	157,3	129,1	141	66	30,2	88,1	20,2	8,3	26,4	19,1	14,2	10,9	12,6	12,3	3,2	10,5	3,5	6,5
13 ♀	Uele ⁱ la	159	130,6	154,1	70,1	31,2	92,2	19,1	9,4	29,5	18,4	14,2	10.9	12,4	12,4	3	10,2	4	5,1
14 ♀	Tasetania	158	131,3	143,3	67,7	31,3	95,7	21,8	8,1	30,4	17,9	13,7	11,2	12,8	12,9	3,4	9,3	3,7	5,6
15 ♀	Lamasia ⁱ len	143,6	117,8	133,	60,1	27,6	87,3	19,5	9,2	26,3	18,3	14	10,7	12,6	12	3,2	10,3	3,4	5,3
16 ♀	Logere ⁱ san	151,5	126,3	135,4	64,2	28,5	94,1	21,3	9,2	28,6	18,7	13,8	10,9	12,5	12,2	3,4	9,8	3,4	5,2
17 ♀	Sani	152	128,2	148	69,2	31,4	96	21,5	9,7	31,4	18,3	13,4	10,3	12,3	11,4	3	9,7	3,7	4,6
18 Q	Siriapa	151,1	124,3	141,3	65,2	29,7	93,3	21,5	9,8	30,6	18,4	13,9	11.6	12,7	12,3	2,8	9,3	3,9	5
19 ♀ 20 ○	Mesimok	151,5	126,5	142,5	68	30,3	87,2	18,5	9	28,1	18,2	13,5	10,2	12,7	11,9	1,9	9	3,8	5
20 ♀ 21 ♀	Mase ⁱ lopi corangei	158,3	133,8	138,7 157	69,2 69,5	30,3 29,2	97,4 95,3	21,5 22	10,3 9,5	29,7 29,6	18,7 17,5	13,5 13,7	10,6 11,4	13,2 13,4	13,5 13,2	3,5 2,2	10,5 9,2	4,7 3,2	5,9 4,7
21 ⊈ 22 ♀	Ha ⁱ sa	161,3 162	134,4 134,9	157	73,5	3,5	93,3 97.6	22	2,9	32	19,3	13,7	11,4	13,4	12,7	3.2	9,2 11,2	3,2 4,1	4,7 5,2
+	114.54	102	134,9	120,4	, 5,5	5,5	,,0		2,7	52	17,5	10,1	,2	10,0	12,7	5,2	11,2	1,1	2,2

Maleilen ♂, Merir

	edium; state of health: healthy		nedium, wide, moderately			
skin color	forehead	24		nedium, straight		
	cheek	23	1 1	nted down		
	region of the breast bone	alar wi	ngs: thin, low and clingin			
	abdomen (above the navel)	septum	: short, wide, wedge-shap			
	region of the shoulder blade	nostrils	nostrils; lengthwise oval, large			
	upper arm, bent side	29	jaw: prognatie	jaw: prognatie Nr. o		
	upper arm, stretched side	30	lips: bulging,	lips: bulging, edged, composite curve		
	palm of the hand	4		teeth: straight, large,		
	inner side of the upper thigh	28		ears: helix edge, edge		
	mucous membrane-upper lip	carmine white		earlobes: attached, pi		
	mucous membrane-lower lip	carmine white	hands	small, delicate		
character of the skin	soft, dry					
color of the iris	nr. 24; sclera: bluish; conjunctiva: dise	olored in the area of the opened	fingers	thin, long		
	slit of the lid		nails	small, shor		
color of the hair	hair of the head nr. 27		calves	thin, long,		
form of the hair	flat wavy, body hair: sparse		feet	small, narre		
head	forehead: moderately high, wide, strai	longest toe	the second			
	part: slightly domed	body tattooed	body tattooed in the old fashion			
	back head: curved					
	entire face: moderately high, elliptical					
	slit of the eye: slanted, narrowly slit, almond shaped, double eye lid					
		L · ·				

cheek bones: moderately protruding

Front height of lower face	Intertragal point to the tip of the nose	Intertragal point to the Alveolar point	Intertragal point to the chin	Horizontal circumference of head	Sagittal circumference of the head	Transversal circumference of head	Length and width index of the head	Length and height index of the head	Width and height index of the head	Physiogn. face index	Nose index
4,3	10,2	12,8	14,3	56,2	39,7	33,3	74,093	67,357	90,909	104,909	90,566
4,2	10,7	13,3	15,3	55,6	38,4	39,1	75	68,229	90,972	154,687	75,862
4,4	10,5	13	14,2	59,4	39,2	34,2	73,709	64,705	87,681	150	80
5,4	1,7	13,7	16,2				76,041	63,541	83,561	147,244	77,777
4,4	11,2	14	15,7	59,5	37,3	36,2	77,659	66,489	89,041	153,488	71,427
4,2	10,7	12,6	14	54,2	38,3	30,6	78,212	67,391	85,714	150,877	69,821
4,1	9,7	12,8	15,2	59	37,2	33,5	68,556	64,948	94,736	150,793	75,438
5	9,6	13,3	14,6	62	39,1	34,3	73,846	68,461	92,361	140,287	73,684
4,2	11,2	13,7	14,9	6	41,3	34,2	74,869	69109	92,307	158,064	76,363
4,2	10,4	13,2	14,9				74,594	61,081	81,884	136,585	77,358
3,6	11,1	12,1	13,8				74,444	67,777	91,447	152,100	83,333
4,2	10,8	12,3	13,5	55,2	37,6	33,3	74,345	70,680	95,070	156,097	62,500
3,9	10	12,2	13,9	51,6	37,4	33,9	77,173	73,369	95,070	140,322	74,074
3,8	10,6	13,7	15,7	52,2	37,3	32,2	76,536	72,625	95,620	131782	67,272
3,4	9,9	11,9	13,4	54,2	35,7	31,2	76,502	67,759	88,5	141,666	72,340
4,1	9,7	11,4	13,5	53,3	33,6	31,7	73,796	64,171	86,956	141,803	62,962
3,8	10,5	12,8	14,3	52,3	37,4	33,4	73,224	69,945	95,522	150,877	74
4,3	9,8	12,3	13,9	53,7	37,7	33,4	75,543	75	99,280	145,528	78
4	10	13,2	15	53	32	34,1	74,175	78,571	05,925	148,739	79,166
4,3	10,7	13,2	15,3	54,2	39,2	34,5	72,192	66,844	92,592	132,592	92,156
3,9	9,2	12,5	14,6	53,1	37,2	33,5	78,285	70,285	89,781	134,848	58,181
4,3	10,9	12,8	14	55	37,5	34,5	70,984	63,730	89,781	136,220	82

ely high

Physiogn. height of the upper face Morphol. Height of the lower face

Height of the nose Depth of the nose

Frenulum labii

Physiogn. height of the face Morphol. height of the face

Ears height of the head

ging

haped tapered to front, protruding down

ge, tooth-to-tooth position dged at the top and at the bottom , pierced right and left

nort, narrow, curved ng, limp arrow nd right and left

Matiratira ♂, 20 Years Old, Merir

<form>ender divide???<t< th=""><th>nutritional condition: fa</th><th>t; state of health: healthy</th><th></th><th>nutritional condition: m</th><th>edium; state of health: healthy except for fram</th><th>iboesia ulcers</th></t<></form>	nutritional condition: fa	t; state of health: healthy		nutritional condition: m	edium; state of health: healthy except for fram	iboesia ulcers		
<form> ngino fue bosino ? <td?< td=""> ? ?</td?<></form>	color of the skin	forehead	22	color of the skin	forehead	21		
<form> n sint (down (down)) ? ? n per unit (down (down)) ? ? n per unit (down (down)) ? ? n per unit (down) ?<!--</td--><td></td><td>cheek</td><td>22</td><td></td><td>cheek</td><td>17</td></form>		cheek	22		cheek	17		
spein ipper monitorial ipper monitorial <td< td=""><td></td><td>region of the breast bone</td><td>25</td><td></td><td>region of the breast bone</td><td>21</td></td<>		region of the breast bone	25		region of the breast bone	21		
<form> n pipe am, bends of all ?1 pipe am, bends of all ?2 pino fich land 32 pipe am, bends of all ?2 pino fich land 34 ?2 ?2 pino fich land 64 ?2 ?2 pino fich land ?2 ?2 ?2 ?2 pino fich land ?2 ?2 ?2 ?2 ?2 pino fich land ?2 ?2 ?2 ?2 ?2 ?2 pino fich land ?2 ?</form>		abdomen (above the navel)	25		abdomen (above the navel)	20		
i pipe ar, stepic dick 23 in The hand 4 in The hand 34 in The hand hand in the hand hand in the hand hand in the		region of the breast bone	20		region of the shoulder blade	26		
pino fue hors pin		upper arm, bent side	21		upper arm, bent side	26		
incr ide of the upper thing 24 incr ide of the upper thing minor upper thing incr ide of the upper thing <t< td=""><td></td><td>upper arm, stretched side</td><td>23</td><td></td><td>upper arm, stretched side</td><td>23</td></t<>		upper arm, stretched side	23		upper arm, stretched side	23		
nucos menora of the open 1 mine while nucos menopenora of the open 1 mine while		palm of the hand	4		palm of the hand	4		
oharacer of the ison omine while omin		inner side of the upper thigh	24		inner side of the upper thigh	24		
charter of the skrii: order of the skrii: often de sindig requirementaria charter of the skrii: often de sindig requirementaria often de sindig requiremen		mucous membrane of the upper lip	carmine white		mucous membrane of the upper lip	carmine white		
or of the insisen2-3 stern: yellowish; conjunctive: discolored in the area of open shit of the lidior of the lidieor discolored, spatied in area of open shit of the lidieor of the hairwide wary:color of the hairplain, bair of the body: noneplain, bair of the body: nonehadform of the hairplain, bair of the body: noneplain, bair of the body: nonehaddform of the hairplain, bair of the body: noneplain, bair of the body: nonehaddform of the hairplain, bair of the body: noneplain, bair of the body: nonehaddform of the discolored, spatied in area of open shit of the lidieplain, bair of the body: nonehaddfored: moderately high and wide, straight, enverd.back of the hair:part: signtly domedpart: signtly domedstraight, enverd.back of the hair:inter fore: moderately high and wide, straight, enverd.straight, enverd.back of the hair:inter fore: moderately high and wide, straight, enverd.straight, straight, straight, enverd.back of the hair:inter fore: moderately high and wide, straight, enverd.straight, straight, straight, enverd.back of the hair:inter fore: moderately high and wide, straight, enverd.straight, straight, enverd.straight, enverd.inter fore: moderately high and wide, straight, enverd.straight, straight, enverd.straight, straight, enverd.inter fore: moderately high and wide, straight, enverd.straight, straight, enverd.straight, straight, enverd.inter fore: moderately high and straight, enverd.straight, straight, enverd.s		mucous membrane of the lower lip	carmine white		mucous membrane of the lower lip	carmine white		
color of the hair hair of the head nr. 3 hair of the head nr. 25, timened group, sideburna form of the hair hair of the head nr. 25, timened group, sideburna form of the hair hair of the head none form of the hair form of the hair hair of the head none for other hair for head: modernately high, narrow, modernately needing hair of the head control the head nore hair of the head more hair of the head for other head more hair of the head more hair of the head nore hold other head more hold other head more hair of the head nore hold other head nore hold other head more hold other head hold other head more hold other head hold other head more hold other head hold othead	character of the skin:	soft, dry		character of the skin:	soft, dry			
form of the bair wide wavy; form of the bair plain; bir of the bady; mode hair of the bady; norm of the bair plain; bir of the bady; mode hair of the bady; forebad; moderately high and wide, straight, curved. part: slight/ domed hair of the bady; part: slight/ domed back of the had; matrix slight/ domed hair of the bady; part: slight/ domed back of the had; matrix filter; moderately high, and wide, elliptical, pointed downwards, moderately in the pressenting the moderately birgh; moderately high, nuberuley birgh; and moderately wide, pointed downwards, moderately moderately high, and wide, elliptical, pointed downwards, moderately in the pressenting the moderately birgh; moderately high, nuberuley birgh; moderately high, and wide, elliptical, pointed downwards, moderately in the pressenting the moderately high, anternot high moderately high, moderately	color of the iris	nr.2-3; sclera: yellowish; conjunctiva: d	iscolored in the area of open slit of the lid	color of the iris	nr. 4; sclera, bluish, conjunctiva: discolor	ed, spotted in area of open slit of the lid		
init of the body: none ⁺ forchead:::moderately high, narrow, moderately receding: head forchead:::moderately high, and wide, straight, curved. part:: slightly domed back of the head::: curved part:: slightly domed back of the head::: curved back of the head::: curved entire face::: moderately high, and/enderately wide, pointed downwards, moderately stack of the peri::: straight, moderately slit, almond shaped, double eye lid straight forchead::: straight, moderately slit, almond shaped, double eye lid cleakboxes::::::::::::::::::::::::::::::::::::	color of the hair	hair of the head nr. 3		color of the hair	hair of the head nr. 27, turned grey, sidebu	urns		
head foreheat moderately high and wide, straight, curved. part: sightly domed back of the head: fits part: sightly domed back of the head: ended back of the head: fits part: sightly domed back of the head: ended ender head: fits part: sightly domed back of the head: fits back of the head: fits part: sightly domed fits fits fits fits part: sightly domed fits fits fits fits fits part: sight moderately protonding fits	form of the hair	wide wavy;		form of the hair	plain; hair of the body: none			
net: per: juit juit juit juit juit juit juit juit	hair of the body:	none		head	forehead: moderately high, narrow, moderately receding			
back of the head: curved entir fac::::::::::::::::::::::::::::::::::::	head	forehead: moderately high and wide, strai	ight, curved.		part: slightly domed			
entire face: moderately high, elliptical, moderately wide, pointed downwards flat, strongly developed eveloped evelope		part: slightly domed			back of the head: flat			
site of the eye: straight, moderately sit, almond shaped, double eye lid site of the eye: straight, moderately sit, almond shaped, double eye lid cheekbones: moderately protruding cheekbones: cheekbones: in enditum, moderately high in enditum, moderately high in enditum, moderately high is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in enditum, moderately high in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in prime downwards is prime downwards in prime downwards in pr		back of the head: curved			entire face: moderately high and wide, elliptical, pointed downwards, moderately			
i checkbones: moderately protruding checkbones: moderately protruding nose rote: medium, moderately high nose rote: medium straight i best: medium, straight nose rote: medium straight i: pointed downwards ip: pointed downwards alar wings: thin, low, clinging i: pointed intervention ip: pointed downwards alar wings: thin, low, clinging i: septim: short, wide, protruding at the bottom end jau: Progratie Nr.o jau: Progratie Nr.o i: jau: Progratie Nr.o jau: Progratie Nr.o jau: Progratie Nr.o i: jau: Progratie Nr.o lip::::::::::::::::::::::::::::::::::::		entire face: moderately high, elliptical, m	oderately wide, pointed downwards		flat, strongly developed eyebrow curves			
noserot: medium, moderately highnoserot: medium flatback: medium, straightback: medium straightback: medium straightback: medium straighttip: pointed downwardsiar wing: thin, low, clingingtip: motifier arwings: thin, lowtip: pointed downwardssepture: short, wide, protruding at the bottom endtip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, lowtip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, lowtip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, lowtip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, lowtip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, lowtip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, edged, composite curvetip: motifier arwings: thin, low, clingingtip: motifier arwings: thin, edged, composite curvetip: motifier arwings: thin, speeded at the top and backtip: motifier argit small, white, healthytip: motifier argit small, white, healthytip: motifier argit small, attrached, pierced on both sideshandstip: motifier argit small, attrached, pierced on both sideshandstip: motifier argit small, white, flat top and at the bottomfingertip: motifier argit small, white, flat top and at the bottomfingertip: motifier argit small, white, flat top and at the bottomfingertip: motifier argit small, white, flat top and at the bottomfingertip: motifier argit small, white, flat top and the bottomfingertif		slit of the eye: straight, moderately slit, al	lmond shaped, double eye lid					
back: medium, straight back: medium, straight ip: pointed downwards ip: pointed downwards alar wings: thin, low ip: pointed downwards alar wings: thin, low ip: pointed downwards ip: pointed downwards ip: pointed downwards alar wings: thin, low ip: pointed downwards ip: pointed downwards ip: pointed downwards </td <td></td> <td>cheekbones: moderately protruding</td> <td></td> <td></td> <td colspan="4"></td>		cheekbones: moderately protruding						
ip: pointed downards ip: pointed downards alar wings: thin, low alar wings: thin, low, clinging alar wings: thin, low alar wings: thin, low, clinging septum: short, wide, portruding at the bottom end ip: moltil: narrow, big nostril: narrow, big postril: narrow, big jaw: Prognatie Nr. o jaw: Prognatie Nr. o ip: medium, edged, composite curve lip: medium, edged, composite curve text: straight small, white, healthy text: straight small, weile, edged at the top and back ears: close to head, helix edge dged at the top and at the bottom earlow: record right and left nards mall, delicated postril: narrow fnger thin, long mall, short, wide, fat nails mall, short, wide, fat mall, short, wide, fat calves thin, long, tight, fat mall, wide, fat feet stop, short, wide, fat mall, wide, fat fat mall, short, wide, fat mall, wide, fat fate thin, long, tight, fat mall, wide, fat fate thin, long, tight, fat mall, wide, fat fate thin, long, tight, fat mall, wide, fat fato thin, long, tigh		nose root: medium, moderately high			nose root: medium flat			
alar wings: thin, low alar wings: thin, low, elinging septum: short, wide, protruding at the bottom end nostrils: narrow, big nostrils: narrow, big jaw: Prognatie Nr.o jaw: Prognatie Nr. o jaw: Prognatie Nr.o lips: medium, edged, composite curve lips: medium, edged, composite curve ice::: straight small, white, healthy ears: close to head, helix edge edged at the top and back ears: close to head, helix edge edged at the top and at the bottom ears: close to head, helix edge, edged at the top and back ears: close to head, helix edge edged at the top and at the bottom ears: close to head, helix edge, edged at the top and back ears: close to head, helix edge edged at the top and at the bottom ears: close to head, helix edge, edged at the top and back finger hands small, worked finger small, delicate finger nails small, short, wide, flat calves in short, wide, flat calves small, wide feet big, short, wide feet small, wide		back: medium, straight			back: medium straight			
septum: short, wide, protruding at the bottom end nostrils: narrow, big nostrils: narrow, big jaw: Prognatie Nr.o jaw: Prognatie Nr. o lips: medium, edged, composite curve lips: medium, edged, composite curve lips: medium, edged, composite curve texth: straight small, white, healthy ears: close to head, helix edge, edged at the top and back texth: straight small, white, healthy earlobes: free, pierced right and left ears: close to head, helix edge edged at the top and at the bottom earlobes: free, pierced right and left mads small, delicate hands small, worked finger thin, long mails small, short, wide, fatt nails small, short, wide, fatt carved fact faces thin, kont, wide, fatt small small, short, wide, fatt faces thin, short, wide, fatt faces thin, short, wide, fatt faces thin, short, wide, fatt face small, wide faces thin, short, wide, fatt faces thin, short, wide, fatt faces thin, short, wide, fatt faces thin, short, wide, fatt faces thin, short, wide, fatt faces thin, short,		tip: pointed downwards			tip: pointed downwards			
nostrils: narrow, bigjaw: Prognatie Nr. ojaw: Prognatie Nr. oips: medium, edged, composite curvelips: medium, edged, composite curvelips: medium, edged, composite curveips: medium, edged, composite curveteeth: straight small, white, healthyteeth: straight small, white, healthyiears: close to head, helix edge edged at the top and at the bottomears: close to head, helix edge, edged at the top and backiearlobe small, attached, pierced on both sideshandssmall, workedingersmall, delicatenailssmall, short, wide, curvedingerauil, short, wide, flatcalvesthin, short, wide, flatiearlobe singt, short, wide, flatcalvesthin, short, tightthin, short, tight and leftiearlobe singt, short, wide, flatcalvesthin, short, wide, flatthin, short, wide, curvediearlobe singt, short, wide, flatcalvesthin, short, tight and leftthin, long, limpiearlobe singt, short, wide, flatcalvesthin, short, wide, curvedthin, long, limpiearlobe singt, wide, flatcalvesthin, short, wide, flatthin, short, wide, flatiearlobe singt, wide, flatthin, short, tight and leftthin, long, limpiearlobe singt, tightthin, short, tight and leftthin, long, limpiearlobe singt, tightthin, short, tight and leftthin, long, limpiearlobe singt, tightthin, short, tight and leftthin, long, limpiearlobe singt, tightthingt, thingt, thi		alar wings: thin, low			alar wing: thin, low, clinging			
jaw: Prognatie Nr. olips: medium, edged, composite curvelips: medium, edged, composite curveteeth: straight, big, healthy, yellowishteeth: straight small, white, healthyears: close to head, helix edge, edged at the top and backears: close to head, helix edge edged at the top and at the bottomears: close to head, helix edge, edged at the top and backearlobes: straight small, white, healthyears: close to head, helix edge, edged at the top and backearlobes: free, pierced right and leftearlobes: free, pierced right and leftearlobes: free, pierced right and leftsmall, workedfingerthin, longnailssmall, short, wide, flatnailssmall, short, wide, flatcalvesthin, short, tightfietbig, short, widebig, short, widefeetbig, short, wide		septum: short, wide, protruding at	the bottom end		nostrils: narrow, big			
lips: medium, edged, composite curveteeth: straight, sig, healthy, yellowishteeth: straight small, white, healthyears: close to head, helix edge, edged at the top and backears: close to head, helix edge edged at the top and at the bottomearlobes: free, pierced right and leftearlobe small, attached, pierced on both sideshandssmall, workedhandssmall, delicatefingerthin, shortfingerthin, longsmall, short, wide, flatcalvesnailssmall, short, wide, flatcalvesthin, long, limpfeetthin, short, tightfeetsmall, widefeetbig, short, widefeetsmall, wide		nostrils: narrow, big			jaw: Prognatie Nr.o			
teth: straight small, white, healthyears: close to head, helix edge, edged at the top and backears: close to head, helix edge edged at the top and at the bottomearlobes: free, pierced right and leftearlobe small, attached, pierced on both sideshandssmall, workedhandssmall, delicatefingerthin, shortfingerthin, longsmall, short, wide, flatsmall, short, wide, curvednailssmall, short, wide, flatcalvesthin, long, limpcalvesthin, short, tightfeetsmall, widefeetbig, short, widefentthe first right and left		jaw: Prognatie Nr. o			lips: medium, edged, composite curve			
ears: close to head, helix edge edged at the top and at the bottomearlobes: free, pierced right and leftearlobes small, attached, pierced on both sideshandssmall, workedhandssmall, delicatefingerthin, shortfingerthin, longsmall, short, wide, flatsmall, short, wide, curvednailssmall, short, wide, flatcalvesthin, long, limpcalvesthin, short, tightfeetsmall, widefeetbig, short, wide, flatlongest toethe first right and left		lips: medium, edged, composite curve			teeth: straight, big, healthy, yellowish			
earlobe small, attached, pierced on both sideshandssmall, workedhandssmall, delicatefingerfingerthin, shortfingerthin, longnailssmall, short, wide, curvednailssmall, short, wide, flatcalvesthin, long, limpcalvesthin, short, tightfeetsmall, widefeetbig, short, wide, flatlongest toethe first right and left		teeth: straight small, white, healthy			he top and back			
handssmall, delicatefingerthin, shortfingerthin, longnailssmall, short, wide, curvednailssmall, short, wide, flatcalvesthin, long, limpcalvesthin, short, tightfeetsmall, widefeetbig, short, widelongest toethe first right and left		ears: close to head, helix edge edged at th	e top and at the bottom		earlobes: free, pierced right and left			
fingerthin, longnailssmall, short, wide, curvednailssmall, short, wide, flatcalvesthin, long, limpcalvesthin, short, tightfeetsmall, widefeetbig, short, widelongest toethe first right and left		earlobe small, attached, pierced on both s	sides	hands				
nailssmall, short, wide, flatcalvesthin, long, limpcalvesthin, short, tightfeetsmall, widefeetbig, short, widelongest toethe first right and left	hands	small, delicate		finger				
calvesthin, short, tightfeetsmall, widefeetbig, short, widelongest toethe first right and left	-	thin, long		nails	small, short, wide, curved			
feet big, short, wide the first right and left		small, short, wide, flat						
	calves	-		feet	small, wide			
longest toe the first right and left body in old fashion tattooed	feet			•	-			
	longest toe	the first right and left		body in old fashion tatte	body in old fashion tattooed			

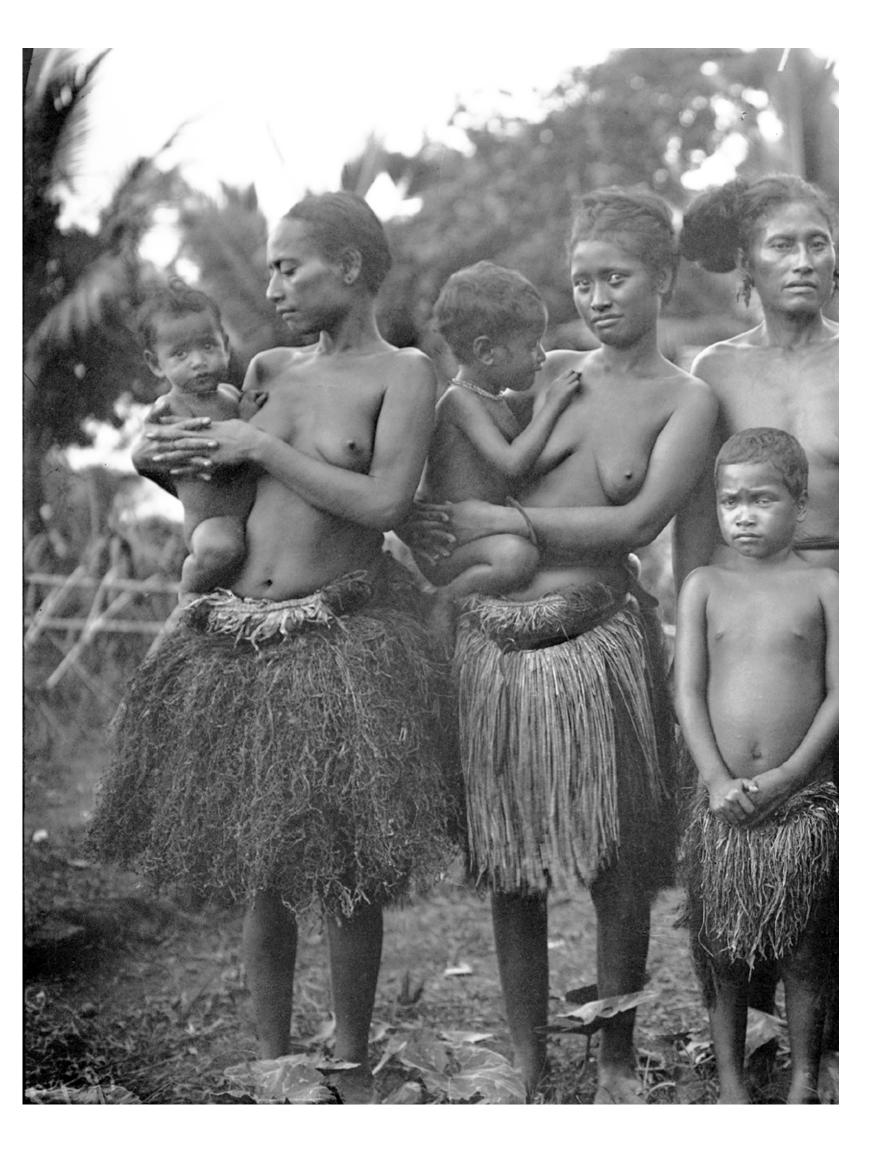
Eraselen 👌, Merir

Ueiian 👌, 25 Years Old, Merir

nutritional condition: medium; state of health: healthy			nutritional condition: medium; state of health: healthy		
color of the skin			color of the skin	forehead	11
	forehead	14		cheek	11
	cheek	16		region of the breast bone	18
	region of the breast bone	16		abdomen (above the navel)	18
	abdomen (above the navel)	21		region of the should blade	20
	region of the shoulder blade	22		upper arm, bent side	20
	upper arm, bent side	20		upper arm, stretched side	21
	upper arm stretched side	21		palm of the hand	4
	palm of the hand	4		inner side of the upper thigh	23
	inner side of the upper thigh	21		mucous membrane-upper lip	carmine white
	mucous membrane of the upper lip	carmine white		mucous membrane-lower lip	carmine white
	mucous membrane of the lower lip	carmine white	character of the skin	soft, dry	
character of the skin	soft, dry		color of the iris	Nr. 4;	
color of the iris	Nr.3;		color of the hair	hair of the head Nr. 3	
Sclera:	yellowish; conjunctiva: discolored, spotte	d in the area of the open slit of the lid	form of the hair	narrow waves; hair of the body: none	
color of the hair:	hair of the head Nr. 27		head	forehead: low, narrow, curved	
form of the hair:	wide wavy-frizzy; body hair: very sparse			parting: slightly domed	
head	forehead: low, narrow, straight, curved			back of the head: curved	
	part: slightly domed			entire face: moderately high, oval, mod	lerately wide, pointed dow
	back of the head: curved			slit of the eye: slanted slit, almond shap	ped, double eye lid
	entire face: moderately high, elliptical, me	oderately wide, pointed downwards.		cheek bones: moderately protruding	
	slit of the eye: slanted, narrowly slit			nose root: medium, moderately h	igh
	cheekbone: moderately protruding			back: medium, straight, slig	htly bent to the side
	nose root: medium, flat			tip: pointed downwards	
	back: medium, straight			alar wings of the nose: thin,	clinging
	tip: pointed downwards			septum: short, towards the b	ack wedge-shaped and tap
	alar wing: thick, low, clinging			protruding at the bottom	
	septum: short wide, and wedge	-shaped and tapered toward the back,		nostrils: narrow, large	
	protruding at the bottom			jaw: Prognatie Nr. 1	
	nostrils: lengthwise-oval, big			lips: medium, edged, composite curve	
	jaw: Prognatie Nr.1			teeth: straight, small, healthy, white, ov	verbite
	lips: medium, bulging, edged, composite	curve		ears: close to head, helix edge, edged of	on the top and the back
	teeth: straight, big, healthy, overbite, yello	owish		earlobe: attached, pierced left and right	t
	ears: close to head, helix edge, edged at th	ne top and the back	hands	small, delicate	
	earlobes: attached, pierced right and left		finger	thin, long	
hands	small		nails	small, short, narrow, flat	
finger	thin, long, limp		calves	thin, short, limp	
nails	small, short, wide, flat		feet	small, short, narrow	
calves	thin, long, limp		longest toe	the second on the right and left foot	
feet	small, long, narrow			C C	
longest toe	the second right and left		Remark. The skin is light	hter than the skin of the other Merir-People.	This type ressembles more
body tattooed in the old	•			nily of the man was indicated as a pure and o	

downward. tapered

more the population of Palau, however, the family of the man was indicated as a pure and old Merir-Clan.





