

TUAMOTUAN RELIGIOUS STRUCTURES AND
CEREMONIES

by

Kenneth P. Emory

103p.

GEORGE BALAZS
1947

TUAMOTUAN STONE STRUCTURES

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By KENNETH P. EMORY

INTRODUCTION

The descriptions of stone structures in the Tuamotu Archipelago contained in this work are based on plans and notes made in 1929 and 1930 during the Tuamotu Survey of Bernice P. Bishop Museum.¹

MARAES

The only stone remains of consequence in the archipelago are those of maraes. In pre-European times houses were not built on platforms, and stone walls were not erected around dwellings or villages. Stone-weir fish traps must have been erected from time immemorial at passes into the lagoon. Most of those I saw were being kept in repair; when neglected they soon become barely traceable ruins. Out of hundreds of the excavations for the growing of taro, *ape*, and other high-island plants, I have seen only two in which the sides are faced with stone, one at Makatea and the other at Fagatau. In these a few feet of horizontal-slab facing form a retaining wall.

Many of the maraes are roughly built without any artificially shaped stone. Many others are carefully built, their platforms faced with neatly fitted slabs of even height; megalithic slab uprights trimmed to a conventional shape stand on the platforms in front of them and out on the court. Some of the marae courts are enclosed partly or completely by low walls.

So numerous were maraes and so well scattered over each atoll that here and there one has escaped the havoc wrought by tidal waves or destruction at the hands of planters clearing the land, those in search of stone for building purposes, or vandals. The natives no longer fear the consequences should they trespass upon or damage a marae.

The maraes in the western part of the archipelago have suffered the most. In the vicinity of the main village at Anaa, Faaité, Apataki, Kaukura, Arutua, Makemo, Kaitu, Raroia, Hikueru, and Amamu, I did not discover a single marae of which enough remained to show its form. But at Takarua and Takapoto in the northwest, Fagatau and Fakahina in the northeast, Makatea in the west, and Hao in the east-center, all islands which were explored farther afield, I obtained records that give an idea of the maraes of the whole central and western regions. (See fig. 1.) Plans of marae ruins from all the inhabited islands in the northern and eastern Tuamotus have been secured.

¹ For an account of the Tuamotu Survey see Annual Report of the Director, B. P. Bishop Mus., Bull. 94, pp. 40-50, 1932.

Marae similarities

NECKER

Tafakoto
REAPD
Sydney

p. 21

p. 76

look-out station
for turtles

1934

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MARAE TYPES

Except in the extreme eastern part of the Tuamotu Archipelago, at Reao, Pukarua, and Tatakoto [Takoto], the maraes of one island differ little from those of another. The eastern maraes are basically related to those of the west.

Marquesas Is.

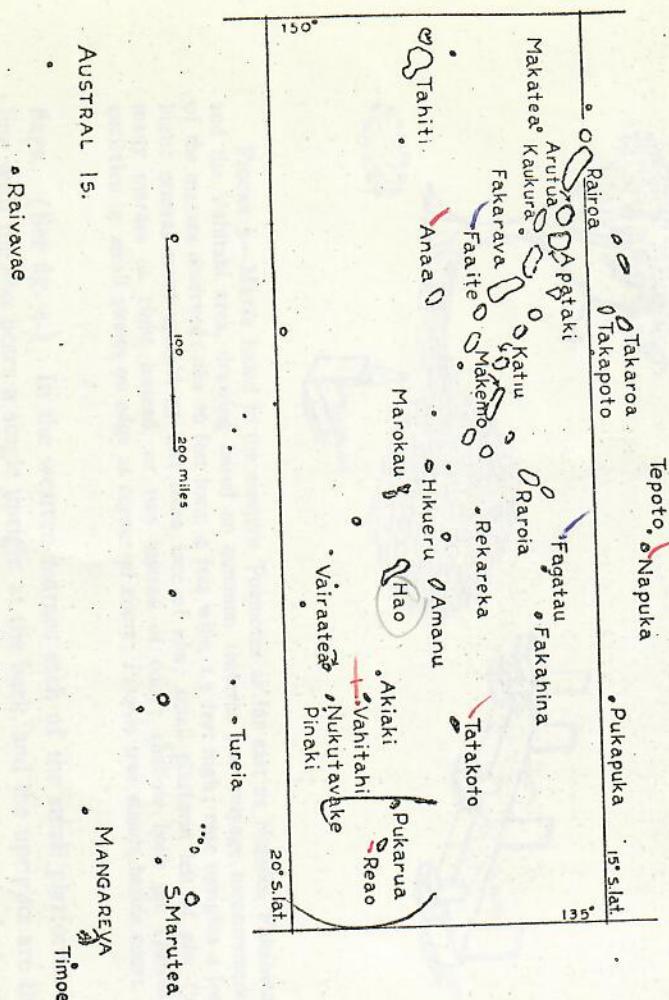


FIGURE 1.—Map of the Tuamotu Archipelago.

Throughout the archipelago the maraes have an unpaved court, quadrangular (when defined); at one end of the court a platform (*ahu*) ranging from 10 to 80 feet in length, 2 to 10 feet in width, and 1 to 5 feet in height, along the rear edge of which are planted three or more upright slabs; and a tiny platform out on the court, placed midway between its sides. The *ahu* uprights range from 2 to 9 feet in height, though most of them are between 3 and 5 feet. The tiny court platform may bear an upright, and other

smaller uprights may stand on the court. The only suitable stone for building purposes is supplied by outcropping or uncovered limestone ledges. Tidal waves have broken many of these into the blocks that are used. Rectangular slabs of limestone completely dominate the stonework of Tuamotuan maraes. Set on end, the slabs become uprights. Set on edge, they form the first course of platform facings, and laid horizontally, the upper courses.

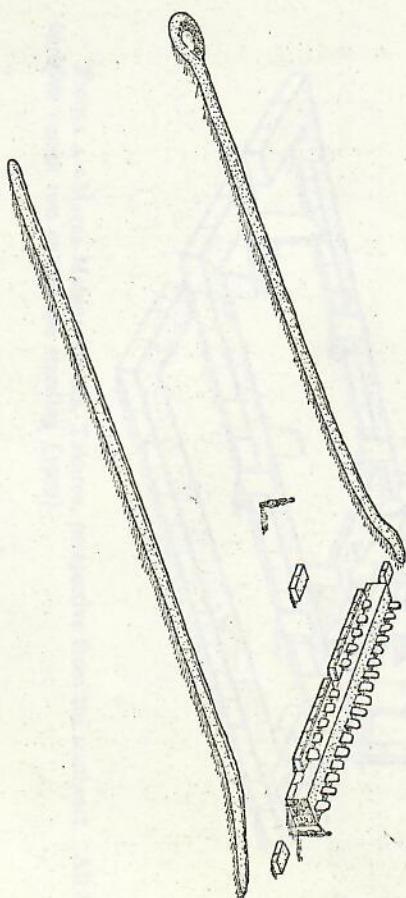


FIGURE 2.—Reconstruction of the Reao marae embodying the most common features and the average measurements of the maraes observed: *ahu* 50 feet long, 7 feet wide, 4 feet high; court 150 feet long; uneven number of uprights on the *ahu*; uprights here and on steps along *ahu* front follow one another at intervals of 8 to 18 inches in an uninterrupted line; uprights 2 to 3 feet high and roughly rectangular; side walls of court are ridges of small pieces of coral; outer extremity of left wall terminates in small circular enclosure.

At almost every marae the bearing of the *ahu* was taken with a hand compass and corrected for declination. It is obvious from this record that orientation to the cardinal points was not practised; nor was there any hard and fast rule as to whether the *ahu* should be placed parallel or at right angles to the lagoon or the sea. It is no accident that many maraes are located in or at groves of a species of *Pisonia*. This tree is called *galae* in the western Tuamotus, *puka* at Napuka, *pukatea* at Vahitahi, and *lotoua* at Reao and Pukarua.

The local variations in maraes mark out areas which were anciently more or less isolated from each other and serve to reveal the fundamental features and the ancestral plan of the maraes of the region. The *ahu* of the western maraes are not more than 2 feet high, but those of Reao and Pukarua are between 4 and 5 feet and have a greater average length and width than the others. They are distinguished by a continuous line of uprights along the top of the *ahu*, spaced only a few inches apart and planted near the middle (fig. 2). The western *ahu* have only three rear uprights placed along the

rear edge (fig. 3). Most courts of the Reao-Pukarua marae are enclosed along the two long sides by a ridge 2 to 3 feet high of small pieces of coral, but the courts in the west, with one or two exceptions, are not enclosed.

In the higher *ahu* of Reao and Pukarua the first course of the facing is of slabs set on edge and the upper courses of slabs laid horizontally. Throughout the west, all carefully made *ahu* are faced with a single course of squared slabs placed on edge. These facing slabs, or curbs, average 2 to 3 feet in length but attain lengths as great as 6 feet. They are fitted together end on, and the corners are made by overlapping. The fill is of coral rubble with a top dressing of fine coral pebbles, or, in some marae, a paving of

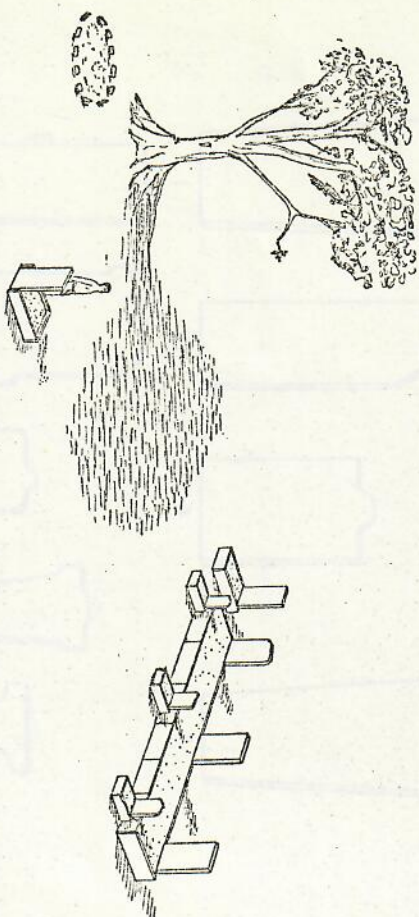


FIGURE 3.—Marae found in the western Tuamotus as far east as Napuka, Fakahina, and the Vahitahi area, drawing based on common features and average measurements of the marae observed: *ahu* 20 feet long, 4 feet wide, 1.5 feet high; rear uprights 4 feet high; central court upright 35 feet from face of *ahu*; small platform left of *ahu* (at many marae on right instead, or two instead of one); shallow bone pit (*pa'afata*) encircled by small stones on edge at corner of court; *Pisonia* tree stands beside court.

Flags. (See fig. 4.) In the western marae each of the small platforms in line with the *ahu* bears a single upright at the back, and the uprights are the same size and shape as the *ahu* uprights. At Reao these lateral platforms are lower than the *ahu* and those we saw had no uprights.

The rear uprights of Reao *ahu* are uniformly 2 to 3 feet high and of rough shapes approaching the rectangular. None are specially shaped. In the west, most *ahu* uprights are squarely trimmed and few are less than 3 feet high. At Fagatau and the neighboring island of Fakahina they average a little more than 4 feet in height. At these two islands are the largest uprights in the archipelago; a number of the marae have specially shaped uprights with short lateral arms or an upward projecting head, or both.

(See fig. 5; pl. I, B.) Only at one Tatakoto marae did I see uprights shaped in the same way. The special shaping of the Fagatau uprights is not confined to *ahu* uprights but extends to court uprights. This is also true of the Tatakoto marae.

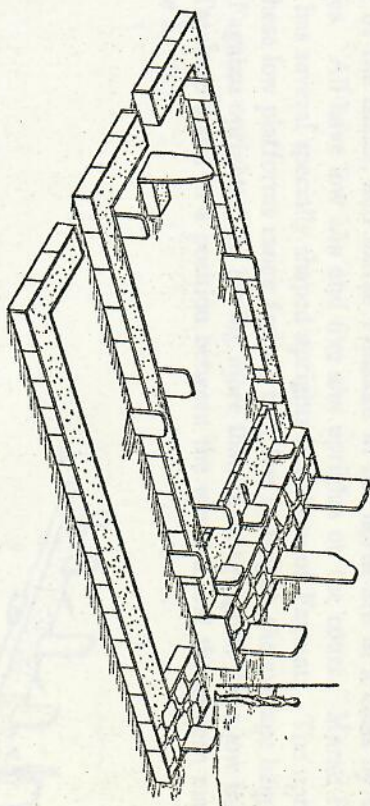


FIGURE 4.—Marae Mahina-i-te-ata, Takarua, perspective from the southeast. All the uprights except two on the *ahu* standing (1929).

The uprights of the *ahu* and its lateral platforms are higher than all others, with the exception of the uprights on the small central platform on the court. (See figs. 3, 4.) In the western marae this platform bears at the opposite end from the *ahu* an upright of the same size and shape as the *ahu* uprights. At Reao and Pukarua there is no upright on this platform. Whereas in the west the platform is at right angles to the *ahu*, at Reao it lies parallel to the *ahu*.

Against the front of the *ahu* in the western marae, apparently opposite each rear upright, is a tiny square or rectangular platform on the outer or inner end of which (more commonly the inner end) stands an upright 1 to 1.5 feet high. On the courts of some marae in the west are a few similar tiny platforms. Some of them bear uprights at the end opposite the *ahu*.

No little platforms in front of the *ahu* or out on the court were found at Reao, but along the front of some *ahu* is a discontinuous step, bearing uprights.

In the western marae a number of other uprights stand on some of the courts.

A fairly constant feature of Fagatau marae is an oblong pile of branch coral along one side of the court. It represents the *ahu* to Ruahatu, lord of the ocean (fig. 6). These piles were seen at one marae at Hao and also at a marae at Vairatea.

The outer ends of many of the left court walls of Reao marae terminate in a small enclosure, presumably the *pa'afata* (refuse pit). At marae Taka-

roa, Fakahina, a refuse pit is located at the left corner of the court 50 feet from the small *ahu*. It consists of a slight depression 10 feet in diameter, enclosed by a circle of stones 6 or 8 inches high, placed on edge and a few inches apart. Numerous turtle and fish bones lie within this circle. Searat (20, p. 479) saw a *pa'afata* at marae Katipa, Fakahina: "It was a circle of a dozen meters in diameter, surrounded by blocks of coral; one finds there numerous bones of turtle."

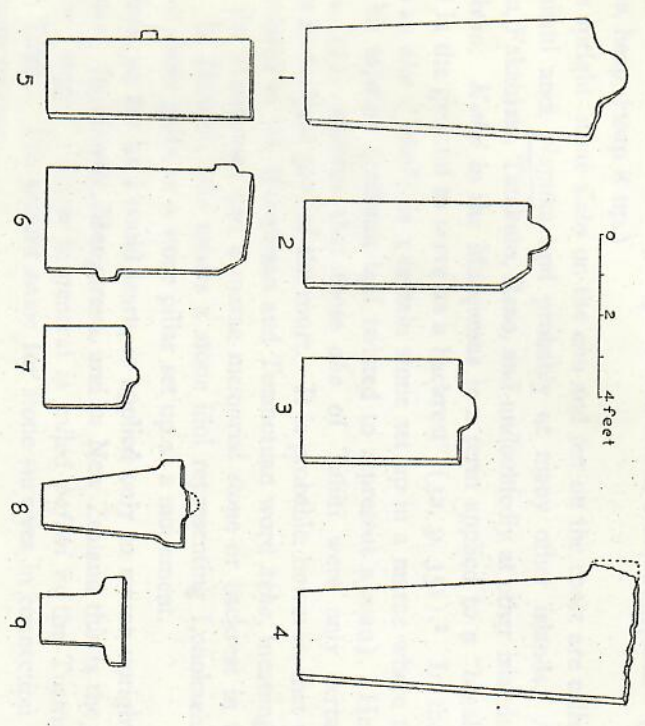


FIGURE 5.—Limestone marae uprights: 1-5, from marae Ramapohia, Fagatau; 3, a court upright; 5, a lateral *ahu* upright; the others *ahu* uprights; 6, *ahu* upright from marae Punakau, Tatakoto; 7, court upright from marae Ahutu, Fagatau; 8, upright from marae Katipa, Fakahina; 9, court upright from marae Ahutu, Tatakoto.

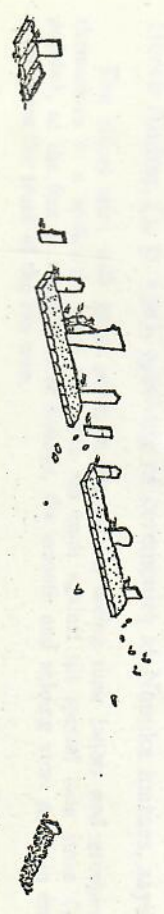


FIGURE 6.—Marae Ramapohia at Fagatau; altar to Ruahutu at extreme right.

Marae Goio, Tatakoto, a marae 200 yards from it at the eastern extremity of the island, and marae Papa-ragi near the village at the west end resemble the Reo maraes. But marae Ti'itokokota in the southeastern part of the island, marae Fareika at the ancient village of Ti'ikaite in the northeastern part of the island, and marae Punakau in the north are in a class by themselves. All have low *ahu* and five *ahu* uprights on the court. Marae Punakau has several specially shaped uprights like those of Fagatau. The uprights of these low platforms range from 4 to 5 feet in height, the average height of the Fagatau uprights. In having more than three uprights, these low maraes of Tatakoto stand in a position between the western and the eastern maraes. (See fig. 7.)

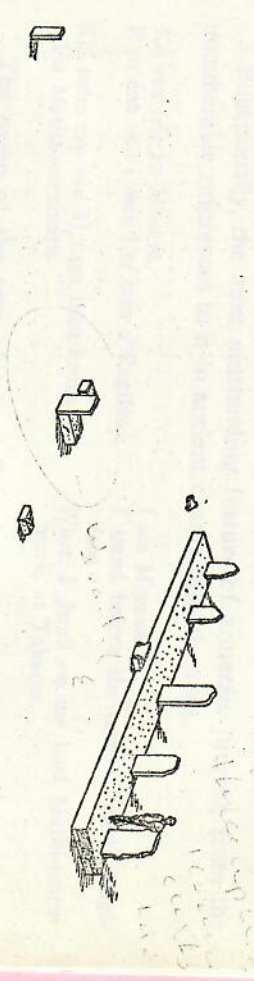


FIGURE 7.—Marae Punakau, Tatakoto, of type intermediate between western Tuamotu maraes and those of Reo in the extreme east: *ahu* 39 feet long, 6 feet wide; central upright 5.5 feet high.

At Vahitahi one marae may have been quite unlike the others described; it seems to have been a rectangular enclosure about 75 feet wide and 200 feet long, with uprights placed along the two sides at intervals of about 2 feet. But it may have had an *ahu* at one end and may have been, except for the uprights along the sides of the court, like the other maraes.

Of the four maraes visited at Napuka, two are classified with the western maraes. The two largest, marae Marokau and marae Fakarava, called marae *tifa'a* (turtle), and certainly great turtle-feasting places, may have been different. All that could be ascertained was that some small, rough *ahu* had been erected at their sites, and some rather large uprights (5 to 6 feet high) but not the original position of these uprights in relation to each other and to the *ahu*.

PARTS OF THE MARAE

In the Tuamotus stone shrines are called maraes, but at Napuka the term *pukete* is applied to a class of small maraes.

Metaphorically a marae is sometimes called a *puke* (pile), as in the chant, "Taku ariki, ka nanao ra vanu ki raro iaku korero, iaku yanaga," which has these lines: "e one hoki tei Tahiti, e puke hoki tei Punakau, e one hoki tei

Meketa, e puke hoki tei Irakau." (Tahiti is the land, Punakau is the marae, Meeta is the land, Irakau is the marae.) The ordinary way of saying "to build a marae" is *ahu i te marae*. The basic meaning of *ahu* is, of course, "heap."

That the specific term for the platform at one end of the court was *ahu* is brought out in the following fragment of a Fagatau chant referring to the building of a marae: "Hakapukepuke tena ahu e, e fakapukepuke." (Heap up that *ahu*, heap, heap it up.)

The upright stone slabs on the *ahu* and out on the court are called *pohtatu*, at Vahitahi and Napuka and probably at many other islands. At Anaa, Fagatau, Fakahina, Tatakoto, Reao, and undoubtedly at other islands they are called *keho*. *Keho* in the Marquesas is a term applied to a "basalt column planted in the ground to serve as a backrest" (32, p. 351).² In the Society Islands an *aho* ('*aho?*') is a certain stone set up in a marae where the priest set up his *tap'au* (coconut leaf twisted to represent a man). Henry (13, pp. 134, 399) records that these *aho* of Tahiti were only certain small uprights in the rear part of the court. It is probable, however, that the word *aho* is related to the Marquesan and Tuamotuan word *keho*, meaning a backrest in the Marquesas and a marae memorial stone or backrest in the Tuamotus. In Hawaii, *eho* means a stone idol representing Lonokeaho, a collection of stone gods, or a stone pillar set up as a monument.