Group of women from Merir. Photo by Sarfert. Glass plate scan, Hamburg Museum.

Marapo ♂, 25 Years Old, Merir

nutritional condition: m	edium; state of health: healthy		nutritional condition: fat	; state of health: healthy	
color of the skin	forehead	18	color of the skin	forehead	23
	cheek	17		cheek	17
	region of the breast bone	21		region of the breast bone	21
	abdomen (above the navel)	26		abdomen (above the navel)	23
	region of the shoulder blade	28		region of the shoulder blade	25
	upper arm, bent side	28		upper arm, bent side	25
	upper arm, stretched side	25		upper arm, stretched side	26
	palm of the hand	4		palm of the hand	4
	inner side of the upper thigh	26		inner side of the upper thigh	27
	mucous membrane-upper lip	carmine white		mucous membrane-upper lip	carmine white
	mucous membrane-lower lip	carmine white		mucous membrane-lower lip	carmine white
character of the skin	soft, dry		character of the skin	soft, dry	
color of the iris	Nr. 2; Sklera: bluish; conunctiva: disco	olored in the area of the open slit of the eye	color of the iris N	r. 3; Sklera: bluish; conunctiva: discolored	and spotted in area of open slit of the eye
color of the hair	hair of the head nr. 27		color of the hair	hair of the head Nr. 27/3	
form of the hair	flat wavy; body hair: very sparse		form of the hair	wide wavy; body hair: weak	
head	forehead: low,narrow, straight, curved		head	forehead: moderately high, wide, strai	ght, curved
	parting: slightly domed			parting: slightly domed	
	back of the head: curved			back of the head: flatly curved	
	entire face: moderately high, elliptical	, moderately wide, pointed downward.	entire face: moderately h	high and wide elliptical, pointed downward	1
	slit of the eye: slanted, narrowly slit, a	lmond shaped, double eye lid		slit of the eye: straight, moderately wi	de slit, almond shaped, double eye lid
	cheekbones: moderately protruding			cheekbones: moderately protruding	
	nose: root: medium, moderately high			nose root: medium high	
	back: medium, straight			back: medium, straight	
	tip: pointed downwards			tip: pointed downwards	
	alar wings of the nose: thin,	low, clinging		alar wings of the nose: thin,	
	septum: short, wide, wedge	-shaped and tapered toward the back,		-	ge-shaped, tapered to front, lying high
	protruding downwards			nostrils: narrow, big	
	nostrils: lengthwise-oval			jaw: Prognatie Nr. o	
	jaw: Prognatie Nr. o			lips: medium, edged, upper edge: com	posite curve
	lips: medium, bulging, edged; upper e			teeth: straight, small, white, overbite	
	teeth: straight, big, white, tooth-to-toot	th position		ears: close to head, helix edge, edged	-
				earlobes: attached, pierced left and rig	ht
	ears close to head, helix edge, edged o	n the top	hands	small	
			finger	thin, long	
	earlobes: attached, both pierced		nails	small, short, narrow, flat	
			calves	thin, long, strapping	
hands:	"Caroline hand" developed on the rig	ht	feet	small, narrow	
finger the first two -1-1	anges of the index finger cannot be bent o	therewise normal	longest toe	the second on the left and right foot	
Ingel ne nisi wo bha	anges of the index ingel cannot be bene of				

finger: the first two phalanges of the index finger cannot be bent, otherwise normal

Iukam 👌, 25 Years Old, Merir

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Gumaianeⁱ ♂, 25 Years Old, Merir.

	edium; state of health: healthy		nutritional condition: me	edium; state o
color of the skin	forehead	20	color of the skin	forehead
	cheek	21		cheek
	region of the breast bone	24		region of
	abdomen (above the navel)	24		abdomer
	region of the shoulder blade	26		region of
	upper arm, bent side	26		upper arr
	upper arm, stretched side	24		upper arr
	palm of the hand	4		palm of t
	inner side of the upper thigh	28		inner sid
	mucous membrane-upper lip	carmine white		mucous 1
	mucous membrane-lower lip	carmine white		mucous 1
character of the skin	soft, dry		character of the skin	soft, dry
color of the iris	Nr. 3; Sklera: yellowish; conunctiva: c	liscolored in area of open slit of the eye	color of the iris	Nr. 4; Sk
color of the hair	hair of the head Nr. 27			sl
form of the hair	flat wavy; body hair: none		color of the hair	hair of th
head	forehead: high, wide, straight, full		form of the hair	flat wavy
	parting: slightly domed		head	forehead
	back of the head: curved			parting: s
	entire face: high, elliptical, moderately	v wide, pointed downwards		back of t
	slit of the eye: slanted, moderately wid	le slit, almond shaped, double eye lid		entire fac
	cheekbones: strongly protruding			slit of the
	nose root: medium, moderately h	igh		cheekbor
	back: medium, straight			nose
	tip: pointed downwards			
	alar wings of the nose: thin	low, clinging		
	septum: short, wide, wedge	-shaped and tapered towards front,		
	the bottom protruding, lying	g high		
	nostrils: narrow, big			
	jaw: Prognatie Nr. o			jaw: Prog
	lips: medium, edged, upper edge: com	posite curve		lips: med
	teeth: straight, big, white, tooth-to-too	th position		teeth: slo
	ears: close to head, helix edge, edged	on the top		ears: clos
	earlobes: attached, pierced left and rig	ht		earlobes:
hands	big		hands	small
finger	thin, long		finger	thick, she
nails	small, short, narrow, flat		nails	small, sh
calves	thin, short, limp		calves	thin, long
feet	small, short, wide		feet	small, sh
longest toe	the second on the left and right foot		longest toe	the first o
knock knees	-		-	

Menitoroe ♂, 30 Years Old, Merir.

te of health: covered with ringworm ead

n of the breast bone nen (above the navel) 18 for all n of shoulder blade arm, bent side arm, stretched side of the hand side of the upper thigh us membrane-upper lip carmine white us membrane-lower lip carmine white lry Sklera: yellowish; conunctiva: discolored in the area of the open slit of the eye the head Nr. 27 avy; body hair: very sparse ead: low, wide, straight, full g: slightly domed of the head: curved face: moderately high, oval, wide, pointed downwards the eye: slanted, moderately wide slit, almond shaped, bones: moderately protruding root: narrow, moderately high back: medium, straight tip: pointed downwards alar wings of the nose: thin, low, distended septum: short, narrow, wedge-shaped and tapered towards back nostrils: narrow, diagonally oval, big rognatie Nr. o nedium, bulging, upper edge: composite curve sloping, small, white, tooth-to-tooth position lose to head, helix edge, edged on the top and the back bes: attached, pierced left and right short short, wide, curved

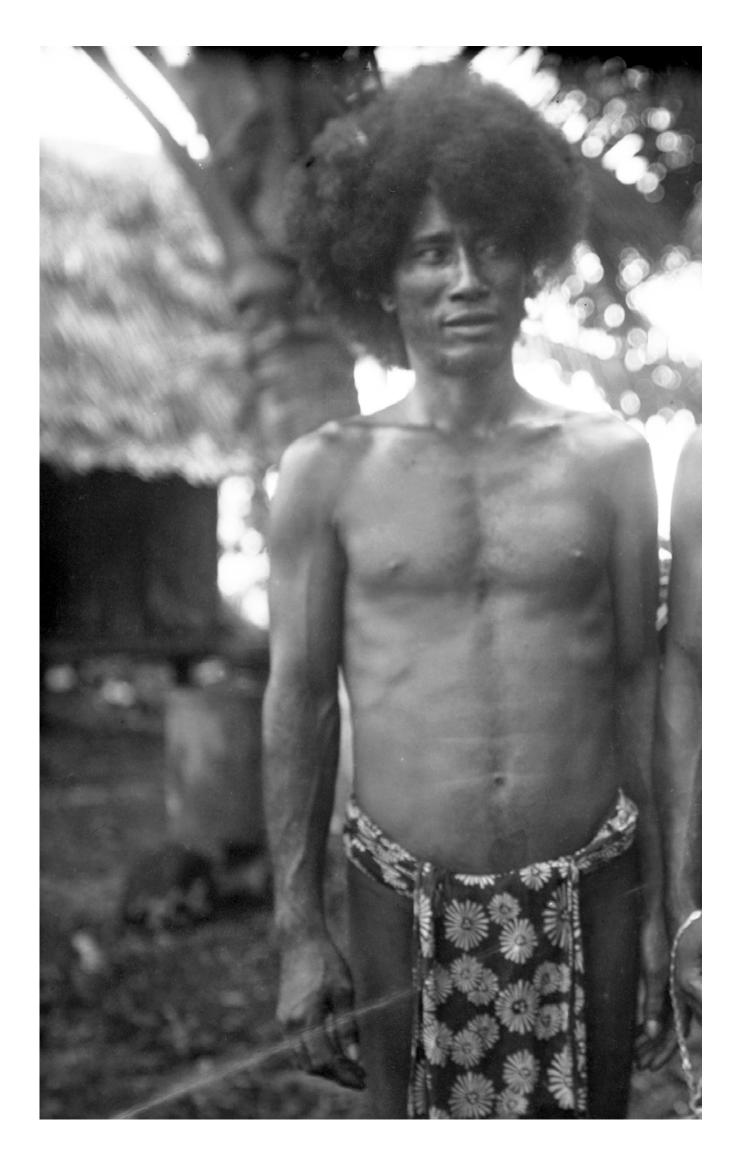
, short, wide, curved ong, limp , short, narrow rst one on the left and right foot

Taiian ♀, 25 Years Old, Merir

nutritional condition: sk	inny; state of health: healthy		nutritional condition: fa	t; state of health: healthy	
color of the skin	forehead	11	color of the skin		
	cheek	11		forehead	14
	region of the breast bone	18		cheek	13
	abdomen (above the navel)	17		region of the breast bone	5
	region of the shoulder blade	27		belly (above the navel)	16
	upper arm, bent side	23		region of the shoulder blade	20
	upper arm, stretched side	21		upper arm, bent side	21
	palm of the hand	4		upper arm, stretched side	21
	inner side of the upper thigh	24		palm of the hand	5
	mucous membrane-upper lip	carmine white		inner side of the upper thigh	24
	mucous membrane-lower lip	carmine white		mucous membrane-upper lip	carmine white
character of the skin	soft, dry			mucous membrane-lower lip	carmine white
color of the iris	Nr. 2; Sklera: yellowish; conunctiva: dis	scolored, spotted in the area of the open slit	character of the skin	soft, dry	
	of the eye		color of the iris	nr. 2; sclera: bluish; conjunctiva: dise	colored in the area of open slit of the eye
color of the hair	hair of the head Nr. 27		color of the hair	hair of the head nr. 27;	
form of the hair	simple; body hair: none		form of the hair	simple;	
head	forehead: low, narrow, straight, full		body hair:	none	
	parting: slightly domed		head	forehead: high, narrow, straight, curv	ved
	back of the head: curved			crown of the head: slightly curved	
	entire face: moderately high, oval, wide,			back of the head: curved	
	slit of the eye: slanted, moderately wide	slit, almond shaped,		entire face: moderately high and wid	le, elliptical, pointed at the bottom
	cheekbones: strong protruding			slit of the eye: slanted, narrowly slit,	almond shaped, double eyelid
	nose root: narrow, moderately high			cheekbones: protruding	
	back: medium, straight, mode	rately concave, edgy curved.		nose root: medium, flat	
	tip: pointed upwnwards alar wings of the nose: thin, low, clinging			back: medium, straight	
				tip: pointed downwards	
		-shaped and tapered towards back		alar wing: thin, low, clinging	
	nostrils: narrow, big			septum: short, wide, wedge-sł	naped and tapered to front, protruding down
	jaw: Prognatie Nr. o			nostrils: narrow, big	
	lips: medium, edged			jaw: prognathism nr. o	
	teeth: slanting, small, white, tooth-to-too	-		lips: medium, bulging, lined, upper e	edge: composite curve
	ears: clinging, helix edge, lined on the to	pp		teeth: slanting, big, overbite, white, l	healthy
	earlobes: free, perforated left and right			ears: clinging, helix edge, lined on th	ne top
hands	small			earlobes: attached, pierced left and r	ight
fingers	thin, long		hands	small, delicate	
nails	small, short, wide, flat		fingers	thin, long	
calves	thin, short, limp		nails	small, short, flat	
feet	small, short, wide, pointing inward		calves	thin, short, limp	
longest toe	the second one on the left and right foot,	-	feet	small, short, narrow	
breasts:	hanging, diameter of the nipple 37 mm ¹ ,	, color 25, edge blurred, nipple small	longest toe	the second one right, the first one left	ft. Big toe clinging.
			breasts:	hemispheric, diameter of the nipple 2	20 mm, color 26, edge sharp- cut, nipple small

Koiitek ♀, 20 Years, Merir

¹ Here and in the following records we talk about the areola.





Men from Merir. Photo by Sarfert. Glass plate scan, Hamburg Museum.

Ueleila ♀, Merir

nutritional condition: fat;	state of health: healthy		nutritional condition	n: medium; state of health: healthy	
color of the skin	forehead	20	color of the skin	forehead	19
	cheek	19		cheek	13
	region of the breast bone	19		region of the breast bone	12
	belly (above the navel)	21		belly (above the navel)	20
	region of the shoulder blade	23		region of the shoulder blade	23
	upper arm, bent side	24		upper arm, bent side	21
	upper arm, stretched side	25		upper arm, stretched side	20
	palm of the hand	4		palm of the hand	5
	inner side of the upper thigh	26		inner side of the upper thigh	24
	mucous membrane-upper lip	carmine white		mucous membrane-upper lip	carmine white
	mucous membrane-lower lip	carmine white		mucous membrane-lower lip	carmine white
character of the skin	soft, dry		character of the skir	n soft, dry	
color of the iris	nr. 2; sclera: yellowish; conjunctiv	va: discolored in area of the open slit of the eye	color of the iris	nr. 3; sclera: yellowish; conjunctiv	a: in the area of the op
color of the hair	hair of the head nr. 27			discolored, spotted	-
form of the hair	simple, wide wavy		color of the hair	hair of the head nr. 27;	
body hair:	none		form of the hair	simple, flat wavy;	
head	forehead: moderately high, narrow	v, straight, full	body hair	none	
	crown of the head: slightly curved	1	head	forehead: high, wide, curved, full	
	back of the head: curved			crown of the head: slightly domed	
	entire face: moderately high and v	vide, pointed at the bottom		back of the head: curved	
	slit of the eye: straight, narrowly s	•		entire face: moderately high, ellipt	tic, moderately wide, p
	cheekbones: moderately protrudir			slit of the eye: slanted, moderately	• •
	nose root: medium, flat				
	back: medium, straight			_	
	tip: pointed downwards			R. mmmppci	lilicppn
	alar wing: thin, low, cling	ging		R	
	-	ge-shaped and tapered to back, protruding down		mmmppcii	i i cppn i i cppn
	nostrils: narrow, big	8			11 11
	jaw: prognathism nr. o				
	lips: medium, bulging, lined, upp	er edge: composite curve	cheekbones: moderat	ely protruding	
		e, upper jaw very big teeth, lower			lerately high back: med
	jaw small, set of teeth big and hea			tip: pointed downw	vards
	ears: clinging, helix edge, lined or	-		alar wing: thin, low	
	earlobes: attached, pierced left an			_	e, wedge-shaped and ta
hands	small, delicate	5		-	downwards
fingers	thin, short			1 0	w, big jaw: prognatism
nails	small, short, flat		lips: medium, bulgi	ng, lined, upper edge: composite curve	
calves	thin, short, limp		teeth: sloping, big, v		
feet	small, narrow			helix edge, lined on the top and in the	back earlobes: attached
longest toe	the second one left and right		hands	small, delicate	
breasts:	•	5 mm, color 18, edge blurry, nipple big	fingers	thin, long	
01000505.	hanging, chanceer of the inpple of	, min, color 10, cage orarry, inppre org	nails	small, short, curved	
			1		

Tasetania ♀, 23 Years, Merir

he open slit of the eye

ide, pointed down, moderately flat l shaped, double eye lid

p m m m L. pmmm

medium, straight and tapered toward the front, atism nr. o

tached, pierced left and right

thin, short, limp

small, narrow

calves

breasts

feet longest toe

the second one left and right

hanging, diameter of the nipple 40 mm, color 26, edge blurry, nipple small

Lamasiailen ♀, 20 Years, Merir

	nedium; state of health: healthy			: medium; state of health: health	10
color of the skin	forehead	21	color of the skin	forehead	12
	cheek	13		cheek	20
	region of the breast bone	16		region of the breast bone	21
	abdomen (above the navel)	27		abdomen (above the navel)	21
	region of the shoulder blade	26		region of the shoulder blade	24
	upper arm, bent side	24		upper arm, bent side	25
	upper arm, stretched side	23		upper arm, stretched side	24
	palm of the hand	5		palm of the hand	5
	inner side of the upper thigh	26	character of the skin	inner side of the upper thigh soft, dry	26
	mucous membrane-upper lip	carmine white	color of the iris	nr. 3	
	mucous membrane-lower lip	carmine white	color of the hair	hair of the head nr. 27, form of the	he hair; sim
character of the skin	soft, dry		head	forehead: low, narrow, straight	
color of the iris		discolored in the area of the open slit of the eye		crown of the head: slightly dome	
color of the hair	hair of the head nr. 27			entire face: moderately high, ellip slit of the eye: slanted, narrowly	-
form of the hair	simple; flat wavy,			cheekbones: moderately protrudi	
body hair:	none			nose root: wide, flat. back: me	U
head	forehead: low, narrow, straight, fu			tip: pointed downward, a	0
	crown of the head: slightly curved back of the head: domed	d		septum: short, wide, hour	r glass shape
	entire face: moderately high and	wide, pointed downwards		nostrils: narrow, big jaw: prognathism nr. 2	
		y wide slit, almond shaped, double eye lid		lips: medium, bulging, lined, upp	per edge: co
	cheekbones: moderately protruding			teeth: slanting, small, overbite, w	
	nose root: wide, flat bac	ck: wide		ears: clinging, helix edge, lined.	earlobes atta
	tip: pointed forwa		hands	small	~
	alar wing: thin, lo		fingers	thin, long. nails small, short, narr	row, flat
	_	dge-shaped and tapered toward the back, lying high	calves feet	thin, long, limp small, narrow, longest toe = the s	second one l
	nostrils: lengthwis jaw: prognathism nr. 1	e-oval, big	breasts:	hemispherical, dia.of nipple 24 m	
	lips: medium, lined, upper edge:	composite curve	Papua type	nemispherieur, dialor nipple 2 m	
	teeth: slanting, small, tooth-to-to-	-	1 71	Longereisan Q, 2	28 Years, M
	ears: close to head, helix edge, lit	*	nutritional condition	: medium; state of health: healthy	
	earlobes: attached, pierced left an	d right	head	forehead: low, narrow, straight, fl	lat: crown o
hands	small, delicate		noud	back of the head: flat	
fingers	thin, long			entire face: moderately high, elli	ptical, squar
nails	small, short, wide, curved			slit of the eye: slanted, narrowly	slit, almond
calves	thin, long, limp small, narrow			cheekbones: moderately protrudi	-
feet longest toe	the first one left and right			nose root: medium, me	-
breasts:	plate like, color: nr. 15, edge shar	p-cut, nipple: small.		tip: pointed forwa	
	1 ·······, ······ ··· ···, ····Be bitai	1 / 11		septum: short, wi	iae; nostrils:

jaw: prognathism nr. 1 lips: medium thin, short, limp

fingers

calves

breasts:

feet

Sani ♀, Merir

simple; flat wavy; body hair: none

- of the head: domed
- rrow, pointed downwards
- ond shaped
- ightly concave
- thin, low, clinging
- aped, lying high

- composite curve
- attached, pierced left and right

- ne left and right
- : nr. 27, edge: sharp, nipple small.

, Merir

- n of the head: slightly domed;
- uare, moderately wide,
- ond shaped, double eye lid
- high; back: straight
- wing: thin, low, clinging
- ils: narrow, small

- teeth: slanting, small, tooth-to-tooth position, white
- ears: clinging; helix edge, lined on top and back, earlobes: attached, both pierced
- thin, long. nails small, short, wide, flat
- small, long, narrow. longest toe the first one left and right
- plate like, diameter of the nipple 15 mm, color: nr. 26, nipple deep.

Siriapa ♀, 28 Years, Merir

nutritional condition: fat;	state of health: healthy	nutritional condition:	fat; state of health: healthy, pregnant
color of the skin	forehead 22	color of the skin	forehead 23
	cheek 21		cheek 21
	region of the breast bone 23		region of the breast bone 22
	abdomen (above the navel) 24		abdomen (above the navel) 26
	region of the shoulder blade 26		region of the shoulder blade 24
	upper arm, bent side 27		upper arm, bent side 22
	upper arm, stretched side 23		upper arm, stretched side 23
	palm of the hand 4		palm of the hand 4
	inner side of the upper thigh 6		inner side of the upper thigh 27
			mucous membrane-upper lip carmine white
	palm of the hand 4		mucous membrane-lower lip carmine white
	inner side of the upper thigh 26	character of the skin	soft, dry
	mucous membrane-upper lip carmine white	color of the iris color of the hair	nr. 2, sclera: yellowish, conjunctiva: discolored in the area hair of the head nr. 27
	mucous membrane-lower lip carmine white	form of the hair	simple; flat wavy; body hair: missing
character of the skin	soft, dry	head	forehead: low, narrow, moderately receding
color of the iris	nr. 3, sclera: yellowish, conjunctiva: in the area of the open slit of the eye	nead	crown of the head: slightly domed
1. 1 C.(1 1 ¹ .	discolored, spotted hair of the head nr. 27		back of the head: domed
color of the hair form of the hair			entire face: high, oval, square, narrow, pointed downwards
body hair:	simple; flat wavy; none		slit of the eye: slanted, widely slit, almond shaped cheekbor
head	forehead: high, narrow, moderately receding crown of		nose root: medium, flat
nead	the head: slightly domed		back: medium, straight tip: pointed downward
	back of the head: domed		alar wing: high, linging
	entire face: high, oval, wide, pointed downwards		septum: short, wide, hour glass shaped, protru
	slit of the eye: slanted, narrowly slit, almond shaped, double eye lid		nostrils: narrow, big
	cheekbones: moderately protruding nose		jaw: prognathism nr. 1
	Nose root: wide, flat		teeth: overbite, yellowish, diastema
	back: medium, straight tip: pointed downward		ears: clinging, helix edge, lined on the top and on the back
	alar wing: thin, low, expanded		earlobes: attached, pierced left and right
	septum: short, wide, hour glass shaped, protruding toward the bott		small
	nostrils: narrow, big jaw:	fingers	thin, long
	prognathism nr. o	nails	small, short, wide, flat
	lips: thick, bulging, lined, upper edge: composite curve	calves	thin, short, limp
	teeth: slanting, big, overbite, white	feet	small, short, narrow
	ears: helix edge, lined on the top and on the back	longest toe	right and left the second one.
	earlobes: attached, pierced left and right	big toe:	clinging
hands	small	breasts:	hanging, diameter of the nipple 69 mm, color: nr. 26, edge:
fingers	thin, long		
nails	small, short, narrow, flat		
calves	thin, short, strapping small, narrow		
feet longest toe	the first one right and the second one left.		
big toe:	clinging		
breasts:	hanging, diameter of the nipple 63 mm, color: nr. 26, edge: blurred, nipple dea	D .	
		Г	

Mesimok ♀,Merir

e area of the open slit of the eye

eekbones: strongly protruding

protruding toward the bottom

edge: sharp- cut, nipple deep

Maseilopi ♀, Merir

nutritional condition: m	edium; state of health: healthy, healed yaws	nutritional condition: sk	tinny; state of health: healthy
nutritional condition: m color of the skin claracter of the skin color of the iris color of the hair form of the hair head	edium; state of health: healthy, healed yaws forehead 21 cheek 20 region of the breast bone 23 abdomen (above the navel) 24 region of the shoulder blade 27 upper arm, bent side 27 upper arm, stretched side 26 palm of the hand 4 inner side of the upper thigh 26 mucous membrane-lower lip carmine white mucous membrane-lower lip carmine white soft, dry nr. 2, sclera: bluish; conjunctiva: discolored in the area of the open slit of the eye hair of the head nr. 27 simple; flat wavy; body hair: nore forehead: moderately high, narrow, straight, flat crown of the head: slightly domed back of the head: domed entire face: moderately high and wide, oval, elliptical-oval, pointed downwards slit of the eye: slanted, widely slit, almond shaped, double eye lid nose root: medium, flat back: wide, slightly concave tip: pointed downward alar wing: thin, low, expanded septum: short, wide, hour glass shaped, protruding toward the bottom nostrils: narrow, big jaw: prognathism nr. o Ips: medium bulging, lined; upper edge: composite curve teeth: slanting, big, white, tooth-to-tooth position, diastema	nutritional condition: sk color of the skin color of the iris color of the hair form of the hair head	tinny; state of health: healthy forehead 19 cheek 18 region of the breast bone 19 abdomen(above the navel) 21 region of the shoulder blade 24 upper arm, bent side 23 upper arm, stretched side 25 palm of the hand 4 inner side of the upper thigh 26 mucous membrane-upper lip carmine white mucous membrane-lower lip carmine white soft, dry nr. 3, sclera: yellowish, conjunctiva: discolored in area of or hair of the head nr. 27 simple, flat wavy; body hair: none forehead: moderately high and wide, straight, full crown of the head: slightly domed back of the head: domed entire face: moderately high and wide, oval, pointed downw slit of the eye: slanted, moderately slit, almond shaped, dou cheekbones: strongly protruding nose root: narrow back: narrow, straight, lightly convex tip: pointed downward alar wing: thin, low, clinging septum: short, narrow, wedge-shaped and tapered the back, lying high nostrils: narrow, small jaw: prognathism nr. 0 lips: medium, bulging, lined, upper edge: composite curve
	R mmmppci i i i cppmmm	R. ¹	nmmppci _i icppmmm

ears: close to head, helix edge, lined on the top and on the back earlobes: attached, pierced left and right small hands fingers thin, long small, short, wide, curved nails calves thin, short, limp feet small, long, narrow hanging, diameter of the nipple: 26 mm, color: nr. 24, edge: blurred, nipple: deep. breasts:

mmm small thin, long small, short, narrow, curved thin, short, limp

hands

fingers

nails

feet

calves

breasts

longest toe

226

χorangei ♀, 35 Years, Merir

f open slit of the eye

nwards

louble eye lid

ed toward

p	p	c i i	i i c p p m m m
р	p	c i i	i i c p p m m m ^{L.}

small, short, wide

the second one left and right

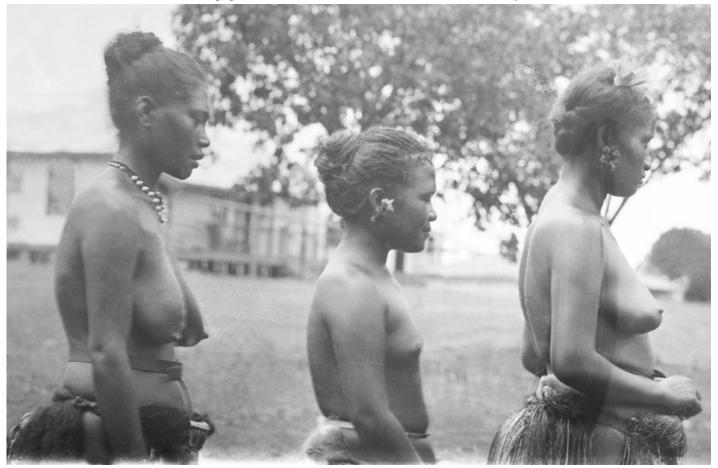
hanging, shriveled, dia. of the nipple: 15 mm, color: nr. 3e, edge: sharp-cut, nipple: deep.



Above and next page: Merir men. Photos taken on Palau by P. Hambruch. Glass plate scans, Hamburg Museum.







Previous page and below: Merir women. Photos taken on Palau by P. Hambruch.

	Haisa ♀, 24 Years, Merir		tongue, mouth, lips
			-
nutritional condition: mediu	-		nose
color of the skin	forehead	24	nostril
	cheek	23	eye
	region of the breast bone	26	lid
	abdomen (above the navel)	27	ear
	region of the shoulder blade	29 28	hole in the earlobe
	upper arm, bent side upper arm, stretched side	26	cheek
	palm of the hand	4	forehead
	inner side of the upper thigh	26	head
	mucous membrane-upper lip	carmine white	eyebrow
	mucous membrane-lower lip	carmine white	hair of the eyebrow
character of the skin	soft, dry		arm
color of the iris		colored in the area of the open slit of the eye	
color of the hair	hair of the head nr. 27		upper arm
form of the hair	flat wavy, simple;		forearm
body hair	none		elbow
head	forehead: low, narrow, strongly reced	ling, curved	hand
	crown of the head: slightly domed		back of the hand
	back of the head: flat		palm of the hand
	entire face: moderately high and wide	e, elliptical-oval, pointed downwards	knuckle
	slit of the eye: slanted, moderately w		finger
	cheekbones: moderately protruding		thumb
	nose root: wide, flat		middle finger
	back: medium, straight		•
	tip: pointed forward		finger nail
	alar wing: thin, low, clingi	-	leg
	-	glass shaped, protruding to bottom	thigh
	jaw: prognathism nr. o		lower leg
	lips: medium, bulging, upper edge: c	omposite curve	knee
	teeth: straight, big, overbite, white		calf
	ears: close to head, helix edge, lined	-	hair of the armpit
		d right; Darwinian tubercle right nr. 3, left	shoulder blade
	nr. 4		pinky
hands	small, delicate		foot
fingers	thin, short		sole
nails	small, short, wide, flat		heel
calves	thin, short		toes
feet	small, narrow		toenail
longest toe	the second one left and right.		
big toe	clinging	om color: pr 26 edge: sharp out	body
breasts:	hemispheric, dia. of the nipple: 25 m nipple: deep.	ini, color. in. 20, euge. sharp-eut,	throat
	mppie. deep.		neck
			gorge
			•,

ererigiere uauti raniuoit metei poili mete taringei tautau ter tepei mangoi fazik fati meteleri f pag, pei sepite mesete apiripinip gumuz irigiri gu zanipei uigunugu χati χatirapei atirozoiro ki gupei söpi gupel ineseri gi simorouu siere gupe meteleri i rgirupei atizik pasaro gi fare gupe χarpirpin χatire gu giri gupel pozi üei rgirüiei zigiri ger uaripei meteleri i rgirupei

armpit

hair of the armpit

shoulder blade

Body Parts. (According to Sarfert)

re, iauuei, tuzauoil	eye lashes, head hair	meteleri metei, simeï
	incisor	ngirouugutei
	corner tooth	ngiriie
	molar	ngiriie
tei	beard	iope
	mustache	homoi
eringe	whiskers	aruzei
	chin-beard	louei
	pubic hair	oloi
	tooth	ngim, ngid
	chin	etei
fati	shoulder	heuelei
	ribs	siri ngaringarin
	breast	ngaringngarin
	nipple	tuti
ipei	female breast	uilire
	female nipple	tuti
umuzi	belly	ziei
	abdomen	apiziei
upei	navel	putoi
	side	peigi
ei	back	taligi
ю	buttocks	metongai
	glans	falor
	scrotum	zör
<i>pei</i>	semen	ueti
gupei	vagina	uunore
ugie	clitoris	uiare (?)
pei	anus	parata
uaripei	tear	seni metei
	breath	ngaze
	penis	ngos
gupei	skin	kin
ei	bones	sire
n gupei	blood	sar
upei	menstruation blood blood vessel	sar
ei		uarar
	wound	ipal
	meat	uitigur
rai	heart	ngaz zanagut tunai
rei	spittle	zanagut tuuei
	sweat	maurau
uaripei	tear	seni metei
	breath	ngaze

Special Section. I. Society and Intellectual Culture.

1. The Community.

The community consists of two strata, the common people, sau, and the chiefly families, sauri getan. There is no obstacle for intermarriage of both groups. Twenty chiefs ruled in old Merir, they all held the title tamar. However, only the paramount chief held the actual power. The common man is only allowed to get near to the chief on all fours. Women, too, could become chiefs. In 1909, there were only 13 chiefs in Ngarabodl:

1. Peilox	8. Irarorimar
2. Ualeirei	9. Melelen
3. Guman	10. Zukom
4. Ariselen	11. Mangiore
5. Marifer	12. Tutamag
6. Lauoizepe	13. Ianis
7. Meziek	

The first chief Peiloy attributed his line of ancestors to the first settlers of Merir. Guman is considered to be the second chief, although in the index he was only listed on the third position. It seems that he intermittently rose in his position, as Ualeirei, the second in line, was in prison; according to Hambruch. Both are brothers. Their clan comes from the Seneues-Islands.

Two small canoes hung on the middle post in the old house of the chiefs. They were connected by sticks and thus represented a double boat. One belonged to the god of the house, Mariteifei, the other one to the heavenly god Rugeiren. When a new chief followed the deceased one, he first had to construct such a canoe, only then is he allowed to build his own. Yet, no sacrifice takes place. The procedure is not quite clear by the way. The informant said: a new canoe is built when the successor accepts the title. Then all young people have to build one of these two boats while all the chiefs have to deliver food for them . ..1

2. Family.

When a young man wants to **marry**, he informs his parents. He is free to marry whomever he loves and in case the girl does not want him, he cannot marry her. He goes to the house of the parents of the chosen girl and gives them some of his possessions as a present. In return he gets the girl and he brings her to his house. The marriage is celebrated in the house of the groom without chants and dances, only with food. He and the parents of the bride themselves provide the food. Members of both families are invited. Part of the people stay in his house; the others continue to eat in the house of the parents-in-law.

On Merir polygamy was still practiced. A man could have up to three women who lived with the man in one house. Recently this custom has been abolished. By the way exogamy is practiced. Sexual intercourse during menstruation is forbidden. The woman goes into the imeriper, where all children are also born. Also shortly before giving birth and for some time afterwards the couple does not have intercourse. In case the child is weak, this ban is active for one year.

When childbirth is imminent, the pregnant woman is brought to the imeriper, where she remains about 30 days. Men are never allowed to enter the house and are also not allowed to be present at birth. While giving birth the woman in labor kneels or sits on the lap of another woman who massages her. All women who are present also help to massage the woman. The navel cord is cut with a shell, girigi, the placenta is buried. From the beginning the child stays with the mother. If the birth was a success, then mother and child are healthy, and the event is celebrated with singing and dancing. On the occasion of a first child's birth the celebration lasts 20 days. No feasts are held for the other children.

The child only gets its **name** when it is older, this means when it is *liveri* or *ueiniet*. The father gives the name. In case he is dead, then the mother has the right to do so. From this time on the child is allowed to eat whatever and as much as it wants. There are no initiation rites for boys, however the act of giving a name indicates a segment in the development. The first menstruation is celebrated with a feast lasting twenty days. A man is never allowed to pronounce the name of the mother, the sister, the grandmother on both sides, and of the sister of the father. On the other hand he is allowed to call the sister of the mother, the wife of the father's brother of the father, and the mother's brother by name.

The name of the father, the grandfather, the father's brother and sister are forbidden for the woman. However, she is allowed to call the mother's brother by name. To break these laws supposedly causes the persons addressed with the forbidden name "to cry". We observed that chief Guman did not uttered the name of his father, nevertheless the older brother did so. All men of the same family call each other uizi, all women niangei.

Even though not actually forbidden, it nevertheless is against the emotion and decency to pronounce the name of a person,. Zaugepit, the first settler on Merir, supposedly introduced the taboo on names. Guman, the nephew of Lavoizepe, calls this one, his uncle also papa, who on his part calls him manerei. Guman's brother Ualeirei uses the same address. Cousins also call each other papa, a name a female cousin also uses to address a male cousin, and also all older men. A nephew is called raure uizi. Other common terms can be seen in the following index:

man woman	mar veiviet	daughter grandfather	rafazei, reiveiviet, fatiarveiviet
father	papa, also term for all older men	on the father's side	paparipapa
mother	neita, also term all older women	grandmother f.side	zinipapa
brother	uizi (between brothers)	grandfather m. side	papaneita
	miangei (between brother/sister)	grandmother m. side	zinineita
wife	ngeili	father's brother	uizilipapa
son	rei, fatiar	father's sister	miangeiripapa
younger brother	uizi leuueit	mother's brother	miangeineita
older brother	uizi teinap	mother's sister	uizineita
sister	uizi (between sisters)	husband father's sister	r zini miangeiripapa
	miangei (between	wife father's brother	liri uizilipapa
	brother and	husb. mother's sister	zini miangeineita
	sister)	wife mother's brother	liri uizineita
older sister	uizi leinap	son father's brother	raure uizilipapa
younger sister	uizi leuueit		fatiar uizilipapa
husband	ngeili	old woman	rorop, tigeuei

¹ compare Tobi, Western Carolines, Volume 2..

son of the son daughter of the son son of the daughter daughter of the daughter	raunaure raunaure veiviet raii mar raii veiviet	chief	tamar latori	(general term) <i>tiveri</i> term for #1 chief veri "" eriveri ""
father of the wife	papeigli, zamareigli	boy	marin	ar
mother of the wife	zeireigli	friend	imeta	k
sister of the wife	miangeireigli	girl	uilina	r
brother of the wife	uizireigli			
husb. of wife's sister	liri miangei	The individu	al age gi	coups are specially termed:
brother of husband	uizireigli	3		
sister of husband	miangeireigli	tarotor		infant
husband of husb. sister	liri miangeireigli	apariara, zri	ueiz,	terms for small boys
father of husband	papareigli	rapariueiz, m	ıarinar,	
clan member	elimet teri meilie	apanozor		
mother of the husband	neitareigli	liueisi mar		young man
	zineigli	mar		man
family	ori miangei,	teriperi mar		older man
	soriieigetan	sorimar		partly white haired man
old man	marinap, manimozu	marinap		old man with white hair
foreigner	teiielimer teri meilie			
		\$		
		rozor; apeiliv	veiviet	young girl with hard breasts
		uirinar, liueiz	zi veiviel	t

Terms of greeting and their use are the same as on Pur. Nose greeting is generally used when, after a long separation, people see each other again. Parents practice this testimony of endearment anytime towards each other and also towards smaller children. However, among the other family members the nose greeting is proscribed except in serious circumstances, such as voyages and death. Each deceased person is honored by all family members with a nose greeting, the last proof of love. The mourners, too, greet each other in this fashion in the mourning house.

sori veiviet

teriperi veiviet

matron

Death and funeral¹, When a member of the family dies, the entire clan gathers in the mourning house and lament loudly. They tear their hair and beat their breasts. The wife of the deceased cries the loudest and beats her breast with full force. Initially she appears to be like in a cramp, and people have to hold her arms, in order to prevent her from mistreating herself. In the meantime women decorate the body. He is clothed with a new lavalap, and all his jewelry is placed on him. His hair is anointed. The body is smeared with yellow turmeric root powder. The women's weeping has the form of a chant; natural sounds are only heard from the widow. No sorrow can be detected among men. Once they finish chanting their lament they have a quiet conversation. Children are also admitted, yet initially they stood laughingly amongst the crowd. Finally the body is wrapped into a sleeping mat. A decoration made of shells is placed from the lower part of the chin over the head. The deceased, who had died at six o'clock, was wrapped one and a half hours later into a big cloth.

During this procedure the wailing chants started anew.¹ In the meantime more and more women are coming. They sit a little bit away and chat. Whoever has some food at hand, eats it quietly during the death lament. People also smoke cigarettes rolled from banana leaves. At the same time another man carves his new comb. One old woman, lying on the left side of the body, is particularly noisy. From time to time the women who have arrived later and who are sitting farther away join in the lament. At one o'clock the house is filled with men and women, altogether 33 persons have gathered. Around three o'clock the face of the body is painted entirely yellowish red, and the body, covered by some red cloth has been bedded on three mats.

Those men who know to sail according to the stars are not allowed to come into the house of the dead, as this would violate the will of the god of the mariners. If they would however still do so, sharks would surround their boat during their next voyage and bad weather would haunt them. Nevertheless, at the death of a mariner they are allowed into the house and are also allowed to touch his body. This rule applies to all, who know about navigation and the stars. In the meantime it is four o' clock, the body is sewn into the mats and accompanied by loud lamentations it is carried to the open grave that had been dug.

Immediately it is placed in there, then the grave is closed. In former times the deceased stayed a whole night in the house, the high chief even stays half of the following day. A common person is carried by four men, the chief is carried by all men. His body is placed into his own big canoe or into the one of his family. They hoist the sail and let the boat drift on the open sea. While the canoe is drifting loud lamentations accompany it. Burial in the ground is practiced among the common people, burial at sea takes place in aristocratic circles. In the old days, on Merir maybe even before the move to Palau, the widow moved into a small house that had been erected for this purpose. She remained in there for three days. During this time she had to lament and cry. Afterwards the house was burnt down. The widow may marry again. In case she loved the man very much, she waits three months otherwise she can do so after one month. When she gets married again the children move to their mother. In addition, custom demands that the mourner walks and sits bent for a quarter of a year.

Right of ownership. Land on Merir was divided into a great number of plots ² with special names that to some extent were subdivided into further, smaller plots. The father of Peiloy had seven plots of land, of which Peiloy received five and his sisters two. The owners of the fields do not form a community, only within an extended family they watch over their mutual interests. Thus, the sisters take care of the fields of a man during his absence. In case he does not have a family, he will pay natural produce for this service. For the rest everyone works individually and everyone can build his house and his plantation wherever he wants. Coconut palms belong to those men, who plant them themselves, sometimes already in their childhood. The fields, or more precisely the plantations belong to women.

Inheritance Law. When a chief passes away, his oldest son receives two thirds of the inheritance. The other children have to share the remaining third. In addition the oldest son has to give the brothers and sisters of the deceased from his inheritance. This happens when they have helped with the funeral of the deceased. The estate of male commoners is divided in equal shares and passed on to all the children. Only the oldest son receives the house and the canoe. The closest beneficiary is always the son. In case a man has no children, when his wife marries again his inheritance goes to his father and his brothers and sisters.

3. Laws.

¹ Sarfert witnessed the funeral feast of the man Faranjal, who belonged to the sau. There he could observe the custom and traditions.

¹ By Sarfert's request one of the men sang calmly a lament.

² According to Krämer, the plots, airan, of Merir are called: 1. Rugarap, 2. Rukovar, 3. Pesam, 4. Imariveri, 5. Imeriböe

when his wife marries again his inheritance goes to his father and his brothers and sisters. Otherwise it seems that the wife gets a share of the inheritance. The surviving partner of a marriage always inherits the coconut palms. In case both of them die then the child inherits them. In case there is no child, then the brothers and sisters inherit. The same is true for the taro fields. The wife inherits the house in case she remains unmarried. Only the son inherits the chiefly title not the brothers.

Criminal law. Vendetta is not practiced. In case of assault and battery the culprit pays a fine to the family of the person he had harmed.

4. Tradition.

The lore of the Merir-People is essentially the same as the one on Pur and Songosor. Here too, people point to Mogomog as the original home island, though not with the same distinctiveness. Interesting traits are the mentioning of the settlers' intermediate station on Palau, the settlement of Tobi, the mosquito magic, and the father's fear of the son when he did not bring back the mother. The Merir version of the settlement's history: Zaugepit was the first man who came to Merir. Nobody knows who had created the island. However, Zaugepit made the laws.

Talau was the first man on Songosor. He was a Mogemog-Man. He came from there in a canoe. In those days Mogemog was too densely populated. Mariteifei was the first man on Pur. He left Mogemog and came via Yap. This island was also too densely populated, therefore he went to Palau, where again too many people lived. Here he encountered Talau. Both of them went with Talues¹, the father of Zaugepit, to Songosor. They set forth in three canoes. Talues and his family were in the first one, Zaugepit with his were in the second and Talau with his family sailed in the third. On Songosor was nobody. Therefore, they settled here.

Later on Zaugepit and Talues continued their trip to Pur and left the islands Songosor to Talau, the oldest son. On Pur they took a green coconut leaf and buried it in the sand, while they went to visit the island. In the meantime Mariteifei landed. He had come from Mogemog to Asapal (on Yap), had stayed a long time there and had sailed directly to Pur. He saw the fresh footprints in the sand and also the spot where someone had dug. Digging there, he found the green leaf. He said to himself: People already arrived before me. Therefore, I am taking an old leaf! He buried it, covered it with some sand and placed Zaugepit's green leaf on top. Finally he covered everything. Then he followed the footprints into the bush looking for the others. He found them and a dispute followed. He said, "who are you? Where do you come from? This here is my place!" However, the others said the same to him.

"Good", Zaugepit and Talues finally said, "let us go into the bush and see who has the older rights!" Then Zaugepit unearthed the green leaf, showed it around and said: "look, I am the older here." Mariteifei said: "good, this is your leaf, now I am going to dig out mine". He dug it out and showed them the old leaf. "Look," he said, "my leaf is old, yours is still green. Thus, I came much earlier and you only came after me." Then Zaugepit said, "good, you are right, you are the owner of this land and we will look for another place."After that they left Pur and came to Merir. However, there were so many mosquitoes that Zaugepit did not want to step on shore. Talues said, "I now go on shore and will do something to make the mosquitoes disappear." He took a green leaf and said a certain word into the leaf. Nowadays nobody knows this word anymore.² This made all mosquitoes leave and the arrivals remained on Merir. This island was only inhabited by turtles which lived in the water and on land. Later on Talues left Merir and went with his wife and both his daughters to Tobi. Here he deposed the daughters with their husbands and said to them: "you are going to sleep here!"

Talues himself did not stay with them but continued sailing from island to island (Tobi, Merir, Pur, and Songosor) in order to see his children. Once when he sailed back from Tobi to Merir his canoe capsized and his wife died inside the hut on the canoe, because she did not manage to get out. He then returned to Merir, yet did not dare to step on shore because he had not been able to save the mother of his son. He was afraid and sailed around Merir. Zaugepit sent a canoe. As the father did not come on shore he assumed that he had lost the mother. The canoe was supposed to bring Talues on shore. He landed and Zaugepit asked how his mother had died. Talues told him. They buried the mother on Merir.

Talues' family is called *Sauri getan*. Mariteifei also belongs to the same family. He is Talues' brother. He and all the others died . . . Talues brought his daughter Rimelepei to Tobi, came back and left Merir entirely to Zaugepit. He himself died on Tobi. Zaugepit died still young: Once upon a time he was resting and ordered his wife to ready a coconut for him. He drank it. She playfully snatched the nut from him. It fell out of her hands and hit him so unfortunately that both his incisors were knocked out. Zaugepit was so ashamed because of this that he no longer partook of any food and died.

Just like on the neighboring islands the very sparse accounts connect to the names of the **most important chiefs**¹. The incidents are more or less the same events as those the Pur-chief, Maian had described. The index of the first chiefs of Merir consists of 23 names, according to Peilox, the last one in this list.

1. Talues	1
2. Zaugepit	1
3. Mal	1
4. Uoiie	1
5. Taugauoi	1
6. Uoiiesiek	1
7. Langarizeri	1
8. Zauteti	1
9. Merat	2
10. Lagi	
11. Tamemilen	2

Under the reign of Uoiie, the 4th. chief, **Papuas** came and killed all men, women, and children on Merir. Only Langarizeri and Zauteti stayed alive, because they had been on Songosor. Merir had to be settled again from Pur and Songosor. As Maiian reported, the chief escaped. Zauteti , the 8th. chief and Langarizeri, obviously the ones who had been saved from the Papuan attack, killed each other: Langarizeri rammed a knife into the body of Zauteti. The other one wrested the knife from him, pointed it to his murderer and stabbed him to death. Thus they both ended.

The 1st. chief Tamemilen died as an old man, which seems to have been a remarkable and memorable circumstance. The 12th. chief Uoraparimar was slain by Larera-People. Megemau, the 13th. chief, drifted to Uleai, as it was reported by people from Mogemog. Mareitepit, the 14th. chief was a mariner. He constantly sailed back and forth between Pur and Songosor and died as an old man. The 15th. chief Arigirifer, drifted west to Draus (?). He died there, the others who had been with him returned home. Under the reign of Uorop, the 16th. chief, the Larera-People came. Nobody was taken away, but many died in the fight. The Merir-People fled to the open sea. The 18th. chief Maramaiuruk gave nine turtles to people from Pur, who in turn gave a lot of food.

- 12. Uoraparimar
- 13. Megemau
- 14. Mareitepit
- 15. Arigirifer
- 16. Uorop
- 17. xafinimar
- 18. Maramaiuruk
- 19. Monuoiu
- 20. Iterap
- 21. Erume
- 22. Eriiiriferi
- 23. Peilox

¹ also called Taleues.

² The magic is called *aio*.

¹ According to information of chief Peilox.

Under the reign of Monuoiu, the 19th. chief, Pur-People on Merir and their chief were slain. It was a conspiracy instigated by the Pur-People, as can be detected from the respective Pur tradition. Under the reign of the 20. chief Iterap five women from Papua arrived drifting. They came from "Sofi". Among them was the grandmother of a boy who is today 15–20 years old. The 21st. chief Erume died already as a small boy.

Oddly enough people on Merir know more about **wars** in ancient times than those on Pur. Though maybe they are only more open about it. In former times many fights supposedly took place between Songosor, Pur, and Merir. The leader was the high chief. War songs were chanted and the captives were killed. Besides the fight with stones, wrestling matches were of prime importance. The parties tried to grab each other from the back, to crush the stomach, and to suffocate the adversary. People also supported their clan members. When the fighter did not seem strong enough, they crushed the head of the enemy with a stone. The Merir-Man Uaiumar was famous because of his physical strength. In a wrestling match he supposedly "crushed" his enemies "very quickly dead". Such wars are said to have still happened at the time of the grandfathers of today's generation. In case he was not killed, the defeated man immediately had to pay curcuma, ropes, wooden bowls, and mats. However, this last information probably refers more to the private quarrels between Merir-People, because at war no one was ever made prisoner.

A lot about **drifting canoes** was stored in the memory of the natives. As far as chiefs were involved the events were already mentioned. A certain William still knew about two Merir-People who had drifted to Palau. One of them was only tattooed. While one returned to his home island the other one died on Palau. A brother of Lanilepes sailed with six others from Merir to Pur. On his way back he drifted to Manila. People supposedly stayed there. This happened when Merir-People still lived on their home island. Guman and Lauilepe report that in the lifetime of their father Papuans drifted from Nugumi-Ninigo to Merir. They were five women. One of them married a Merir-Man and gave birth to a son. The women died because of sicknesses. They were called: Merifito, Sizoi, Sipo, Gues, and Rofi. Their offspring, two boys, died during the typhoon. One descendant of these women, Moping, is still living on Songosor. He represents the third generation. On August 3, 1909, 12 men, 4 women, and 2 boys, accompanied by soldiers, came from Nabukit to Goror. They originated from Mogemog and wanted to sail to Yap , missed this island and drifted to the Philippines. Then however, they, in their two canoes, found alone the way back to Nabukit.

5. Religion.

The religion of Merir-People is based on the same belief as the one of people on Pur. **The world**, respectively the earth, *iuar*, is surrounded by the firmament, *ran*. On top of it is the **sky**, *uaunen*, in the east is *tataro*; underneath the world *farifer* is situated. Rugeiren, the god in the sky, together with his father Arizirapa and his mother Itamariu, lives in *uaunen*. Both his sons, Orofat and χ lose (?), and his sister Iremegei stay with him. Two fish Igezaupi and Tigeligeli dwell in the underworld , *farifer*. Whenever they move there it creates an earthquake.

Rugeiren is the highest god and rules over everything: sky, earth, land, and sea. He holds the life threads of all human beings in his hand. When somebody has to die the god breaks his life thread. He lives above the star *mazitöp*. He lets people die who do not have a good character and are up to no good on earth. He allows the other ones to recover from their sicknesses. Izamagei or Iremegei, the sister of Rugeiren, creates the sicknesses of human beings.

Arizirapa, Rugeiren's father, gave his son all the power. He sends rain and sunshine and makes the seasons succeeding each other. He also gave humans the gift of speach. Arizirapa and Itamaru had eight children: 1. Rugeiren ♂, 2. Aririmezi ♂, 3. Zeren ♂, 4. χ oto ♂, 5. Tautau-Uerimezau ♂, 6. Iremegei ♀, 7. Izazapiu ♀, 8. Izamariu ♀. Rugeiren lives together with Iremeigi and her sister Ialo. His three sons Orofat, χ lose, Alore, and his daughter Mozilope stay with him. All these **gods** have their duties: Orofat is the messenger of the gods and the creator of all living beings. He creates the fish, the birds, the trees, and the plants. However, it is not known who created heaven and earth. Orofat also taught humans to correctly build a house. In former times people had a light way to build their houses. When they wanted to climb on top of the house to thatch the roof, the house collapsed under their weight. Thus, Orofat told people: "If you use my invention, your house will no longer collapse." People, however, did not care for his advice. The next house they built collapsed again.

Then Rugeiren advised them to take Orofat's invention to their heart. Since then they do so and their houses stand solidly. It is said that the alteration consisted of installing strong wind bracings situated in-between the construction of the apex and the wall. Another time Orofat and Rios created human beings. Rios did not understand how to correctly construct human beings. He did not make them any joints, so that they could not move. On the other hand, Orofat created his human with joints. When he had finished building him, he hit him with his fist into the joints of the arms and legs and the human ran away. We do not know anything else about Rios only that he lived on earth and died there. — As Rugeiren's messenger Orofat wanders around everywhere and is on the lookout. Whenever he finds something not in order he reports it to Rugeiren.