Pohatu, so far as I could learn, is applied only to marae uprights in the Tuamotus. In Hawaii, Mangareva, and in New Zealand this is the common word for "stone." Stone in general is called *po'faki* in the Tuamotus and 'ofa'i in Tahiti. The ancient name for stone survives in connection with the Tuamotuan maraes.

At Takarua, uprights on the court were called *hirinaki* (backrests), the equivalent of the *tuhiri* or *turu'i* (leaning-stones) on the maraes of the Tahitians. Temiro-a-Paoo at Fagatau says that the *po'fatu* or *keho* along the back of the *ahu* were not *hirinake*, but that those out on the court were. Hervé Audran (3, p. 130), speaking of ceremonies at Napuka maraes, says:

The elders went with great pomp to the marae, taking their lances and grouping themselves in a semicircle, each one with his back against his special long stone (*te po'fatu*), at the foot of which was *te nohogu*, the smooth and shining stool made in one piece from the trunk of the *lou* tree.

Elsewhere (3, p. 134), Audran states that the elders "formed a semicircle around the marae." It is clear from Audran's description of a marae (3, p. 130) that he means by "marae" in this instance its *ahu*, hence that the men sat on the court and not on the *ahu*.

² Numbers in parentheses refer to Literature Cited, p. 77.

The *keho* to the right and left of the *ahu* bore ancestral names at marae Ramapohia, Fagatau, and were *tapao tupuna* (ancestral memorials). Before them offerings were made. One of its *ahu* uprights, the central of the three at the eastern *ahu* (fig. 6; pl. 1, A), was called Pehan-gaga, which I was told was not an ancestral name. Temiro insisted that no one sat with his back against the memorial slabs beside the *ahu* any more than against the *ahu* uprights. Montiton (17, p. 366) calls these *ahu* uprights "idols." This does not rule out their use as seats, for they may have served, as I am convinced they did, as seats (backrests) for the ancestral gods. Rucea of Vahitahi said the *pohtatu* were upright stone slabs, some of them carved, serving as memorial stones to warriors and chiefs.

Functionally, the most outstanding feature of a marae, judging from the innumerable references to it in ancient chants, was the *tara*.

Ko vanu teie ko Moeava,	I am Moeava.
E tu ana vanu i mua i te tara o Ragifoa,	I stand before the tara of marae Ragifoa.
Kia noho ahu vanu ki ruga toku henna ra,	When I dwell on my land Matiti-maruka Matiti-marumaruru.

The name of the *tara* of marae Pearu-kura at Takapoto was Vai-meho. I was told at Vahitahi that the *taru*, an upright stone at one end of the marae, was an object of the greatest veneration. Paee of Anaa states that the *hirinaki* (backrest) of the seat of the ariki at the marae was the *taru*, also called the *uru* (head). However, my Vahitahi informant, Rucea, places the *tara* at the opposite end of the marae from the *noho raga o te ariki* (stone seat and backrest of the chief) midway between the sides.

The word *tara* has among its many meanings "the pointed ends of a canoe," "the end of a house," and seems also to have been used to indicate the end, probably the *ahu* end, of a marae.

In the story of Moeava it is said that his son, Reipu, was hidden at Tepohoria, a place behind (*i muri mai*) and "just outside of" the *tara* (*i te tara i vaho mai*) of marae Ragifoa, the place where the Murihenua, the famed ship of Moeava, was kept on props when not in service. The Tuamotuan historian, Teururehu, translating "i te tara o te marae" into Tahitian, gives *hiti* (end) as the equivalent of *tara*. That this is the *ahu* end is implied by the following line in the chant of the island Rekaraka: "Ko i na tagata e ahu ana i te tara o ta rana munga ra e, Te-manga-haga-nui." (These are the two men who heaped up the *tara* of their mountain [i.e., marae], Te-manga-haga-nui.) Here *tara* seems to refer to the end, where the *tara* stood, and is another way of referring to the *ahu*. On the other hand, if the whole chief's seat, that is, the small stone platform on the court and the upright at its back, was called the *tara*, then it might have been this which was "heaped up." The expression "sitting upon (*noho ki ruga*) the *tara* of the marae" appears in chants.

As if it were something exceptional, it is said of Poureva, the chief marae of Hao Island, that it had two *tara*. The one at the south side (*i te pae i*

toga) was called Haro-pito and the one at the north end, Rio. Nevertheless, it may be that both the chief's seat on the court and the central upright on the *ahu* were called *tara*. Certainly the *tara* was one or the other, if not both, for it was in front of these two stones that the chief stood, or sat, in all important ceremonies. When Moeava went to meet Hiarei, chiefess of Napuka, she was on the marae of Raghia, sitting at the *tara*.

In the Society Islands the backrest of the chief's seat at the marae was called the *haci*, but the positions next in honor, to the right and left, were marked by backrests called *tarahu* (*tara-hu*?).

The position of the chief's court seat of the western maraes is occupied at Reao and Pukarua by the *ahu-tagā* (jaw-of-the-*ahu*), a small platform parallel to the *ahu* and apparently without an upright. Teaka-a-Tetaiririu at Reao mentioned that prayers were recited at the *ahu-tagā* before approaching the *ahu*. I did not learn whether the chief ever sat here. But in Tahiti a certain small platform on which the chief was placed during inaugurations was called an *ahu-ariki*. It seems to have been a platform seat (30) in front of the *pu-arii* (an upright on the middle of the court at the end opposite the *ahu*) and therefore the equivalent of the Tuamotuan *tara* as defined by my informant Paea. If in Tahiti and in the Western Tuamotus the feature corresponding to the *ahu-tagā* of Reao was a chief's seat, perhaps the *ahu-tagā* was also a chief's seat. In Tahitian chants *ahu-tā'a* (= *ahu-tagā*) refers to some part of a marae and is possibly another term for the *ahu-arii* (30).

I did not learn the term for the three small platforms against the front of the *ahu*, each opposite an *ahu* upright and each bearing a smaller upright. Evidently they were seats for the living representatives of the ancestral gods during certain stages in marae ceremonies. Seurat (20, p. 479) describes them as "sortes de prie-Dieu," on which the priests knelt. Montton (17, p. 379) throws some light on their function.

During a marae ceremony Montton has the chief priest begin the ceremony by sitting with his back against the marae, meaning by "marae" the *ahu*. The high priest's principal assistant (*huhuki*) was on his right, and the two assistants *fabatau* and *hakari* on his left. Out on the court, opposite the high priest, "knelt" the *tuturi* (kneceler). All these assistant priests, as well as the chief priest, according to Audran (4, p. 235), were of chiefly blood. To the left and right of the *tuturi*, adds Montton, two parallel rows of warriors sat on their stools. After the high priest had been presented with his ceremonial cap and his staff by the *huhuki*, who took a bunch of leaves and with them struck the pavement to awaken and call the god, the chief "turns towards the marae, and with great contortions and deafening yells, invokes all the gods" (17, p. 379). It was after this, undoubtedly, that he took up his seat out on the center of the court, for it was here, so Temiro-a-Pahoa told me, that he was presented with the head of the turtle.

The three stones along the front of the *ahu* of Society Islands maraes occupy the position of these small seats and uprights in the Tuamotus. The

Tahitian uprights seem to have served as the first, second, and third positions of honor reserved for the gods or their representatives, the first position being marked by the central upright. These are probably among the uprights termed by Henry (13, p. 135) *ofā'i manava ari'i* (memorials of departed chiefs and ancestors). If so, they have taken on the function of the rear *ahu* uprights of Tuamotuan maraes, and probably also of the Tahitian *ahu* uprights which disappear in the coastal maraes.

The marae court at Reao is called a *tahu*, the side walls *pa*, and the ends of the court opposite the *ahu* where women and common people were allowed to gather the *pa-hā*. The marae court at Hao was called a *tahu*, also a *nahora*. A marae at Reao had an *ana* (literally, "cave"), a little vault in the *ahu* or in a step in front of the *ahu*, where sacred objects were kept.

The old men of Reao seem not to have heard of the *fare heiao*, a little house on or near the maraes in the western Tuamotus, where images and sacred objects and paraphernalia were kept. At Fagatau I was told that the *fare heiao* was near the marae but not on it. Here the *fare-tini-atua* (relic boxes) were kept. Some maraes had no *fare heiao*. Montton (17, p. 336) confirms my Fagatau information concerning the location of the *fare heiao*. He says of the *fare-tini-atua*:

They ordinarily rested piled up in a house constructed for this purpose near the marae. But, on the occasion of a religious or patriotic ceremony, they were taken from the general depot, and after dusting and decorating, they were placed on the marae or in the vicinity, on forked posts.

In the term *fare heiao* is seen the Hawaiian term for marae—*heiao* or *heiau*. The *palata*, or *palata kiva*, was a pit at a corner of the marae court into which were thrown the bones of sacrificed turtles and fish.

A *ruahatu* was a heap of branch coral deposited at Fagatau and Fakahina maraes as offerings to Ruahatu, lord of the ocean. This may throw light on Audran's cryptic remark concerning Napuka maraes (3, p. 134): "The marae was a sacred place of Polynesian paganism. It was formed from Ruahatu."

ORIGINAL APPEARANCE

Insofar as stones entered into their make-up, the appearance of Tuamotuan maraes at the time they were in use is indicated in the reconstructional drawings (figs. 2, 3, 4, 7). In these, more uprights should be added to the court as only the uprights which regularly appear in certain positions are shown.

One of the Spaniards of the Quiros expedition who landed on Anna (15, p. 419) described a Tuamotuan marae as it appeared more than three hundred years ago (1606). In a grove of coconut and other trees on an inlet under a "lofty tree of thick foliage" (undoubtedly a *Pisonia*) were the raised slabs of

a marae. Here the ground was "kept very clean" and from the tree hung plaited coconut leaves which "fell over" the uprights of the stone "altar."

Byron (12, p. 130), who saw a marae at Takaroa in 1765, mentions the lofty trees which shaded them. From the branches hung the "figure of a dog" adorned with feathers, and (8, p. 102) "a great number of the heads and bones of turtles and a variety of fish, enclosed in a kind of basketwork of reeds." No house on the marae was mentioned, but behind it and a little to the east were found (8, p. 102) "many neat boxes full of human bones." From this Byron (8, p. 102) inferred that the marae was a graveyard and that these people had "great veneration for the dead." The boxes were *fare-tini-aitua*. When they were taken from the *fare heiao* onto the marae, they were, according to Montiton (17, p. 336), installed on forked posts "in the middle of the plot (*platebande*)." It is not clear from his description whether or not he means by "plot" the *ahu*. Audran (4, p. 130) says these *fare-tini-aitua* were raised on a kind of altar called *raga* (3, p. 134) set on a considerable layer of flat stones. *Raga* is a term applied to any kind of framework rack, or support. The layer of flat stones of which Audran speaks is undoubtedly the *ahu* of the marae, for outside Makatea there are no flag pavements on the marae courts. Seurat (20, p. 476) understood that these *fare-tini-aitua* were placed on the summits of the rear *ahu* uprights, but in this I am sure his informants meant "against" their summits. The *fare-tini-aitua* in the Mission Museum at Rome has a carrying pole lashed to each side, and undoubtedly the ends of these poles rested on the forked sticks mentioned by Montiton, the *raga* of Audran. Audran (3, p. 130) says that the marae of Ragihoa at Napuka had twelve of these *fare-tini-aitua*.

The missionary Father Fierens (11, p. 130) in 1870 encountered maraes on all sides at Tatakoto:

They were generally piles of stones made with more or less symmetry. Several consisted of a single great stone, 3 or 4 meters high. All these altars are furnished with small boxes resembling coffins and enclosing hair of ancestors or feathers of rare birds. The whole box is covered with pandanus leaves and feathers of sea birds. I saw a few idols of wood. . . . The maraes were surrounded with the remains of fish, the skeletons of animals, and in some islands these cannibals have made around their maraes wreaths of skulls and bones of human victims sacrificed principally in their wars.

In the village at Napuka in 1870, Fierens (11, p. 133) found a road leading to a marae, where he saw a "dozen boxes in form of coffins" and "not far away, under a spreading, leafy tree, heads and carapaces of turtles, set on long picks, and, off to the side, an enormous pile of fish and bird skeletons, and the ovens which cooked the sacrifices." At the Fagatau marae of Ragihoa in 1929, I found on and about the *ahu* a considerable number of sticks of *mikiniiki* wood, about 3 feet long, which had undoubtedly served for propping turtle skulls and carapaces.

When turtles were offered in numbers at a Napuka marae, says Audran (3, p. 130), the court was enclosed by a garland of coconut leaves skillfully interwoven, and called *te kahiiga*.

DISTRIBUTION

The number of maraes on a large inhabited atoll and the distribution of these maraes over the island is indicated by the location of 22 maraes around Takapoto, of 19 maraes around Takaroa, and of 28 maraes around Reao. (See figs. 14, 22, 56.) I was furnished a list of 36 Reao maraes by two men of that island. It is certain there were others, probably not more than 50 for the whole island. I learned of 30 maraes on the island of Fagatau, which is only 5 miles long, and many of these were double maraes, or maraes of two *ahu*.

At some islands most maraes were placed on the seaward side, as at Reao; at others, again, most maraes were on the lagoon side, as at Fagatau.

Maraes are located in or close to the villages. Byron, in 1765, visited a marae in a village on the southwest part of Takaroa. It was approached (8, p. 102) by a "rude but very agreeable avenue" which "opened to a spacious area" where the marae, shaded by one of the largest coconut trees they saw in the place (13, p. 130), was located "close to the houses of these people."

Ohono, the principal ancient village of Fagatau, was located on an islet about 300 yards long and 100 yards wide. Marae Aturona stood on one end of this islet and must therefore have been quite near the houses but at one end of the village.

MARAE NAMES

I picked up at random the following names of 344 Tuanotian maraes. There are 274 different names in the list; in other words, 104 of the maraes (30 percent of the total) have names borne by other maraes. No two maraes on the same island have the same name, with two exceptions. As an average of one out of about every three maraes has a name shared by two or more maraes, very intimate relationships must have existed between the islands. Five names in the list are shared by five or more maraes, each on a different island:

Kotuku-rere (Flying-heron) is applied to nine maraes, one on each of the following islands: Arutua, Takapoto, Takaroa, Fakarava, Kaitu, Hikietu, Takume, Fagatau, Fakahina, over which area the maraes are of identical type.

Aturona is the name of eight maraes, one on each of the following islands: Anua, Nihiru, Takume, Fagatau, Fakahina, Amamu, Vairarata, Tatakoto. Here the distribution runs into Tatakoto, where maraes differ from those to the west.

Ragi-hoa is the name of five marae, distributed as follows: Tahanea, Tanere, Napuka, Fagatau, Fakahina. If Ragi-faoa is considered the same name, Takarua and Tikai must be added. Over the area included by these islands the marae type is the same. The three names just given, Kotukurere, Aturona, and Ragi-hoa, I have not been able to find among several hundred Society Islands marae names or some five hundred Hawaiian names. They evidently belong to the Tuamotus. Although they appear also as place names, they are primarily marae names.

A marae Hitiaga is to be found on Rairoa, Takarua, Raroia, Fagatau, and Reao, or across all the Tuamotus. This is also a conspicuous marae name in the Society Islands and even turns up in Hawaii, on the island of Kauai, if the name Hikiina-a-ka-la is regarded as equivalent. At Reao the full name is Hitiaga-te-ata (Conning-of-the-shadow).

A marae Ahu-tu appears on Takapoto, Faaité, Fagatau, Napuka, Hao, Nukutavake, and Takakoto. This name also appears across the Tuamotus and in the Society Islands.

On the basis of its marae names, Tatakoto must certainly be considered intimately connected culturally with the western islands, and Reao must have close relationships.

At Tatakoto there is a marae Puna-kau. A marae of the same name appears at Fakahina, and this is the traditional name of the leading marae of Tahiti (marae Puna-au-ia.). Marae Te-ao-tea at Tatakoto is the name of a marae at Makatea in the extreme west. In fact, out of the 8 Tatakoto marae names, 6 are shared in the west.

Marae Pourvera at Reao has the same name as an important marae on Akiaki and the greatest marae on Hao. It is also the name of a marae on Fagatau and on Faite far in the west. Hiti-annau is a Reao and a Faite marae name. Yet out of 18 Reao marae names, only 3 are shared by islands to the west.

As in the Society Islands, marae of the same name are erected throughout the archipelago, but they are built in conformity with local types and show no closer relationships to their namesakes than the other marae.

Tuamotuan marae names (those marked with an asterisk appear as place names):

*Aehu (Va-hau), Fakahina, Anaa	*Anini, Takapoto	Faka-tokatehau, Fakahina	
Agiaigi, Rekarereka	APA-apa-o-te-ragi (or Apapa-te-ragi), Fagatau and Hao (see Papa-ragi, Tatakoto)	Fake-kura, Fakahina	
Aha-mea, Raroia	*Apa-taki, Fakahina, Fagatau	Fara-puta, Taega?, Fagatau (see Ara-puta)	
Ahu-kino, Amannu, Hao		Fara-toga-ao, Nihiuru	
Ahu-poa, Tahanea, Tatakoto, and Takume	*Ara-taki, Fakahina, Fagatau	Fare-aka, Moituinga	
Ahu-ragi, Fagatau	*Ara-toga, Fagatau	Fare-fare-matagi, Takapoto	
Ahu-reva, Vahitahi	Apu-te-rai, Makatea	Fare-ika, Tatakoto, Takume	
*Ahu-roa, Vairatea	A-rana-pohia, Hao and Fakahina (see Ramapohia, Fagatau)	Fare-kura, Manhi, Takume	
Ahu-rouru, Takapoto	Ara-puta (probably Fagatau)	Fare-kura, Manhi, Takume	
Ahu-tu, Takapoto, Napuka, Fagatau, Faite, Hao, Tatakoto, and Niuentavake	Ara-puta (probably Fagatau), Nihiuru	*Fare-pia, Anaa	
Ahu-vera, Amannu, Hao	Ahu-hi, Vahitahi	Fare-ruki (Fare-ru'i), Meesia	
Akaku, Hao	*Aturona, Nihiuru, Takume, Fakahina, Anaa, Tatakoto, Fagatau, and Vairatea	*Fariuru, Hikueru, Reao	
Anau-te-po, Pukarua	Faka-te-uariiki, Manhi	Fariuru-tutu, Manhi	
		Fenua-kura, Kautkura	
		*Gaere, mythical marae of Rata	

Goiu, Tatakoto	Marae-te-tupa, Takarua	Ovehau (Aehu), Anaa
*Goiu-ka, Hiti-roa, Rara	Maretiki, Takapoto	Pae-pae-kuriri, Fagatau
Hae-ragi, Pukarua	Marre-tini, Faite	Paeue, Takarua
Haga, Takarua	*Maragai, Toau	Pae-ara-toroha, Tuamaki
Hani-uru, Apataki	Maramarana-i-Atea, Faite, Makemo	Pae-taha, Raroia
*Havalki, Nukutavake	Maruata, Hao	Pahoruru, Arutua
Havana, Napuka	Maru-hoa, Fakahina	Paka-hana, Rekarereka
Heketihi, Reao	Maru-horo, Takarua	Pakeke, Hao
Hekena, Takapoto, Makemo, Marokau	Marumaru-ata, Pimaki	Papa-ragi, Tatakoto (see Apapa-te-ragi)
Hikihake, Amannu	*Maru-oha, Vahitahi	Papa-reva, a great marae?
*Hitiaga, Takarua, Rairoa, Fagatau, Reao	*Mata-ho, Anaa, Faite	Pape-tevaitoa, Faite
Hitananau, Faite, Reao	*Mata-o-rehua, Niau, Fagatau	Paru-te-tau-tua, Fagatau
Iho-iho, a great marae, ?	Mata-pu-rei-hau, Makatea	Patu-o-rogo, Takarua
Iraianu, Meesia	Mata-tahi, Reao	*Paua, Hikueru
Kahoko, Takarua	*Matati-poki, Takarua	Peankura (Ahupoa), Takapoto, Rekarereka
Kaho-reva, Fagatau	*Matiti-maru, Fagatau, Takapoto	Pekai, Fakahina
Kai-e-te-tini, Takarua	Matiti-tau-a-te-aroha, Faite	Po-a-nio, Reao
Kakea, Nukutavake	*Mauga-roa, Hao	Poigaro, Amannu
Kakopi, Takapoto	Mauga-tapu, Reao	Poitia, Makatea
Karepaia, Faite	Mehta-i-te-ra, Anaa, Matahiva	Poituku, Amannu
*Karo-tua, Hao	Mehta-i-te-ragi, Haraiiki	Pou-heva, Amannu
Katagaroa, Pukarua	Motu-o-koro, Tepoto	Pou-heva, Makemo
Katipa, Fakahina	*Motu-tapu (One-Make), at Raraka	Pou-ihii, Tatakoto
Keho-puta, Tikie	Nana-ho-tagata, Fagatau	Pou-reva, Faite, Fagatau, Hao, Akiaki, Reao
Koiha-riki, Hikueru?	Nikan, Vahitahi	
Kotuku-rere, Arutua, Fakarava, Takarua, Takume?, Katiu, Fakahina, Takapoto, Hikueru, Fagatau	Nimo, Faite (see Marae Nimo)	Pou-roi, Takarua
Kuhono, Manhi	Niru-tahi, Apataki	*Pou-tagai, a great marae?
Kumahatoga, Fagatau	Mauga-hau-maroro, ?	Pou-tapu, Hikueru
Magmagatetic, Fakahina	Nuku-te-varovaroro, Fakahina	*Pua-rau-toga, Reao
Mahnahi, Ahe	*Ogio, Anaa	Pua-tau-humu, North Maruea
Mauga, Fagatau	Ohutu, Tikie	
Makeva-tamariki, Rekarereka	Okauru, Takapoto	Pue-garo, Fagatau
Manaha-o-Tagaroa, Fagatau	*Omamu, Pimaki	*Puhigaru, Manhi, Raroia, Fakahina
karava	*One-karamea, Takarua	Puhi-ruu, Taega
*Manna-tika, Reao	*One-kura, Aratika	*Pu-keiga, Katiu, Rekarereka
Maoake-taharoa, Takapoto	*One-make, Faite, Raraka	Puna-ka, Takakoto
Maofo, Taega	One-tapu, Takapoto	Punava, Fakahina
Marae-aro, Makatea	Orihahanu, Anaa	Punavara, Apataki
Marae-hara, Takume	Orolega, the marae of Havalki	Rachokoro, Ahe
Marae-iti-nia, Anaa	*Oromea, Fagatau, Fakahina, Hao	Ragi-faoa, Takarua, Tikie (see Ragi-hoa)
Marae Nimo, Faite	*Orama, Apataki (see Marae-tama)	Ragi-haru, Fagatau
Marae-o-Koha, Faite	Orava, Fagatau	*Ragi-hoa (Ragi-faoa), Tahanea, Tanere, Napuka, Fakahina, Fagatau (see Ragi-faoa)
Marae-onemake, Faite		Ragi-nea, Rekarereka
Marae-tama, Apataki		Ragi-puia, Reao
Marae-tapu, Makemo?		Ragi-te-tau-noa, Fakahina
		Rai'upu, Makatea
		Rakereke, Fagatau

Ramapohia (Ramapuhia), Fagatau	Te-ara-toro-arii, Manhi (?)	Te-vero-o-te-ragi Faka- hina
Rogo-ma-tane, Rekarareka	Te-are-ro, Reao	*Tiare-kura, Takapoto
Tagarokivi, Hikiveru	Te-ata-i-narama, Reka- reka	*Tiave, Reao
Tagi-haere, Fagatau	Te-ava-tea, Tikei	*Tikerike, Fagatau
Tahagahaga, Mani hi	*Te-fare-turama, Takapoto	Titi-kokoa, Takoto
Tahapahapa, Mani hi	Te-fau (Marae-te-fau), Makatea	Tohikka, Fagatau
Tahara, Fakahina	*Te-heuega, Faaita	Tokona-i-te-ragi, Reitoru
*Tahiti-nui, Fakahina	*Te-hiiti-kura, Takapoto	To-pe-a, Tikei
*Taitanaga, Rarakea, Re- karakea, Hao	Te-hono, Ahe	To-tara-na-hii, Amannu, Hao
Tai-noka, Fakarava, Ma- kata, Niau	Te-ihii, Makatea	Tu-agagi, Takarora and Takapoto
Takere-ru, Vairaitea	Te-ihoga, Tematagi	Tuaraki, Vahitahi
Tamapa, Makatea	Te-mahia, Fagatau	*Tugata, Fakahina, Hao
Tane-re-tahi, Hikiveru	Te-marae-o-Koha, Faaita	Tu-hui-kura, Amannu
Tapiaro, Tikei	Te-manga-haga-nui, Re- karakea	Tupu-te-ragi, Vahitahi
Tapu-hina, Makatea	*Te-moko-tua, Reao	Tu-raga-hu, Takapoto
*Tapu-nui, Takapoto	Te-nuku-au-tapena, Re- karakea	Turaha, Fagatau
Taputapatea, Hao, Faka- rava	*Te-nuku-tu-pahu, Takarora	Turaina, Faaita
Taputu-akia, Hao	Te-paepae, Fagatau	Ture-moa, Toau
Tarahae, Apataki	Te-pito, Reao	*Ture-moe, Rekarakea
*Tara-mea, Apataki	*Te-poiatu, Reao	Ture-moke, Toau
Tara-rua, Taroro, Rarora	Te-pua-i-fare-ika (Tu- pua-i-fare-ika), Katuu (see Fare-ika)	*Turuga (Turona ?), Hao (see Ahurona)
Tarere-kura, Manihi or Ahe	Tapu-tini, Takarora	*Turuhe, Takarora
Tatakoto, Takarora	Te-pu-matagi, Rekarakea	Tutuvera, Hao
Tautia, Apataki	Te-ragi-tua-tini, Reao	Utuhina, Takarora
Te-ahu, Rekarakea	Te-raki-rou, Rekarakea	Vae-rota, Reao
*Te-ahu-o-tava, Fagatau	Te-rerega-tava, Rekarakea	Va-hau, Ana
Te-ahu-o-te-manakia, Hao	Te-tai, Takarora	Vai-ahu, Motutiga
Te-akiaki, Rekarakea	Te-tamamu, Katuu	Vai-ehu (or Te-ehu), Takarora
*Te-ao-tea, Makatea, Ta- takoto	Te-teka, Reao	Vai-ka, Fagatau
*Teapai, Reao	Te-tupu, Reao	Vai-mono, Kauehi, Tika- hau
*Te-ara-ta-papa, Rekarakea	*Tauru-mutu-hia, Takarora	Vai-oru, Hao
Te-ara-tavaka, Reao	Te-vai-raka, Reao	Vai-tonoana, ?
		*Varokia, Fakahina

COMPARISONS

The marae of the western Tuamotus differ little from the inland marae of Tahiti and Moorea. Some marae of Tahiti, in fact, are identical except for the employment of basalt instead of the exclusive use of limestone slabs and coral in their construction. The most significant difference appears in the number of *ahu* uprights. Most Tahitian inland marae have a single rear upright, but a few have three. However, as in the Tuamotus, the uprights along the front of the *ahu* in the Windward Society Islands are three in number, and in the coastal Tahitian marae, in which the *ahu* is elevated and its uprights completely disappear, these three uprights along the front are

very large, the largest in the marae. They probably took over the function of the *ahu* uprights as seats (backrests) of honor for the gods. The *ahu* of the western Tuamotuan marae have a greater average length than the inland Tahitian marae. Their courts are not so well defined, but they show the same rectangular plan and proportions.

The eastern Tuamotuan marae, those of Takoto, Pukarua, and Reao, though they differ from the western, do not resemble closely the marae of Mangareva. Seurat (20, p. 483) says:

"The marae of the Mangarevans, of which there still exist vestiges at Timoe and South Marutea, neighbors of the Gambiers, differ considerably from those of Tahiti, the Marquesas, and the Tuamotus." He describes these marae as rectangular platforms 6 feet wide, 20 feet long, and 6 feet high, built up of limestone slabs laid regularly one on another. In front of the platform, a little opening 2.5 feet high leads to a chamber in which a man can crawl flat on his belly. "This chamber was considered the dwelling in place of the spirit of the god of the marae. These are generally grouped by five or six and a path of flagstones leads to each one of them."



FIGURE 8.—Ancient ruins on Timoe Island southeast of Mangareva as sketched in 1902 by Alvin Seale: a, "royal tomb" containing bones of at least three persons; b, "ordinary tomb"; c, "marae."

Alvin Seale of Bernice P. Bishop Museum spent a morning ashore at Timoe (fig. 8) in 1902. He reports (19):

On the two highest points of the island were marae and tombs of piled up coral. These tombs contained very old human bones. One of these tombs was shaped like a house and was 7 by 15 feet and 6 feet high. [See fig. 8, a.] It was a solid pile of stone, containing at least three sets of human bones. This was probably the royal tomb, for the others were of much smaller size, conical, about 7 feet in diameter and 5 feet high. [See fig. 8, b.] The body seemed to have been placed in the foundation of these tombs and then the blocks and broken pieces of coral piled on top. Near the royal tomb was a place of pagan worship consisting of several stones set up and a smooth platform of stone on the inner side like this. [See fig. 8, c.]

What Seale describes is ancient, for in 1797 Wilson (21, p. 115-116) saw on the prominent southeast point of Timoe "three piles of coral stones; two were built round and small, and one square, the sides of which might be about 12 feet long, 6 feet high, with a hole at one side, seemingly to creep in." Beechey (6, vol. 1, p. 141) in 1825 saw at Timoe "upon the angles of the island . . . three square stone huts, about 6 feet high, with a door only to each. They did not appear to be dwelling houses and were probably places of interment or worship." At South Marutea he saw (6, vol. 1, p. 198) "a

square stone hut, similar to those described at Crescent Island, on one of its angles." But Moerenhout (16, vol. 1, p. 164) saw at the north end of the atoll

... three walls, constructed by coral slabs and placed at a little distance one from another but which might have been part of one construction, of rectangular plan. . . . We had taken them at first for stone huts, but M. Brock, experienced in such things, proved to me that they must be the ruins of a marae.

The Reao marae, whose *ahu* is a long wall, and whose court is enclosed along the two sides by a detached wall, has three walls disposed as Moerenhout describes. The Timoe structure, as described by Seale, is in proportions and shape quite like a stone house. I think if Sourat had seen the Reao maraes he would not have confused those of South Maratea with the Timoe structures.

The small stone towers and the house-shaped platforms of Timoe have no parallels in the Tuamotus proper. The row of upright stones facing on a pavement on Timoe, though resembling a southeastern Tuamotuan marae, is not exactly like anything discovered in the other islands. Its continuous line of uprights is comparable to the arrangement of uprights on the *ahu* of Reao maraes.

The meager information concerning the stone structures of Mangareva itself suggests that the Timoe stone "hut" and cairn were not represented there. In the absence of burial caves for the final disposition of the bones of the chiefs, the Timoe islanders, who were from Mangareva, may have resorted to burial in or under the structures which Seale called "tombs." Mangareva had at least two kinds of marae:

One was simply a thatched house enshrining a god, and this house stood across one end of a rectangular pavement defined by squared coral curbs which projected about 10 inches above the ground (6, vol. 1, p. 167; 16, vol. 1, p. 93; 29). The other was a long, narrow platform, about 3 feet high, faced with neatly trimmed limestone slabs set on edge. This platform stood within a large shed placed across one end of a rectangular pavement defined by coral curbs. The platform seen by Beechey (6, vol. 1, pp. 171, 194) was about 35 feet long, 6 feet wide, and the facing blocks were 5 feet long, 3 feet high, and 1 foot thick. Beechey and Moerenhout (6, vol. 1, p. 167; 16, vol. 1, p. 97) were received by the chief on this platform. Beechey was then made to sit with the chief at a "large stone" in the center of the court.

Upright slabs have been observed at some maraes on Mangareva. Mr. R. L. Eskridge told me of finding a great slab standing on a terrace at a marae at Rouriki, on the western slopes of Mt. Duff.

Structurally the Mangarevan platforms, facing on a rectangular court, are comparable to Tuamotuan maraes. These platforms remind one especially of the high *ahu* of Reao maraes. At a number of Reao *ahu* I did not see a single upright and may have been mistaken in supposing they all originally possessed them. But Tuamotuan marae courts were not paved or defined by

curbs, and no *ahu* were formed of such large blocks as were used in Mangareva. Houses, as far as I know, did not stand over the *ahu* of Tuamotuan maraes. In function and structure, therefore, the Reao, Pukarua, and Tatakoto maraes stand much closer to the western Tuamotuan and Tahitian than to the Mangarevan.

Most remarkable, however, is the fact that the eastern Tuamotuan maraes, in differing from the western and Tahitian, exhibit a number of the differences which distinguish the archaic marae ruins of Necker Island, at the northwest extremity of Hawaii, from the inland maraes of Tahiti (30). On Necker and on Tatakoto and Reao, instead of three *ahu* uprights there are five or a continuous line of them. The Necker and Reao *ahu* attain greater lengths than do the *ahu* of the western Tuamotus and inland Tahiti. The *ahu* uprights of Necker more closely resemble, in size and rough shape, those of Reao than those of the western Tuamotus or Tahiti. [It is easy to believe that the maraes of the eastern Tuamotus are survivals of the same culture which left the prehistoric maraes on Necker Island, and therefore that the Tatakoto and Reao maraes represent a form employed by the earliest settlers both in Hawaii and in southeastern Polynesia.] The discovery in 1933 on Sydney Island, north of the Tokelau Islands, of prehistoric maraes which resemble the Necker and eastern Tuamotuan maraes (29) is conclusive evidence that the marae form is an ancient one.

In any consideration of the succession of marae forms in southeastern Polynesia, the marae described by Seale (19, fig. 7) at Timoe atoll, 35 miles east of Mangareva, deserves attention. Here is a row of closely set uprights planted directly in the ground along one end of a space partly defined by a pavement. The sacred places of New Zealand, the *whānau* (22, p. 289), are marked by a row of small uprights along one end of an open space. In one of the Necker maraes (28, marae 12) and in several of the simplest inland Tahitian maraes there are no *ahu*; the uprights at the end of the court rise directly from the ground. This is the southeastern Polynesian marae reduced to its simplest terms.

The maraes of the Tuamotu and Society archipelagoes are built up around the stone seats which form the most conspicuous features of the Tuamotuan and inland Tahitian maraes and which are preserved throughout all the more recently evolved, elaborated maraes of coastal Tahiti and the Leeward Society Islands. The simple inland maraes of Tahiti and the maraes of the Tuamotus bring into relief the rôle of the stone seats. These seats mark out positions of honor for the gods and the elect of the family or tribe when they meet together with their ancestors and ancestral gods. The marae of southeastern Polynesia was, primarily, the rallying place of the whole clan, both the living and the dead.

In the *Tuamotus* some of the upright slabs along the rear of the *ahu* (backrests of seats reserved for deified ancestors and at the same time as memorials for them) were shaped in the semblance of the human form. Corresponding *marae* slabs at *Tongareva* are cut in the same way: a central vertical flange suggests the head; lateral flanges, the arms. In addition, however, there are on *Tongarevan* *marae* uprights single flanges at an upper corner. Some of these are vertical, others horizontal, and one slab has a notch in the middle of the top edge instead of a projection (24, p. 155). Here resemblance to the human form breaks down completely. Buck (24, p. 179), in the absence of local information, is inclined to regard these flanges, or notches, as purely ornamental. But did not the custom of notching these slabs originate from the notching consequent upon giving them a human shape? To me the unilateral flanges are abbreviated attempts to give a human character to the slabs. Single unilateral flanges are found on *Tuamotu* slabs, but these are part way down the side and suggest the protruding umbilicus, a sign of unusual prowess throughout southeastern Polynesia.

In *Raiavayae* of the Austral Islands (36), one of the slabs at *Marae Temahara*, traditionally the oldest *marae*, has an upward-projecting head exactly like those at *Fagatau*. At this *marae* is an *ahu* not discovered at any other of the *marae*s on the island and identical with a *Reao ahu*. Near *Unuran* *marae* on the same island, Mrs. Routledge (34, fig. 13, d) sketched a backrest with a human face carved on a central projection at the top.

The wooden slabs set along the back of a long, low *ahu* of a *Kanai* temple figured by Captain Cook (28, pl. 14) occupy the place of the stone slabs along the back of the prehistoric *Necker ahu* in *Hawaii*. These wooden slabs have a human face carved on them. That the *Necker ahu* uprights were backrests for the gods finds support in the fact that the small stone images discovered at one of the *marae*s have no pedestals and can not stand upright by themselves. It is my belief, therefore, that they were propped with their backs against the upright slabs.

From backrests to memorial slabs is a simple transition, and from such memorials to memorial images is a natural step which seems actually to have taken place in the *Kanai* temple.

From the considerations in which we have just indulged it is possible to see in the image platforms of *Easter Island* a closer affinity with the *Polynesian marae*s of *French Oceania* than has heretofore been appreciated. What are called the image *ahu* of *Easter Island* are prehistoric platforms, relatively long, low, and narrow, facing on a rectangular, unenclosed court. Along the back of these platforms is set a row of uprights carved in human form and representing the head, arms, and upper part of the body. These statues bore names of ancestors, and the absence of legs may have to do

with their being represented as seated along the back of the *ahu*. The *Easter Island ahu* have been called burial places, but Mrs. Routledge (33, p. 170) has been careful to point out that this was not their only function, or necessarily their principal object. There is nothing to rule out their having served much as the *Polynesian marae*s to the west.

The great image platforms of *Easter Island* follow a plan which, after all, can be construed as a magnification and elaboration of the *marae*s of the *Tuamotus*, with whom the historic *Easter Islanders* were closely connected linguistically—more closely, according to Churchill's exhaustive analysis (27, p. 167), than with any other branch of the *Polynesian* family. Two *Easter Island* image platforms, *Ahukinokino* and *Ahuroa*, bear names of well-known *Tuamotu*an *marae*s.

The sudden collapse of the activity centering around the erection of the enormous image platforms and the carving of gigantic statues in itself indicates that these are the end products of a development pushed beyond the capacity of its inhabitants to sustain. The obsession which swept the *Easter Islanders* to heights unexceeded in *Polynesian* stonework left them in such exhaustion that *Europeans* have found it difficult to believe the ancestors of the historic inhabitants are responsible for the colossal remains, and would rob the *Easter Islanders* of their glory by attributing their works to "armies" of laborers from surrounding archipelagoes whose sinking precipitated the end.

WEIR TRAPS

In the shallows beside lagoon passes near all villages and also in the shallow channels between islets, along the shore of the lagoon, and even on the leeward reef flats where the water attains a depth of 1 or 2 feet during full tide may be found walled fish traps. Most walls are loosely constructed with blocks and fragments of coral and are built up to rise several inches above water at high tide. The simplest walls consist of a single line of coral stones. The most elaborate are more solidly constructed, 2 to 3 feet wide, and leveled along the top. Some walls are reinforced by heavy stakes driven in along the sides. Nowhere did I see carefully faced walls.

Most traps were laid down in ancient times and have been kept in repair. When under the modern régime the people of one island were concentrated in one or two villages, many traps were neglected. Traps damaged or destroyed by tidal waves have not been repaired or replaced. But the names and locations of many of the weirs which have disappeared are still known.

The names of 84 *Reao* weirs have been collected. Nine of these names begin with *pa*, from the name for weir (*pa ita*). Only a few weirs bear the same name as the adjacent land. As with *marae* names, weir names have been carried from one island to another. Among several weir names learned

at Takakoto, one, Tehopua, is the same as a Reao weir name. In the western Tuamotus weirs are called *kana parū*, or *kana ita* (fish enclosures).

Weirs were hereditary family property. Undoubtedly in former days no one could take fish from them except members of the family and others by permission. Today though traps are privately owned anyone may take fish from them, but if he damages the weir without repairing the damage the owners make trouble for him. Some traps seem to have been reserved for the chiefs and others for the *ragaitira* (gentry). I have this information from an old man of Faite: The weir of his family was named Tahuaare. Vanavana was a weir at Onemake, Faite, belonging to the *hūi ragaitira*.