The natives term all other sorts of smaller spirits, inhabiting heaven and earth and working there, also as sons of the god of the sky with the same name. Alore gives humans their work and orders them what to do. Mozilope visits the sick and massages them. Iremegei gives medicine to the sick. Izazapiu draws the tattoo designs on the skin, and Izamario executes the tattoos. χ oto builds the houses and Zeren the canoes, whose construction is his invention. However, Orofat invented the European ships.

People report: When Zeren invented the canoe he had a quarrel with Orofat. While he was still working on it Orofat came and inspected the canoe. Zeren said, "what are you looking at? You cannot build such a boat." Orofat felt insulted, took a coconut, hoisted the sail, went to Spain, and built a boat. Then he sailed back to Merir and said to Zeren: "look, here is my canoe, which I built myself." — "Good", said Zeren, "it has nearly the same size. You did not build a bigger one than mine." Thus, Orofat once again went to Spain, built there a schooner, and came back with it. He said to Zeren, "this is my canoe!" Zeren replied, "this is still not big!" Thus, Orofat went once more to Spain. There he built a big schooner and came back with it to Merir. Zeren sailed out in a small canoe to meet him and called him. Yet, Orofat did not listen to him but sailed over the small boat, broke it and made it sink. He went on shore in another canoe. . . . The other Orofat legends, too, reveal quite clearly the picture of the "very clever man whom nobody loved".

Once upon a time when people built a chief's house, they dug a hole for the middle supporting post. They dug very deep and Orofat said to them, "why are you excavating such deep holes? This is not at all good for the beams." While the other ones were digging Orofat shoveled the earth out. When they were finished, they pushed him into the hole and thought they had killed him. Yet, Orofat called his small ants for help, ordering them to gnaw a hole all along the post. The ants did this, however, they gnawed all the way to the bottom where Orofat was. When the house was finished the inhabitants prepared a feast. Now Orofat crawled out from his cave and sat on the overlying cross-beam. Then he ordered the ants to bring him some coconut. They took a little bit and gave it to him. He rubbed it between the palms of his hands, forming a small ball, and in this fashion created an entire coconut. Then he asked them to bring some taro. Once again they brought a little bit, he formed it into a small ball, and made a big tuber out of it. In this manner he had brought some of all dishes and made them whole again. When people distributed the food in the house and all started eating Orofat also opened his coconut. When the other ones heard the noise they asked, "what was that?"





Local men. Glass plate scan, Hamburg Museum.

Looking at the spot from where the noise had come they saw Orofat in the middle of his many dishes. People marveled at this. They looked into the cavity where the post stood; it was in perfect order.

Since then nobody ever did anything against Orofat and people started to believe that he was a god. . .After this event Orofat returned once more back to the people on earth. He went to catch some turtles and caught four animals. He took them and placed them on the sand of the beach. Then he went home and told the chief that he had caught four turtles and that on the next day people should gather and distribute them. Orofat received the smallest turtle, the chiefs received the bigger ones to divide.

Orofat had the gift to turn himself into something else, to make himself small and big. So he came down to earth at night and turned into a rat. He bit a hole into the side of one of the turtles reserved for the chiefs. He took all the fat out and defecated and urinated into the body of the animal. The fat, however, he stored in his own turtle. He treated the other turtles the same way. The next day, when the chiefs wanted to gather, Orofat went into the bush and turned into the bird, riangeik. When the chiefs had finally gathered they asked, "is everybody here?" Then one of the chiefs asked once again. Yet, the high chief said, "Orofat is missing!" They sent a man into the bush to look for him. He shouted, "Orofat, Orofat!" Yet nobody replied. So he went back and told the chiefs that he had not found anybody. Orofat's father, the first chief, asked him whether he had found Orofat. He replied, "no!" Then Rugeiren asked, "didn't you see anything in the bush?"-"Oh, yes," said the man, "a riangeik". Thus the man went once again into the bush. This time, following the advice of Rugeiren, he called, "Orofat, No-Orofat! Come, do not come!" Now Orofat answered, "I am coming!" When he finally came, they divided the turtles and he received the smallest one, as he had known beforehand, The bigger turtles had to be carried away by two men each. However ten men were necessary to carry away his turtle. On the same day the chiefs killed their turtles and cut them open. Then they found the fat covered with excrement and Orofat's vomit welled out of its mouth. All of them insulted Orofat when they came to him and saw that his own turtle was full of fat. . . Tautu - Uerimezau is a mariner. He learned the navigation from Arizirapa and later on taught it, as well as the knowledge of the stars constellations, the winds, and the direction of the waves, to human beings. Aririmeze invented the oracle.

Here too, people think the **world of the dead** is situated on two big canoes. It is called *uezeti*. Their harbor is located somewhere in the west, *iroto*. The bigger of the two boats belongs to Ruko, the god of the sea, and is called *uametaue*. Masaa , the son of the shark, rules over the smaller boat. The canoes always sail against the current. When the current goes to the north, they sail to the south and vice versa. Thus, the sailing direction of the death-ships can be determined by the currents. Nobody knows anything about the land where the ships are moored. The spirits of young people, *eriz*⁻¹, are placed into the small canoe. Old people, those whose hair is already grey, are in the big boat. They do not have to work. The young people, however, have to help. For instance when Ruko has his ship cleaned the young people from the small canoe have to come on board his ship. When an evil spirit, what means the spirit of a bad person, comes then Ruko has him chased away or killed by the other spirits. The spirits of the dead sail in a canoe to the ships of the dead even when they were buried in the ground. Masaa is the son of the shark and lord of the small ship of the dead that collect the spirits of the dead. This is the reason why he plays a major role during sicknesses. From time to time Masaa also has to travel to Rugeiren and by assignment of Ruko he has to report about the conduct of the inhabitants of the two Merir-Villages.

Ruko is the **god of the sea** and rules there as absolutely as Rugeiren in the sky. He does not have a father, his mother is Iaoröpo. He has three or four sons who are with him on his canoe. Chief Peilo χ no longer knew their names. All together his knowledge about the realm of the dead was as thorough as the one of the men Ualirei and Lauoizepe. In addition they told the following story:

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Once upon a time Ruko's canoe sailed past Merir. From the beach Mariteifei saw Mautuma, Ruko's wife, and fell in love with her. He sailed close to the canoe and almost capsized it, so that Mautama fell over board. Mareteifei caught her. When Ruko suddenly could not see his wife anymore, he looked around and saw how Mareteifei kidnapped her. Then he took a sou-net and tried to catch her again. Yet he only caught her spirit, while Mareteifei kept her body and married her. Mautama was just holding a small shark, which was Masaa, in a coconut shell filled with water. When the canoe capsized she lost the shell and Masaa, both of which fell into the water. Therefore, she started a loud whining. Because of her crying Mariteifei went again to the canoe and tried to catch the shark with his hands. However he did not catch it. Therefore, he went to Ruko, in order to borrow his net. This, being a coarse-meshed net, did not bring him any success. Now he borrowed a close meshed net from him. This time he was lucky and caught the small shark. Mareteifei was supposed to catch the fish for Ruko, therefore he had gotten the net. He, however, did not do so but caught the fish for himself. He took the shark home and placed it in a leaf. While the small shark was lying on the leaf it turned into a human child. The next day he was again a shark and on the following he was again a human being and this continued alternately. In this fashion he grew up. When he had become a man he did not turn into a fish again. Then Ruko came and carried him away. Before Ruko had been alone on both his canoes. If he wanted to sail one canoe he had to anchor the other one first. Therefore, he took Masaa away from shore and gave him one canoe. Mareteifei had given his consent because the god had said to him, "I will teach Masaa, should I die he can take my place."

Masaa was a son of the shark. Mautama saw him as a small fish in the water, and caught him with her hand. First she placed him into the canoe, then into a coconut shell and kept him for her own pleasure. Masaa, too, takes only the spirits of good human beings on board of his ship, the other ones he chases away. Generally he stays at sea all the time. Occasionally though, he comes on shore and goes to Guman's house. This one is the "spokesman" of Masaa.

Masaa plays a major role when **sick people are treated**. When a human being gets sick, this means he gets sick in a natural fashion, then Masaa cannot help. However, when an evil person had caused the sickness then he can chase away the sickness-spirit. Even in case someone is very sick, he will not die as long as his lifeline, the line leading from his head to Rugeiren's hand, is totally intact. This means when there are no damaged or weak spots. When Masaa sees that the lifeline is completely in order he can help, because he then realizes that the sickness is caused by an evil human being. Thus, when someone is sick, people pray to Masaa not to take away this person. Masaa enters the spokesman, now Guman, whose family since the older times provided the spokesman. Yet, he only comes when the sick person, or his relatives give presents to Guman. Masaa then says: the spirit of this man is in my canoe. He dismisses again the spirit of the patient when he is satisfied with the presents made to his spokesman. Masaa also tells his spokesperson if he can help or not. The healing process starts when Masaa talks to the evil spirit, who causes the sickness, and chases him away. In that event of death that Sarfert had witnessed the patient or his family had not given anything to Guman. Therefore, the man had died. After his death the spirit came to Guman and was railing against the diseased and his family. The spokesperson, obsessed by Masaa, shivers fiercely and shouts, "ha-ha-ha-ha". During this seizure Sarfert heard Guman singing. The deceased had not given anything to Guman because he did not believe in the power of Masaa.

¹ According to Lauoizepe ngaru is the term for spirit, and eriz indicates the realm of the dead.

If no presents are given to the spokesperson, then the spirit comes only after the death of the patient, chastising him and his relatives. Besides Guman, Ualeirei can also be the spokesperson, because they are brothers. also Masaa is considered an evil spirit and is the lord of the humans' spirit whom he wants to have his canoe.

The shark is the important totem animal of Merir-People. He is considered the god of the sea and nobody eats him. In case someone would dare to do so then his boat would have to capsize and the shark would devour him. People also have different set phrases spoken at sea to the shark so that he would leave them at peace. According to the information of others these are not set phrases, but people beg the shark in a normal way not to devour them.

The rest of the gods also take care of the Merir-People. Thus, during the meeting of the chiefs, a spirit comes to Irarorimar, one of the chiefs. Also to Ariselen. Mostly they are the spirits of Mariteifei, Orofat, Talues, and Zaugepit who possess certain men. They are considered to be benevolent spirits. Mariteifei comes to Lauoizepe, Ariselen, Totumag, and Irorimar. The relationship between certain people and spirits is passed on from father to son and is linked to the family. It is remarkable that the spirit of Talues, who actually belongs to Songosor, without doubt came to Merir however not to Palau. Since the Merir-People live there he no longer visits his spokesperson.

The speaker of a spirit is a sort of **priest**, for instance Irorimar is the priest of Mariteifei, who visits him whenever he feels like it. Just like Masaa he has the power to heal. He also comes when chiefly meetings are in session. Then a big feast is prepared and Irorimar partakes of it. Then the spirit takes possession of him and he asks him to bestow health upon the chiefs, something the spirit promises to do. - Orofat sometimes comes to chief Lukom, however never during the meeting of the chiefs but only in the house of the man. Just like Mariteifei and Masaa he, too, can heal the sick. The spokesmen of the mentioned gods are the only doctors or priests of the people on Merir. Their spirits are the only ones who come to the people.

Zaugepit provides the seasons and ripens the fruits. He can also provide a good catch of fish. He was also the one who gave the advice not to cut any breadfruit or other trees during their time of ripening. Zeren is a big, strong, and evil spirit dwelling in the northeast of heaven. He holds a wooden club in his hand with which he beats the spirits. He never takes a rest; all the time walking up and down. When a spirit comes he kills him with his club. In his area of heaven, which is admittedly small he is the sole ruler. Rugeiren too, who otherwise is the lord of heaven has nothing to say here. Both of them live together without any conflict.

In former times an old man supposedly lived on Merir, who practiced medicine. He washed ulcers and placed leaves on the wounds. He also prepared extracts of plants and gave the sick food and drinks. While he gave the potion he sang. Not only the chiefly family considers the shark their totem animal the entire population has given rules to avoid certain animals. This originated in ancient times. Below are the following animals, they, however, are not considered to be inhabited by spirits:

xaseper, a small turtle, *feiie* (Palau *rul*), a stingray with a long tail, *Rauut*, an eel, *Periper*, a fish, *Git*, a jellyfish.

The whale lazo, supposedly very frequent in in the waters surrounding Merir, is on the other hand not a totem animal, itai tuuutop. These animals are not eaten by anyone. Talues is said to have introduced this law. If someone would dare to do so, he would not catch anything.

Stars are also connected with all sorts of legends: Thus, the star Ur is a spirit who wants to catch two people fleeing from him. Once upon a time the star Mar had strong wings. When he flapped them typhoons would come. Therefore, the evil spirit Zeleïlain, who owns Songosor, took a stick and broke Mar's right wing. Since then he can only flutter and there are no longer strong winds every month.

the human being according to their likeness. The legend goes like this: The moon and the mouse were the only living beings on earth. One day they were thinking to create human beings. The moon wanted to have them after its own creation: at full moon they should be big, during the waxing and waning moon they should be small; and they should be immortal. The mouse, however, did not want this, preferring to have human beings after its own creation. Therefore, they should be mortal, too. Like all other creatures they should grow and get older and older until they finally died. The mouse had a big dog and she threatened the moon to make it also mortal, if it did not create human beings according to the mouse's wish. The moon was afraid of the mouse's big dog and relented. Thus, humans were created mortal.

The **invention of fire** that is based on thunder is told in several versions. In this connection the mentioned totem belief is also remarkable: thunder is afraid to sit on his totem the pandanus tree.

The two women, Izamerio and Izazapio lived together in one house. Izazapio made mats and loin cloths. Izamerio went out of the house. It was raining, lightning, and thundering. A flash of lightning struck. The woman saw the fire on the ground. She took a coconut shell, placed it inside, and covered it with the second shell. Then she went back to the house. However, she did not know yet what she had found. She chopped some wood and added some of the fire to it. Then she saw how it burned. She placed some food on the fire and ate from it. This made her quite fat. When the woman Izazapio saw the other woman being so fat she went to her had asked her, "what kind of food made you so fat? Before you had been so skinny." Izamerio gave to the other one some of her food and this one replied, "oh, this is good food! How do you do this?" Izamerio said, "I will give you some of it (the fire); it is something very good." And she gave her some of the fire. Izazapio told everyone. All human beings came and wanted to have some of her food and then from her fire. She gave all of them from it.

According to another version the invention happened like this: During a thunderstorm a woman by the name of Izamerio (the wife of the chief) went out to fetch some water. A flash of lightning came down and it thundered. She saw the fire and placed it into a coconut shell covering it with a second shell. In her house she made a hole in the ground and deposited the fire in there. In those days it was still very cold on earth. She placed taro inside, fish, and everything that was eatable: she cooked it and ate it. While she became quite fat from it all the other humans remained skinny. They came and saw how she was so fat. She offered food to all of them. They, however, did not accept it. Though one night . . .

Thunder (?) fell down on top of a pandanus tree. A woman went to the waterhole in order to fetch some water. She found the thunder on the pandanus tree. He asked her to take her down from the tree because the pandanus is the totem of the thunder and he did not want to stay on his totem. He said, "if you take me away from this tree you will find something good. It will be at the place where you will bring me. When I have left from there and you come back to it, you will find it in a coconut shell." He also ordered her to keep the shell with its content well hidden at home. He told her that the content would be very precious, that she should place it onto wood and then should place her food inside. Then the food would be especially good for consumption.

cooked it.

The creation of man is a deed of the moon and the mouse. They were the first living beings and wanted to have

The Invention of Fire.

Rizilela and Ariforaua.¹

Once the woman had moved the thunder to another place and returned to it the next day, she found the coconut. She took it home with her, dug a hole into the ground and placed some of the content (of the nut) inside and

¹ Obviously the narrator mixed up the names: Ariforaua found the fire and gave it to Riziléla (comment of Sarfert.)

One day her younger sister Izazatio said to her, "you look so good, so thick and fat, what kind of food are you eating?" The older sister gave her some of her food, which she tried and found very good. She asked the older one how she had prepared it. This one answered, "I will show you later not now." She became bigger and bigger. The younger one was wondering why and one night she secretly observed the sister how she cooked. When this one took the fire out of the shell she walked over to her and asked her, "what do you have here? What kind of food are you preparing?" Then the other one revealed to her the preparation and gave her some of the fire.

Now there were only two women in the village who knew the fire. Both lived in different houses. Both kept it secret and cooked their food just for themselves. Both of them became very fat, while the other ones remained very skinny because of their raw food. When the other ones noticed this, they said, "what kind of food are you both eating that you become so fat, while we remain skinny?" All people went into the houses of the two sisters, inspected them and found the fire. Without asking they took some of it and said, "why are you both eating only cooked food, while we should eat raw food?"- Since this time all human beings have the fire

6. Time, Knowledge of the Sky, Navigation ¹.

Due to historical tradition chronology is indicated by generations instead of years. Therefore, no one knows to state his age in years. Nevertheless a division of time in years, months, days, and times of the day exists. The year starts when the sun rises at its spot on the horizon, where the constellation called *mezitöp* has also its rising point. Therefore, it is called like the constellation mezitöp. This beginning of the year is in the first month of the year called *tumugl* which in 1909 should have corresponded our August-September. The year ends when the sun finally rises again in mezitöp, after completing its movement from its rising point mezitöp to the south and the north and passing mezitöp once. According to information of the natives the sun's course of the year has the following months:

Name of th	e Month	Position of the Sun in the Constellation	Name of the	Month	Position of the Sun in the Constellation
 tumugl mazisik mezitöp tauta naχe gui 	· /	mezitöp uru marailigel mauri marailigel uru	7. uru 8. iarüar 9. mari 10. is 11. taiglauor 12. eglamaut		mezitöp iarüar taiglauor tumugl taiglauor iarüar

The above mentioned 12 months, as can be seen with ease in a comparison with the constellations in the second row, they are partially named after these constellations, especially after the 5 months tumugl, mezitöp, uru, iarüar, *taiglauor* and maybe even after a sixth one (*mari* = constellation *mauri*?). Looking to Pur and Songosor we see that is also true for the remaining 6 months. All the months are named after constellations, the rising points of which the sun itself traverses in the course of one year from N to S and back.

The weeks and days of the week have no name. On the other hand the day, the natives count it from 6 o'clock in the morning until 6 o'clock in the evening, is divided in 20 segments. The period from 9 o'clock in the evening until around 1 o'clock at night is combined. The times of the day, which of course correspond only approximately to our hours:

o'cl	ock mide	lay	maruk	4 o'clo	ock in the morning	uitalari or nioniar
2	"		tapar	5	"	niueigiregite
3	"		teleriuolik	6	"	nintiiari
4	"		torigios	7	"	timar iruar
5	"		tozarei	8—9	" in the morning	linga lauat
6	"	in the evening	iotoroiar	10	"	fafareki
7	"		niuaraue	11	"	fafzerau ozeeng,
8	"		mozo	12	"	fafzerato otaraain
9-1	"	at night	nogarepariuoin	12	" noon	otarain
1	"	at night	tang razitouo			
2	"		tauoriuoin			
3	"		tauoriuoin lari.			

For the orientation in navigation the natives named certain points of the compass, which absolutely correspond with our 8 cardinal points. These are:

north	ieuen	northeast	ratineuen
south	iogl	northwest	irotoeuen
east	ratiu	southeast	ratiuogl
west	iroto	southwest	rotoogl

constellations are:

1. mezitöp	7. maiteberesen	13. tumugl
2. <i>uru</i>	8. rivangavan	14. metegli
3. marailigegl	9. rivangavan	15. <i>uouo</i>
4. mauri	10. uoreuoi	16. <i>megl</i>
5. grieg	11. <i>ierüar</i>	17. mezaupur
6. uoraχ	12. taiglovar	18. megli tamar
		19. uorouuer or tauonin

Of these constellations megl (16) is Centaur α , β , the uouo (15) is the Southern Cross, and taiglovar (12) are the 4 stars of Orion, among them the three stars of the belt (compare with the names of the stars of Ngulu). According to the testimony of the Merir-People those from Pur, Songosor, Tobi, Mogemog, and Oleai sail after the same stars and always find their way. Following Guman's directions the rising points on the eastern horizon of these 19 constellations were charted in the constellation charts. Fig. 158. Fig. 159 depict constellations in the same order according to Chief Peiloy, however here are all individual stars indicated, that belong to each of the constellations

In order to understand Guman's chart of stars according we still have to point out that the numbers correspond with those of the list of stars on the previous page, that the 19 constellations do not rise at the same time, thus, in the concept of the natives, the 19 points of the chart are a sort of lines of the rose of a compass on the eastern horizon. Line nr. 1 is supposed to indicate the eastern point, line nr. 10 the northern point, and line nr. 19 the southern point. If you insert on the western half of the horizon also the setting-point of the same constellations, as it happened in the details given by the Merir man William, and if these points are indicated with 1'-19', because they correspond with the rising points of the same constellations the result is, according to Fig. above, a rose of compass with 38 lines.

Moreover, just like Pur- and Songosor-People they have developed a much more sophisticated way of finding their bearings, according to the rising and setting points of 19 constellations. According to Chief Guman the 19

¹ almost word by word from Sarfert's manuscript

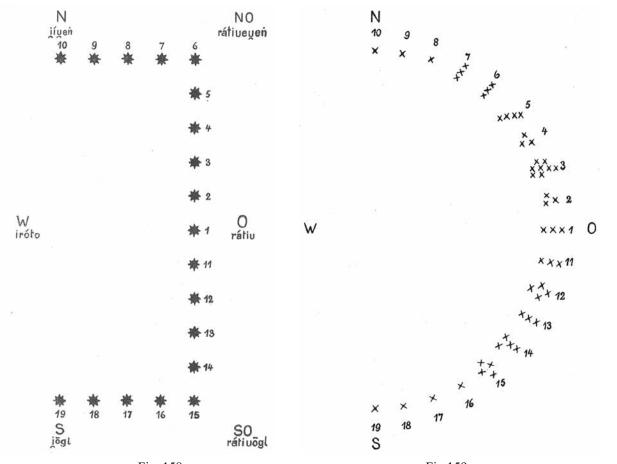
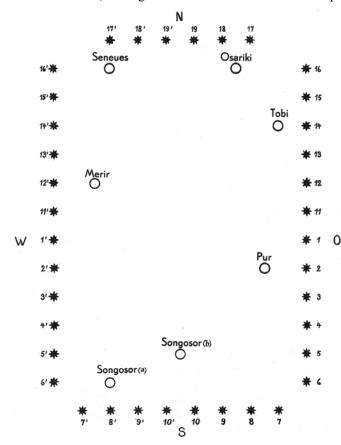


Fig. 158. Fig. 159. Fig. 158. Constellations of Merir-People for their navigation, according to the native Guman. (Eastern half of the horizon). — Fig. 159. Constellations of Merir-People for navigation, per chief Peiloy.



Guman designed his chart of stars in the presence of 7 other men, while the constellations were depicted with stones on a mat and the ribs of coconut fronds indicated the course. Chief Peilo χ also drew the constellation in the presence of 6 other men.

Fig. 160. Merir-People's rose of compass, according to the native William.

It is hardly necessary to state that the natives chose these 19 constellations in such a way that their rising respectively setting points result in an approximately even division of the horizon, thus that the "lines" of the this "rose" have more or less the same size. It is important to remark that Sarfert started his recording for the expedition on Merir and here for the first time the natives' nautical knowledge and their rose of compass caught his attention. This is relevant because the rose of compass in illustr. above has 38 lines while the ones from Pur and Songosor have only 36, although the natives of these islands reassured him to sail following the same 19 constellations. These two additional lines result because the constellations 10 and 19 are indicated with their rising and setting points while for Pur and Songosor 10 and 19 occur only once as the southern and northern point. Maybe the Merir-People's double inscription is an error, as they now lived for many years in Palau and did not sail anymore. However, this could also be true of the single inscription of the lines 10 and 19 for Pur and Songosor. Hopefully a comparative examination will be able to shed light. We also should not take offense that in Fig. above each side of the horizon does not have the same amount of lines. This was certainly caused by the natives' rough drawing since they are not used to such a reproduction and this can be seen in a comparison with the compass roses of the other islands.

Courses. Further more William indicated in his compass rose, just like in a map, the islands Merir, Pur, Songosor, Tobi, Seneues (St. Davids-Group, Mapia-Uarat?), and Osariki (Helen-Reef). As their entirely wrong geographical position to each other already proves, this was not his intention. He wanted to indicate sailing courses, this means the direction to the rising and setting points of the constellations which have to be kept when sailing from one island to another. Yet, due to his inability to draw he did not manage to illustrate this. At any rate, the indication of the course was left out, and thus, an incomprehensible chart was the result. Unfortunately Sarfert's sketch book with the Merir sailing courses was lost, therefore we have to refer to the analogue courses of Pur and Songosor. In order to determine the direction when sailing, people look, just like on Songosor, over the outstretched fist in such a fashion that the knuckle of the middle finger serves as an eyepiece. Fig. below shows how to aim for the star of the course and how to determine its course to the rising and setting points.

When Merir-People were still living on their home island they went on sailing trips between Songosor and Pur for **trading purposes**. They also took women on such voyages. There is ample proof of this in their accounts. Recently they travel sometimes on board trading ships. In this stayed for Lauilepe was two months on the Hermites and returned after half a day layover on Ninigo on board the ship of the trader O'Keefe's ship. They call New Guinea Nugum and Palau Panie. They knew from this group the islands Malakal, Olukzap, Uruktzapel, Ngargol, Nagrekopassanga, Goror, and Aulong. They measure the position starting from Malakal. They know Papua only from hearsay; they do not like to deal with them. For instance the man Guman refused to be brought face to face with Papuans. Nevertheless, they know that "Papuans have arrows, bows, and the shield, but no spears". They also know that they do not know the loom.

Fig. 161. Positioning the rising- and setting-point of a course star visible in the sky. After a sketch of Sarfert.



Expressions for the Surrounding Nature.

heaven air	ran iauilari	lunar eclipse (the moon is dying)	imezi melem
rain	ut	water	sar
rain cloud	roso	sea	retet
rainbow	legiem	wave	rauraparal
wind	iain	high tide	iauurapaupa
storm	tarapara iain	low tide	imeta
lightning	ipeiezeen fizie	swell sand	iauuroroχ pi
	merupi	day	ilari
thunder	pel	night	nipoin
sun	iaro	morning	nimiarie
shadow	iaungan	midday	otarain
moon	melem		rotoiet
new moon	elos	evening	niuaraue
full moon	melem mereb	year	mazitöb
waning moon	iausigidot	month	melem
waxing moon	melem mesik		

7. Feasts, Dance, Songs, and Games.

The feasts are collective public festivals or dancing feasts celebrated for special occasions. When the breadfruit sareripe an eight day feast takes place in the chiefs' meeting house. It seems that this is mainly a celebration for the chiefs. The participation of the population is not certain. At the inauguration of a chief, due to the passing away of his predecessor, a chief has to organize a celebration lasting 4 days. The other chiefs help with the expenses. When a newly built chiefs' house is finished a day dance is held.

The twenty-day feast in the month *mezitöb* is likely to be a fertility feast. People celebrate in a boat on sea; during this time sexual intercourse is not allowed. In former times at the end of a victorious war a feast was held. The other feasts are family occasions. The marriage celebration lasts only one day. On the occasion of the birth of the first child a twenty-day celebration takes place.

For children born there after no more celebrations are held. A one-day celebration marks the occasion for a child's first apron donation. An initiation rite takes place for girls, though not for boys. The onset of the first menstruation is followed by a feast of twenty days. Tattoos are also celebrated ¹.

Dances and games take place during the day and at night by the moonlight. The dances are very similar to those on Pur. They have the cultic men's and women's dances and the obscene dances of the turtle. They are accompanied by chants. The trumpet shell, tauni, is not used for it.

Lovesongs, *uarol*, are occasional songs that everyone can compose and they go around among the population. People also take some on from other islands. Thus, the song liaiilaxa uagita tipei was composed by a man from Songosor.