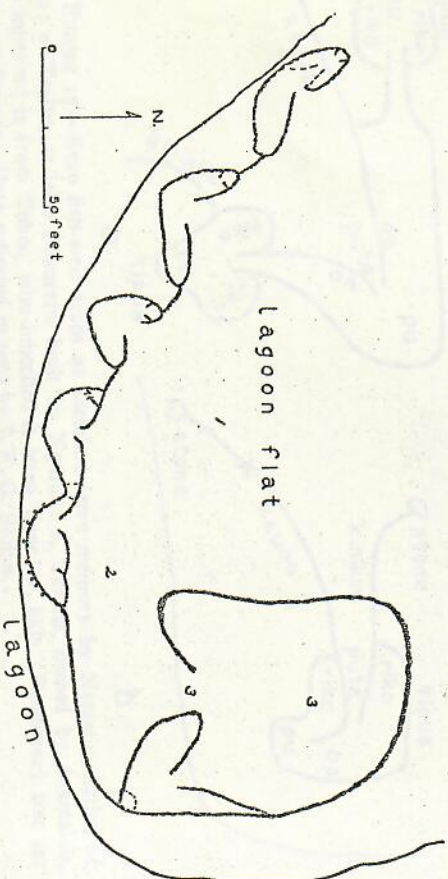


FIGURE 9.—Walled fish traps known as Pakite near village at Takaroa; figures indicate depth in feet.

The famous Pakite trap at the inner end of the pass at Takaroa (fig. 9) consists of a series of adjoining traps, each, I understand, owned by a different family. Ownership here implies responsibility for upkeep. Fish are communal property. That they should enter one trap rather than another is no reason why they should belong exclusively to the owner of that trap any more than a turtle belongs to the man who catches it. Fish, wherever taken, are subject to the tribal laws of sharing.

Weir traps are so designed and faced that fish following along with a current are led into an enclosure from which they do not readily find their way out before someone comes along to take them by net or spear. Some traps are constructed to take advantage of the tide coming in from the sea, others for the waters flowing from the lagoon at low tide. Thus the Pakite traps at Takaroa catch their fish when the tide flows in from the sea over the lagoon flats. The weir at Amannu village works when the water is running out of the lagoon. (See pl. 10.)

The simplest traps utilize the shore as one lead, or boundary of the runway. The other boundary is a wall which leads to the shore and the enclosure. Some roughly improvised weirs have no permanent enclosure. A net is placed around the inner opening of the runway. Many permanent enclosures of permanent weirs take advantage of such natural features as rocks, old shell heaps, or part of the shore. The trap is carefully adapted to the situation. The plans of traps (figs. 9, 10, 11) illustrate the range of configuration.

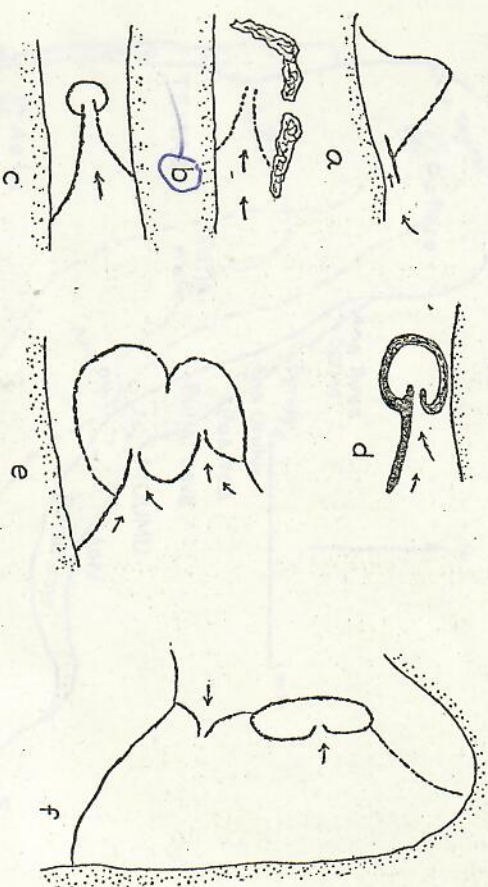


FIGURE 10.—Tuamotuan walled fish-weir traps: a, simple enclosure with a short single lead in 1 foot of water, Takapoto; b, enclosure naturally formed by *Tritidactna* shell heaps in shallow water, with artificial leads, south lagoon shore, Napuka; c, ordinary trap and runway in a shallow channel between two islets, Takaroa; d, heavy-walled trap in 1 foot of water along lagoon shore, Takapoto; e, double trap, off the village at Faite; f, shallow pond, itself a trap, with smaller trap incorporated in it, north side of pass, Hao.

Everywhere in the Tuamotus the main enclosure of a weir trap is called a *tipua*. The leads at Faite are called *takerevati*; at Napuka, *kakana*; at Anaa, *rarena* and *rarega*—"Kana e, kana e, rarega toro ki Vavanu henua." (Fish weir, fish weir, with wings extending to Vavanu.) The end of a *tipua* opposite the entrance is called *tohe* at Anaa. *Tipua* is a term applied also to the turtle pounds (stone enclosures or circles of posts standing in shallow water).

When the *Albatross* visited the Tuamotus in 1899, A. B. Alexander noted stone fish traps at Rairoa, Apataki, Anaa, and Makemo. At Apataki, Alexander (2, p. 752) describes and figures a weir of a form I did not see.

A runway 250 feet long and 100 feet wide at its seaward mouth lay facing the sea in the shallow water of a narrow bight. Near the middle the runway was constricted to about 3 feet in width and then flared out again towards the end opposite from the sea.

Fish would be led into the constricted passage, coming from either end, and here they would be taken by net or spear. The fish could be watched from the bank on each side.

Three enclosures are described by Alexander (2, p. 747) at Rairua as rectangular, 50 feet long, 25 feet wide, with an opening at one end 6 feet wide and leads to the opening 75 feet long.

Across the entrance to enclosures at the inner end of the runways, stakes are driven or stones set to prevent small sharks and other preying fish from entering. When it is desired to impound the fish, the entrance is blocked by stones or a net.

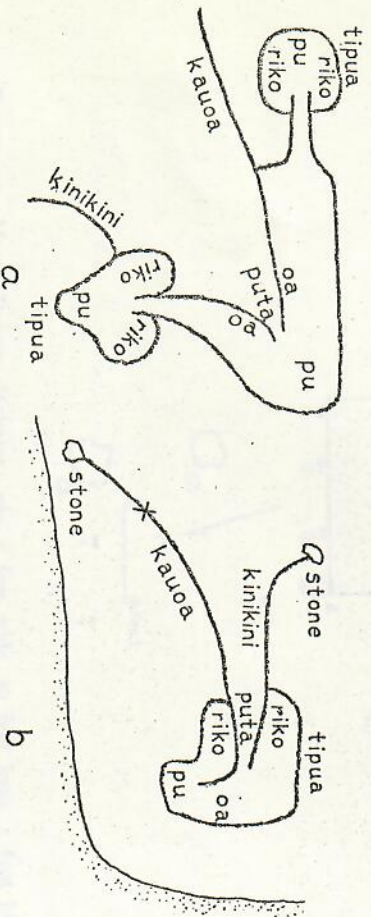


FIGURE 11.—Reao fish-weir traps as sketched from memory by Nemeiti, native of Reao: a, Teaitu, at islet Pokurere, built by Ngatata; b, Taraha, owned by Aramako, who inherited it from Tuho, who inherited it from Tane; x, hala (*Pandanus*) tree set up as watchtower. Data collected in 1923 by J. F. G. Stokes.

The fish most commonly taken by most traps is the parrot fish (*tegetega*) and lagoon fish of that size, as the *openu*. But there are traps for larger fish like the *wriua*—for instance, trap Horopoi at Paaiti. *Aiwe* and *kabarere* fish usually enter the weirs at night. Small turtles sometimes come into them. An informant in the west said that anciently fish were taken from the traps by net or by hand but not by spear, on account of the blood. Today they are everywhere most frequently taken by spear.

The walled weir traps of the Tuamotus are of two kinds: 1, simple traps in which a runway leads to a simple enclosure, the leads of the runway projecting into the enclosure; 2, compound traps in which one or both sides of the enclosure are so designed as to be themselves traps or to be readily convertible into small, temporary pounds. Both kinds exist in Manihiki (23, p. 159) and also in the Society Islands (31, p. 91), where they are called *'ama'ia* (fish enclosures) or *horo'ia* (fish runs) and the enclosures themselves are called *haapua*. Weirs much like the simple Tuamotu traps are known as *pa* in the Cook Islands (25, pp. 298-306). These, however, only form a pocket into which the fish are driven and then taken. In Samoa the

walled weirs (*pa*) are more simple than the Cook Islands weirs, for, so far as the records (26, pp. 444-446) show, permanent enclosures are not built at the inner ends of permanent leads.

At Pearl Harbor in Hawaii there are ancient traps identical in plan and operation with the simple Tuamotuan and Society Islands traps (35). These are called *pa* and are named after the principal fish caught in them, as Pa-kile, Pa-nakiawa.

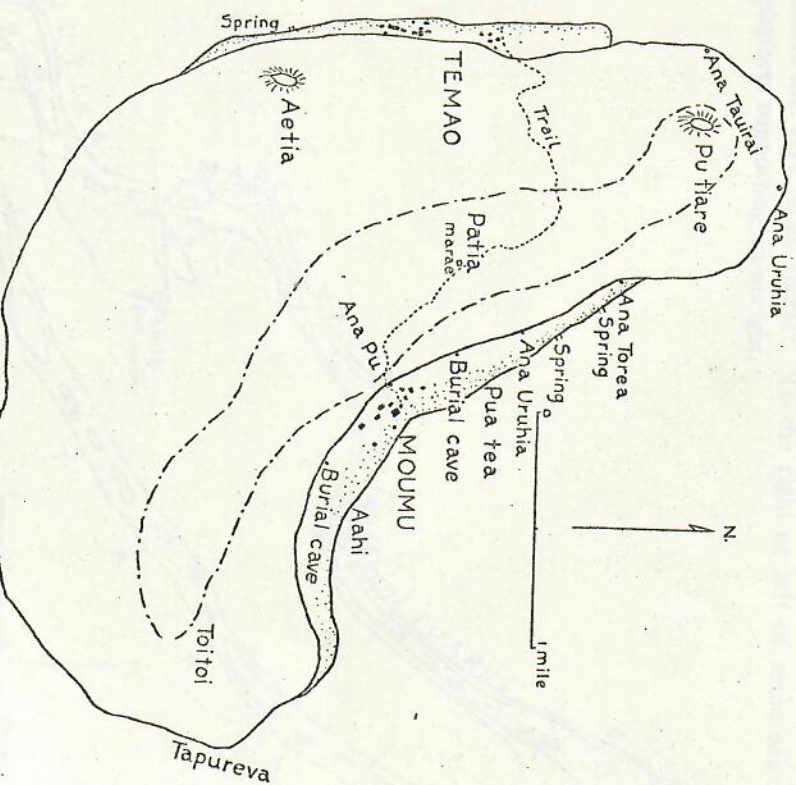


FIGURE 12.—Map of Makatea traced from map of the Makatea Phosphate Company. Area enclosed by dotted line contains the phosphate fields, now being worked.

RECORD OF MARAES

MAKATEA

Makatea (fig. 12) is called by the Tahitians *Matatea* [Ma'atea]. It is erroneously believed that Roggeveen gave the name *Aurora* to it when he visited it on June 2, 1722, whereas he called it "Iyland van Verwiking" (Recreation Island). His "Aurora" is probably Manihi. Makatea is undoubtedly the "Sagittaria" sighted by Quiros, February 13, 1606.

Only one Makatean marae, Raiupu [Ra'i-upu] (fig. 13), seems to have survived. Seven other maraes are reported destroyed: Marae Aro at Tearea, western part of the plateau; maraes Teaotea, Te'au, and Poitia at Tahiti; central part of the plateau; marae Te'hi at Tahue, central part of plateau; maraes Mairapu-rei-hau and Apu-te-rai [Apu-te-ra'i] at Moumu on the north-east coast. In manuscript books at Takarua the names Tainoka and Tamapua are given as maraes of Makatea. Henry (13, p. 106) gives the name Tapuhina as that of the marae of the high chief Tairuapofatu [Ta-ru'i-apo-fatu].

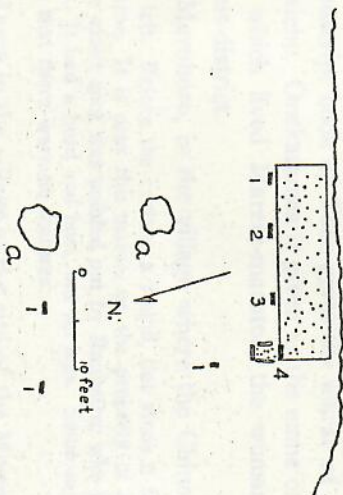


FIGURE 13.—Marae Raiupu, Makatea: *ahu* 5 feet wide, 20 feet long, 1 foot high along court face, 2 feet high along back, where the land begins to slope off steeply; *a*, banyan tree; 1-4, rough uprights; 1, 2 feet high; 2, 3.5 feet high, 2 feet wide, 6 inches thick; 3, 3.5 feet high; 4, 2 feet high in line with the facing of the *ahu*; 60 feet out on the court and 5 feet west of the *ahu* is a platform 6 feet square, 1.5 feet high.

Moerenhout's men who were sent in 1832 to Makatea from Tahiti to cut trees (16, vol. 1, p. 211) "found trees so large that they could not transport them." The largest were all, as at Tahiti, near the ruins of maraes, and their number proved to him that the island once had a much larger number of inhabitants.

TAKARUA AND TAKAPOTO

Byron in 1765 named Takarua and Takapoto the "King Georges Islands," but they were discovered by Le Maire and Schouten on April 14, 1616, and named "Isle without Ground" because of a belief that the two islands were one. Cook visited Takarua in 1777 and understood the native name of the island to be Tiokea, which is perhaps a Tahitian name for it. Cook believed that the name Oura given him by the Tahitians applied to Takapoto, hence its appearance on his map. Oura, however, is Aoura [Au'ura] of the Tahitians, or the island of Kankura. It is now almost certain that Takapoto is the "Pernicious" island where Roggeveen lost one of his ships in 1722. Kotzebue in 1816 gave the name "Spiridof" to Takapoto.

All except one of the ten marae plans made on these two islands have a single *ahu* and all the *ahu* are low and small. One is 2 feet high, but this has a step 6 inches high running along the front. None of the other *ahu* are higher than 18 inches. The average width of nine *ahu* is 4 feet, and the average length 20 feet. The range in width is from 2 to 6 feet, and the average from 10 to 39 feet. Some of the *ahu* are faced with squared and fitted limestone slabs, but the largest stone seen is only 5 feet long and most of the others are very much shorter. To the right or left of some *ahu* is a small platform supporting an upright.

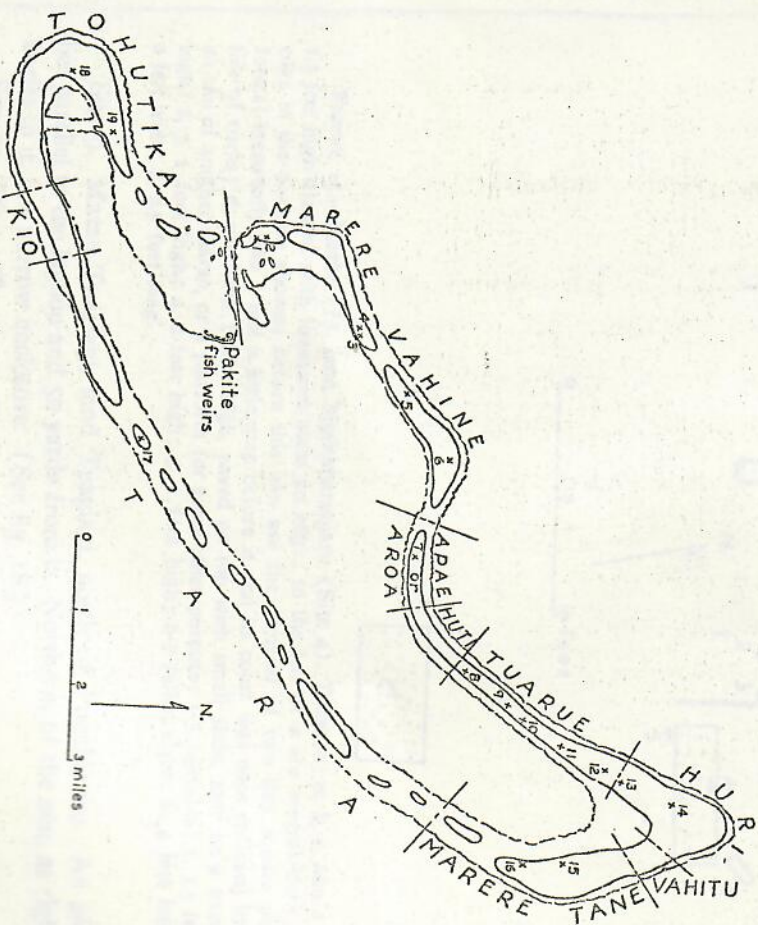


FIGURE 14.—Map of Takarua, showing districts (*matakeninga*) and location of maraes, indicated by the site numbers 1 to 19. Based on U. S. Hydrographic Chart no. 81.

The court of only one marae is enclosed: this by a neat wall 1 foot high, constructed by laying two parallel lines of fitted slabs on edge, 2 feet apart, and filling in level between with coral and sand. (See fig. 4.) At the end opposite the *ahu* the enclosure has an opening 1 foot wide. An enclosure 12 feet wide, 40 feet long, built with exactly the same sort of walls, was seen

alongside of the court of a marae (fig. 18) and may have had an *ahu* at one end, but I could find no clear trace of it. There are court uprights along the sides of this enclosure.

The *ahu* uprights range in height from 1.5 to 6 feet, but average 3.5 feet. There is no special shaping beyond squaring.

TAKAROA

(See fig. 14, for location of maraes.)

The manuscript book of Toae gives the marae of the district of Marere-vahine as Vaiehu. Onekaramea is given as the name of the marae on the land Ahunea at which lived Marere-marutoa, the woman founder of the clan occupying this district.

Site 1. Maruhoro, in the village where the Chinese store now stands.

No trace left. Before the cyclone a round, flat stone 6 feet in diameter lay on the site of the marae. It is near this marae, on the property of Ragivaru, that a coral *tiki* is buried. The exact spot was pointed out by Ragivaru, who buried it. It was described as 2 feet high. It had a head and bust, but no legs. Some say features of the face were carved, others that there were no features.

Site 2. Marae in the village at the site of the Mormon church. Completely destroyed. Some slabs were used for old graves in the churchyard.

Site 3. Raghiaoa, at Matitimarumaru. An *ahuahu* (assembly place for feasting) of all the districts.

The marae is in poor condition. Fifty yards from the lagoons are two rectangular platforms 1 to 2 feet high and at right angles to each other. The one on the south is 9 by 12 feet, and the one on the north, parallel to the shore, 6 by 9 feet. Inland from these over an area at least 50 yards square are a number of large slabs standing on end. The *kohika* (oven) where Taghiaariki was cooked is a large hollow in the ground, 50 yards from the marae.

Site 4. Marae (?) at Matitimarumaru about 200 yards inland and south-west from marae Raghiaoa, possibly a part of it. This marae has three *ahu*, two of them on the same line and one a little farther in toward the court. (See fig. 15.)

Site 5. Marae Huga at Honupirau. Although wrecked by a tidal wave, fallen and broken slabs mark the spot. This was a marae of Matohi, a warrior.

Site 6. Marae Mahine-i-te-ata, on land Onahera in district of Marere-vahine, on an open plain of small pieces of coral, and a third of the distance from the sea to the lagoon. The walls and facings are absolutely intact; all uprights are standing except two of the main rear uprights. To reach the marae, land at Tatakiragi on lagoon side and take a northwest direction across the island. (See figs. 4, 16.)

Site 7. Marae Matatipoki at Matatipoki, Aroa district. This marae is located between two small creeks, 150 yards from the lagoon. It has been swept by tidal waves and disfigured by growing trees. (See fig. 17.)

Site 8. Marae (?) at Rokoava, north of Tetahaga.

Fifty yards from the shore of the lagoon a number of prone slabs, 2 to 3.5 feet long, lying in a line parallel to the lagoon and over a distance of 12 feet mark the site of a marae. Twenty feet farther inland is a platform 6 inches high, 2.5 by 3.5 feet.

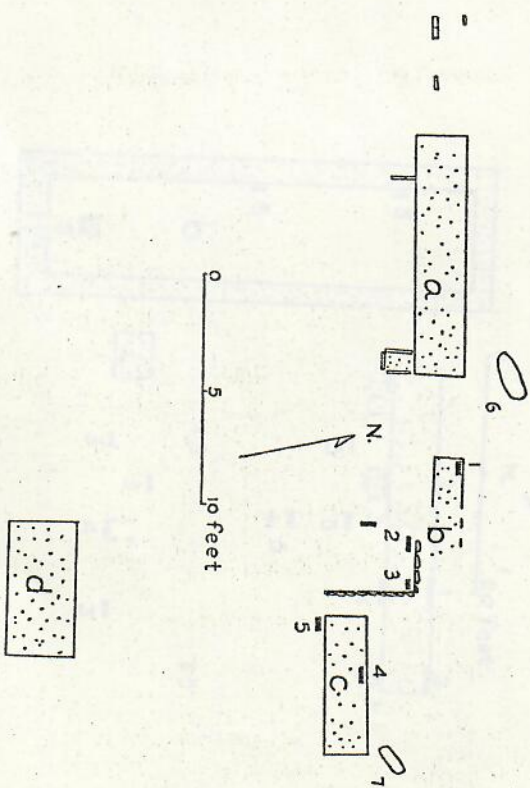


FIGURE 15.—Marae (?), land Matitimarumaru (Site 4), Takaroa: a, b, c, *ahu* 1 to 1.5 feet high framed with limestone slabs on edge; to the left of a are several slabs on edge in the position shown; before this *ahu* are the remains of two tiny square platforms; apparently *ahu* b had a little step before it and its court was once enclosed by a line of curbs; d, platform 1 foot high, paved on top with small slabs, may be a grave, an *ahu* of another marae, or a platform for some other purpose; 1-5, uprights; 1, 3.5 feet high; 2, 3, 1 foot high; 4, 2 feet high; 5, 1 foot high; 6-7 fallen slabs; 6, 4 feet long, 2 feet wide; 7, 2.5 feet long.

Site 9. Marae Tuagiagi, land Tuagiagi, north of Pukaharuru. An *ahu* lies parallel to the lagoon and 50 yards from it. Northeast of the *ahu*, at right angles to it, is a narrow enclosure. (See fig. 18.)

Site 10. Marae Turuhe at Tarire, Gati Tuarue. All that remains of this marae is a squared slab, 7 feet long, a few feet from the lagoon shore. It is said to be covering a grave.

Site 11. Marae (?) at Taarohia. A large marae on the very edge of the lagoon. The hurricane of 1906 all but erased it. (See fig. 19.)

Site 12. Marae Patu-o-Rogo at the northern end of Tuarue district. The *ahu* lies parallel to the lagoon and 100 feet from it. The broken tang of a basalt adz, of Tahitian form, was found in the *ahu*. (See fig. 20, a.)

Site 13. Small marae just within the southern border of Hari district. It is broken to pieces.

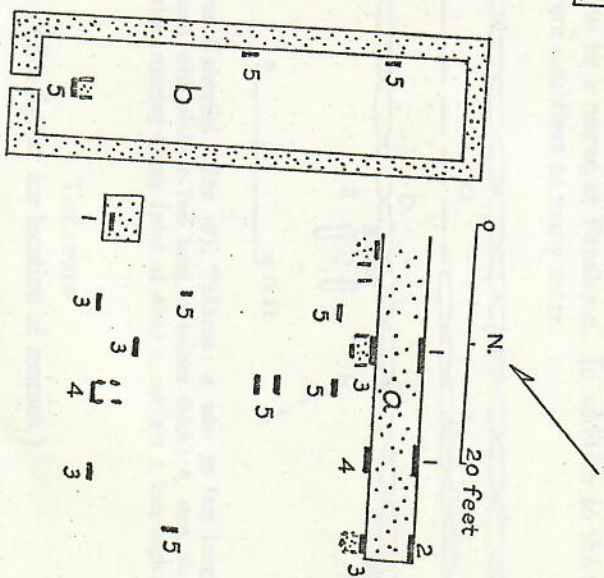


Figure 18.—Marae Tuangiagi (Site 9), Takaroa: a, *ahu*, 1 foot high, faced with rough curbs; b, enclosure with walls 6 inches high, formed of two parallel rows of curbs filled in between, originally, with sand or fine coral; 1-6, uprights, roughly squared; 1, 2.5 feet high; 2, base of broken slab; 3, 1.5 feet high; 4, 2 feet high; 5, 1 foot high; 6, 3.5 feet high, 1.5 feet wide.

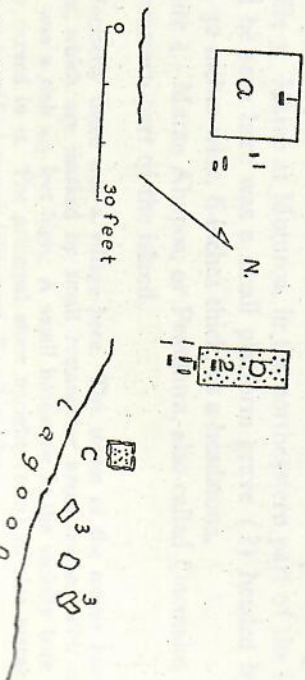


Figure 19.—Marae at Taarohia (Site 11), Takaroa: a, rectangular area enclosed by curbs; b, rough platform 2 feet high, boundaries uncertain, a tree growing up through it; c, platform 1 foot high; 1, upright 1 foot high; 2, upright 2 feet high; 3, fallen slabs, some as long as 4 feet.

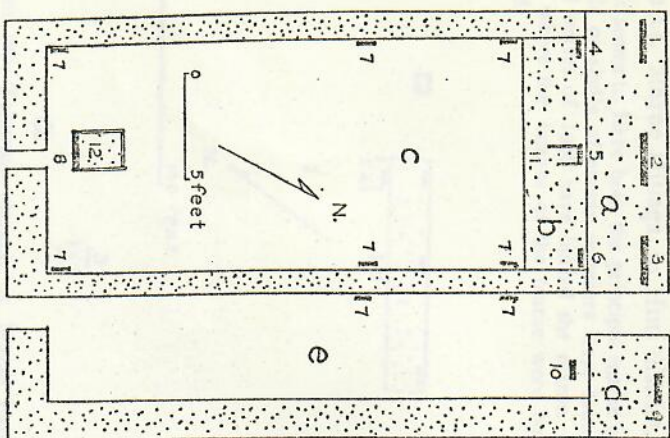


Figure 16

Figure 16.—Marae Mahina-i-te-ata (Site 6), Takaroa, length 31 feet, width 20 feet: a, *ahu*, 2 feet high, faced with slabs on edge, paved with small flat slabs; b, step 6 inches high, faced with curbs surfaced with coral pebbles; c, court enclosed by wall 1 to 1.5 feet high, 1.5 to 2.5 feet wide, faced on both sides by single line of slabs on edge; in the end opposite the *ahu* is an entrance a foot wide; d, *ahu* 1 foot high, constructed as a; e, court, unpaved, enclosed by a wall on the east and south, 1 foot high, 2 to 2.5 feet wide; 1-10, limestone uprights; 1, 3.5 feet high, 2 feet wide; 2, 5 feet high, 2.5 feet wide; 3, 3.5 feet high, 2.5 feet wide; 4-6, 20-21 inches high; 7, 2 feet high; 8, pointed slab 3 feet high; 9, 1.5 feet high, 10, 1 foot high; 11, square compartment with outer enclosing slabs on edge missing, it is sunk in the step and covered with two or three slabs which have been moved to the side; in this compartment was an uncut, unfinished half of a pearl shell; 12, small platform 6 inches high faced with three slabs on edge, surfaced with coral pebbles.

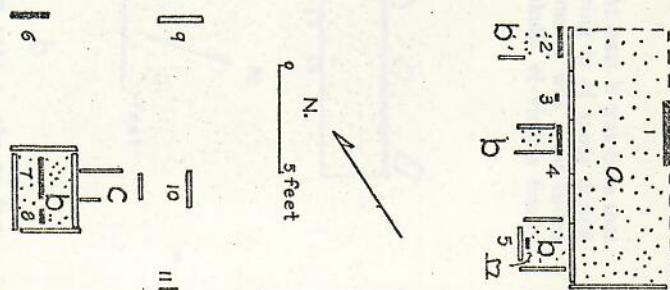


Figure 17

Figure 17.—Marae Matatipoki (Site 7), Takaroa: a, *ahu* 12.5 feet long, 6 inches high, framed by slabs on edge, several coral slabs lay on *ahu* as a paving; b, small platform 6 inches high; c, platform 3 inches high, framed by slabs on edge; 1-7, uprights; 1, 2.5 feet high, 3 feet wide, 2 inches thick; 2, 1 foot high; 3, 6 inches high, 6 inches wide; 4, 11 inches high; 5, 6 inches high; 6, 18 inches high; 7, 30 inches high, 24 inches wide; 8, 24 inches high; 9-10, slabs on edge; 9, 3 inches high; 10, 2 feet long; 11, upright 2 feet high.

Site 14. Marae Hitaga, in Huri district.

This seems to have been the principal marae of the island. At least it was here that the heads or skulls of enemy warriors were brought. The washing in of sands during the tidal waves of 1906 have buried the marae. South of the marae was a pit called Rapou where the images of the marae were buried and the skulls of victims finally deposited.

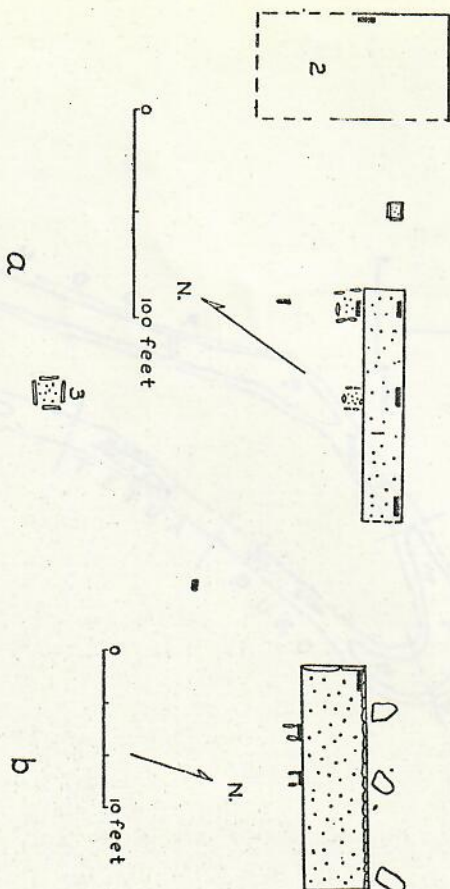


FIGURE 20.—Takaroan maraes. *a*, Marae Patu-o-Rogo (Site 12): 1, *ahu* 22 feet long, 4 feet wide, 1 foot high; 2, rectangular area enclosed by curbs; 3, platform 1 foot high; all uprights approximately 2 feet high. *b*, Marae Paene (Site 15): *ahu* 21 feet long, 5.5 feet wide, 1 foot high, faced with small, rough limestone slabs on edge; three prone slabs 3 to 4 feet long lie along the back; upright standing on *ahu* and two in front, 2 to 2.5 feet high; two uprights on court, 1 foot high.

Site 15. Marae Paene at Toanau, in the district of Marere-tane. The *ahu* lies parallel to the lagoon and 40 feet from it. (See fig. 20, *b*.)

Site 16. Marae Tetai at Teurufano. A small marae destroyed to make way for the planting of coconuts.

Site 17. Marae Tauru-mutu-hia on land of same name. Destroyed and buried by the hurricane of 1906.

Site 18. Marae Kaietehini, or Kotukurere, at Kotukurere, 20 yards from the lagoon shore at the western extremity of the lagoon. The *ahu* lies at right angles to the shore. (See fig. 21.)

Site 19. Marae Taputini at Oteto in Fatua, Tohitika district. Two broken slabs alone mark the site of this marae on the lagoon shore.

There is also a marae seaward of marae Kaietehini, on a land called Kapa, which I failed to locate. Somewhere in the same district of Tohitika existed a marae called Pouroa, on a land called Fakatikatari. Just north of the present village, at Pahere, was a marae called Onekaramea. An old manuscript book says this marae was at Ahumea, and Ahumea may be another name for Pahere.

I was told of a marae called Maru-o-ahitu at Ohae, on the lagoon shore, and another marae at Titaitau, seaward, both in Gati Area. These two maraes were destroyed by the hurricane. Just within the north boundary of Kio district there used to be a marae at Papahou. In addition to the 25 maraes mentioned there were doubtless as many more.

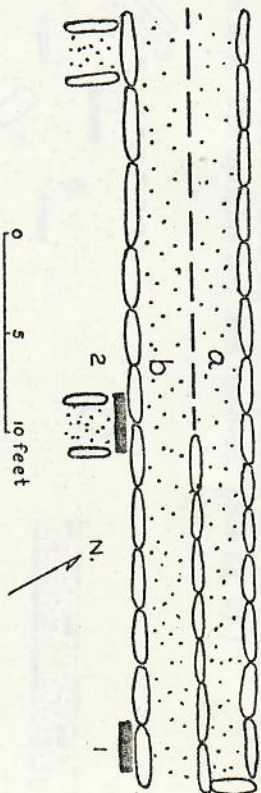


FIGURE 21.—Marae Kaietehini (Site 18), Takaroa: *a*, *ahu* 39 feet long, 40 inches wide, 1 foot high, faced with slabs 2 feet long, 2 inches thick; *b*, step, nearly 1 foot high, and 20 inches wide, running along front of *ahu*; 1, upright 1 foot high; 2, upright 2 feet high.

TAKARORO

(See fig. 22 for location of maraes.)

Site 1. Marae Hikuragi at T'uangigi, Huri district, at southwest part of island, south of the present village. It lies 100 yards from the lagoon and at right angles to it. Graves are to be seen on the right and left of the court and behind the marae. (See fig. 23.)

Site 2. Marae Kotukurere on land Tararo, Huri district, southeast part of island, 100 yards from the sea, 200 yards from the lagoon, and 10 yards south of a creek. Tidal waves have knocked this marae to pieces. (See fig. 24.)

Site 3. Marae at Moturoa, in the northeastern part of the island. All that could be seen here was a small platform grave (?) headed by a slab 4 feet high, 32 inches wide, 6 inches thick, as a headstone.

Site 4. Marae Ahupoa, or Peankura, also called Onemake, at Pogi, in the northeastern part of the island.

Formerly there was a village here. The stones of the marae have been taken for graves, which are marked by small rectangular areas framed with curbs. One headstone was a slab 4.5 feet high. A small headstone in the vicinity bore the name Mapue deeply carved in it. The principal stone upright (*tava*) of this marae was called Vaimaho, or according to one informant, Tagahinahina.

NAPUKA

Byron discovered Napuka on June 7, 1765, and named it and its neighbor, Tepoto, "Disappointment Islands." Wilkes, who visited the island on August

23, 1839, understood the native name to be "Wytsohee." The name Napuka first appears in the *Annuaire des Etablissements de l'Océanie* for the year 1863.

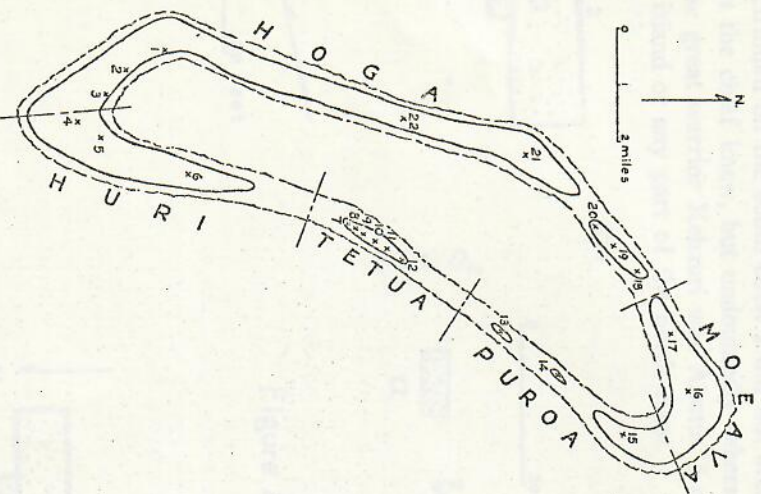


FIGURE 22.—Map of Takapoto, based on U. S. Hydrographic Chart no. 81, and giving the districts and the location of maraes:

- | | | |
|------------------|---------------------|------------------|
| 1. Okukina | 9. Turagaahu | 17. Ahutu |
| 2. Maaoke-tahara | 10. Farefarematagi | 18. Tiare-kura |
| 3. Marae Tiki | 11. Turahan | 19. Ahu-poa |
| 4. Tapuniu | 12. Okaruu | 20. Ahu-fouru |
| 5. Hikuragi | 13. Te-fare-turaina | 21. Te-hiti-kura |
| 6. Kotukurere | 14. Ahu-fouru | 22. Kotukurere |
| 7. Hekeu | 15. Fare-para | |
| 8. Onetapu | 16. Anihi | |

Site 1. Marae Aturoka at Otihiare, about 1 mile south of the main village, west coast. The single *ahu* of this marae lies parallel to the shore and 100 yards from it. The uprights are of firmly cemented limestone (*kava*). The rear uprights of the *ahu* and the one on the small platform of the court are *pofatu*. (See fig. 25.)

Site 2. Marae Fakarava on land Mirinuku seaward of Mahora, south coast near west end. The one small *ahu* lies parallel to the sea and about 100 yards from it. It has suffered considerably from a tidal wave. No specially shaped slabs were seen. (See fig. 26.)

Site 3. Marae Aturoka (?), Araveke, or Faraveke, middle of south coast. A small marae consisting of a single *ahu*, 200 yards from the sea and parallel to it. The uprights had been removed. (See fig. 27.)

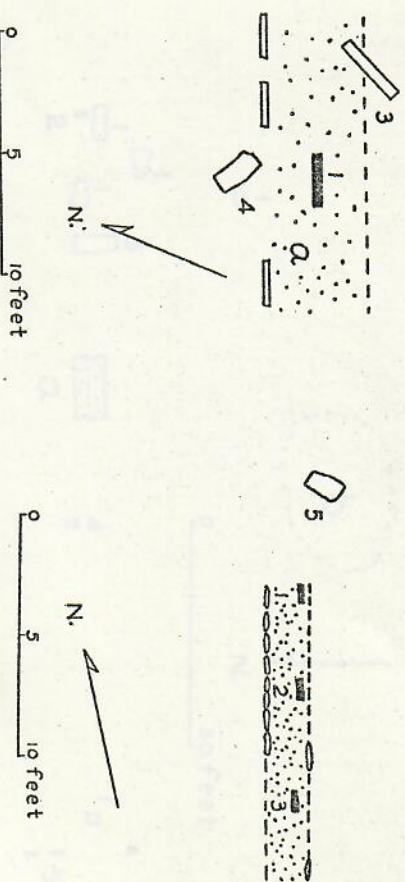


Figure 23

Figure 24

FIGURE 23.—Marae Hikuragi (Site 1), Takapoto: a, remains of *ahu* framed with limestone slabs on edge, 1 foot high; 1, squared upright 40 inches high, 28 inches wide, 4 inches thick; 2, upright 1.5 feet high; 3, prone slab 3 feet long, 1 foot wide, 1 foot thick; 4, prone slab.

FIGURE 24.—Marae Kotukurere (Site 2) at Tararo, Takapoto: *ahu*, 4 feet wide, 2 feet high, faced with square slabs on edge; 1-4, uprights; 1, 2 feet high; 2, 6 feet high, fallen; 3, 5.5 feet high, 2 feet wide, fallen; 4, 3.5 feet high, 2 feet wide; 5, prone slab 3 feet long; 6, broken slabs.

Site 4. Marae Marokau on land Ogare, southeast coast of Napuka, several miles from east end. A large marae on the highest part of the land, 100 yards from shore. The land is free of brush here and unplanted, but a tidal wave has swept over the site, doing much destruction. No specially shaped stones were seen. (See fig. 28.)

At Ragihoa, in the present village at the west end of the island, there was once a marae of the same name. At Tematahoa at the east end of the island a large marae named Taranaki has been destroyed. A marae named Pakere at Mahora or Mirinuku on the south coast I did not see. These are all the maraes of which the chief knew, but undoubtedly others exist. The marae of the son of the great warrior Kehauri was Ahutu. I did not explore the east end of the island or any part of the north coast.