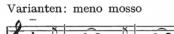




Turtle chant of men. xameti. All men together wrote the poetry, chanted by the man Moarifaul. Petitiuuo peitaigetake rar gala razada meta riga uulezei zatile zazali latuzeita nieririmeze razeietiu zangoru gouule zale ueimer.

phrase at the end.







P. R. 23. Women's Turtle-chant *xameti*, chanted by the woman *xaparuar (Aparuau)*. Satirical chant aimed at men. ezama zalitipei ouamezili merei zeua euosouai uito fengerieisak ovara riatoiai gesimeta raiegi zaiseua uolu zeauare efitifiti ieleuil mazaye sengel uizili mesago lauozu meferemei meizau nauaure uie siriperi meri tepite uie. Comment Herzog: the transcript contains small sections from the beginning and two lines from the middle part. The chant is very similar to P. R. 17a.



xamereis or *Uarol* (love song). The man Ariselen is the poet; chanted by Uaian (?) Marifangel mamalei / iratar mie / mezegl / xarimeigiri me mengeon / merer niemei house / uarara glifazi / irupa, *xametipe / imengimengi iramangl / itiuaut tauai /*

Schildkrötengesang der Männer

Comment Herzog: the cylinder contains 11 lines, of which the first two are in the transcript, except for the set

Schildkrötengesang der Frauen

marifángelmamálei

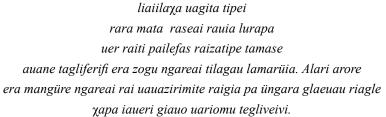
¹ One month is indicated here, however, it is not clear if this relates to the time of celebrating or the time of tattooing.

zeuatiperi uagi aifatane maisere / bongizaue / garararani house / irifezangala / ialom ozaramazier reai / ranileaҳo rerar mar / auua ҳan ҳirazegl / periei mengiek giriezegl / ougapasai lalam / zirifare ҳailau / leseiua atoiara / iraugl renizamur / ereniuara tagete / naugitale mare / mitima zerielauar lenilata rifereis / rieri melib gugalib / laii tauua riafan / zimeni getaua re iengi / zi goulu mezaie taume / zi memaru iaҳamagl / iaze mezarasoҳ / meҳaiefiri ngeҳee / rigaraҳaue ҳamales / fini tailan / zarapazereni lange / renizozi fatoҳ / fararenipar / larasavar uaii zapur / larimete meniaisete / laҳauou ie riai / uatala rifan / gezaҳe fini gararoroҳ / tiperie / iai ialuroҳ / rani iai uararoҳ / arafazei ieiki uararom.

Comment Herzog: dance song (*Ualuk*) concerning the sun and the moon. Unfinished. Singer *Uaian*. Transcript of the first two sections of the song, the others have no set phrases for the beginning.



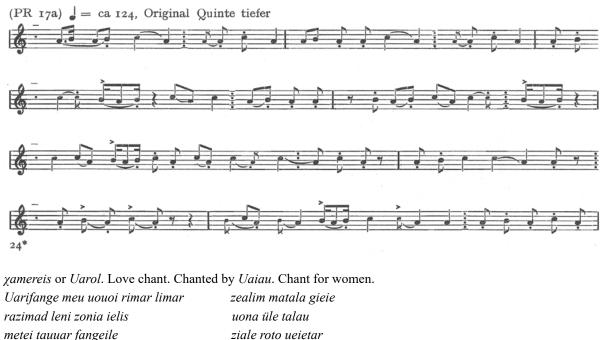
 χ *amereis. Ualuk*¹. Dance chant for women. Composed by the Songosor-Man Felegietag. Chanted by the old man Sisie.



Comment Herzog: The cylinder contains two sections. The transcript contains the 2nd. and 3rd. line of the second section, which has all together 6 lines.



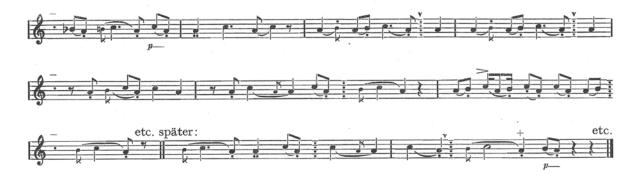
¹ In the index of the cylinders quoted as Ualuk (dance).



xamereis or Uarol. Love chant. Ch Uarifange meu uouoi rimar limar razimad leni zonia ielis metei tauuar fangeile eluue uana soias zelu uani gari tar uani faro maigezi mazol ngaza imal zeef filo ruua taivau ziriogovute xamali uerie iafila ringange

Comment Herzog: Women's love s shows the 3rd. and 4th.

As the text passages *marifangel mamalei*... and *uarifange meu uouoi*... have not been indicated with the respective number of the cylinder, their attribution to the transcription is not possible with certainty. It is likely, however, that they belong together as indicated here. At best for the first mentioned song the transcription P. R. 17a comes into consideration. That it belongs to P. R. 24 is indicated by expressions in the text.



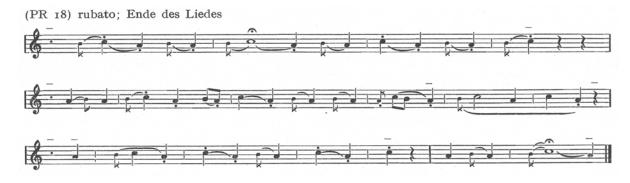
Comment. On this Herzog remarks: The transcription reproduces the first half of the song, with the exception of a few bars at the beginning, which had been left out because of indistinctness. Then again another bar (indistinct) is missing, followed by two bars, which are at the end of the transcription.

ziale roto ueietar meta taua fangüle ifata iai ga ualix mere nitau mala rauue tauar imeru fangi glinger uazara rearu uarani tepi ielanger uia seta glimari.

Comment Herzog: Women's love song, chanted by xaparua. The cylinder contains 11 lines, the transcription



Uarol, chanted and composed by the old man Sisie. Comment Herzog: The transcription contains the last 3 lines of the melody.



The transcription P. R. 21 and P. R. 25a and b are death chants. Both were sung by a woman, the last one by *xaparuar*. The first chant contains 11 lines of which the first 4 are depicted here; a few sounds in the beginning are missing of the second, a recording mistake. The transcription P. R. 25b features the first two lines of the 10 lines cylinder (according to Herzog)





The amount of games ¹ is amazingly numerous and not all of them are known on the neighboring islands. Only two of the games are for the entertainment of one individual, a practice of their skillfulness. Most of them are games for several people and only few can be played by two. Most of them by far are games concerning movement, some have a sportive character.

1.* xazopozopo. A memory-game. One of the participants digs a random amount of holes in a self-determined sequence into the sand. Then he turns away and has to memorize the amount and the succession of the holes. Whoever makes a mistake will be laughed at. A hole is called *perotox*, two holes *liauou*, three *sierei*, five *limare* sör. This seems to be the maximum amount. Curiously the number four is not included. The chief chose the following picture of holes. Illustration 162.

- 2.* Juggling several fruits of the Calophyllum tree in one hand. middle, then the fruits are spun in circles in different directions.
- 4.* Taiuel. One player throws with a small sou-net the fruit of the fidal tree away; another one has to catch it with the net and throw it back to the first one.
- 5.* Peipei-w restling match. The player performs with one arm an undercling and with the other an uppercling. The loser is whoever lies first on the back. The play with which on Pur affairs of honor are settled, causes much happiness among Merir- People. 6.* Ilai, fencing game with sticks, a mock fight. People only beat against the sticks.
- until the pole breaks.
- back to the starting point.
- to make the other one fall.
- 11. *Rigezailou* is a snake game where you crawl underneath.

around.

1 The ones indicates with * are also known on Pur.

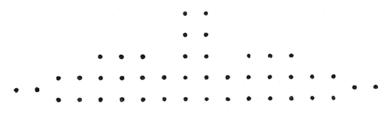


Fig. 162. Memory-game xazopozopo.

3.* Fazeraurou. A calophyllum fruit is attached on each end of a string. The string is held with one hand in the

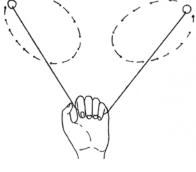


Fig. 163. The game fazeraurou.

7.* Rapazatirimoz. Divided in two parts people grab a long pole on the ends and push with it against each other

8.* Kilim, footrace. The goal is indicated by a vertical post where people run to. There they turn around and run

9. Gluaze, to play tag. Men of both parts of the village of old Merir position themselves in two rows. Each individual player of one row tries to catch his opposite from the other row.

10.* Taitai. Two men stand opposite each other, each one linking one leg underneath the one of the other. Then they jump in circles and try to pull each other away and

12.* Rauiri. A strong man rotates another man in circles. He holds him fast on one foot. The man pushes the other foot against the leg of the one who spins him

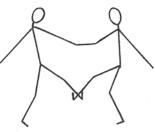


Fig. 164. The game taitai.

13.* Mangali gatalizanga. A man pushes both feet against the thighs of a man standing in front of him who holds him on the arms and spins around with him

14.* Ronoto. Rope skipping. A liana is turned with both hands above the head while the player jumps with both feet over it.

15.* Piripiri. Rope skipping. Two men swing a long liana while other men jump across underneath it. For a change they jump off and on with one and the other foot.

16.* Giligili pazopaz. People run in circles with their faces turned outwards. In their middle is a man who tries to get outside. When the man is standing outside, then two, including the man, crawl through. In this fashion the line-up and the movement change.

17.* Maleuutiu. People stand in rows and clap their hands while singing. Then they swing their arms in between the ones of the others. Taking once the left arm, once the right arm of the adversary in between their own. While singing they clap the hands on top and on the bottom. Then they jump closer and then away while clapping the hands.

18. Autotazilai. People jump alternatively on the right and on the left foot while swinging the raised leg to the side.

19. Manimarenged. People form two rows and jump through in between the persons of the opposite row. They jump alternatively on both legs and throw the raised leg back- and forwards while turning their back to each other.

20.* Zozogonumeziau. Persons sitting in a circle grab each other's hands and while singing they swing their upper bodies if possible all the way to the ground. This game causes much happeniss.

21.* Pazozo. A group of men swing their arms and sing while doing so. In the end they all jump forward on one leg. Whoever's jump is the best is the winner.

22. Om (cooking house). A women's game. Women sitting in a circle grab each other's arms and pull. Whoever lets loose falls backwards and is laughed at.

23.* Pigipigiuaura. Women's game. Women, sitting in a circle, all place their hand on the ground in the bar of the stone beater. While singing the palm and the back of the hand are alternatively placed on the ground. When the chant is finished they all put their hands down for the last time. Whoever has the back of the hand on the ground is laughed at.

8. Language.

The Personal Pronoun.

		my coconut (the on
1. Pers. Sing. I	<i>ngan</i> , absolut: <i>memete</i> (nom.)	my lemon
	neei (dative)	ing tomon
	<i>ïe</i> (accusative)	
2. Pers. Sing. you	gete (nom.)	
	<i>no</i> χ (dative)	1st. Pers. sing.
	<i>uk</i> (accus.)	2nd. " "
3. Pers. sing. he	iezimer	3rd. " "
she	irazmer	
1. Pers. plur. we	(I and you) gete ma ngan	
	(I and he) gete me iazimer	

(we three, excl.) gete ma ngan me iazimer (we all) *xamizeua pipirieglimet*

2nd. Pers. plur. you (you both) (you three) (you four) (you all) 3rd. Pers. plur. they all

1. for items 1st. Pers. sing 2nd. " 3rd. " "

my knife iai uazei

2. for living beings 1st. Pers. sing. 2nd. 3rd.

> my chicken rei my pig rei my dog rei my wife nge

3. for dead animals dedicated for con

my dove ros my fish ros

Comment. For the fish only rosai is used. rei iek does not exist. The fish is only regarded as food. Other animals are connected with rei or rosai depending on whether they are kept alive or slaughtered.

4. for consumable fruits 1st. Pers. Sing. rarei

Examples. my coconut (the one I want to eat) rarei uan rarei gulugul

1 For the use of the form ngeili etc. there are no examples.

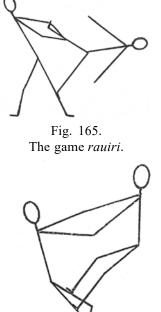


Fig. 166. The game

mangali gatalizanga.

(we four, incl.) gete ma ngan me iazimer pazimer (we five, incl.) gete ma ngan me inzimer pazimer

ger me iazimer ger me iazimer pazimer ger me iazimer pazimer pipirieglimet pipirieglimet

I. Prefixed.

,	The Po	ossessive Pr	onoui	1.		
iai						
iam	и					
iarc	ı					
		Examples.				
		my net <i>ia</i>	i sou		my fire	iai iar
rei		ngeili 1				
"		raum		loum		
"		raure		liete		
		Examples.				
χaian		my dove		rei mar	·	
peik		my cat		rei gazo		
piriz		my boy		rei marinari		
eili veiv	iet	my girl		rei uilinari		
sumpti	on:					
	1st. F	Pers. sing.	rc	osai		
	2nd.		rosa	тит		
	3rd.		rosa	ra		
		Examples.				
sai mar						
sai iek						

II. Post positioned.

```
-ei
 -um
-ara.
```

Examples.

my hand	gumuzi		my arm	pei
your hand	gumuzum		your arm	poum
his hand	gumuzure		his arm	pauure
my nose	uauti		my foot	gupei
your nose	uautum		your foot	gupum
his nose	uauture		his foot	gupare
my beard	aruzei		my skin	ginipei
your beard	aruzum		your skin	ginipoum
his beard	aruzara		his skin	ginipoura
my father	papai		my son	rei
your father	раратит		your son	roum
his father	papare		his son	rauure
my mother	neitai		my sister	miangei
your mother	neitamu		your sister	miangom
his mother	neitare		his sister	miangara
my tattoo	faruferi		my bed	pazoi
your tattoo	faruforum		your bed	pazoum
his tattoo	farufora		his bed	pazoro
my house	iemei		my apron	marozei
your house	imom		your apron	marozoum
his house	iemara		his apron	marozora
			or	tailara
				tailai
				tailamu
	The Verb.			
	Present.			Past.
1st. Pers. sing.	I see	ngan igatoro	1st. Pers. sin	g. I went $ira\chi o^{-1}$
2nd. " "	you see	gete ogatoro	2nd. " "	you went oraχo
3rd. """	he sees	ie igatoro	3rd. " "	he went <i>ira</i> χo
1st. Pers. plur.	we see	gise zigatoro	1st. Pers. plu	70
2nd. ""	you see	ile lagatoro	2nd. " "	
3rd. """	they see	merarai lagatoro	3rd. " "	they went <i>lira</i> χo
	I come	ngan iuitox	C 11	1 to -1
	you come	gete ouitox	Generally th	e past is expressed in the s

ie iuitox gise ziuitox

ile lauitoχ

ngan iueroχ gete ouerox

ie iuerox

gise ziueroχ

ile liueroχ

merarai liueroχ

*merarai lauito*χ

Generally the past is expressed in the same form as in the present.

Future.

	I will come	I will go
1. Pers. sing.	izauitox (ua	razi) izaroχ
** **	gozauitox	ozearox
	izauitoχ	izaroχ
1. Pers. plur.	zizauitox	zizaroχ
2. Pers. plur.	lizauitox	lizarox
3. " "	<u>l</u> izauitox	lizaroχ.
1 The prefixed p	ronoun can also be	missing.

The infix za presumably came into existence from the word izaua, long way. The meaning of the prefix uarazi could not be solved. It can also be left out. In addition the following forms of verbs and set phrases were recorded.

I give you	ngan iuariku
he gives him	ie iuarariieie
you give him	ile iuara neei zimer
go away!	раиаи
I tell you, come	here! pato iuarau
tomorrow I will	catch some fish:
yesterday I caug	ght fish:
tomorrow I go t	to Matalai:
tomorrow I will	l be back:
yesterday I wen	t to Matalai:
today I go to M	atalai:
tomorrow you g	go to Matalai:
tomorrow he go	bes to Matalai:
tomorrow we ge	o to Matalai:
tomorrow you g	go to Matalai:
	there could also be
plural, always t	wo and more.
I build a house:	
tomorrow I will	build a house:
yesterday I buil	t a house:
I see	igatoro
I see	igauaugo
he will see	0 0
	izaxatoro
you will see	lizaxatoro

I am sick ngan i xamitek he is sick ie i xamitek I will be sick: imerar xamitek he is healthy ie imaro lari they are healthy merarai limaro lan I will be sick ngan imaro izi xa you will be sick gete omaro ozei χ he will be sick ie imaro izei xam we will be sick gise zimaro izei χα you will be sick ile limaro izei xan they will be sick merarai limaro ize

260

he comes

we come

you come

they come

I go

you go

he goes

we go

you go they go

you give me gete ouaraneei he gives you *ie iuarano* we give him *pipierimete iuaraneei* we give him *gise iuara neei zimer* they give him *merarai iuara neei zimer* come! pato uku uarazi izauuor gora iek raro igora iek uarazi izara Matalai uarazi izauitoχ raro ira Matalai. lanei iuera Matalai uarazi iuera ozara Matalai. uarazi ozara Matalai. uarazi gise zizara Matalai.

uarazi lizara Matalai.

e iuerox. gise always means two people. ile can be two or more. merarai they,

iuifaugl zeua iem uarazi iuifaugl zeua iem. raro ifaugl zeua iem

Some Forms of to See.

I will see	izaxatoro, izaxauauge
you will see	gozaxatoro, ozaxauauge
we will see	zizaxatoro
they will see	lizaxatoro

The Auxiliary Verb To Be.

	2	gete o xamitek	they are sick	merarai li xamitek
	we are sick	gise zi xamitek	you are sick (pl.)	ile li χamitek
	I am healthy	ngan imaro lari	you are healthy	gete omaro lari
	we are healthy	gise zimaro lari	you""(Pl.)	ile limaro lari
ar	i			
an	nitek			
χι	amitek			
nit	tek			
χa	mitek			
mi	itek			
zei	i xamitek.			

	Ve	erbs.		The Numeral.
to work	uatar	to crawl	galaχ	The numeral is not used standing alone but always in connection with the related noun. While counting a suffix
to breathe	ngaz	to lie	iuouor	added to the numeral, relating to the kind of the counted noun. This suffix influences the sound of the precedir
to get up	zutaik	to sneeze	mozi	numeral especially the vocal of the root syllable. Thus, it is not possible to present a fully-fledged unaltered for
to bathe	uauta	to whistle	remerieparieri	for the individual numerals. After deleting the different suffixes we have approximately the following form for
to blow	ugu	to talk	iuarauk	the numbers: from 1—10
to stay	ipemi	to clam	uatan	$1 ze, zi 8 \qquad uar$
to bring	razato	to call	fazan, razoili	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
to eat	mangal	to see	gauauk	$3 zor, zer 10 \qquad zeik$
to fall	epingitio	to sit	matotiu	$4 fa \qquad 11 \qquad zeiki me zi \dots$
to yawn	таиа	to sing	ameres	$5 rim, lim 12 \qquad zeiki me li \dots$
to give	iuararige	to sleep	iuimasegl	
to use	veve	to beat	uautu	
to give birth	iamitiur	to stand	izi	7 uiz, fiz
to hit	uaut	to snore	ingaz	
to hear	longelon	to stand	izi	20 gliek 100 zauoki 1000 zengelezi 10 000 zeutaroieteik
to chew	riniz	to push	tou	
I saw	igauaugo	you will see	gozaxatoro, ozaxauauge	
	0 0	he will see		
		we will see	izaxatoro	50 rimeik 400 fauoki 4000 fangelezi and so on
			zizayatoro	60 oroik 500 zrimeruoki 5000 rimengelezi
		you will see they will see	lizaxatoro	70 uizik 600 orouoki 6000 orongelezi
		they will see	lizaxatoro.	80 uariek 700 fezouoki 7000 fizingelezi
	17	,		90 ziueik 800 uarouoki 8000 uaringelezi
to work	ve uatar	erbs. to crawl	galax	900 tiouoki 9000 tiuongelezi
to breathe	ngaz	to lie	iuouor	one hundred thousand teiietiu taroieteik
to get up	zutaik	to sneeze	mozi	100 000 zangaur teiietiu taroieteik
to bathe	uauta	to whistle		200 000 liangaur " "
to blow	udula ugu	to talk	remerieparieri iuarauk	300 000 zorungaur "" 400 000 fangaur ""
to stay	ipemi	to smell	uatan	400 000 fangaur " " 500 000 rimangaur " "
to bring	1	to shout	fazan, razoili	600 000 <i>orongaur</i> " "
to eat	razato mangal	to see	gauauk	700 000 <i>fizingaur</i> "
to fall	epingitio	to sit	matotiu	800 000 uoringaur " "
to yawn	таиа	to sing	ameres	900 000 tiuangaur " "
to give	iuararige	to sleep	iuimasegl	1000 000 mezepi mezepi
to use	veve	to beat	uautu	Nevertheless to count in pairs is done in the same fashion for all items, without any special suffix.
to give birth	iamitiur	to stand	izi	
to hit	uaut	to snore	ingaz	1 pair taluie 30 pairs tiuzeriek 2 pairs aruuain 40 " tiofeik
to hear	longelon	to stand	izi	3 " rimoor 50 " tiorimeik
to chew	riniz	to push	tou	4 "fiziuar 60 "tioorok
				•
to tattoo	farufer	to cry	iten	5 iluzeik 70 ilojiziek
to kill	rii	to throw	ikai	10 nunex 60 nountex
to drink	r (e)	to count	aroiia	90 <i>"tiotineik</i>
				100 <i>" tiozauoki</i>

100

The Numeral

- " tiozauoki

The measure of leng	gth is the length of	both outstretched arms, <i>i</i>	igaue.	Wooden Tools.
1				zifazo, the suffix for small things is always used
	length zange	-	fizingaue	a comb <i>zeuua gom</i> a wet coconut <i>iopopu zeua uan</i>
	lengths <i>liang</i>	иие в	uarungaue	a table <i>zeuua pazo</i> 2 wet coconuts <i>iopopu luouua uan</i>
3	20141	guue 9	tiuangaue	1 big tuber of taro zeua tereperi uod a dry coconut iperi zeua uan
4	jungi		zeike tiu angaue	Comment: worked wood, which is only part of a whole and does not yet present an item, is connected with <i>zisau</i> .
5			zeike ma rimangaue	Only finished items have the suffix zeuua. All kindling is zeari.
6	" orung		liek angaue	Parts of Plants. 1 coconut zeuua uan
		100 "	zauoki angaue.	a blossom <i>zeuua mougur</i> 2 coconuts <i>luouuo uan</i>
				a coconut zeuua uan 3 coconuts zoruuo uan a tuber of taro zeuua uod 4 coconuts fauuo uan
The following suffixes are used when nouns are counted :				a tuber of tarozeuua uod4 coconutsfauuo uana lemonzeuua gulugul5 coconutsnimouao uan
	or plants as a whole			Exception: an areca nut <i>uo</i> ; here a small coconut is called <i>zifaz uan</i> .
			ody parts, large living things (not human) big	
,	fruits, wooden tool	5.		1 housezeuua iem3 houseszoruua iem2 housesluoua iem4 housesfauua iemand so on
	for small things .	11 ' 1		
	or humans and sma			1 (big) fishzeuua iek3 fishzoruua iek fauua iek2 fishluouua iek4 fish
		ch as leaf, blossom.		
		-	s not known, which are nevertheless documented	Big Stones:
by examples and dev	viate from the usua	ll ones: -guuo, -erat, -par	and some others.	big stone zeuua faz, zeuua teriperi faz
Just like us, the nativ	ves use the numera	l as an indefinite article.	There seems to be no indefinite plural and	As Big Living Things Are Considered:
accordingly the num	neral two is used in	stead of expresssing the	plural. Here, too, the respective kind of suffix,	<i>uarik</i> bat <i>paro</i> shark
depending on what l	kind of word, has t	o be used for the numera	1. For instance:	piriz dog periperi shell
	<u> </u>			peik pig guz louse
	Singular		Plural	mar bird though gigi (butterfly) and ran (fly) are not.
house	zeua iem	houses	luoue iem	gas rat
man	zimaro mar	men	liemero mar	$\chi eian$ chicken as long as these animals are small the numerical suffix <i>zimer</i>
fish	zimer iek	fishes	liemer iek	iek fish is used. zimer iek is always a small fish.
coconut	zeuua uan	coconu		<i>uzeri</i> lizard
woman	zimaro veiviet	womer	te e e	III. Zifazo. Small Items.
				1 small tuber of taro zifazo uod a small stone zifazo faz, zifazo geperi faz
Now follow some ex	xamples for the ab	ove shown rules of the na	atives' language:	2 small tubers of taro <i>liefazo uod</i> a small tubers of taro <i>zifazo geperi uod</i> .
		to I. zaχai		3 small tubers of taro zorufzo uod 4 small tubers of taro fafazo uod
one tree	zaχai siriged	6 trees	oroxai siriged	4 small tubers of tarofafazo uod5 small tubers of tarorimefazo uod
two trees	liaxai siriged	7 trees	fiziyai siriged	To IV zimer.
three trees	zeruxai siriged	8 trees	uaruxai siriged	Humans.
four trees	faxai siriged	9 trees		1 man zi maro mari lii maro mari zeri one big man teriperi mari
five trees	rimayai siriged	10 tree	es zeike ziu siriged	2 men maro mari fa maro mari five big men rimer teriperi mari
		to II samua or sam	0	3 men 4 men 4 men 5 men 6 one small man two small men 6 <i>liimer geperi mari</i>
Items as a whole, bo	odv Parts	to II. <i>zeuua</i> or <i>zeu</i>		4 men
	•	1 0.1		5 men <i>ri maro mari</i> three small men <i>zerimer geperi mari</i>
a cloud <i>zeuua</i>		5	a fish net <i>zeuua sou</i>	6 men <i>oro maro mari</i> one good man <i>imero mari</i>
a bracelet <i>zeuua</i> a nose <i>zeuua</i> a	0		an eye <i>zeuua metei</i> an ear <i>zeuua zeringe</i>	7 men <i>fizi maro mari</i> five good men <i>imeri rimeri mari</i>
a hand zeuua			20000 20101ge	8 men <i>uari maro mari</i> one sick man <i>χamiteki zimero mari</i>
	~			9 men <i>tiu maro mari</i> five sick men <i>χamiteiki rimero mari</i>
				10 menzeike maro marione dry maniopopu zimero mari
1 The definite article is 1	not documented.			11 men zeike me zi maro mari

In case zime	r is used in connection with an	imals then it mear	is that they are small; otherwise they have to be	1 leg	zo guuo gupei	6 legs	oro guuo gupei
connected wi	th zeuu.			2 legs	lio guuo gupei	7 legs	fizi guuo gupei
		To V. zisau.		3 legs	zoru guuo gupei fa guuo	8 legs	uaro guuo gupei tiuo
		10 1. 21500.		4 legs	gupei rimo guuo gupei	9 legs	guuo gupei
Parts of item		(1		5 legs		10 legs	zeike tiuo guuo gupei
1 leaf 2 leaves	zisau saure liisau saure	6 leaves 7 leaves	orosau saure fizisau saure	The following pours	re counted in a deviant way:		
2 leaves 3 leaves	zerisau saure	8 leaves	uarisau saure	The following flouris a	re counted in a deviant way.		
4 leaves	fasau saure	9 leaves	tiurisau saure	1 cigarette	zeau sigarete	1 piece of wood	zi pat
5 leaves	rimesau saure	10 leaves	zeketiu saure	2 cigarettes	li au sigarete	2 pieces of wood	lii pat
		15 leaves	zeike me rimisau saure	3 cigarettes	zeri au sigarete	3 pieces of wood	zeri pat
a fan (made o	of strips of pandanus) <i>zisau ilüp</i>	<i>pau</i> ; and all crafted	wood, before it becomes a finished tool.	4 cigarettes	fai au sigarete	4 pieces of wood	fa pat
. .		C 1		5 cigarettes	rim au sigarete	5 pieces of wood	rimi pat
			long as it has been recorded — in connection with	6 cigarettes	oroiau sigarete	6 pieces of wood	oro pat
body parts, th	hat are otherwise counted accord	ding to the rules w	ith <i>zeuua</i> .	7 cigarettes	fizi au sigarete	7 pieces of wood	fizi pat
	<i>-a</i>		-eri	8 cigarettes	uari au sigarete	8 pieces of wood	uaru pat
1 tooth	$ze a ngid^{1}$	1 hair	ze eri simei	9 cigarettes	tiu au sigarete	9 pieces of wood	tiu pat
2 teeth	li a ngid	2 hairs	li eri simei			10 pieces of wood	zeike tiu pat
3 teeth	zeri a ngid	3 hairs	zeri eri simei				
4 teeth	fai a ngid	4 hairs	fai eri simei		Adverb	and Preposition.	
5 teeth	rim a ngid	5 hairs	rim eri simei	yesterday	raro	here	ie
6 teeth	oroi a ngid	6 hairs	oroi eri simei	tomorrow	uarazi	there	itar
7 teeth	fizi a ngid	7 hairs	fizi eri simei	today	lenei	thither	itar
8 teeth	uari a ngid	8 hairs	uari eri simei	day after tomorrow	mezigilan uarazi		
9 teeth	tiu a ngid	9 hairs	tiu eri simei	day before yesterday	mezigilani raro	in front	imor
10 teeth	zeike tiu ngid	10 hairs	zeike ziu simei	before	mozu	behind	imuili
15 teeth	teike me rim a ngid	15 hairs	zeike me rim eri simei	a long time ago	firimoru mozu		
	-pau		-at (-rat, -gat)		uara mazau	over	ueniin
1		1 4		not too long ago	taengi naro	on top	uaur
l arm	zi pau pei	1 toe	zerat xatire gupei	always	pipie lari	underneath	iuar
2 arms	li pau pei	2 toes	lierat <i>xatire</i> gupei	now	igete	outside	irugur
3 arms	zeri pau pei	3 toes	zeriat <i>xatire</i> gupei	tomorrow morning	nimiarie ni uarazi	inside, in	itan
4 arms	fa pau pei	4 toes	farat xatire gupei	yes no	nge nauueri	ahead! come!	paten paton
5 arms	rimi pau pei	5 toes	rimerat <i>xatire gupei</i>	what is this?	metaitar	what is the name of this?	metamere
6 arms	oro pau pei	6 toes	oroat <i>xatire gupei</i>	what is this:			metumere
7 arms	fizi pau pei	7 toes	fizigat xatire gupei		A	djectives.	
8 arms	uari pau pei	8 toes	uarigat xatire gupei	big small	tereper iteper	blind deaf	imazilimatar epinge
9 arms	tiu pau pei	9 toes	tiuorat xatire gupei				teringe
10 arms	teike pau pei	10 toes	zeike tiu xatire gupei	high	eerai	dumb	itagura titir
11 arms	zeike me rimi pau pei			long	ierei, igömes	lame	torozegl
				old	inap	good	imaro
It seems the f	inger ze χati is counted just like	the toe zerat χatire	e gupei. The numbering suffix has obviously been	young	uesi	bad	tamar
pushed out b	ecause of the same sound as the	e following noun.		round	eramatagou	white	eruozopos
			ngers far xati, 5 fingers rimer xati, 6 fingers	cold	fau	black	elosolos, elos
<i>oro</i> χ <i>ati</i> , 7 fi	ngers <i>fizi</i> xati, 8 fingers ua	<i>ri χati,</i> 9 fingers	tiu xati, 10 fingers zeike tiu xati-guuo	warm, hot	iues	clean	rala ualau
				dry	iperi	red	lozas
1 The final endi	ng <i>i</i> of the number $>i$ instead of $>u$: for	<i>aia, oroia</i> , is an indica	tion against the derivation from zeuua.	wet	іорори	blue	elozo
		-	-				

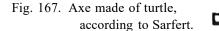
healthy	taiiamite (?)	green	erala ualau
sick	χamitek	brown	elos, elosolos
dead	mazi		

II. Economy and Material Culture.

1. General.

The main food resources of the natives are a griculture and fishing. In the process the economically necessary workloads are distributed among the sexes in the following manner: men execute the construction of the house and the canoe and they practice fishing. They only participate in agriculture conditionally: they plant (for instance together with their wife) coconut palms, sugar cane, and they prepare palm wine. In addition they do all kinds of wood work and construct their own fishing tools. Women do the chores at home and in the field. Sometimes men support them doing this. Women never fish and of all the practiced handicrafts they plait and weave the loom.