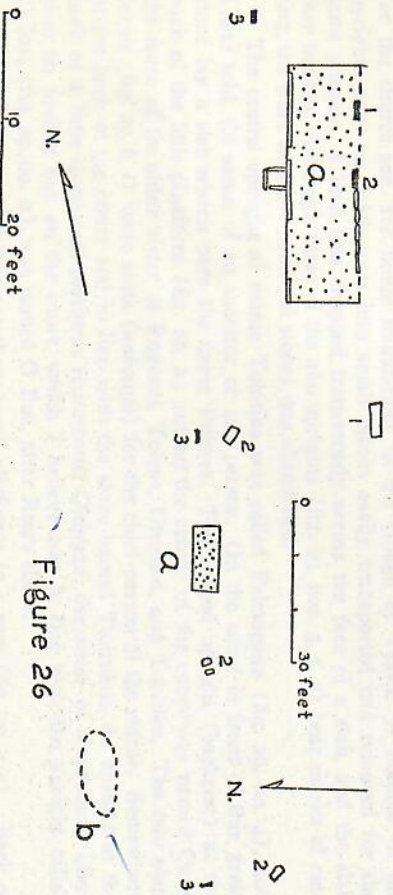


Figure 25

FIGURE 25.—Marae Aturoka (Site 1), Napuka: *a*, *ahu*, 6.5 feet wide, 22 feet long, facing slabs along front all 2 feet high, one 7 feet long, slabs of rear facing lower and smaller, the fill of sand and rubble level with top of rear facing; *b*, small platform 1 foot high, filled level with beach pebbles, behind it a still smaller platform 3 inches high; 1-4, roughly squared uprights; 1, 3.5 feet high; 2, 3 feet high, 1.5 feet wide, 3 inches thick; 3, 1.5 feet high; 4, 3.5 feet high.

FIGURE 26.—Marae Fakarava (Site 2), Napuka: *a*, *ahu* consisting of a rough pile of coral, 2 feet high; *b*, turtle bones in great quantity; 1, prone slab 7 feet long; 2, prone slab; 3, upright 2.5 feet high.

FIGURE 27.—Marae Aturoka (Site 3), Napuka: *ahu*, 5 feet wide, 13 feet long, faced with small rough slabs on edge and not more than 1 foot high, half filled with rubble.

Figure 26

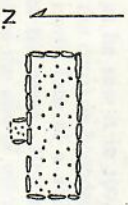


Figure 27

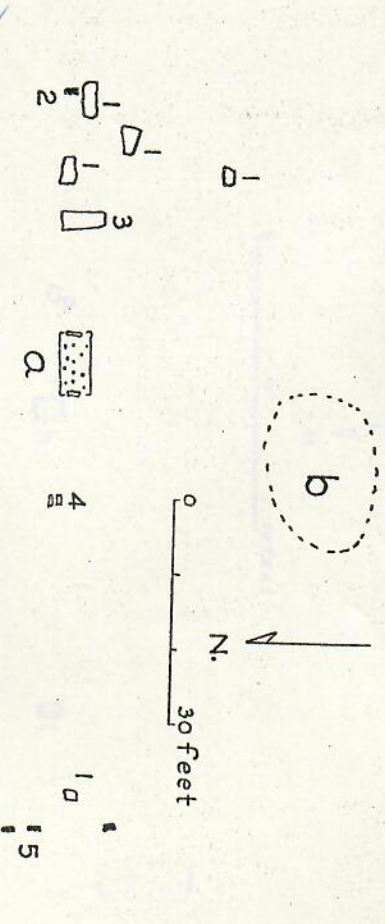


FIGURE 28.—Marae Marokau (Site 4), Napuka: *a*, *ahu* set around with small slabs on end, end slabs higher, filled in loosely with large stones, has appearance of a modern grave; *b*, ground scattered with turtle bones over area 30 feet in diameter; 1, prone slab; 2, upright 1.5 feet high; 3, prone slab 7 feet long; 4, two slabs 6 inches high and 6 inches apart; 5, slab 2 feet high, 1.5 feet wide.

FAGATAU AND FAKAHINA

The plans of the marae ruins of Fagatau and Fakahina leave no doubt about their original appearance and prove that the maraes of the two islands were almost identical. Most of the maraes have two *ahu* in line. The *ahu* are 1 to 2 feet high, 3 to 7 feet wide, and 10 to 56 feet long. The average length is 25 feet, the average width 4 feet.

FAGATAU

The name Fagatau has been inconsistently spelled on the charts. Bellinghansen discovered the island in 1820 and named it "Arakcheff." On his chart of 1842 Wilkes spells the name "Ahangatou" and on recent charts it is "Angatau." The name used in poetry is "Maropua." This seems to have been the designation by which the ancient Tahitians knew it, for it appears among the names of Tuamotuan islands given the Spaniards in 1774.

Site 1. Marae Ramapohia at Matitoga, southwest coast, a mile south of the village, Teana, in a grove of *Pisonia* trees. It stands at the northern end

of the island on the seaward side, about 300 yards from the seashore and the same distance from the end of the island. (See figs. 6, 29.)

The *almu* lie about at right angles to the sea. Marae Ramapohia consists of two marae lying side by side: the one on the west, and traditionally the older, whose *fatu* (owners) were Terangi and Tuhirangi, is marae Teapaepae; that on the east, whose *fatu* was Teie, is marae Tohitika. The upright stones of this marae are the largest and most perfectly shaped of any seen on the island. They are of hard *kara*, a firmly cemented sandstone.

The facing stones of the platforms were almost entirely removed to furnish material for the church and for house foundations in the village of Teana. A number of the uprights were cut with axes into small blocks easily transported and removed for the same purpose. A line was chopped transversely across the face of a slab, and the slab then broken. Although three of the *almu* uprights (fig. 29, nos. 3, 5, 7) bear marks of cutting, the work on these principal stones was abandoned.

The central upright of marae Tohitika was called Pehaugaga (fig. 29, no. 4), not, I was told, the name of an ancestor or any person. On the court in front of this great stone lay a slab which bore the name Pukava. The shaped upright (backrest) at the back of the little platform (fig. 29, *h*) out on the center of the court was named Ore, the name of the older sister of Rogonui, Tolene, Uupava, and Tohitika. The two platforms (fig. 29, *h*, *i*) were seats (*nohoaga*) for the chief person of the marae. Somewhere at the back of the court and in line with the stone named Tauruhua, an upright at the back of a little stone-seat platform represented Ohimata, the sister of Tauruhua. Likewise an upright out on the court, which I believe was in line with the upright called O Rua (fig. 29, no. 2), was named O Pua, after Rua's sister.

West of marae Tohitika are three small platforms in a row (fig. 29, *e-g*). Back of the central one stands an upright called Kainuku, and undoubtedly an upright formerly stood at the back of each of the other two. From east to west these platforms were named Tauruhua, Kainuku, and Puniava, names of ancestral spirits who helped in the search for turtle.

Seurat (20, pp. 480-481) describes Ramapohia as he saw it in 1902. It has suffered no notable change since then. The western part of the court is bounded by an elongated pile of branch coral (*pinkana*) placed against the north face of a slab placed on edge (fig. 29, *k*). This was the altar to Rauhutu, lord of the ocean. Not more than 5 yards west of this altar were numerous turtle bones. West of the *almu* of marae Teapaepae were three small uprights. "At this place," says Seurat (20, p. 481), "it seems, the men ate the turtle, a sacred animal." From Temiro-a-Pahoa, aged 88 (1920), "it seems, the men ate his father perform ceremonies at this marae, I learned that the *una raka*, sacred *una*, or breastplate (entoplastron) of the first turtle of the season, was offered up at the altar called Tauruhua, the second at that called Kainuku, and the third at that called Puniava. Prayers were addressed first at the three altars on the east, then at Tohitika marae, then at the stone Ora, then at marae Teapaepae.

In giving the names of the platforms and uprights, Temiro was a little uncertain as to which names applied to which stones. He first gave the order of the three platforms to the east as Tauruhua, Puniava, Kainuku; then upon reflection he changed it to Tauruhua, Kainuku, Puniava. The east *almu* upright of marae Tohitika he called Tu, then changed it to Ora, which he had applied to the slab between marae Tohitika and marae Teapaepae. Temiro's final order for the platforms on the east agrees with Montilton's order (17, p. 379), in which the gods were addressed thus: Tauruhua, then Puniava.

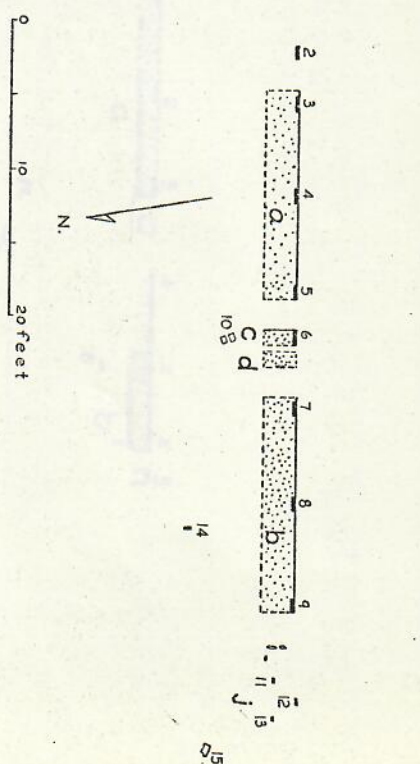
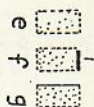


FIGURE 29.—Marae Ramapohia at Mattoaga (Site 1), Fagatau: *a*, *almu* of marae Tohitika, facing slabs removed except for one in front; *b*, *almu* of marae Teapaepae, facing slabs removed; heap of coral filling remains at the site of these *almu*, 1 foot high; *c-f*, small platforms 1.5 feet high, faced with curbs; backrest of platform *h* is 4 feet 9 inches high, 2.5 feet wide, 7 inches thick, top margin rises into smoothly curved head; backrest of platform *i* is 4 feet high, 2 feet wide; *j*, area of court on which stand three small uprights; *k*, elongated pile of branch coral 2 feet high and wide; *1*, plain slab 4 feet high; *2*, slab 5 feet high, 1 foot 10 inches wide, flange on east side (fig. 5, no. 5); *3*, fallen slab 6 feet long, 2 feet 10 inches wide at top, 1 foot 10 inches wide at base, rises into head damaged on one side; *4*, central slab, now fallen, 9 feet 8 inches long, 3 feet wide at top, 2 feet wide at base, 5 inches thick, upper east corner projects laterally in a broken arm; *5*, slab 7 feet 10 inches high, 2 feet 7 inches wide, 7 inches thick, rising to a head 1 foot wide at the base, 8 inches high (pl. 1); *6*, plain slab 5.5 feet high, 2 feet wide, 5 inches thick; *7*, slab 6 feet high, 2 feet wide, 5.5 inches thick, a sharp line had been cut, apparently by a steel axe, across the court face 1.5 feet below the top, which rises in a head 6 inches high; *8*, unsquared slab 5 feet high, 3 feet wide, 8 inches thick; *9*, unsquared slab 4 feet high, 1 foot 9 inches wide, 9 inches thick; *10*, slab cut in two for transportation; *11-13*, uprights respectively 1.5, 2, and 1 foot high; *13*, 1 foot wide, 2 inches thick; *14*, pointed upright 1 foot high and wide, 3 inches thick; *15*, prone slab 2.5 feet long, 1 foot wide, right angle cut in one upper corner; *16*, heavy, broken, prone slab; *17*, upright 1 foot high; *18-20*, platforms 1.5 feet square, 1 foot high, faced with small curbs.

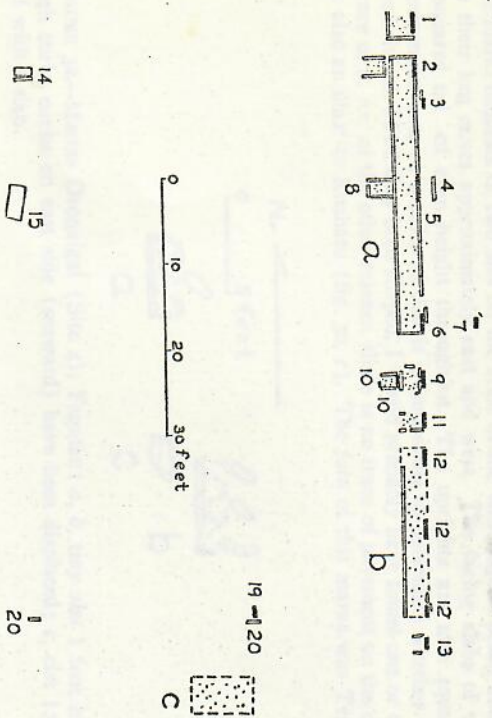


FIGURE 30.—Marae Poureva (Site 2), Fagatau: *a*, *b*, *alm* faced with square slabs on edge and of even height, and filled with small pieces of coral and shell within several inches of the top; *a*, 2 feet high; between the two *alm*, tiny platforms from 3 to 10 inches high; *c*, heap of branch coral; 1-18, limestone uprights; 1, 3.5 feet high, 2, 4, 6 feet high; 3, 9, 12, 3 feet high; slab leaning against 4, possibly not in place, 3 by 3 feet; 6, 5 feet high; 7, 8, 2 feet high; 10, 1 foot high; 11, 2.5 feet high; 14, prone slab 3 feet long with slab on edge, 1 foot high; 15, prone slab 4.5 feet long, 2 feet wide; 16, 2.5 feet high; 17, prone slab 3 feet long; 18, 2 feet high; 19, 1.5 feet high; 20, slab on edge, not more than 6 inches high.

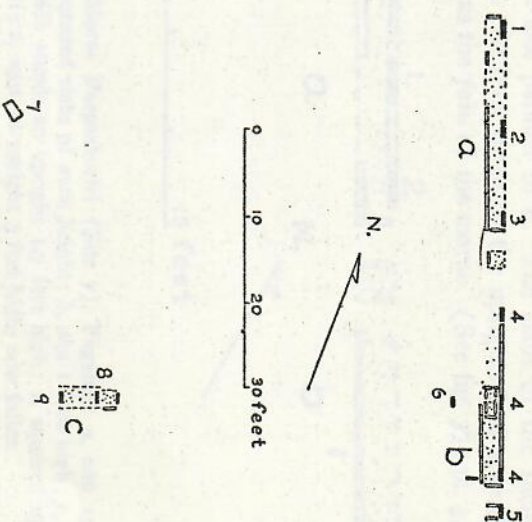


FIGURE 31.—Marae Oromea (Site 3), Fagatau: *a*, *b*, *alm* 1 foot high faced with roughly squared, thin slabs, of even height; *c*, rough pile of branch coral; 1-9, slab uprights; 1 broken; 2, 3.5 feet high, 1.5 feet wide; 3, 4.5 feet long, 1.5 feet wide at top, 1 foot wide at bottom; 4, 3 feet high; 5, 2 feet high; 6, 1.5 feet high; 7, prone slab 3 feet long, 2 feet wide (4.5 feet farther back on court and 18 feet farther north is an upright 2 feet high); 8, 2 feet high, back of a tiny platform 6 inches high; 9, 1 foot high.

Site 2. Marae Poureva at Huarei, southwest part of atoll, on the lagoon side. (See fig. 30; pl. 1.)

The marae consists of two *ahu* on the crest of the wide lagoon beach and parallel to it, with their long axes approximately east and west. The facing slabs of the *ahu* are nicely squared and of even height throughout. The uprights are also squared. Their upper extremities are so weathered that it is impossible to determine whether or not they have been shaped. Had they been shaped, I would probably have found one or two bearing some trace of it. As at the other maraes, there is no trace of pavement on the court. Here there is also an altar to Ruahatu (fig. 30, c). The *fatu* of this marae was Tetai.

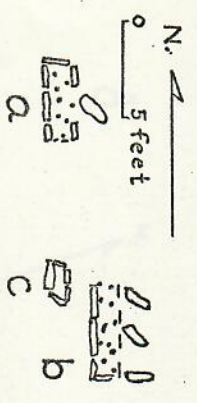


FIGURE 32.—Marae Orogaigai (Site 4), Fagatau: a, b, tiny *ahu* 1 foot high, framed by rough curbs, curbs on east side (seaward) have been displaced; c, cist 1.5 feet deep, covered with a slab.

Site 3. Marae Oromea at Tehanogaake, south part of Fagatau. (See fig. 31.)

The two *ahu* of this marae lie 100 yards from the lagoon and parallel to it, with the court on the inland side. The uprights are roughly squared. Of special interest is the compartment before the central slab of the south *ahu*. This is probably the remains of a tiny vault for the storage of relics. The *fatu* of the marae was Tagata.

Site 4. Marae Orogaigai, summit of the high beach ridge, on land called Horohoroatika, east end of island. A tiny marae consisting of two very small platforms and a cist, famous as the place in which a human heart was cooked. (See fig. 32.)

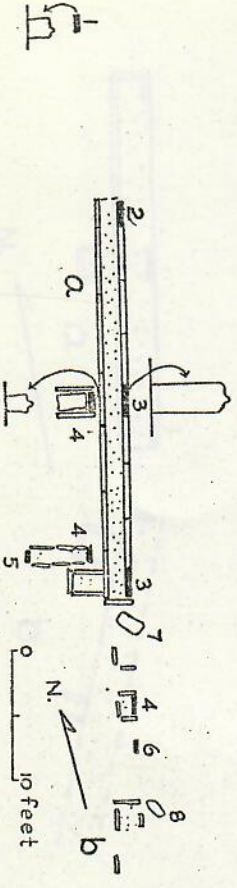


FIGURE 33.—Marae Ahutu (Site 6), Fagatau: a, *ahu* faced with slabs of even height except for one at the northwest corner which rises a few inches above the general height of 1 foot 6 inches, rear uprights are in line with rear facing slabs; b, ruins of another *ahu*; about 30 feet southeast of slab 8 is a pile of branch coral, an altar for Ruahatu; 1-6, uprights; 1, 2 feet high; 2, 5.5 feet high; 3, 6 feet high; 4, 2 feet high, 1 foot wide; 5, 1 foot high; 6, broken; 7-8, prone slabs.

Site 5. Marae Rakerake, or Tiketike, at Fanautototo, east end of island back of the crest of the sea beach.

The largest of Fagatau maraes, Rakerake consists of innumerable small rectangles of curbs with an upright at one end, looking very much like graves. There are a number of *ahu*. No specially shaped slabs were seen. Lack of time prevented my making a plan of this marae said to have belonged to Tane-tupu-hoe, from Puaga (Pukapuka), who lived 13 generations ago.

Site 6. Marae Ahutu at Vairororo, north end of island, 20 yards from the lagoon, the *ahu* parallel to it. The slabs of the facing of the *ahu* are evenly squared. At least three of the uprights had a small projecting head. Tahukatuata was the *fatu* of the marae. (See fig. 33; pl. 3, A.)

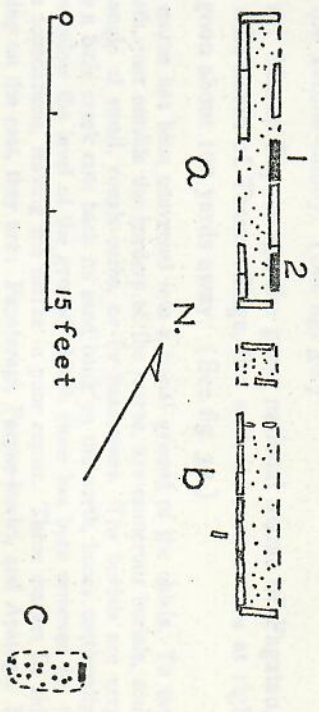


FIGURE 34.—Marae Paepaekuriri (Site 7), Fagatau: a, *ahu* 15 feet long, 1.5 feet high, faced with squared slabs of even height; b, *ahu* 1 foot high; c, pile of branch coral at one end of which stands an upright 1.5 feet high; 1, squared upright 3.5 feet high, now broken in half; 2, squared upright 3 feet high, now fallen.

Site 7. Marae Paepaekuriri, on land Farariki, north part of island. (See fig. 34.)

A small marae of two *ahu* in a poor state of preservation, 50 yards from the lagoon and at right angles to it. Remarkable about the marae are the numerous rough sticks of *gagie* wood (*Pemphis acidula*), 4 to 5 feet long, 2 inches in diameter, which at one time stood on or about the *ahu* supporting skulls of turtle. The facing slabs are of even height. No specially shaped uprights were found. Forty-five feet out on the court from the *ahu* is a prone, squared slab 2.5 feet long.

Site 8. Marae Raghioa at Fagatarruru, north part, 100 yards from lagoon, and *ahu* at right angles to it. (See fig. 35; pl. 3, B.)

The marae consists of two *ahu* roughly built, with uprights of rough shape. About the *ahu* lie a number of fallen *gagie* sticks on which the skulls of turtles were once impaled. In the roots at the base of a large *gatae* tree (fig. 35, d), at the east border of the court were quantities of turtle and pig (?) bones. Under a pile of stones which I thought might be a burial (fig. 35, c) I searched for bones but found none.

This marae is said to have been built by Matupava (who lived 15 generations ago), great-grandfather of Mahinu. Kanake told me that Mahuraviki from Napuka, the father of Matupava, first built a marae called Poihi on the seaward side. When he died, Matupava left that marae and built this marae of Raghioa, and when Matupava died his family built marae Ahutu.

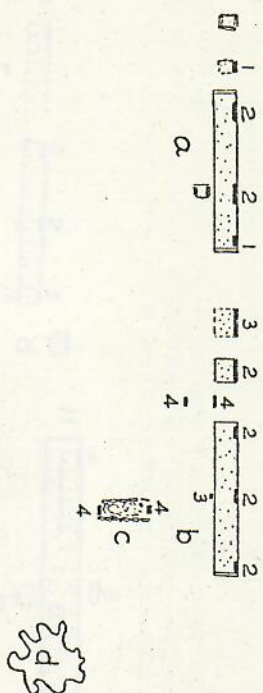


FIGURE 35.—Marae Raghnoa (Site 8), Fagatau: *a*, *b*, *ahn* 1 foot high faced with rough stones and filled with large stones; *c*, pile of stones with an upright at each end; *d*, large *gatae* tree; 1-4, uprights, none of them shaped; 1, 2 feet high; 2, 2.5 feet high; 3, 1.5 feet high; 4, 1 foot high; 5, prone slab 3 feet long.

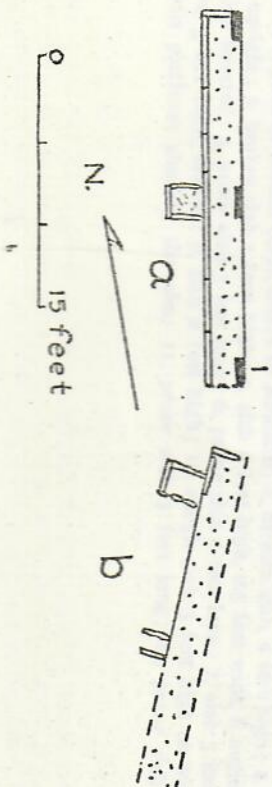


FIGURE 36.—Marae Kouturere (Site 10), Fagatau: *a*, *ahn* 2.2 feet long, 2.5 feet wide, 1.5 feet high, all uprights now fallen, all slabs squared but no shaping beyond this; *b*, ruins of another *ahn*; 1, upright 3.5 feet high; 2, 20 feet south of *b*, and 1 foot in front of the line which would continue the court face stands an upright 2 feet high.

Site 9. Marae Hitiaga, directly seaward of marae Raghnoa, a few yards from the seashore.

This large marae has been completely destroyed, apparently by a tidal wave, a few broken slabs alone marking the site. Of interest is the great sacred grove of *gatae* trees in which the marae stood. It was called *Phi*, a name applied by some to the marae. The grove extends for a quarter of a mile along the coast. The marae was built by Mahuruaridi from Napuka, who lived 16 generations ago.

Site 10. Marae Kouturere at Navora, about a mile north of the village Teana, 10 yards from the lagoon and the *ahn* at right angles to it. On the court was scattered branch coral from an altar to Ruahatu. This marae belongs to the Tehina family. (See fig. 36.)

Site 11. Marae Papatetagi, the great national marae of Fagatau, a quarter of a mile north of Teana village, lies with its several *ahn* at right angles to the lagoon about 100 yards away. (See fig. 37.)

This marae has been converted into a burial ground of the chiefs. To the east and to the north, just outside the borders of the marae, are numerous burials, some marked by a rectangle of small, rough curbs, or by headstones. The burials are very shallow, so that as a little creek cuts back its sand bank on the north, bones continually appear a few inches below the level of the ground. Much stone has been removed for the church and house foundations, leaving the marae in poor repair. Three maraes lie side by side. Commencing on the east, they are: Papatetagi, Paepae-kuriri, and Apatoga. No shaped uprights were found, only roughly squared uprights.

Site 12. Marae Raghitaruru on the islet of Tekaiaga, west coast, just south of the village pass, and 40 yards from lagoon, to which its *ahn* is parallel.

The *ahn* lies exactly north and south. It is 45 feet long, 4 feet wide, 2 feet high, faced with large squared slabs on edge, of even height. In line with the rear facing slabs rise three uprights, the central one 5.5 feet high, the one at the north corner 4 feet high, and the one at the south corner 6.5 feet high, 3 feet 4 inches wide at the top, 1.5 feet wide at the bottom, 6 inches thick. This slab has a projecting head; the others are simply squared. Thirty-six feet out on the court and in line with the tallest *ahn* upright is an altar to Ruahatu, 3 feet wide, 8 feet long. As usual, it consists of a pile of branch coral. On the north border of the court is a large grove of *Pisonia* trees. Another *ahn* on the north is also 45 feet long.

Site 13. Marae Aturona, Ohono, the principal ancient village of the island, on the south end of the island between Tekaiaga and the land on which Ramapohia marae stands, west part of Fagatau.

The *ahn* lies parallel to the lagoon shore and 100 yards from it. It is at least 30 feet long, faced with heavy squared slabs on edge, and lies exactly north and south. Several great broken slabs lie about the *ahn*. One in rough human form, that is, with a projecting head and a slight knob on one side, measures 7 feet long, 3 feet wide, 8 inches thick. Out on the court 33 feet from the *ahn* are the remains of a small platform 4 feet long, 1.5 feet wide, 6 inches high. North of the *ahn* are the remains of two small platforms 3.5 feet long, 2 feet wide, an upright at the east end of each. This marae belonged to Gali Varoa.

In addition to the 13 maraes so far described, I learned of the following:

MARAE	LAND	FARU
14. Apataki	Tuatira, village Teana	
15. Mataorehua	Marrutaka	
16. Ahuragi	Anini	Built by Mahi-nui-te-rakei-vero, a man from Mahine (Napuka?) 14 generations ago
17. Matiti-maru	Faketa	Taviva
18. Ragi-puia	Faketa	Taunata
19. Pari-te-tau-tua	Tanakoka (?)	Tahukatuhaha (13 generations ago)
20. Puegaro	Komokite	Taunata (?)
21. Maiuga	Near Ramapohia marae	Varoa-te-hikamaro-i-Hao Ma
22. Taghiacre	Tekaiga	
23. Turaiiga		
24. Vaika		
25. Faraputa		
26. Otava	Village of Teana	
27. Te-ahu-o-tava	East part of island	
28. Kunahuatoga	Near village Teana	
29. Temaha (?)	Te-one-gure	
30. Kahoreva (?)	Anini	

Apataki marae, one of the finest of Fagatau maraes, was the principal marae for the Varoa clan. Nothing is left of it. Estail's store now occupies the site. Ahuragi was founded from a marae of the same name, located on the seaward side of the island at Marrutake. Pari-te-tautua was built after marae Matiti-maru. Puegaro was established from Raroiia. Varoa-te-hikamaro was buried in Papatetagi marae about 70 years ago. Otava marae was for Tava, not for people of Fagatau.

FAKAHINA

Fakahina has not been consistently spelled on the charts, where it is usually written "Fangahina." On Wilkes' map of 1842 the name is given as "Akahina." The island was discovered by Kotzebue on March 2, 1824, and named "Predpriatic."

Site 1. Marae Katipa on land Katipa south of landing place on west coast. (See fig. 38.)

This marae, according to Seurat (20, p. 3), was the largest of the Fakahina maraes and the only one at which human sacrifices were made: "The victims were strangers who landed on the island. The heads of the victims were carried to a large hole situated near a marae established in the vicinity, on the lagoon side. The bodies were buried in the large marae." I was told that the enclosure for skulls was at Oromea, on the lagoon side of Katipa. Andran (4, p. 234) gives Oromea as the name of one of the six principal maraes of Fakahina but does not mention Katipa. My guide to the marae said that Katipa was only the name of the land. He did not know the name of the marae.

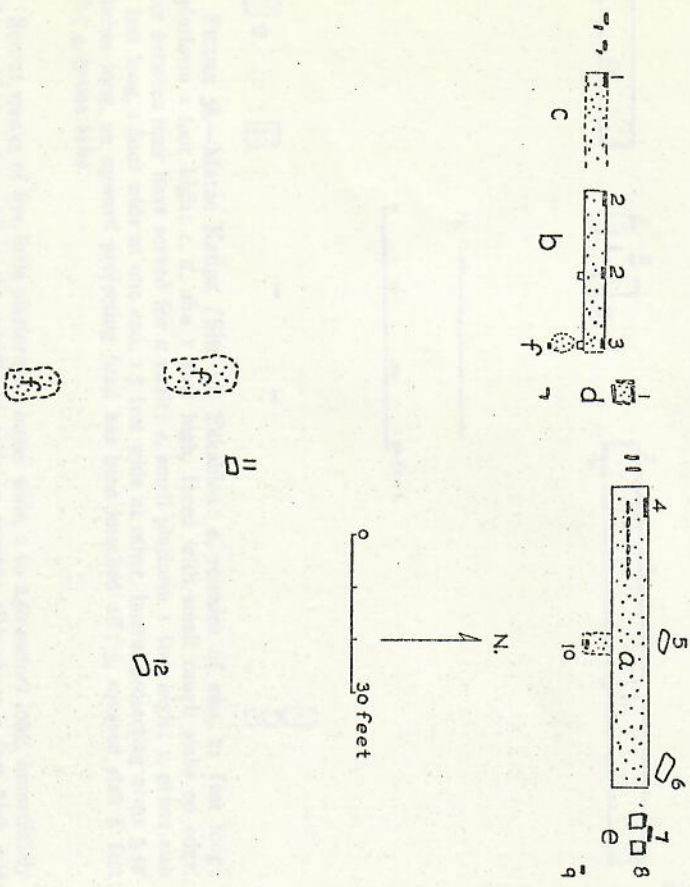


FIGURE 37.—Marae Papatetagi (Site 11), Fagatau: a, *ahu* of marae Papatetagi, thin facing slabs along court face, a line of corals on edge divides platform nearly in two lengthwise at west end and suggests a step 1 foot high, 3 feet wide, all along the front; 56 feet long, 7 feet wide; b, *ahu* of marae Paepae-kuriri; c, *ahu* of marae Apatoga; d, small platform faced with curbs; e, two small platforms with a slab upright at the back of each; f, piles of branch coral, altars to Ruahatu; 1, broken slab, 2 feet high; 2, broken slab upright; 3, broken slab 1 foot high; 4, slab 5 feet high, 2.5 feet wide, 8 inches thick, roughly squared; 5, prone slab 3 feet long; 6, prone slab 5 feet long; 7, slab 5 feet high; 8, slab 3 feet high, broken; 9, slab 2 feet high; 10, rough slab 3 feet high on outer end of little platform abutting the *ahu*; 11, prone slab 3 feet long; 12, prone slab 4 feet long.

The marae is located 100 yards from the crest of the beach and was swept by the hurricane waves of 1902, after Seurat visited it, so that it is necessary to rely on his description of those features which have been destroyed. The plan of the ruin as I saw it is given in figure 38. Seurat (20, pp. 477, 479) does not distinguish the divisions between the *ahu* and the platforms in line with them, but runs them into one long *ahu* 40 meters long. Of the eight slabs he saw standing in place, only one is now standing.

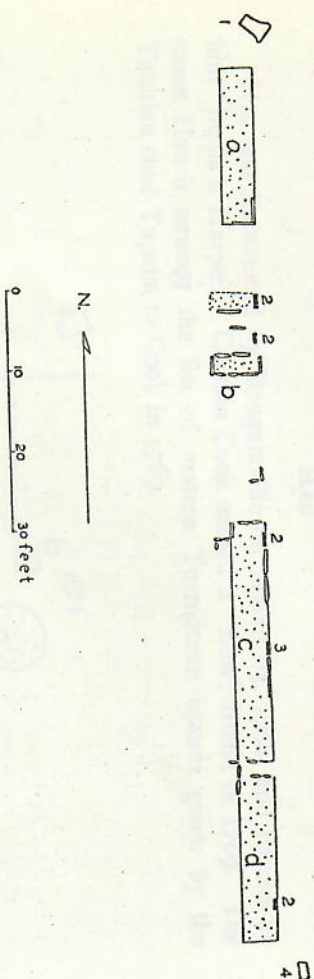


FIGURE 38.—Marae Katipa (Site 1), Fakahina: *a*, remains of *ahu*, 21 feet long; *b*, platform 1 foot high; *c*, *d*, *ahu* 1 foot high, faced with small rough slabs on edge, space between may have served for a vault; *e*, small platform 1 foot high; 1, prone slab 3.5 feet long, 1 foot wide at one end, 1.5 feet wide at other, lateral projecting arms 3 or 4 inches long, an upward projecting head has been knocked off; 3, squared slab 6 feet high; 4, prone *keho*.

Seurat speaks of five little platforms 1 meter wide, 2 to 2.50 meters long, immediately in front of the *ahu*, and in the middle of each an upright slab about 2 feet high and parallel to the *ahu*. These must be the structures shown in figure 38. He refers to other structures that must have been near the crest of the beach and consequently destroyed: "Next, one finds, facing the great marae, two rows of little altars . . . 0m, 80 wide, 1m, 50 to 2 meters long, with a vertical slab 0m, 80 to 1 meter high on the side towards the sea; there are eight of these in the second row."

It seems certain that most of the slabs had upward projecting heads, and at least two short arms as in the Fagatau maraes. I failed to locate the *patata* (bone pit) which Seurat saw: "It was a circle of a dozen meters in diameter, surrounded by blocks of coral; one finds there numerous bones of turtle." *Pisonia* trees were growing on the court.

Site 2. Marae Tahiti-nui or Apataki at Ariahaiko, east end of island. (See fig. 39; pl. 4, A.)

The *ahu* is parallel to the crest of the beach and 60 yards from it. Seurat gives the name of this marae as Tahiti-nui (1, p. 476), but my guide, the chief Machaga, insisted it was Apataki; however, in a list of place names given by him six months later, Tahiti-nui was a name of a land a little farther north. Since Seurat saw the marae (1901 or 1902), the southern of the two *ahu* has been completely destroyed to furnish material for a water cistern. When it was taken down a *faru-tini-ahua* (fish box) was discovered in it. Seurat mentions four *keho*, or rear *ahu* uprights, 6 feet high, only one of which is still standing in place. No specially shaped uprights were found.

Site 3. Marae (?) at Panako north of Ariahaiko, 200 yards farther inland than marae Tahiti-nui. The marae has been destroyed, but I found one *keho* at the southern end of the *ahu*, which lies with its long axis parallel to N. 40° E. This *keho* has short arms and a slightly projecting head.

Site 4. Marae on boundary between Pukaiti and Muriaku, on land called Te-kai-a-Tagaroa (?).

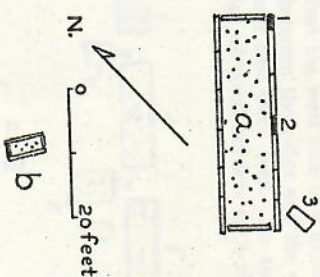


FIGURE 39.—Marae Tahiti-nui (Site 2), Fakahina: *a*, *ahu* 1.5 feet high faced in front with six slabs of even height, fill of coarse sand; *b*, small platform seat 1 foot high with squared upright 5.5 feet high, 2.5 feet wide at the top, gradually tapering toward bottom (pl. 4, A); 3, prone slab, probably a *keho*.

There are two small *ahu*, on a hill of coral stone midway between the lagoon and the seashore, 500 yards from each. Each *ahu* lies parallel to the shore and due north and south. The southern *ahu* is 15 feet long, 3 feet wide, 1 foot high, with a central court seat to the west, a lateral upright 2 feet to the north, and a little boxlike platform against the court face of the *ahu* near the north end. The second *ahu* lies 50 feet northwest of the first and measures 18 feet in length, 3 feet in width, and 1 foot in height.

Site 5. Marae Taharoa, north part of island, 100 yards from lagoon, with an *ahu* at right angles to it.

Probably the marae called Taaroa by Seurat. The *ahu* lies due north and south. It is 3 feet wide and about 30 feet long. The court is on the west side. Fifty feet from the *ahu* and at the north boundary of the court is a *patata*, a slight depression 10 feet in diameter enclosed by a circle of small stones on edge a few inches apart. Numerous turtle and fish bones lie within this enclosure.

At Hokikakika, the old village on the south coast, was a marae named Varokia which has been completely destroyed by planters. The sites of maraes Aturoa at north Kopuava and Maruhoa at Tumureva were visited, but these maraes have disappeared. Other maraes mentioned by Seurat (20, p. 476) are: Marae Kotukurere at Vaitakatika; marae Magamageteie somewhere on the eastern part of the island; marae Fakakura at Fakapituga in the north; marae Ahutai at Ahuroa, between Farekoka and Maramahiti, in the north; marae Tevereteragi in the northwest; marae Tugata in the west; maraes Panakao, Ragihoa, and Pubigaro in the south. Andran (4) gives the

names of the six principal marae of the island as: 1, Aehau; 2, Oronnea; 3, Ragri-te-tau-noa; 4, Pekai; 5, Vai-tomoana; 6, Tugata. Of these I learned only of Oronnea and Tugata. I have, therefore, the names of 21 Fakahina maraes.

HAO

Hao was discovered by Bougainville on March 23, 1768, and named by him "l'île de la Harpe." Captain Cook named it "Bow" island in 1769. The name Hao is among the list of eastern Tuamotuan islands given by the Tahitian chief Tupaia to Cook in 1769.

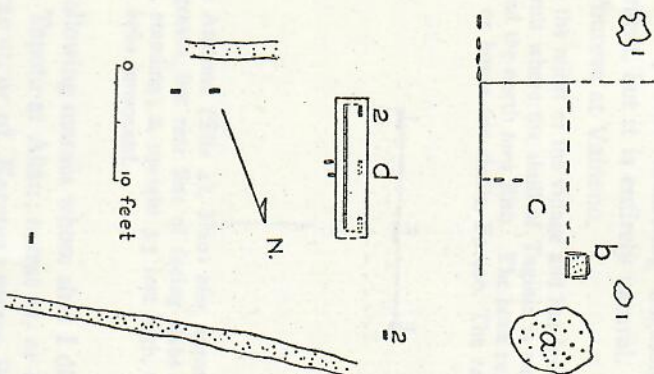


FIGURE 40.—Marae Ahukino (Site 1), Hao: *a*, great pile of coral 8 feet high, loosely laid up, on crest of ridge, may be some surveyor's cairn; *b*, platform 2 feet high faced with rough curbs; *c*, terrace faced with small rough slabs, first course on edge, upper courses laid horizontally, west face of terrace is 4 feet high; *d*, small *ahu* 12 feet long, 3 feet wide, 1 foot high, with step 6 inches high along court face and also (?) around the ends, *ahu* and step faced with small, flat pieces of limestone on edge; 1, *Pisonia* tree; 2, upright 2 feet high.

Only three marae⁴ plans were collected on Hao. The *ahu* are small and poorly made, the uprights unshaped, and the courts unenclosed except in one marae, along each side of which is a low, irregular ridge of coral. Marae Maruata has two or three main *ahu* and a number of small side platforms.

It has the largest uprights seen: one of them is 5.5 feet high. At this marae were two small piles of branch coral. The arrangement of three rear *ahu* uprights obtains at Hao. The small *ahu* at marae Ahukino has a low step along the front.

Site 1. Marae Ahukino at Tehapune, south side of the pass (*ava* Kaki) at northwest part of island, and on the lagoon side. (See fig. 40.)

The marae lies on and against the west face of a great ridge of coral and has a small *ahu* and court out on the flat between the ridge and the edge of the pass. South of this marae the ruins of another small *ahu* were seen. No specially shaped slabs were seen, nor flag pavements. A low ridge of coral borders each side of the court.

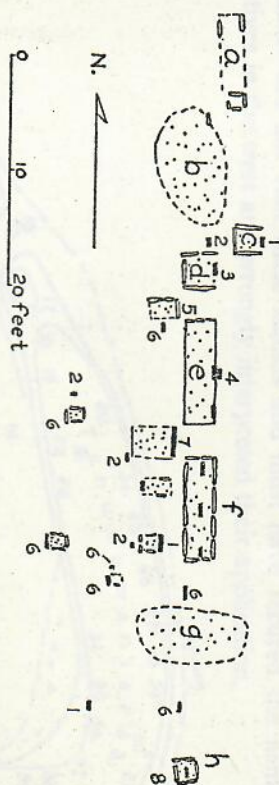


FIGURE 41.—Marae Maruata (Site 3), Hao: *a*, apparently the remains of an *ahu*; *b*, pile of rough coral; *c*, small platform 1 foot high filled level with gravel; *d*, remains of small platform; *e*, *f*, *ahu* 1 foot high, faced with thin coral slabs on edge, *f* filled with gravel, whereas *e* filled with gravel and stones, uprights of *f* all broken, but originally they were not more than 2 feet high, central upright appears to have been largest; *g*, pile of rough coral, 3 feet high; *h*, platform 1 foot high; 1, slab 2 feet high; 2, 1 foot high; 3, 5.5 feet high, the largest upright, 1.5 feet wide at top tapering to 1 foot at bottom; 4, two slabs, that on the court side 3 feet high, that behind 2.5 feet high; 5, 2.5 feet high; 6, 1.5 feet high; 7, 3.5 feet high; 8, 1 foot high, but broken.