The fields, the distribution of which has already been described — except for their names — are called according to the fruits grown there. They distinguish meteri uuray and meteri uod (taro), meteri mogumog (arrowroot), meteri fazogl (banana), meteri moru and uone gisar. Only women tend the taro fields. After the area has been cleared from grass, then the ground is prepared. To do this they only use the digging stick, xoto. However, no special depressions are created. In the end the tuber are placed into the ground. Every 4 to 5 months people can harvest. In order to crush the soil people have a tortoise adze, tapazilai; the extra wide blade is inserted into the handle.



Women alone prepare the meals. They do not keep special hours and the entire family eats together. There are only food taboos for pregnant women. If possible they do not let the fire extinguish. In case of need they fetch some in the neighborhood. In former times they used two sticks for whipping fire, called gliag; the same method as on Pur and Songosor. Recently they use matches. Besides the meat of fish Merir-People eat pork and an amazing number of poultry. With the exception of chicken all of it is hunted. The birds listed below are eatable.1

In addition, they cherish two small crabs, lagum (Palau rugung) and ievi (Palau gadad). However they do not know how to catch them, but get them from Palau-People.

χaian agiinggui	chicken	tapar	(roraie)
gaiingau	black dove (<i>pazao</i> χ)	lan	duck (sauar)
		rifolox	(polorol)
χatao	(guel)	riangeig	(rogai)
χauan	(gazam)	rigosoi	(frariek)
χalag	egret? (soro)	gelefaz	(pongpeinugl)
les	a black bird (<i>pezau</i> χ)	iriri	
ngaugau	(mölup)	girin <i>xau</i>	(meluglgu)
uirig	a white bird (soser)	ritoto uot	
liazi	(rosurloouogl)	rigar periper	bat
mesigo	(grgies)	uitiaz	(otilic glat)
paiienei		liamax	
faugalau		mensauru uurax	
giop	(pelorel)	zok	(zuzuk)
menifariu oruor		ziuaual	(pagai).
tiuxalis	(driz)	liazi	(rosurloouogl)

The Most Important Dishes Made From Plants:

- known as pesur.
- Palau *brak*.
- 3. *yauguz*. A salad made from the leaves of a kind of grass. It first must be boiled in water. 4. fazol. Roasted pandanus fruit.

- 6. sauuor. A green salad, prepared in the same way as the one above. Palau torox.
- 7. maï. Breadfruit. Roasted and boiled as a whole.
- 8. gulugul. A kind of lemon, eaten green.
- 10. uauuai. An imported fruit, roasted and cooked. (Palau porpai).
- 11. bamugen. Pumpkin cooked.
- 13. mogumog. The flour of the arrowroot.
- 14. gumiet. Cooked sweet potatoes.
- 15. *pelar*. Cooked beans.
- 16. iauauua. Kind of grass on Merir.
- 17. uarumai. Lemon-like fruit, eaten raw. Palau uaux.
- 18. bokue. Raw and cooked kind of pineapple. Palau lug.
- 19. fas. Big fruit of a tree, raw or cooked. Palau rougo nopar.
- 20. tavas. Small fruit. Palau razopungel.

1. maru. Peeled and cut taro, placed on fire and covered with stones, roasted, on Palau

2. *uuary*. The other kind of taro cultivated by them. It is prepared in the same fashion. On

- 5. ziob. A salad made of leaves. It is bound together and roasted, then thrown into
- hot water. It seems it is eaten out of the water. On Palau this dish is called oser.
- 9. *xalifat*. Also an unripe eaten fruit. Palau *ropodel*.
- 12. uan. Coconut, either drunk raw or scraped or also cooked.

¹ The names in brackets are Palauan terms.

21. eitaz. Small nut. Eaten raw. Palau mie. 22. uarigir. Small fruit, eaten raw. Palau rasimir. 23. yanoy. Lemon-kind fruit, eaten raw. Palau geregul, loyol. 24. iam. Yams, cooked. 25. tar. Eaten cooked. Palau tal. 26. zeb. Cooked. Palau ripas. 27. rof. After soaking it in water for three days, it is eaten raw. Palau zanges. 28. toik. Eaten cooked. 29. palige. Roasted. 30. farieri uor. Roasted. Palau zuzuk. 31. fetai. Roasted.* 34. ulai. Boiled or roasted. 35. use. Boiled or roasted fruit. Palau uoso. They do not know salt.

2. Fishing and Hunting.

Methods and tools for fishing on Merir correlate with those on Pur and on Songosor. When fishing with rods people nowadays use only the small, simple hook, χau , formerly made of tortoise shell, recently predominantly made from an iron wire. It can also be used in deep water, when the hook is attached to a stone and sunk with it. Then even bigger fish can be caught with it. If anything the other hooks serve only as a neck decoration. There are two different kinds, the *piriatau* and the *api*. The first one is either flat and furnished with a small barb (Fig. 168, 1366 II) or a bit rounder with a curved tip. The api has been worked from a nearly semicircular piece of tortoise shell. The tip is only hinted and right from the start the entire piece was produced as jewelry.

Composite fishing hooks, parupi, are used to catch bigger fish. The lure is made of motherpearl, paritore, the hook is made of tortoise shell, uose.

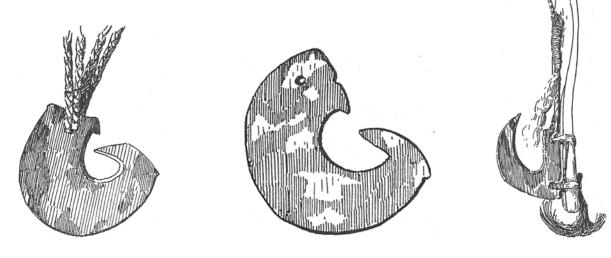


Fig. 168.

Fig. 170.

Fig..169. Fig.168, nr. 1366^{II}. Decorative hook made of tortoise, *piriatau*, on a necklace made of pandanus leaf, *fize*. Diameter of the hook 5 cm, length of the string plaited from 4 strips: 120 cm. — Fig. 169, nr. 1374¹¹. Composite fishing hook, parupi. Lure made of mother-of-pearl, length 11 cm, greatest width: 21 mm. A small tortoise shell hook is attached with hibiscus bast. Length of the back-end: 32 mm. Tip of the hook slightly curved inwards. Distance between blinker and tip ca. 3 cm. Front part twined from a double strand hibiscus bast. Fly from human hair. — Fig. 170, nr. 4633^{II}. Fishing hook.

strand of hibiscus bast.

For Net-fishing the Merir-People use nets with handles (handle-net), drop nets, bag-net, and standing nets. The handle - net, sou, is the same as on Pur. Merir-People distinguish between sou riuarimata and sou rimangal. The first one is the smaller one and is only used within the reef. The fisherman wades into the water with it. It is also used during night at low tide. The man holds the net in one hand, a torch made of coconut fronds in the other. A second man holds the fishing basket. The first one fishes the sleeping fish, the second one collects them in the basket. This kind of fishing can also be practiced alone when the rays of the full moon come down vertically. Then the sleeping fish are flushed with a stick at low tide. They are driven from their hiding places behind stones into the net right next to it. The sou riuarimata of the Hamburg museum is well done and its construction is comparable with the net from Songosor on plate 5, 4. The handle is called *iuar*, the frame *yature*, the piece of wood to stiffen the net *oruuei*. The frame consists of two bent pieces of wood, the tips of which are attached one over the other. The handle protrudes considerably into the frame. The ends are attached on both sides of the handle. A stiffening piece of wood, 24 cm long, is positioned at the end of the handle. One side of the frame measures 72 cm, the handle has a length of 1 m. The wrapping is made of coconut sennit cord. The net is made of the same material: of double stranded, strongly twined bast. The side of a mesh is 2 cm. The wooden pieces of the frame are pulled through the first meshes of the net.

In most cases the sou rimangal is bigger than the sou rimarimata and used outside of the reef. In the light of the full moon several canoes with three men each leave for the open sea. One of the men has a torch in order to flush the sleeping fish. The other two have each a *sou*. In this fashion people catch the flying fish *mangal* and the jumping fish maki. The last one can be quite dangerous and supposedly can spear a man to death. Therefore, for this fishing technique people need very bright torches, in order to have a good view. People throw the sou-net on top of the fish, quickly turn it around, and pull it outside. Often more than one hundred fish are caught in this manner. The frame of the net consists of 4 parts. The connecting points are called $\chi a \chi a r$, the entire frame $\chi a ture$, the lower part of the frame is curved and attached to the handle. The stiffening piece of wood is missing. The net corresponds entirely to the nets from Songosor. The handle, *iuar*, of the net 1349 II is 98 cm long and has a diameter of 2 cm. The diameter of the frame is 60 cm x 48 cm. The net is netted from a string made of cotton wool, it is very thin and a mesh has a length of 2,7 cm. All bindings are executed with coconut sennit cord.

The umbrella drop net *fen* is used to fish on the open sea. Just like on Songosor, besides this one, they know the sou golum. These nets are not big. A piece of bait, pere, is attached on a string over the circular wooden frame χatu . The strings for submersion are also attached on the frame. A shell or a piece of coral stone serves a sinker. The net 1375, Fig. 171, has been made quite carelessly. The ugö is an open mesh bag, used as a throwing net in shallow water. It corresponds with the Pur-Net depicted. Its diameter measures about as much as the width of a man's span. When fishing the fisherman holds it over the left arm and the left shoulder and throws it over the fish. Initially Merir-People, just like the ones on Pur, also fished with the big gill nets, ugarei. Nevertheless, on Palau they also acquired the method used there. They hold the net in between two canoes and always stay within the reef. In order to flush ou the hiding fish, people from each boat throw a stone behind it, in order to startle it and to catch it in the meshes of the net. They call the floats attached on the top rope of the net *apezit*, the weight on the bottom string are called *fazir*. It seems like that fishes are only speared when chased out. For this either the sou or the spear is used. At first the fishes have to be rounded up. This is done with the help of several coconut fronds attached to a rope. The leaves have to stick out on all sides. Now the men go into the shallow water encircling the fish with the rope. At all times it has to remain under water. The fish do not dare to get out of the circle because the fronds scare them.

At the bottom a fly of human hair is attached. The front part consists of very fine string, twined from a double

After that the spearing starts. The spears are called $\gamma azik$ iek > $\gamma azik$. In former times the spears were made of one piece and the barbs on the tip were carved. Nowadays, they are usually made of two pieces. The shaft is called *uungure*, the top part *yazik*, the barb *yamaseripar*, the last end with the barb *meteri* $\chi ezik$. The tip and the shaft are held together by tying it with a string, $\chi a \chi a r$ or mataru uungur (compare Songosor, Fig. 19b, nr. 1514 II).

For kite fishing, sauri ieseik, people use a leaf from the breadfruit tree, sauri mei. It is stiffened by inserting leaf-ribs. The axis of the kite is formed from the rib of a coconut frond, which protrudes quite a bit over the end of the leaf. All this together has a length of ca. 50 cm. People let the leaf fly on a long string, auriieseik. At the end of the leaf a second string is attached, its end jumps on top of the water and has a bait made of spider web. Attached to it the small spider, that produces it, is called *sarai*. The spider web, *getauo lala*, makes a fishing hook unnecessary. The mouth of the fish is tangled so tightly in the spider web that it cannot get loose. The fish caught in this fashion can be up to ½ m long. The string runs from the canoe through two small holes poked into the upper part of the leaf, from there along the bottom side to the »tail« and then into the water.



diameter of ca. 25 cm. The

fen. The circular frame has a The shark is caught with the help of a loop and some bait. Two men are necessary to catch big animals: they operate the loop. One fisherman alone meshes of the net measure 32 can handle small sharks. In this case he takes a thick rope and forms a loop, mm. The sinker is a shell. faloiki, with it. It is kept open due to the stiffness of the thick rope and does

not need a stiffening piece of wood. At the end of the loop hangs a small bait fish on a thin string. The string is wound around the body of the fish and attached with both ends on the side of the loop, so that it is strung tight. When the shark wants to eat the bait he has to swim sideways into the sling. As soon as he is inside the men pull the loop tight and push the long end of the rope as a second loop over the shark. Then they pull it outside and beat it dead with a club.

The fish trap, *uaiau*, was used on Merir. It has a flat bottom and a curved roof. The entrance leads inside like a funnel. It was placed in a depth of three fathoms and was well visible there, so that it was not necessary to indicate the spot. It supposedly was 11/2-2 m long. The natives do not build fish weirs, because the ground is to hard. In shallow water they use the crushed leaves of guru fish poisoning, zope. It is placed underneath some stones. The drugged fish are caught by hands.

Four men in a boat sail outside the reef in order to catch turtles. Two fishermen are roped up. When they see a couple (during copulation the animals spend their time on the surface of the water) the two men jump in. The ends of the ropes are held fast by the two other men in the boat. Now each one of the swimmers grabs one of the animals by throwing himself on top of its back and placing his left arm underneath the left front leg of the turtle and his right arm over the right shoulder of the animal. Then the men in the boat pull on the ropes and in this fashion the swimmer and the turtles are slowly pulled in. Once they are near enough the men in the boat throw a noose over the front legs so that they are bound cross wise and place them in the bottom of the canoe. Individual animals can hardly be caught. They are always caught in the described fashion. Only **birds** are **hunted**. The index of animal food shows that many species are consumed. They know five different methods to catch the

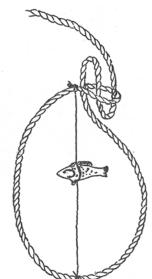
slingshot. Doves are caught in flight by day and by night with the big net sou rimer. The net is especially big. The huntsman armed with it, climbs a tree. This hunting method is supposed to be very efficient. They hunt with a snare that can be pulled tight, *iezerimer*. It is attached on a long pole and is made of the rib of a coconut leaf. The catcher climbs a tree with it, closes in on a dove with the snare and then quickly pulls tight. They also use a bow to hunt birds. 3. The Canoe.

The art of constructing a canoe is handed down from father to son. Not all men know how to do it. Currently there are only chief Peilox and the men Ualerei, Ariselen, Lukam, Maniioro, Ianis, Uaieu, Ivararunar, Tutamar, Ualaien, and Moarifoil who can build a canoe. They say they learned it from their fathers. Preferably Calophyllum wood, filau, is used.¹ It takes about half a month to build a three meter long canoe. A big canoe can be finished in five months. The construction of a canoe is accomplished free of any cult. The construction of the Merir-canoe is hardly different from the islands Pur and Songosor.

The canoe can be sailed and paddled. When sailing on the open sea people took all their food ready made with them, because they had no fireplace on Fig. 172. Shark sling with their boat. The photo here shows a sailing canoe at full speed. Fig. 173 shows a bait, according to E. Sarfert. model made by the natives. Fig. 174 depicts a schematic view of the individual parts, especially of the outrigger's lifting gear, seen from the top. Often an attachment is protruding far out on the side of the canoe opposite of the outrigger. According to Sarfert the individual parts of the canoe on Merir are called:

windward platform	<i>eau bada</i> Kr.	bow	moar		
lee platform canoe	bairime Kr. auua	stern top piece on the bow	mulite pelir		
top piece of stern hull	pelir mulite ren iua (1)	float	tamar (13), tam Kr.		
edge of the keel gunwhale top piece of gunwhale	rapite ngeisrer (2); iei Kr. rerigieze (3) χeritieta Kr.	longitudinal piece of wood above the float stiffening cross holes in the float	uarie (14); variei Kr. apise* puluuulotam		
thwart	<i>taur</i> (4)	binding on the float	tautau		
mast board hole for the mast	feleve (5) uatouari (6)	forks on the float	rator rat Kr.		
beam of the outrigger	giaur (7);	sail	üie		
curved outrig. beam diagonal poles	kiau Kr. fariauχon Kr. meteleuen (8) betekevei Kr.	mast vertical side of the sail, respectively vertical beam ²	χauz χazegaz		
bent pieces of wood	uautam*	lower horizontal side			

animals. The simplest way is to kill birds during their sleep with a thrown stone. However, they also know the



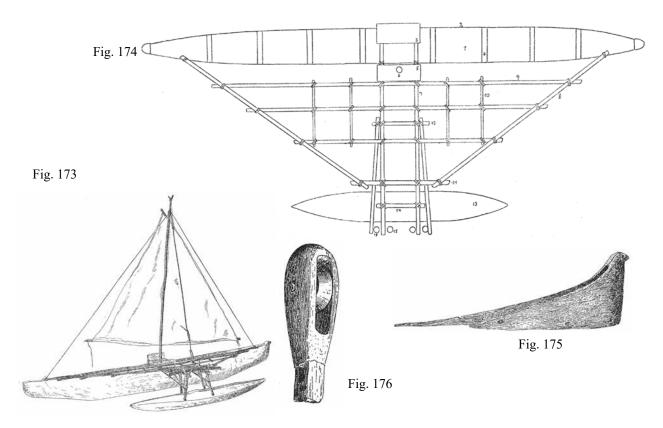
1 Certainly an error, just like on the neighboring island it must be breadfruit

long outrigger sticks	iaupase (9)	respectively top mast ¹	nun
cross outrigger sticks	leausik,	paddle	vature, vatinigax, falir Kr.
	lemetesik (10)	bailer	nin Kr.
last long outrigger stick	taliare (11)	anchor	rümetek
short stiffening wood		Callophylum resin	
under the scaffolding	χapise (12)	for caulking	uor

These terms show the extensive correlation with the respective terms of Songosor and Pur.— The sail is sewn together from narrow stripes of Pandanus mats, in which the strips run in the direction of the mast. There are no reports concerning the rigging, however, the photograph on plate 14 shows clearly that there is no abbreviation from the known one. - The snatch block made of breadfruit wood has been adopted from the Europeans and is very popular.

4. Clothes, Jewelry, Tattoos, and Weapons.

The natives keep their bodies very clean. Every day they bathe in the ocean. Children walk around naked until they are five years olden. In the old days the women's clothes consisted of an apron-like mat, made from woven material of pandanus leaves, *iepe*. They were fastened with a belt made of pandanus leaves, *rararupeu*. Men still wear the maro, however, today it is made of calico, in former times women wove it on the loom. Recently the traditional women's costume consists of a grass skirt reaching a bit over the knee. In the front it is folded on top of each other and held fast with a belt or a sash, mostly of calico. The skirt starts a bit underneath the hipbone. Furthermore, they always wear around the midriff a very tight belt, knotted in the front. This one, too, is made of European material. Men wear the lavalap either looped into a simple knot or carefully spreading the free end and hanging it apron-like over the penis.



¹ The terms specified here do not correlate with those of Songosor, where the respective terms have the names the other way around. Presumably there is a mistake in terms.



Fig. 173. Model of a boat nr. 1629^{II}. Length of the hull: 120 cm, height of the hull, 12 cm, length of the float: 12 cm, height of the float: 5½ cm, height of the mast: 90 cm. — Fig. 174, nr. 1629^{II}. Top view of the model boat. 1 ren iua, 2 ngeisere, 3 regigieze, 4 taur, 5 feleve, 6 uatouari, 7 giaur, 8 meteleuen, 9 iaupesa, 10 leausik, lemetesik, 11 taliare, 12 apise, 13 tamar, 14 uarie, 15 rator. — Fig. 175, nr. 3885^{II}. Top piece of hull, pelir, breadfruit wood, l. 60 cm, h. 19 cm. — Fig. 176, nr. 4635^{II}. Snatch block, height 16 cm.

The woven belt was called marozorozo. Just like their neighbors on Pur and Songosor, during trips on the open sea they wore the sailing jacket called *rigou*, made of woven material from pandanus. They have the **hat**, *pelin*, and the cap, eperi pelin, as a headgear. Both are woven from pandanus leaves, fazole. While working in the field women protect themselves from the sun with a taro leaf, winding it around the head. In former times the hair style of men and women was seemingly the same. The hair was never cut, but only loosened with a comb, gom.

It was twisted to a knot, usually on the side of the backside of the head. Older men let their beards grow.

Flowers play a major role as jewelry. Wreaths in the hair of women and children can often be seen. They also like to wear flower garlands, male riuenisimei. Head decoration is the decorative comb iletöv, usually decorated with feathers from the *zouk*.¹ The black colored combs are carved from breadfruit wood, as is already known from the other islands. The teeth are very long. The flat area is divided by a constriction. In most cases the side edge is also decorated. The decoration, too, does not show anything new. Sometimes chains made of pandanus leaves substitute for the wreaths. They are also wound around neck and arms and are called sim or fiz.

As a decoration of the ear people stick a flower into the peirced earlobes. They have different names for this: autoni teringe or dsiei. The decoration of the neck consists of all kinds of necklaces. To begin with there are simple, long, band-like necklaces made of a narrow network from woven pandanus, consisting of borders made in a plait pattern fashion (compare Fig. 128). The width is about 6 mm and the name is *uize* or *fize*. They are also used as decoration of the arm or people wind them around their breast and hips. They also produce round necklaces made from strips of pandanus leaves, which are wrapped by small, tightly braided strings made of human hair, called accordingly zim.

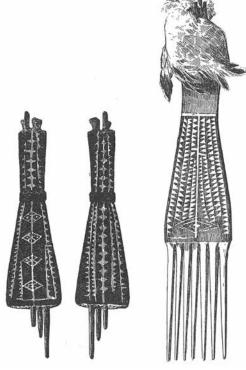
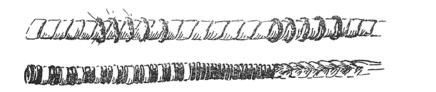


Fig. 177, nr. 4638^{II}, nr. 1387^{II}

Combs for dances, iletöv, made of breadfruit wood, carved and colored black. Length 34 cm, length of the teeth 11,5 cm, thickness 1 cm, width at the bottom 6.5 cm. narrowest point 3.5 cm. Length 24 cm, length of the teeth 5 cm, width at the bottom 5,2 cm, narrowest point 26 mm, thickness 1cm.



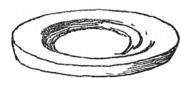


Fig. 180

Fig. 178. Fig. 179. Fig. 178. nr. 1384^{II}. Necklace *uize* made of strips of pandanus leaves and braids of human hair, *zim*, width of the leaf strip: 4 mm. After ca. 4 wrappings with leaves follow 5 with hair. - Fig. 179, nr. 2399^{II}. Necklace, *mesi*, made composed from shell and coconut shell discs, their diameter is about 4 mm. — Fig. 180, nr. 1374^{II}. Ring, regei xati, diameter 17 mm, width 2mm.

The general term for necklace is *mele*. People like to adorn these necklaces with the earlier mentioned hooks made of shell or tortoiseshell, *yapi*. Besides these they have necklaces made of shell discs, snail shells, and beads made of coconut shell. Fig. 179, nr. 2399 II shows such a necklace. Two coconut discs alternate with a disc made of shell. They are strung on a string made of hibiscus bast fiber.

A stone is used as a tool. The spinning top-like snail, Trochus, called iaxoro by the natives, is the source for the material of the first kind Bangles made of tortoise shell are called regei uoz, those made of coconut shell are regei tarak. Men give them to women as presents.

They also produce finger rings, regei yati from the same material. It seems that men prefer rings made of coconut shell. Nothing more than the name, autoni uoiti, is known of the nose decoration. It was not seen on anyone. Besides the already mentioned big combs the **decoration for dances** consists of adornments made of flowers and leaves and, most of all, ornamental painting. People smear the breast and the back profusely with gugun (curcuma) and paint a thick line across the forehead, the cheeks, the upper lip, and the chin.

The heavenly women Izazapio supposedly invented tattoos, farufer. In former times certain men practiced it professionally. Recently only chief Peilox and Ariselen still know about it. They executed it on men and women. No class distinction is expressed by this decoration. Everybody who wanted could get a tattoo. Besides the already mentioned celebration there are no regulations.

Nevertheless, the person, while being tattooed, is not allowed to work. The new moon is considered the right time to begin. Usually several people "are processed" at the same time.

As a decoration of the arm people wear the various, above described necklaces made of pandanus leaves and bangles, regei pei, produced by men from shell, coconut shell, or tortoise shell (compare with Songosor Fig. 47).

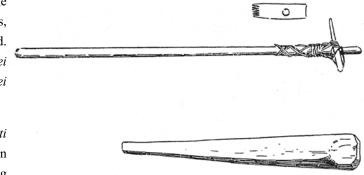


Fig. 181, nr. 1380^{II} and nr. 1381^{II}. Tools for tattoos. Hammer, taio, made of breadfruit wood. Length 25,5 cm, side length of the upper field: 3 cm. This item is new and very carefully executed. Fork, rarit. Length of the bamboo handle: 13 cm, rake, made of poultry bones; length 2 cm, wrapping made of fine strips of pandanus leaves.

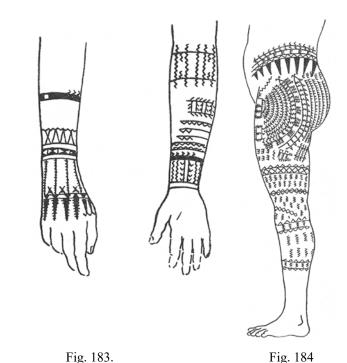


Fig. 183. Tattoos of the right hand, besides the forearm from the inside and the outside of a woman, according to Kramer. Fig. 184 Tattoos of the buttocks of a woman, according to E. Kramer.

¹ People also use the feathers of the white, mesigo, or the black, les, sea bird.

The work takes about one month. People calculate half a day for the completion of the back, for the front, the arms, and the legs also half a day, as well as for the sides and the legs. It seems that there are long periods of rest between the individual stages, as otherwise the long period of time cannot be explained. The execution of the procedure is the same as on Pur and Songosor.

The **pattern** correlates to a great extent with the patterns on Songosor and Pur. Nothing new can be found among it. However, we can say that small abbreviations in detail, if not to say enrichments can be found. Thus, for instance, the decoration of a woman's upper thigh, a semicircular arrangement of zigzag lines, closely positioned one after the other, is not known from other islands. Such a lush design is also not known from Mogemog, even if the correlation is otherwise quite extensive. Especially the arrangement of the men's back and breast patterns is remarkably similar. On the other hand the pattern of the upper thighs seems to be longer on Songosor, Pur, and Merir. Moreover, Mogemog-People seem to use the fish far more often as a pattern. They fill the area of the women's lower legs with wide stripes instead of the fine zigzag lines and strokes popular on the other three islands. (Tattoos of the men Ariserara, according to E. Krämer. Archive Hamburg.)

The tattoos of the lower arms, especially of the inside, are richer than on the other islands. Especially when we take into consideration that the patterns recorded on Songosor are obviously not from there, but are the work of a woman from Oleai. In former times the weapons used by the natives, was the spear, $\chi azik$ or *uonger*, the dagger *uazei*, and the throw stone *haropu* or *gas*. Once the sling shot seemed to have been a weapon to wage war, recently it is only used as a toy and tool for hunting. People call it *zulu* or *uure*. It consists of a stick as long as an arm, on the end of which a plant fiber has been attached. It has been made into a noose that can be tightened around the sling stone. In the process of throwing it the fiber breaks and the stone is shot away. The arrow, *raure* and the bow, $\chi azik$ or *uoleuol*, supposedly never have been a weapon, but were always only a toy. The spear has survived as a fishing tool.

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5. House and Household goods.

Everybody knows how **to construct a house** and does so himself. When getting married the son builds his personal residence, however, it also happens that two or three families live in the same house, depending on its size. Nevertheless, when the family is getting bigger they like to build the new house in the vicinity of the old, paternal house. The division of labor for the construction of the house is the usual one: men build the scaffolding and women weave the mats for the roof and the walls. Coconut fronds are used for the production of these mats. We have no illustration of the badly decayed houses of old Merir. A small model house, constructed by the natives of Palau, is depicted in Vol. 2: a simple square construction with a gable roof. Walls and roof are covered with mats made of coconut fronds. However, it seems to be a somewhat different from the residential house: the corner posts are not exactly positioned in the corners but were moved a little bit inside. Accordingly the purlins and collar beams have also been shifted, so that the ends of the longs sticks protrude a little and touch the wall of the house. The meetinghouse on Merir had a slightly raised floor. On Palau all residential buildings are positioned on small poles. The filling of the wall has been altered, too.

Without entirely abandoning the coconut mats, they use here wooden slats that have been caulked white. They decorated the new house of the chiefs with white and red color. People produce it from the root of the *rör*-tree, the other one from chalk. The construction of the house deviates somewhat from the building on Songosor. The three ridge beams, positioned one above the other, and the missing stay (prop) are remarkable. Purlins and collar beams have no special names. There is an abundance of doors: one under each gable field and four under each long side. Yet, this may vary at each individual house.

The house plan below is the one of the chiefs' house in Ngarabodl.

The terms for the parts of the house are as follows:

 posts
 ridge beam
 2. ridge beam
 3. ridge beam roof, roof side
 roof slats
 rafters
 wind bracing, bracing wall
 slats of the wall
 sparen of the wall
 door coconut mats of the wall
 coconut mats of the roof



Fig. 185. Residential building Lorenzen.

Terms for the individual patterns of men's tattoos in the front: 1 saberibe, fatur, 3 dangenob or dangouo Dala.... Dangaloat, pude (tail-fish), aberia. In the back bororibei beruneg (mast) harineda right side, piserigering uauneon ouudore or ngiri paxo ngerimanm ratimoi bororogu uoginigena gedau

e are as follows: zule ungirab ungasik ungasik igado zilai ilapangaik ilipinge uau lari orofat tit ilapangaik itit latit ratam gir iazo

building in Nagrabodl. After a photo by

~~~~~	fatur
<b>XX</b>	dangoyo
	dāla
₩¥	dangeloat
$\downarrow$ >>	pude, tailfish
	bororibei
III	berimeg = Mast
$\Delta \nabla \nabla$	harimeda
Ă	piseregirin
	uaunéon, saberibe
	ouudore oder ngiri paχó, Shark tooth
	ngérimam
$\longleftrightarrow$	ratimoi
~~~~	borórogu
Ŷ	ųogirigeųa
ΣΣΣΣ	gédau
X	sengeseng, ngeuele, Frigate bird
	vararan om vut, Navel tattoo of women

The primary buildings belonging to a village, *epipieiem* or *fariiei*, are the residential hut, *iem*, the cooking house, om, a small house next to the dwelling house, and the boathouse, fare. The stove is called ferange. The sleeping place, *igage* or *rimei*, prepared with sleeping mats *soper* and head-rest, *urun*. They also have a name for the hammock: imonom.

Wooden tools have been salvaged in a badly weathered state from the ruins on Merir. They consist of different forms and sizes of bowls, *töpi*, of chests and pots, which show no difference to the known items from both of the other islands. The bowl with the bulging rim (nr. 3879 II) and the oblong bowl with the peculiar handle-decoration (nr. 4299 II) can be considered unusual forms. Even imported items could be found among them: the lower section of a very large bowl with feet, supposedly from the Admiralty Islands, and a small bowl from Palau. Most common were slightly hollowed bowls with a swaying bottom. Inside rounded, with a slightly flattened rim, and short handles. Height, width, and length of the individual pieces vary of course, still both items depicted here are representative for this kind. The biggest is 102 cm long, the smallest one 89 cm. The smallest bowl of the kind like nr. 4299 II/5 is 44 cm long and 7 cm high. The bowl 4229 II/2, already mentioned above, differs from the others less by their form than by their decoration. Around 1 cm underneath the rim is a bulge from which the handles protrude. The part of the side underneath is decorated with an embossed pattern. The relatively tall, circular bowl with its roundish and swaying bottom on the inside and on the outside is the second item that cannot be found on the neighboring islands. 1 $\frac{1}{2}$ cm underneath the rim runs a small bulge. Fig. 191 shows a round pot with a lid and a round bottom on the inside. The lid is furnished with a groove, which fits into the lower part of the vessel, which becomes narrower at the bottom. The badly damaged chest with a lid is one of those items that are already known from Pur and Songosor. The lost lid probably consisted of several pieces which were attached onto the chest with strings. The upper edge shows the beginning of a zigzag decoration. The small chest nr. 3884 II has a lid placed on top.

People mainly use the shells of coconuts as drinking vessels and water containers. The entire nut, with a small hole on top that can be closed, is called *paule*. When a quarter of the shell has been filed off then the container is called *tarako paule*. It then serves as a cup. Often half a nut or an entire nut is furnished with a string to hang it. In this fashion it serves to store color or paste. People used small nut halves as a spoon. Preferably the small, still egg shaped nuts are used for this. Sometimes people also produce spoons made of sea- and snail shells. In the process of food preparation the well-known pearl shells or pieces of bones serve as scrapers. Any sort of coral stone is used as a rasper.

Woven materials, fazifaz, for household purposes and for personal use, are quite similar to those from Songosor and Pur.

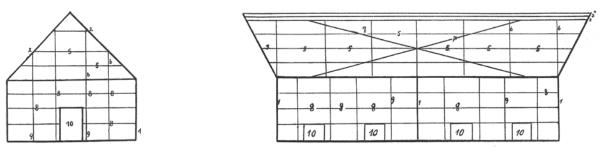
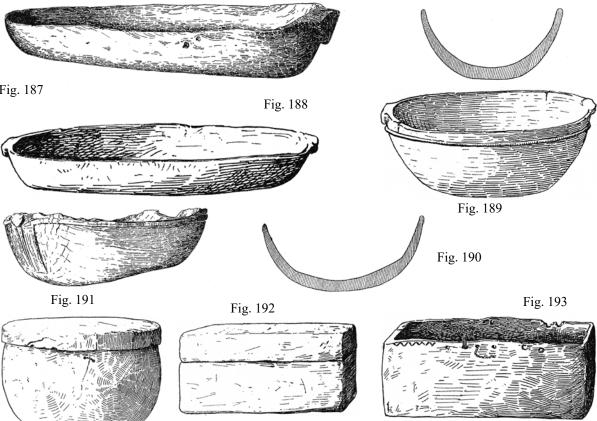
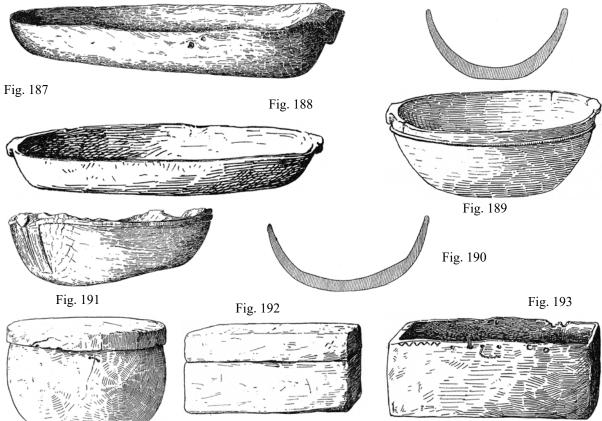


Fig. 186. Timber work of the chiefs' house in Nagarabodl. Drawn by Maleilan

Coconut fronds, *iazo* and strips of pandanus leaves, *terau* are the materials which are used. The collected sleeping mat, soper, nr. 1376 II conforms entirely to the Songosor-mat shown there. It is a diagonally woven matting in taffeta weave, apeas, with back weaving at the edge and canted corners. Measurements: 142 x 101 cm, width of the strips 3 mm, material pandanus leaves. All baskets are woven from coconut fronds. They are all woven in taffeta weave in a diagonal direction, however sometimes the plaiting pattern is 2a over 2b under 2b and so forth, all the while moving forward one {strip}. Merir-People differentiate between five kinds of baskets. The *tangalik* basket is used to fetch taro. Raiz is a basket for fish, used by women and men and has the form of a Songosor basket. Yet, the technique is somewhat different. Half a frond is used at the beginning on the upper edge. The fronds are split and one half is placed on top of the other so that both parts of the same leaf are plaited with each other. On the other hand the Songosor basket needed two halves of a frond, the leaves of which were entwined with each other. This matting also grows diagonally in a taffeta weave. The collected Merir-basket is woven from very short strips of a coconut frond.





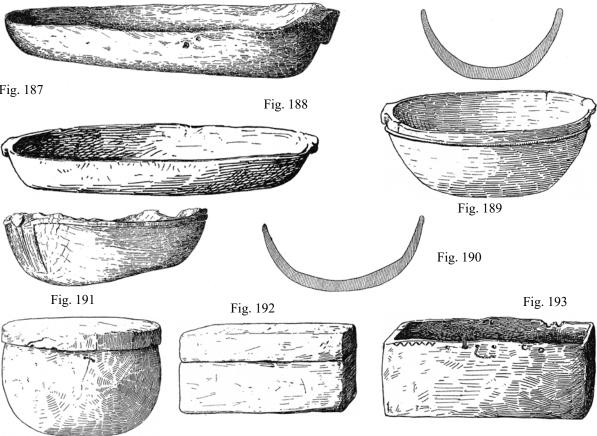


Fig. 187, nr. 3871^{II} . Wooden bowl made of breadfruit wood, *töpi*. The bottom on the inside is round, on the outside it is flat and swaying. It has short handles, ornamented with notches. Length 98 cm, width 31 cm, height 15 cm. — Fig. 188, nr. 4299^{II}/5. Wooden bowl made of breadfruit wood, *töpi*, with a swaying bottom and small handles. Length 80 cm, width 29 cm, height 12 cm, — Fig. 189, nr. 3879¹¹. Tall bowl made of breadfruit wood with a round bottom on the inside and the outside and with an overlap 11/4 cm underneath the rim. Length 43 cm, width 30 cm, height 15 cm. — Fig. 190, nr. 4299^{II}/2. töpi, made of breadfruit wood. Oval; flat on the inside, outside swaying. With a rim and embossed decorations underneath the handles. Length 40 cm, width 26 cm height 13 cm. Fig. 191, nr. 3882^{II}. Pot with a lid. Bottom round on the inside. The lid is furnished with a groove, which fits on the rim of the vessel. The crack has been carefully repaired. Diameter on the top 36 cm, at the bottom 23 cm, height with the lid 23 cm. — Fig. 192, nr. 3884^{II}. Wooden chest with a lid. Length: 34 cm, height: 16 cm. — Fig. 193, nr. 3883^{II}. Damaged base portion of a rectangular chest made of breadfruit wood with holes to attach a lid and with decorations. Length 56 cm, width 22 cm, height 20 cm.

At the bottom it is closed by a braid, the ends of which stick out around 10 cm. Length ca. 41 cm on the top, 31 cm at the bottom, height 27 cm. The χato -basket serves to store food and is hung on the posts of the house. It corresponds to the Songosor basket depicted. The collected Merir-basket is woven from very short strips of a coconut frond. The leaves are narrowed to 43 mm and loosely interlaced in a taffeta weave. The handles rise up on the outside, at the same time closing the woven material in the form of braids. Width of the basket on top 46 cm, at the bottom 27 cm, height 29 cm. The basket ngasorouut, too, serves to store food and resembles the bagbasket depicted; it consequently differs less by form than by its purpose. The Merir-basket is a badly weathered piece, plaited from two frond halves, according to the schemata 1a over 1b, under 1b. Height 18,5 cm, width on top 32,5, at the bottom 30 cm. Width of the strips 1 cm. The *yaulueri* are carrying bags for women, like the kind of tangalik, but very narrow and flat. The braid at the bottom is free and can be moved back and forth. Width on top 48 cm, at the bottom 39 cm, height 28 cm, width of the strip 1 cm. All bags made of pandanus leaf are called, according to the material, terau. They are carried by men and women or used in the house, in order to store items of personal use. An excellently accomplished piece is the bag nr. 1364 II.

All bags are executed in taffeta double weave in a diagonal direction. Often their upper rim is strongly gathered, and they are narrow, flat, rectangular, and of different height. Short braids with knotted ends form the finish. Slit shaped holes are left open on the sides, providing an attachment for the handles. One bag differs from the others by its 10 cm addition of the bottom. The width of the strips is 2—3 mm. The smallest bags of this kind are only 12 cm high and 16 cm wide at the top and 21 cm at the bottom. (An even smaller bag of the same kind supposedly comes from Yap and is only $7\frac{1}{2}$ cm wide at the top, $8\frac{1}{2}$ cm at the bottom, and the woven strips are $\frac{1}{2}$ mm wide.) The firefan ripau, made of coconut fronds, resembles the fire fan of Tobi in Vol. 2. The midrib serves as the start of the woven material, the arm, and the stiffening. The leaves have been woven upwards on both sides. The fronds are made narrower and are folded, on the upper rim they are bent back with the corners sticking up. The ones of the Tobi fan are bent back straight. This is the only difference. The Merir-fan (nr. 1385 II) is 41,5 cm long, 20 cm wide, and the strips are 18 mm wide.

6. Tools.

We could not obtain a lot of tools. As far as we can judge European tools replaced the traditional fashion to a great extent. The ones used by women in the household have already been described. The old axe is called *tarai* and matches the Pur-tool. The taro axe was already mentioned in the section about agriculture. Apparently only European products are used as knives. In former times shells were adjusted for this purpose. The adjacent knife stands out from the other pieces due to the fact that the handle represents a local work. The shaft, made of breadfruit wood, has been notched so deeply that the blade has been inserted there. By wrapping it with coconut fiber cord both of them are attached to each other. The upper end of the wood has been spared of the binding. Whatever kind of European iron people can get they cleverly adjust for their purposes. Thus, a piece of strip iron was found as a blade on a coconut rasper. A beveled edge chisel was also in their possession. By the way, the acquisition of these items by the expedition did not pose any difficulties.

The technique of the jewelry production is still quite unaffected by foreign influence. Tortoise shell is pierced with the shark tooth drill, *pulapul* (compare with Songosor, Fig.97). It was handled like a beater. In case it was used as a drill, then a horizontal piece of wood on two strings was fastened to the top. People use an adjustable compass made from a shark tooth, niriparo in order to draw a circle on tortoise shell for the creation of rings and bangles. After cutting out the jewel, it is smoothened on a stone. Bangles made of Trochus shell are fashioned in the following way: First the upper part of the casing, then the entrance is hewn off with a stone and only the remaining ring is smoothened with stones.

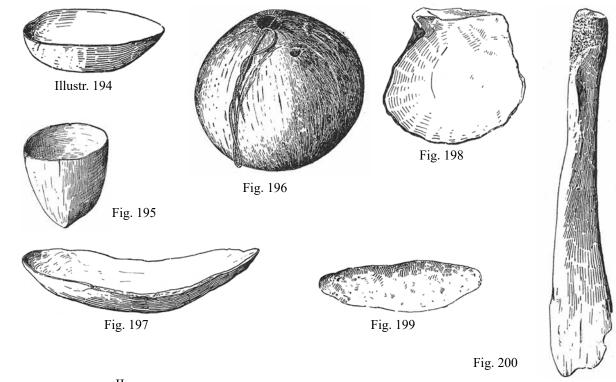




Fig. 201, nr. 4652^{II}. Knife. European blade with a shaft made of breadfruit wood, a work of the natives. Wrapped with coconut fiber cord. Length of the shaft 15 cm, width 3 cm, length of the blade 13 cm., width 2,5 cm.

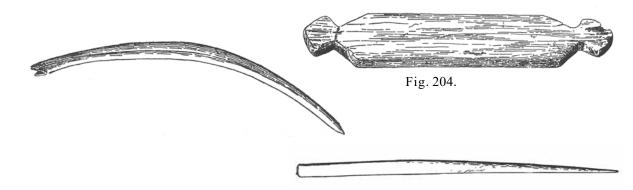


Fig. 202.

Fig. 194, nr. 4640^{II}. Half a small coconut forming a spoon. Length 7,2 cm, width 4,5 cm, height 3 cm. — Fig. 195, nr. 1369^{II}. Coconut cup for the storage of color, gugung, ocher, produced from the roots of the guzar-tree. tarak goro gugun. — Fig. 196, nr. 1367^{II}. Coconut with a hanger, serving as a water container paule. Diameter of the hole 23 mm. — Fig. 197, nr. 4647^{II}. Spoon made of *Turbo olearius*. Length 15 cm, width 7 cm. — Fig. 198, nr. 4646^{II}. Scraper made of Margaritifera. Diameter 8 cm. — Fig. 199, nr. 4649^{II}. Rasper made of coral stone. — Fig. 200, nr. 4648^{II}. Scraper, supposedly made of whale bone. Length 24,5 cm.

Fig. 203.

Fig. 202, nr. 4644^{II}. Fig. 203, nr. 4643^{II}. Brocading needle made of bone. Length ca.14 cm. Length 25 cm. Fig. 204. Nr. 3878 ^{II}. Old weaving board made from breadfruit wood. Length 63 cm, width 17 cm.

They obtain tortoise shell, by placing the caught turtle one day into the sun on the beach. In this manner the animal is killed. Afterwards people soak it for three days in the sea in a bag that is weighted down with stones. After this time the back plate can easily be removed. All arrangements connected with the workmanship of tortoise shell are men's work, which is executed by all of them. Twining of ropes, *tari*, and string, *iau* is also men's work. The usual weaving work is done by women. All kinds of bones, especially those of pigs, are used as weaving sticks. People use coconut fibers, χose , banana, *muro*, hibiscus bast fiber, and pandanus leaves. Delicate banana yarn for weaving is artfully wound to balls. Women also know about dyeing. They have the knowledge to produce white color (made of chalk), black, blue-green, and red.

Loom weaving is a technique bound to be extinct, because he woven belts, *mesik*, for men are recently replaced by *Calico*-lavalap. The loom in all its parts and terms corresponds entirely with the tool from Songosor, so that it does not have to be described here.



Fig. 205, nr. 1370^{II}. Ball of banana fiber, *muro*, for loom weaving.



Dancers from Merir. Photos by Sarfert. Glass plate scans, Hamburg Museum.





Merir word index		fa maro mari	famaru mare	fauua iem	fau iim	gete ma ngan me iazimer	pazimer
German	Modern orthography	fa pat	fapat	fauuo uan	fau wanu	her ma r	ngangu ma irademaru pardemaru
		fa pau pei	fapau pau	faxai siriged	fahae sirihet	gete omaro izei xamitek	her homara peiri hamatahi
aifatane	yai fatani	fafazo uod	fafad wot	fazan, razoili	fadongi, ladolu	gete ouitox	her hobito
ailirap	youlurap	fai a ngid	fayau ngii	fazifaz	fadufodu	giaur	kiyawor
ameres	hamerase	fai au sigarete	fayau siheret	fazik, fazir	faduk, fadur	giegi	hiyehiye
apanozor	habanador	fai eri simei	fayari simei	fazol, fazole	fadol	gigi	hiyehi
apariara	haparieri	faleilan	Faleilang	feiie	faile	giligili	heliheliya
apeas	hapeyad	faloiki	falohi	feik	faih	gin	kin
apezit	haped	fangaue	fangaf	felauaizis	falewaisis	ginipei	kinipei
apiripinipei	hapiripin pai	fangelezi	fangaladi	felegietag	falehiyetah	ginipoum	kini paumu
apise	hapise	Fanu	faanu	feleve	falaf	ginipoura	kini paur
apiziei	hapidiyei	far xati	fahat hatui	fen	fen	giop	hiop
ariselen	anselmo	fararazale	farihalatu	fengerieisak	fanguruyeitahe	giri	hiriye
ariueren	yariwerang	farat xatire gupei	fahat haturi hubei	fenigamar	fenihamar	giri gupei	kuri hubei
arizirapa	hosirapar	•	fari hubei	ferange	farang		hirihir
aroiia	-	fare gupei	farihuluhul	-	farihesih	girigi girin you	
	hahoya	faregulugulu fareuoiie		fereugisi		girin xau	hiringohau hisa
aruuain	aruan		farewoi fari manak	feriaugl	fareyaul fareiben	gise	
aruzara	yarudar	fari maraxe	fari marah	ferieuen	fariben	gise iuara neei zimer	hisa dibara haneya demaru
aruzei	yarudei	fari meraurei	fari mauwer	fetai	fetai	gise zi xamitek	his di hamatahi
aruzum	yarudom	fariaitaz	faletah	fezouoki	fidibuhuye	gise zigatoro	his dihatoro
atirozoiro	hatunuh	fariapogo	faripohuwa	filau	fitau	gise zimaro izei xamitek	1
atizik	hatusik	fariauxon	larifariyauraw	firimoru mozu	firi morowe moduwe	gise zimaro lari	his dimaho lari
atoiara	hatoiyeri	farieri uor	faruyeri woru	fitiarveiviet	fatuyar faifire	gise ziuerox	his diraho
auane	uani	farieteni	faruyeiteng	fiz	biis	gise ziuitox	his dibito
auriieseik	yawori hasaih	farifasa	farifas	fize	biis	git	hiit
aurun	yaurung	farifer	farifare	fize	fid	gliek	liyeih
autoni teringe	yautoni teringe	farigaitaz	farihatad	fizi a ngid	fidiyau ngii	glopoki	liyebuhuye
autoni uoiti	yautoni bautui	farigauroigi	farihaurohi	fizi au sigarete	fidiyou siheret	gom	kom
auua	auwa, awa	farigeluato	farihelifato	fizi guuo gupei	fidihub hubei	goronia	goronia, koronia
bairime	yairuum	farigepizoroi	farihepidohoi	fizi maro mari	fidimoru mare	goror	koror
bamugen	pamuken	farigirvau	farihirifou	fizi pat	fidipat	gouule	haule
betekevei	matalafangi	fariiei	fariim	fizi pau pei	fidipau pau	gozauitox	hoda bito
bokue	pohuwa	farimaleireien	farimaleireng	fizi xati	fidihat hatui	gozaxatoro	hoda hatoro
bongizaue	bongirawe	farimenipi	farimenipi	fizie merupi	fidi marup	grieg	uhurih
dsiei	suyei	farimok	farimoh	fizieri simei	fidiyeri simei	grieran	wori yarang
eau bada	yaupad	farimorozik	Fariworosih	fizigat xatire gupei	fidihat haturi hubei	gui	hui
eerai	eyarai	faripele	faripale	fizingaue	fidingaf	gulugul	kulukul
efitifit	efitifit	fariseri	farisseri	fizingelezi	fidingaladi	gume	huum
eglamaut	yalemaudi	fariuelei	fariyetedi	fizisau saure	fidisou saur	gumiet	kamuti (tumuso)
eitaz	hatad	fariuorox	faruworoh	fiziuar	fidiwar	gumuz	humus
elimet teri meilie	yalematari me lii	fariuorozik	fariworosih	fizixai siriged	fidihae sirihet	gumuzi	kumusi
elosolos, elos	elosolos, elos	farizauan	faritawas	gaiingau	heingau	gumuzum	kumusum
elozo	elos	farozoron	fasorung	galax	halah	gumuzure	kumusure
eperi pelin	hapari polung	farufer, farufora	faruforu	gatalizanga	hatalidang	gupare	hubar
epinge teringe	epung taringar	faruferi	farufori	gauauk	habauhu	gupari	hupar
epingitio	epungutiwo	faruforum	faruforum	gazo	haso	gupei	kubei
epipieiem	epipiye iim	farugrieg	faruhuriyeh	gelefaz	helefas	gupum	hubom
erala ualau	ehalawalao	farugur	farihur	geperi faz	hapari fadu	guru	kuru
eramatagou	eramatahun	farumau	farumawo	ger me iazimer	hera ma iya demaru	gurupeti	ruhuripi
ereniuara	ireni wara	faruue	faruub	ger me iazimer pazimer	hera ma iya demara		hub
ererigiere	yarari harai	fasau saure	fasau saur		era ma iya demaru para demaru	guuo guz	hud, kud
ererik	ererihiye	fatiar	fatuyar		hesi	•	hosar
eriz	•		fatuyeri bidil papa	ges gesimeta	hesimatahe	guzar	harobu
	yarud besebes	fatiar uizilipapa		•		haropu	
eruozopos		fatiriueg	faturiyeh	getauo lala	rihatabulala har	heuelei	yafalai
esees	bonsisi	fatox	fatoh	gete	her	iai	yai
etei	yatei	fatur	fatur	gete a xamitek	hera ho hamatahi	iain	yangi
euosoruai	ewol saworiwai	fau	fou	gete ma iazimer	her ma ira demaru	ialan	yala
ezama	edama	fauoki	fabuhuye	gete ma ngan	her ma ngangu	ialom	iyolom
fa guuo gupei	fahub hubei	fauua iek	fau iih	gete ma ngan me iazimer	her ma ngangu ma ira dema	iam	yam

iamitiur	papaitiuwo	ile liuerox	ile laraho	is	iis
iamu	yamu	imariveri	imeriferi	itagura titir	itahura titiro
iar, iara	yar	imaro	emaho	itai tuuutop	iteri tautub
iareare	yareyare	imazilimatar	emadulu matar	itan	iran
iariiar	yaruyoru	imeiate	imeiyet	itar	ihirar
iariiar	yaruyoru	imerar xamitek	imara hamatahi	iten	itengi
iaro	varo	imeri rimeri mari	emaho rimaru mare	iteper	ehapara
		imeriboe	imeribae		-
iaruar	yaruyoru			iterap	iterap
iau	yawo	imerigou	imerihou	itiuaut	itiwou
iauar / iauuei	yawar / yawai	imeriper	imeriporu	iuar	ifar
iauauua	bobai	imeriper or raparim	imeripor or taraparim	iuararige	hariya
iauilari	yaulari	imeriper or xaperim	imeriporu or hapirim	iuarauk	ibara hauho
iaulurapa	lunurap	imeripue	imerepua	iuenigemat	ribonihamat
iaungan	yaungar	imeriueri	imeriwer	iuerox	ibe raho
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iaupesa	yaupasa	imeta	emat	iuifaugl zeua iem	ibefaulu dewo iii
iausigidot	yausihito	imetaivo	imetaro	iuimasegl	ibemadul
iauuei	yawai	imetalo	imetalo	iuouor	ibouor
iauurapaupa	bulepoupou	imetegiete	imetahiyet	izara	idara
iauurapaupa	raowraparap	imeteri uoi	matariwolang	izarox	idaraho
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iazure	yadur	imezi melem		izauitox	idona bito
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ie I xamitek	iye e hamatahi	imoguiol	Imahuyaro	izaxatoro	ida hatoro
ie igatoro	iye ehatoro	imom	imom	izaxauauge	ida habauhu
ie imaro izei xamitek	iye emara peiri hamatahi	imonom	imonom	izi	iddu
ie imaro lari	iye emaho lari	imopalunge	imepolung	kete ogatoro	her hohatoro
ie iuarano	iye ehaneho	imor	imowa	kete omaro lari	kete homaho lari
ie iuarariieie	iya ebara hariei	imotauteigi	imetautehi	kete ouaraneei	her hohaneyai
ie iuerox	iye eraho	imuili	imili	ki	aki
ie iuitox	iye ebito	inap	erap	kiau	kiyao
iek	iih	ineseri gupei	meseri hubei	lagum	lahum
ieleuail	eyalwael	ingaz	ingad	lagum, ievi	lahum, yefi
iem	iim	ingite	ingir	laiteki	laetahe
iemara	imara	iogl	iyoul	lan	dabar
iemei	imei		•	lanei iuera Matalai	lanei ibera mada
		iogoreen	cocoriyangi		
iemepapa	imepap	iope	leb	lari orofat	lari worofat
iepe	yep	iopopu	eupobu	latit	latit
ierei, igomes	yarai, ekames	iopopu luouua uan	eupoub luwou wanu	latoriveri	laturiferi
ieruar	yoruyoru	iopopu zeua uan	eupobu dewo wanu	lauoizepe	Waidep
ieuen	yefangi	iopopu zimero mari	eupobu demaru mare	lauozu	lawodu
ievi	yefi	iotoroiar	tororiyaro	lazo	lado
iezerimer	yaderimeru	ipal	ipali	leausik	leyausih
iezimer	iye demaru	ipeiezeen	epalada yangi	leausik	yalausih
igatoro	ihatoro	ipemi	ibe mire	legiem	lakim
igauaugo	ihabauhu	iperi	epare	leigitaxo	laetahe
igepero meri	hapari mare	iperi zeua uan	epare dewo wanu	lemetesik	lamatasih
	meihira	-	1	lenei	lanei
igete		iramangel	ida mangiya		
igirope	ruhurap	irarorimar	irahorimale	li a ngid	liyau ngii
ikai	hating	irarorinar	irarorimale	li au sigarete	liyau siheret
ilai	ilae	iratar	ida ttar	li eri simei	liyari simei
ilapangaik ilipinge	lapangahi woriping	iraugl	irou	li pau pei	liyepau pei
ilapangaik itit	lapangahiri tit	iraxo	iraho	liangaue	liengaf
ilari	nilari	irazmer	ira demaru	liangelezi	liyangaladi
ile iuara neei zimer	ilabara haneya demaru	irifezangala	irifadangala	liauou	luwou
ile lagatoro	ile lahatoro	irigiri gumuzi	uruhuri humusi	liaxai siriged	liyahae sirihet
ile lauitox	ila labito	irigirin iapon	irihapon	liazi	liyedi
ile li xamitek	ile la hamatahi	iroto	rotow	lie xati	liyehat hatui
ile limaro izei xamitek	ile lamar peiri hamatahi	irotoeuen	rotowafengi	liefazo uod	liyefad wot
	-		e		•
ile limaro lari	ile lamaho lari	irugur	iruhur	liemaro veiviet	liyemaru faifire

liemer iek liyemaru iih liemero mar liyemaru mare liyehatu haturi hubei lierat xatire gupei liyemaru mare lii maro mari lii pat liyepat liiek angaue liiek ngafar liimer geperi mari liyemaru hapari mare liisau saure liyesau saur limare limaru liyohub hubei lio guuo gupei liraxo ila laraho liri miangei liri meyangai liri miangeireigli liri meyangai liri bidil papa liri uizilipapa liri uizineita liri bidir neira dewo iim liuanisike liwonisih liuanuruke niwoniruh liueisi mar riweisi mare liueizi veiviet riweisi faifire lbenleuen liuenilen lizarox leda raho, ledao raho ledao bito lizauitox n (waradu) lizaxatoro ila lada hatoro longelon longolong labei louei loum luum losasa lozas maho lari lukom yaikom luoue iem luwou iim luwou uwanu luouo uan luouua iek luwou iih luwou wanu luouuo uan maian mauyango maidelae maisere maiteberesn mairapraifangi era madalaii maidelae maizela mahi maki malarieme malerimei male riuenisimei maleri benisim maleileuen malerengi malerigazoc malerihadoh maleuutiu malewatiu maloriuori maloriwor mamalei hamalei mamusik mamusih manerei manarai mangal mangal mangal mangal mangau mangal mangesure mengesur manimozu manimoduwe maniterore manitaror marailigegl mahaliheli marailigel mahaliheli mararai iuara neei zimer maraharar ehaneya demaru mari maar menifangur marifangel marifer manifare marinap marenap u faifire mariteifei maretaifou

mariueiueit xaian maroliuenioli	marufefin hayang marori fani youl	meteri meiiogl meteri meiiuen	marari maiyoul matari mauwen	ngeili	nga lii, ngalii
marozei	marodei	meteri meliuato (melilati		ngeisere, ngeisrer	ngaser
	marodara			ngim, ngid	ngim, ngis
marozora	marodara mahodohod	meteri mogumog	matari mokumoh	ngiri paxo	ngiri paho
marozorozo		meteri moru	matari moruya	ngiriie	Ngiruyei
marozoum	marodum	meteri pagur	matari pahur	ngirizei	Ngizei
marumar	marumare	meteri uariuei	matari wariwei	ngirouugutei	ngiribuhotai
mataru uungur	mataribungur	meteri uod	matari wot	nhure	urar
matotiu	matotiwo	meteri uolangaz	matari wolangad	niemei	nimei
maua	mmawo	meteri uurax	matari burah	nieririmeze	reniyeri madei
maurau	maworawor	metongai	matongai	nimetazoguue	nimatahauhud
mauri	maar, mouon	mezaitouelen	bonitoutub	nimetemau	nimetamau
mazi	made	mezaupur	madabur	nimeterouiriki	nimatari birih
mazisik	madisih	mezegi	medehi	nimiarie	nimariyeri
mazitob, mazitop	madirap	mezigilan raro	maidelani raro	nimiarie ni uarazi	nimariyeni waradu
mazoal	madawal	mezigilan uarazi	maidelani waradu	nimoturon	nimodurang
megirimegl	maheri mal	mezitop	madirap	nimouao uan	rimou wanu
megl	mahi	mezitop	madirap	nimozo	nimod
megli tamar	mahi tamau	miangara	meyangar	nimozuron	nimodurong
meiiogl	maiyoul	miangei	meyangai	nin	rum
meiiuen	maiyefang	miangei	meyangai	nintiiari	nimatarieri
meiriagl	maiyoul	miangeineita	meyangari neira	nipeteriem	nipatarim
melauu	melabu	miangeireigli	meyangari lii	nipoin	nibongi
mele	male	miangeiripapa	meyangari papa	niriparo	ngiri paho
meleausiki	maleyausih	miangerireigli	meyangari lii	niuaraue	nifahafi
melelen	maleileng	miangom	meyangmu	niuerieri giegi	riwerangi ri hiyehiy
melem	malam	mie	me	nogarepariuoin	nihalepa ri bongi
melem mereb	malam marap	moar	mowar	nun	lari num
melilatuzei	maleriwatur	moarifaul	morifaul	nunetero uari	nimatari uari
mengiek	mangiyei		mokumok		holoi
menifariu oruor	meni fariworuworu	mogumog		oloi	
		moruuungetoro	morumutohou	om	uum
mensauru uurax	mani sauri burah	mozi, mozo	modi, mod	oraisi	horasi
merarai	maraharar	mozu	moduwe	oraxo	horaho
merarai lagatoro	maraharar la hatodo	mulite	milir	ori miangei	wori meyangai
merarai lauitox	maraharar la bito	nagarabodl	ngarbodl	oro	oro
merarai li xamitek	marahar ila hamatahi	nauaure	nawer	oro guuo gupei	worohub hubei
merarai limaro izei		nauueri	naweri	oro maro mari	woromaru mare
	maraha lamar peiri hamatahi	naxe	nah	oro pat	woropat
merarai limaro lari	maraharar lamaho lari	negi	huyesih	oro pau pei	woropau pau
mesagoaxe	pasamoah	negilipauo	ngeripau	oro xati	worohat hatui
mesete	meser	neita	neira	oroat xatire gupei	worohat haturi hube
mesigo	mesihou	neitai	neirai	orofat	horofati
mesik	mesiye	neitamu	neiramu	oroi eri simei	woroyari simei
metaigo	metalo	neitare	neirar	oroi a ngid	woroyau ngii
metaizog	matadok	neitareigli	neira ri lii	oroiau sigarete	woroyau siheret
metariar	matariyar	ngan	ngangu	oroik	woroih
metaroripi	mataloripiye	ngan I xamitek	ngangu I hamatahi	orongelezi	worongaladi
metegli	mataluya	ngan igatoro	ngangu ihatoro	orosau saure	worosau saur
metei	matai	ngan imaro izi xamitek	ngangu imara hamatahi	orouoki	haworohi, worubuh
meteleri fati	mataleri fati	ngan imaro lari	ngangu imaho lari	orouukiriiuen	woribukieri yefangi
meteleri metei	mataleri matai	ngan iuariku	ngangu ihariho	oroxai siriged	worohae sirihet
meteleri uaripei	mataleri faripai	ngan iuerox	ngangu iberaho	-	orungaf
meteleuen	matalafangi	ngan iuitox	ngangu ibito	orungaue oruuei	donobei
meteleuen	matalafangi	•			
	e	ngar	ngari	otarain	wotarangi
meter xazik	matari hasih	ngareai	ngariei	ovara	hotara
meteri	matari	ngaringorin	mataringorungorui	ozaramazier	hodara madul
meteri fazogl	matari fadol	ngaue	ngafar	ozarox	hoda raho
	o matari haringamaho	ngaugau	keingao	ozaxauauge	hoda habauhu
meteri geringimaxo	•			-	
meteri geringimaxo meteri maiol meteri meiiiuen	matari maiyol matari mauwer	ngaz	ng-ngad, naruhur ungo	ozearox pag, pei	hodonaraho pai

paro parupi pasare mariyeni waradu paten paton pauau paule pazo verangi ri hiyehiye peigi peik pel pelin orohat haturi hubei pelir pelir pere periei worohi, worubuhuye oribukieri yefangi pi piriz

pagai paiienei palige papai papareigli paparineita paparmum papeigli parata paritore pasaro gupei pato iuarauku paure / pei pausok pazopaz pazoro pazoum pazozo peigazox peigoro peiiazox peilox peilox meiiogl peimagl peimaro peimogl peitaigetake peizom pelir mulite pelorel periperi pesemegl petitiuuo pieri uor pieu uor pigipigiuaura pipie lari pipierimete iuaraneei pipirieglimet piripiri piseregirin poili metei

bagai pauyanai balih papai papari lii papari neira papamu papa elii pahat pouri toh paho, pahowa hauribir pasar pasapasari hubei imowa pato ibara hauho pato pawau poul paur / pai pautoh padoi padopado pador padom paisoso peihadoh peihi peihor peiyadoh peih peilod peilod maiyoul peimale peimaho peimahor peitahetahe peidom paal polung palur palur palur milir belolchl para epariyei perih pesemaih peditiu piiye piyeri woru piyeri woru pihipihiwara pipiye lari pipiyeri yalemat labar haneyai pipiyeri yalemat piripir piris pasari hiringo pouri matai

pozi pulapul puluuulotam pur putaf putoi rafazei raiegi raii mar raii veiviet raiz raizatipe rala ualau ran ranileaxo raniuatag raniuoit ranizaxoi ranogo rapariueiz raperi xaian rapite rararupeu rarei gulugul rarei uanu rari raro ifaugl zeua iem raro igora iek raro ira Matalai ratam ratineuen ratiu ratiuogl rauaig rauiri raunaure raunaure veiviet rauraparal raure uizi raure uizilipapa raurugumer rauure rauut razato razeiertiu reai regei pei regei tarak regei uoz regei xati regeriar regigieze rei iek rei or rosai reiveiviet remerieparieri ren iua reniue renizamur reremetiu

podui bulobul bulobulotam puro wotapatap butoi rahafadai raniyehi rai mare rai faifire harais ra iratipe ehalawalao rangi, yeri (fly), yari, yayari rani leaho raibatah ranibout ranidahoi ranoho hapari riweisi hapari hayang hapir hohori puua harai huluhul harai wanu yaru rarowa ifaul dewo iim rarowa ihor iih rarowa ira Madalaii hatam hotiwafangi hotiwo hotiwaulu rabaye rauri raunour raunour faifire raworaparap rauri bidi rauri bidil papa rauruhurimer raur rabut hadato rae dolutiwo rai rakeri pai rakei tahaku rakei boss rakeri hatui ruhuriyar ruhuringaser rai iih rai or hosai rai faifire ramariparuyeri rani uuwa raniweiye reni eramatiu

retet rgiruiei rgirupei ri maro mari rieri rigatauoragl rigatauzulox rigirimeiroize rigiripalau rigosoi rigou riguriveri rii rim a ngid rim au sigarete rim eri simei rimangaue rimazai siriged rimefazo uod rimei rimeik rimelion rimengelezi rimer teriperi mari rimer xati rimerat xatire gupei rimi pat rimi pau pei rimo guuo gupei rimoor riniz rios ripau ripeiliuolon ritoto uot riuemuoto riueni tauataf riuenitotu riueniuot rivangavan rixaxe ronoto ror rorop rosai rosai iek rosai mar rosamum rosara roso rotoiet rotoogl roum rozor; apeiliveiviet rugarap rugeiren rugeriagl rugiripi rugorab ruguraparim

reteti ngiruyei ruhuri pai rimaru mare ruyoru rihatabulala rihatauduraho ruhurimairois ruhuripanou rihosobir rihou ruhurifare riiya rimau ngii rimau siheret rimari simei rimengaf rimahae sirihet rimefad wot nimei rimeih rimeliyango rimengaladi rimaru tarapari mare rimerhat hatui rimehat haturi hubei rimepat rimepau pau rimohub hubei rimoar runud dios ulupou ripeiwelong hiringo toutou ribeniuot bontafataf ribenitaotau ribeniwot rifangafang ranidaho runnut rooru urourap hosai hosai iih hosai maru hosamu hosar hosou rotoiyet rotowaulu raum hapalafaifire ruhorap rugeireng ruhuriyare ruhuripiye ruhorap ruhuraparim

ruguvari ruguzongosar rukovar rumetek rumonelin sar sarai sarai xaian sau sauri getan sauri ieseik sauuor seneues-Islands sengel seni metei sepite sialemau siere gupei sierei siieki simer simorouugie siri ngaringorin siriperi songosor soper sopi gupei soriieigetan sou golum sou rimangal sou rimer sou riuarimat taengi naro taiaua taiglauor, taiglovar taiiamite tailamu tailara taku tales taliare taligi talues taluie tamaniveri tamar tamase tapar tapazilai tarai tarako paule tarapara iain tarauli gapitei tarieri tarigazox tarotot tataro tauai taues tauni

ruhurifare ruhuridongos ruhofar rimatahi rumoneilang saru, ssar sahai sahari hayang sawo sawori hairan sauri hasaih sauwor Seneves senger sani matai sapir diyaribau diyeri kubei doruyou siyehi sim simeri hubei siri mataringo siripei dongoraso soob sapiri hubei sawori hairar sou holum souri mangal sou ri maru souri worimat taringinaro taiyau talebour tai hamatahi talamu talara takuu talis taliharo taluhi talebes yatalu tamoniferi tamau, tamor tamasu haperae tapadelai tarae karaho poul tarapari yangi talauri hapitei tareyare iterihadoh tahoutot wototaro tawahi talebes tawiya

	tauonin	taborengi
saro	tauoriuoin	taboribongi
	tauoriuoin lari	taboribongi lari
	taur	ttao
5	tauta	tauta
	tautau	boutam
_	tautau teringe	toutou ri taring
g	tavas	tafasu tahilifeifire
20	tegliveivi teiielimer teri meilie	
ng	teike me rim a ngid	tai yalemata ri me lii daih ma rimeyau ngji
	teike pau pei	deih ma rimeyau ngii deihepau pau
	tepei	tapai
	terau	talau
	tereper	tarapar
	teriek	derih
	terigezox	iterihadoh
	teriperi mar	tarapari mare
	teriperi veiviet	tarapari faifire
	tigeligeli	Tiheliheli
	tigeuei	tihofaiye
	tilagau	tilahau
gorungori	tiouoki	tiwobuhuye
orungon	tiu a ngid	tiwoyau ngii
	tiu au sigarete	tiwoyau siheret
	tiu eri simei	tiwoyari simei
	tiu maro mari	tiwomaru mare
ng	tiu pat	tiwopat
0	tiu pau pei	tiwopau pau
1	tiu xati	tiwohat hatui
	tiuangaue	tiongaf
at	tiuaxai siriged	tiwohae sirihet
	tiuo guuo gupei	tiwohub hubei
	tiuongelezi	tiwongaladi
	tiuorat xatire gupei	tiwohat haturi hubei
	tiuorisau saure	tiwosau saur
	tiuzeik	tiudeih
	toik	tohi
	topi	tapiye
	torigios	yato rilos
	tou	touua (tingii)
	tumugl	tumuli
	tuti	matari tut
	tuti	tutui
	tuzauoil	turuyawai
ru (general term)	uagita	uehita
	uaiau	yawo
	ualeirei	Maleirai
	ualuk	baluh
	uan	wanu
	uaniale	woniyare
gi	uanigirifou	wonihirifou
ei	uansisi	winisisi
	uar	woru
	uarar	wahar
	uararox	habararoh
	uarazi	uaradu, waradu
	uarazi gise zizara Matalai	
		waradu ibera hodara Madalaii
	uarazi iuifaugl zeua iem	waradu ibe faulu dewo iim

uarazi izauaitox	waradu ida bito	uimagura	wimahur	xameti	hamati
uarazi izauuor gora iek	waradu ida hor iih	uirig	birihi	xametipe	dametipei
uarazi lizara matalai	waradu didara madalii	uirinar	firenau	xamiteiki rimero mari	hamatahi rimar
uarazi ozara matalai	waradu hodara madalaii	uitalari	bita lari	xamitek	hamatahi
uare	uhur 	uitarau	ruhutarau	xamiteki zimero mari	hamatahi dema
uari a ngid	waruyou ngii	uitigur	fitihor	xamizeua pipirieglimet	hami dewa pipi
uari au sigarete	waruyou siheret	uito	ebito	xan	han
uari eri simei	waruyeri simei	uiz, fiz	fid	xanox	hannoh
uari maro mari	warumoru mare	uize	biis, bidi	xaparuar	haparuwar, hap
uari pau pei	woropau pau	uizi leuueit	bidi leiweisi	xapilouo	hapilou
uari xati	waruhat hatui	uizi teinap	bidi leinap fidih	xapiritiri	hapirifare
uarie	wariyengi, woriyengi	uizik uizili	bidil	xapiriuori	hapiriwota
uariek	warih uwarim			xapiriuota	hapiriwotaq
uarieme	worohat haturi hubei	uizilipapa uizineita	bidil papa bidir neira	xapise	hapise
uarigat xatire gupei	uwari kir		bidiri lii, waisi elii	xapizaxe xapizaxo mauruk	hapidah hapiraho ma ur
uarigir uarik	warik	uizireigli uleai	wereai	xapizaxo inautuk xaremetiu	harematiu
		umezeriveri	mezeriferi	xarimeigiri	mariyehiri
uaringelezi uaripei	warungaladi fari pai	ungasik	ungesih	xaringimaxo	haringamaho
uarisau saure	warusou saur	ungasik igado	ungesih yaado	xaringiniaxo xarpirpin gupei	hapiripin hubei
uaro guuo gupei	waruhub hubei	ungirab		xarpriprin guper xasenger	hasenger
uarol	yarol	uoiligez	ungarap ribonuhes	xaseper	hasab
uarouoki	warubuhuye	uoitegi	woutehi	xaseper xasik, xatige	hadih
uaru pat	warupat	uoleuol	balobalo	xatao	hataf
uarumai	uwari mei	uone gisar	bonihasar	xati	hatui
uarungaue	uarungaf	uonger	bungurfatur	xatirapei	haturapai
uaruxai siriged	waruhae sirihet	uor	buru	xatirapei xatire gupei	haturi hubei
uatan	tongutong (tongu)	uorax	woroh	xatio	hato
uatar	wahar	uoreuoi	werewer dabuk (N)	xatu	fadu
uatoe	fatou	uori	woru	xature	yatur
uau	uwou	uorouuer	werewer	xau	hau
uaule	baul	uose	bos	xauan	habang, hayang
uaunen	wenengi	uotiegitaz	botiehita	xauguz	hauhud
uaur	uwawor	uouo	bubu	xauz	haud
uauriaozo	woriyado	uouoi	luwou	xaxar	hohor
uaut	wautu	uru, urun	uuru, urung	xazegaz	lari horuhoud
uauta	falewari	urupau	urupau	xazik iek	hadih iih
uautam	boutam	ut	uut	xazopozopo	hapodupodu
uauti	bauti, bautui	uuarik	warih	xirazegl	irasangel
uautu	wautu	uungure	bungur	xlose	dios
uautum	bautum	uunore	bunar	xose, xoto	hoos, hoot
uauture	bautur, bauture	uurax	burah	zaiegi	daniyehi
uauuai	bobai	uzeren	udarengi	zaiseua	dai dewo
uauzuk	woduh	uzeri, gumaser	uder, humaser	zale	dale
uazei	uwadei	variei	woriyengi	zalitipei	halihitipei
uei	uyei	vature, vatinigax; falir	fature fatunihaho	zamagl	damale
ueimer	we immeri	vauvau	faofao	zamareigli	tamari lii
uenifozumaxo	wonifadumaho	veiviet	faifire	zanagut tuuei	sani kutufei
ueniin	wenengi	veve	hori	zangaueu	dangaf
uerigapepe	farihapeipei	xaian	hayang	zanipei	rani pai
uerigerei	bonsisi	xailau	halau	zarat xatire gupei	dehatu haturi hu
uesi	waisi	xaisau	hisau	zaringelezi	dorungaladi
ueti	wet	xalag	halau	zarouoki	dorubuhuye
ugarei	ukarai	xalangab	halangap	zaugepit	dauhepit
ugo	uuho	xalifat	halifato	zauoau	rihitawau
ugu, ugure	uhu, uhur	xamaseripar	hamasuripar	zauoiagl	dabeyol
uiare	biyar	xamat	hamat	zauoki	dobuhuye
uie	biye	xamauria	hamauria	zauoki angaue	dobuhui ngafar
uieizog	uieisok	xamazogiri	hamaduhir	zaxai siriged	dahae sirihet
uigunugupei	bukuyeri hubei	xamereis	hameras	zeangid	deyau ngii

ze eri simei ze xati naru mare ze, zi zeari maru mare zeau sigarete pipiyeri yalemat zeauare zeb, zeik zeike ma rimangaue naparuyar zeike maro mari zeike me rim eri simei zeike me rimi pau pei zeike me rimisau saure zeike tiu angaue zeike tiu ngid zeike tiu pat uruh zeike tiu xati zeike tiu xatire gupei zeike tiuo guuo gupei zeike ziu simei bei zeike ziu siriged zeiki me li zeiki me zer zeiki me zi zeireigli zeketiu saure zengelezi zerat xatire gupei zerauruk zeri a ngid zeri au sigarete zeri eri simei ing zeri maro mari zeri pat zeri pau pei zeri xati zerimer geperi mari zeriot zerisau saure zeruxai siriged zeua zeua iem zeua or zeu zeua tereperi uod zeuatiperi zeuke me zi maro mari zeutaroieteik zeuua zeuua faz zeuua fazik, gom zeuua gulugul hubei zeuua gumuz zeuua iare zeuua iauuei zeuua iek, iem zeuua metei zeuua mougur zeuua or zeu far zeuua pazo zeuua regei zeuua roso

deyari simei dehat hatui de, di deyari deyau siheret deyawar deb, deih deih ma rimangaf deih mare deih ma rimari simei deih ma rimepau pau deih ma rimesau saur deihetiu ngafar deihetiuo ngii deihetio pat deihetio hatui deihetiwo haturi hubei deihetio hubei deih ma deo simei deihetiwo sirihet deih ma luwou deih ma doruw deih ma deo dini lii deihetio saur dangaladi dehat haturi hubei laerauruh doruyeri ngii doruyou siheret doruyeri simei dorumoru mare dorupat dorupau pau doruhat hatui dorumoru hapari mare deriyout dorusou saur doruhae sirihet dewa deo iim defad or dewo deo tarapari wot dewa tiperi deih ma demaru mare deuotarorietahe dewo deo fadu dewo faduh, kom dewo huluhul dewo humus deo yaafi dewo yawai deo iih, deo iim dewo matai dewa tauur dewo or deo dewo pado dewo rahei dewo loos

zeuua sou zeuua teriperi faz zeuua uan zeuua uauti zeuua uod zeuua zeringe zi maro mari zi pat zi pau pei ziei zifar uan zifazo zifazo faz, zifazo zifazo geperi uod zifazo uod zigiri gerei zilai zim zimaro mar zimaro veiviet zimer zimer iek zimeripi zineigli zini miangeineita zini miangeiripapa zinineita zinipapa ziob ziraxo zisau zisau ilupau zisau saure ziuaual ziueik ziueni pazei zizarox zizauitox zizaxatoro zo guuo gupei zogu zok zope zor, zer zoru guuo gupei zorufzo uod zorungaue zoruua iek zoruua iem zoruuo uan zouk zrimeruoki zriueiz zukom zule, zuzuk zutaik

dewo sou deo tarapari fadu deo uwanu, deo wanu dewo bautui dewo wot dewo taring demaru mare depat depau pei diyei defadu wanu defadu defad fadu, defad defad hapari wot defad wot sukuri harai delaye sim demaru mare demaru faifire demaru demaru iih simeripiye dini lii dini meyangari neira dini meyangari papa dini neira dini papa hiop diraho desau desau ulupou desau saur sibabol tiwoih duweni fadai dida raho dida bito dida hatoro dohub hubei duhu duuh dope dor, doru, der doruhub hubei dorufod wot dorungaf doruu iih doruu iim doruu wanu duuk rimebuhuye riweisi yaikom duul, duuh dutahe



Chief PeiloX and Ualerei. Photo by Sarfert. Glass plate scan, Hamburg Museum.

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