Site 2. Marae Aramapohia at Tarahureporepo, north side of pass. This marae was located in the middle of the point, but has been completely destroyed by tidal waves. Remains of *ahu* and prone uprights cover a considerable area. No trimmed slabs were seen.

Site 3. Marae Maruata at Tekotika, central east part of island, 100 yards from the lagoon. (See fig. 41; pl. 4, B.)

The *ahu* are parallel to the lagoon. A rude marae of many small platforms and unslashed uprights. This is the marae of Te-hau-o-rogo. The navel cord of Vahinia is supposed to have been buried here, according to the glorification chant (*fakataiva*) of Te-hau-o-rogo.

Site 4. Marae Aturona on a point of land at Poponahiano just north of Vainono, south end of island. The *ahu* lies at right angles to the lagoon and 100 yards from it. West of the *ahu* are traces of other *ahu* which have evidently been destroyed to furnish material for modern grave platforms. (See fig. 42.)

Site 5. The *tahua* of Munani at Taitatea, in center of south end of island. This is a large area where an exposed horizontal layer of limestone has broken into small pieces resembling flagstones. This *tahua* is often described as a pavement, but it is entirely natural.

Site 6. Marae Pourava at Vainono.

This marae lies in the midst of the village and has been completely destroyed. I was unable to locate the vault where the skull of Taghina is supposed to lie. The south *tava* was called Haro-pito and the north *tava* Rito. The bone refuse pit was named Manahan-Tagarua and the place or house for skulls, Faraao. The *tahua* of the marae was called Tohega.

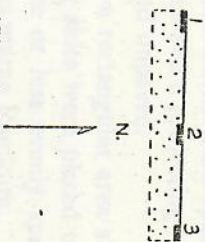


FIGURE 42.—Marae Aturona (Site 4), Hao: *ahu*, apparently 20 feet long; material has been removed for graves, but rear line of facing slabs in place, also rear uprights; 1, upright 3.5 feet high, standing; 2, upright 3.5 feet high, top broken; 3, upright 3 feet high, top broken; these *keho* unworked.

I learned of the following maraes whose sites I did not visit: marae Ahuti at Pahumaru; marae Tapoti at Akau; marae at, or of, Turoga; marae Maut-garua at Ohura; marae at, or of, Karotua; marae Pakeke at Ohaviri; marae Taikanapa at Pahumaru; a marae *ruahine* of Tepori; marae Tutu-vera at Fakumu; marae Akunaku at Ohoro; a marae *ruahine*; marae Tugata at Vainoru. All, except possibly marae Tugata, are in the southeastern part of the island.

VAHITAHU AREA

The five islands of the Vahitahi area, Vahitahi, Akiaki, Nukutavake, Pinaki, and Vairatea, are grouped together because they share a homogeneous culture. Pinaki and Nukutavake, the first of the islands seen by Europeans, were discovered on June 6, 1767, by Wallis, who named Pinaki "Whitsun Island" and Nukutavake "Queen Charlotte's Island." On June 11, 1767,

Wallis discovered Vairatea, which he named "Egmont Island." Vahitahi and Akiaki were discovered by Bougainville on March 22, 1768. Vahitahi he named "Les Quatre Facardins" and Akiaki, "Les des Lancers." On April 4, 1769, Cook passed both islands and named Vahitahi "Lagoon Island" and Akiaki "Thrum Cap."

The native names applied by Wilkes to these islands on his map of 1842 are, without exception, wrong. Akiaki he calls "Pukerua," Pinaki is given the name "Tamatuleiwawai," Nukutavake is called "Akiaki," and Vahitahi is called "Nukutavake." Vairatea is called by Wilkes "Yatakoto." Wilkes himself did not visit these islands and must have secured the names from natives in the west and wrongly interpreted their application.

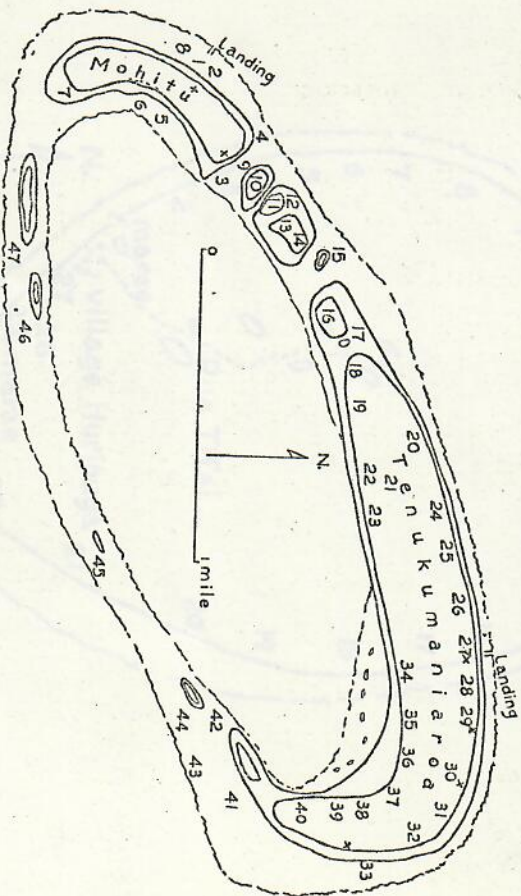


FIGURE 43.—Sketch map of Vahitahi; x, marae locations; numbers refer to place names as follows:

- | | | |
|-------------------------|---------------------|------------------|
| 1. Maruoha | 16. Tehiva | 32. Tauraga-mamu |
| 2. Kati-te-ra | 17. Te-motu-o-Mokio | 33. Oniho |
| 3. Yakavau, marae | 18. Tefaki | 34. Takerepofiti |
| 4. Tugitigiti | 19. Taura-vera | 35. Paparihau |
| 5. Ranagi | 20. Tehonito | 36. Taroro |
| 6. Tepua-i-ranagi | 21. Roua | 37. Parariteima |
| 7. Tina-ruga | 22. Tokina | 38. Tevaimarigi |
| 8. Pekahi-moko-havahava | 23. Tamahi | 39. Paupipo |
| 9. Mahochoe | 24. Topihere | 40. Terere |
| 10. Tekopne | 25. Punaha | 41. Mata Tohama |
| 11. Teheva | 26. Tarapokena | 42. Teaoeta |
| 12. Okui | 27. Haeragi | 43. Okapora |
| 13. Naonao | 28. Magarari | 44. Tahore |
| 14. Ganutu | 29. Takahema | 45. Omupuka |
| 15. Tamatava | 30. Otrua | 46. Vapuka-mua |
| | 31. Tepuku | 47. Vapuka-muri |

The real name of Vairatea is Tirahia, but Vairatea, which first appears in the *Annuaire des Etablissements de l'Océanie* for 1862, has become generally accepted. The error can be traced to Lutett, who was told by a Vahitahi castaway at Hao that the island was "Uairatea" and that Akiaki was "Uakiaki." The "U" in Vairatea was copied "V," hence "Vairatea." "Tirahia," as Lutett should have written the name, is a bungling attempt to render "Tirahia," the name by which the inhabitants of the island refer to it.

The marae ruins in the Vahitahi area are few and in a poor state of preservation. Nevertheless at least one fairly preserved marae exists on each island and it is possible to piece the records together to form the following idea of them:

The *ahu* are 1 to 2 feet high, 4 to 6 feet wide, and rather long, running up to 60 feet but averaging 30 feet. The facing is of small slabs on edge except at Haeragi marae on Vahitahi, where one slab measures 6 feet in length. In this marae facing slabs could be traced at intervals along a line extending 105 feet, but there may have been several *ahu* in this line.

Ahu uprights reached a maximum height of 6 feet, but 3 feet was the normal height. None were seen which were specially shaped, but some of them might have had short arms and a projecting head like the Fagatau slabs. The courts were unenclosed and unpaved.

At Vahitahi I came across a rectangular area about 75 feet wide and 200 feet long. Along the two long sides were placed uprights not more than 2.5 feet high and apparently more or less evenly spaced at intervals of about 6 feet. This was pointed out as marae Ragikura.

A pile of branch coral (altar of Ruahatu) was seen at only one marae, at Vairatea.

VAHITAHĪ

The two maraes in the present village on the island of Mohitu (fig. 43) have been completely destroyed. The church occupies the site of Marae Maruoha. Atutahi marae was near the north end of the island at a place called Takavanu.

Site 1. On the large island of Te-nuku-manua-roa, now often called Taverohia, which is in reality the name of one of the lands within the island, the most important marae seems to have been Haeragi, 50 yards from the seaward beach and half a mile from the north end.

Ahu at right angles to the shore. *Ahu* facing slabs in place denote a width of 6 feet. Excavations which had been made to remove these slabs for a storeroom on the spot reveal them to have been buried as deep as 2 feet. One slab measured 6 feet in length, 2 feet in height, 6 inches in thickness. Facing slabs in place could be traced at intervals for 105 feet, but no uprights were found.

Site 2. Farther east along the coast, at Takahenua, is marae Nikau.

Ahu lies parallel to the shore and stretches out for at least 60 feet. Three prone slabs about 6 feet long, 4 feet wide, and 1 foot thick, probably uprights, are nicely squared. Some other slabs seem to have had lateral arms and a projecting head similar to uprights at Fagatau.

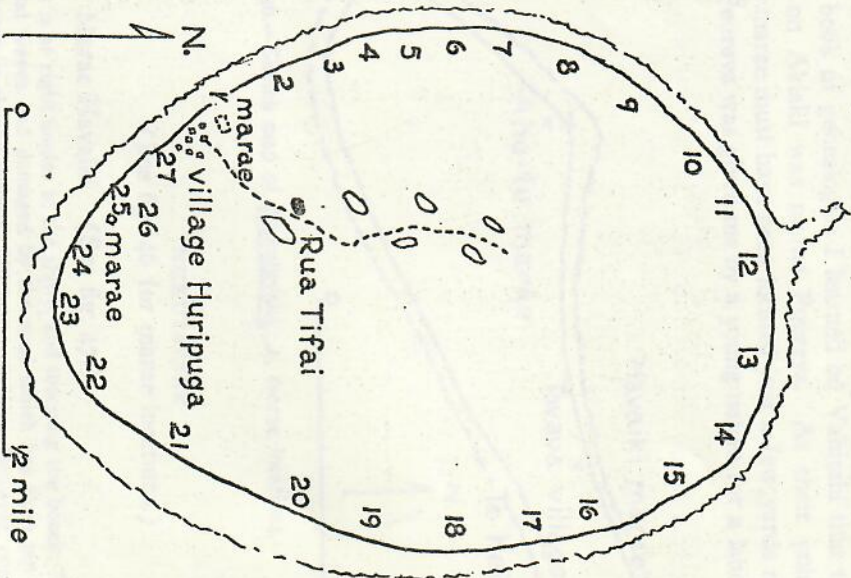


FIGURE 44.—Sketch map of Akiaki, showing trail from village inland among the *marae*, or excavations for the growing of taro; numbers refer to place names given by Tahuka (Takaoa), chief of Vahitahi, in 1930.

- | | | |
|----------------------------|---------------------|----------------|
| 1. Hitiaga | 10. Gapepen | 20. Te-umu |
| 2. Teraa | 11. Tekanio-takarua | 21. Kopunara |
| 3. Pugavere | 12. Terepa | 22. Vaharua |
| 4. Parareia | 13. Putara-namua | 23. Paraoa |
| 5. Pututetaino | 14. Turei hopuaga | 24. Viri anono |
| 6. Tahiri-roa, or Taheriro | 15. Ohuarei | 25. Tekaheru |
| 7. Teafakaruru | 16. Gapeki | 26. Panikere |
| 8. Temakotaha | 17. Teaturu | 27. Arakiaki |
| 9. Mararoa | 18. Gapekiore | |
| | 19. Teavaruhi | |

Site 3. At the east end of the island on the north shore lies marae Ragi-kura.

Fifty yards from the beach and parallel to it extends a row of uprights more or less evenly spaced along a line for about 200 feet and unconnected by curbs. At least six uprights, none more than 2.5 feet high, were observed still standing in this line. Seventy-five feet farther inland two uprights were found in a line parallel to the first. These uprights probably bounded the court. At the northeast end of the court I discovered several small slabs on edge; these were probably part of the facing of an *ahu*.

Site 4. At the eastern extremity of the island, on the crest of the shingle beach seaward of Oniho, lies a well-preserved *ahu*, parallel to the beach. It measures 30 feet in length, 4 feet in width, and 1 foot in height. The court is on the interior side. No uprights were observed.

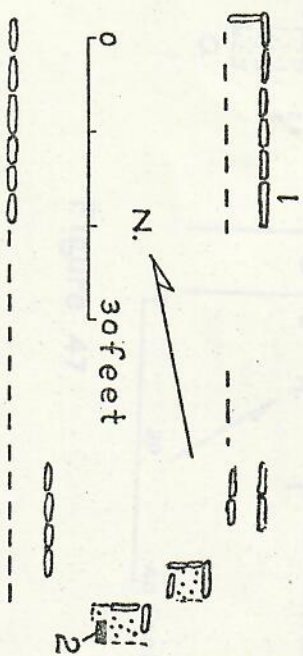


FIGURE 45.—Marae Hitiaga (Site 1), Akiaki: lines of slabs on edge are indicated; 1, largest slab, 4 feet long, 1.5 feet high, 6 inches thick; 2, only standing upright, 3.5 feet high, 20 inches wide, 8 inches thick.

An unsuccessful search was made for the site of Ahureva marae at the ancient village site of Oniho. A chant copied from a book of genealogies mentions one other marae, Tuputeragi near Paparihau:

... From Temarama to Temaruga, the marae is Tiria on the lagoon side, Tearoga inland. Ragi-kura is the marae, Tagi-a-pirake the drinking well, Potaka-te-gahoa is the well for Haratau, Torokura is the assembly place. From Marua to Paparihau, Tuputeragi is the marae. From Paparihau to Pauripo, the marae is Ahureva, the drinking well is Keke.

AKIAKI

(See fig. 44 for location of maraes.)

Site 1. Marae Hitiaga at Hitiaga. (See fig. 45.)

The marae has suffered much damage from its proximity to the village, and I am not sure that some of the stones were not moved to their present position to mark graves. The south end of the ruin is about 100 yards from the sea. The first turtle of the year was captured while I was at Akiaki in July 1930. It was killed and cooked at the edge of the marae, and this, I was told, was the custom.

Site 2. Marae Takana at Tekaheru.

The site has been swept by a tidal wave, but there remain the ruins of an *ahu* about 60 feet long faced with slabs on edge, 2 feet high. This *ahu* lies parallel to the shore and about 100 feet from it. In this space two small uprights are standing and a *Pisonia* tree is growing. Turtle bones lie scattered about.

From a book of genealogies I learned on Vahitahi that the marae of the Gati Hogi on Akiaki was marae Poureva. As their point (*koru*) was Teraia, this marae must have been located just a few yards north of Hitiaga. The name Poureva was given me by a young native for a land at Teraia.

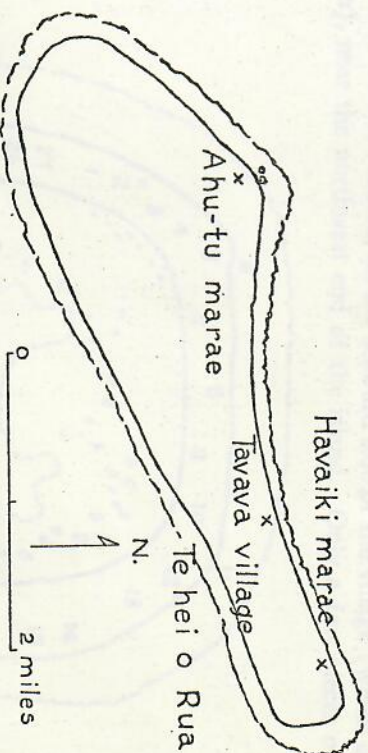


FIGURE 46.—Sketch map of Nukutavake: x, marae locations.

NUKUTAVAKE

(See fig. 46 for marae locations.)

Site 1. Marae Havaiki. (See fig. 47.)

The *ahu* is at right angles to the shore, and touching the beach. This marae has been swept by tidal waves and damaged by the road which has been put through it. One of the *ahu*, however, is clearly defined. No intact uprights, however, could be found.

Site 2. Marae Kakea in the present village of Tavava. It is remarkable to find many of the *ahu* facing slabs still standing in place, though the marae is located in the very center of the village. Its *ahu* lies at an angle to the beach. (See fig. 48.)

Site 3. Marae Ahu-tu at southwest point of island, in a grove of *Pisonia* trees along the sandy beach. The marae has been almost completely obliterated by tidal waves. In one spot I was able to make out a small square of curbs.

Site 4. Two great stones called Matatanaru, on the beach opposite marae Ahu-tu.

The stones are used as guides for canoes departing for the island of Vairaatea. The largest is about 20 feet long, 15 feet wide, 10 feet high; the other, lying 5 feet from it, is about 15 feet long, 10 feet wide, and 7 feet high. These stones have been torn by some ancient tidal waves from the Tertiary coral limestone ledge underlying the island. My guide told me the stones were in the same position before the cyclones of 1903 and 1906, and his remarks are corroborated by the photograph taken off this shore by Agassiz in 1899 (1, pl. 70). The top of these two stones, when in line from the reef flat, pointed directly west-southwest by my compass—exactly the sailing direction for the northern point of Vairaatea. The complementary sailing points on Vairaatea I did not see, but they consist of a *Pisonia* tree and a stone.

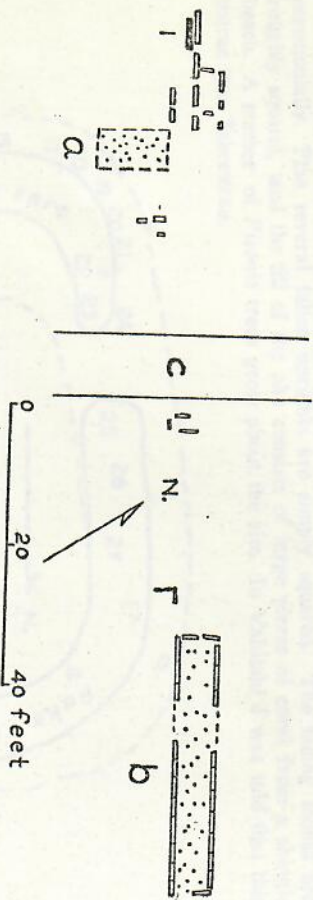


Figure 47

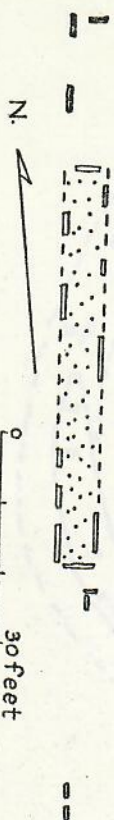


Figure 48

FIGURE 47.—Marae Havaiiki (Site 1), Nukutavake: a, platform 1 foot high, boxed in by small slabs on edge, filled with sand; b, *ahu* 1 foot high, of thin slabs on edge, none more than 3 feet long; c, present road; 1, base of great broken upright.

FIGURE 48.—Marae Kakea (Site 2), Nukutavake: position of each facing curb in place marked to scale; no curb more than 1 foot high; largest curb 6 feet long.

PINAKI

(See fig. 49 for marae locations.)

Site 1. Marae Marumaturata, in grove of *Pisonia* trees called Tarahope on land called Kopiripiri.

The *ahu* is clearly indicated over an extent of 23 feet by two parallel lines of facing slabs on edge, 6 feet apart, and at right angles to the bench 50 yards distant. The *ahu* lies due north and south.

Site 2. Marae Omannu at Omannu, southwest coast of the island. The *ahu* lies diagonal to the beach and a few yards from it, and extends over about 50 feet. It is in very bad shape. Before the cyclone of 1906 a large stone was standing here. There is said to be a marae at Teonemahue on the east coast, but I traversed only that part of the island from Pohakiri to the pass.

VAIRAATEA

(See fig. 50 for marae locations.)

Site 1. Marae Ahuroa, on the seaward side of the village (which is on the lagoon), near the northwest end of the island. Only a few pieces of crum-

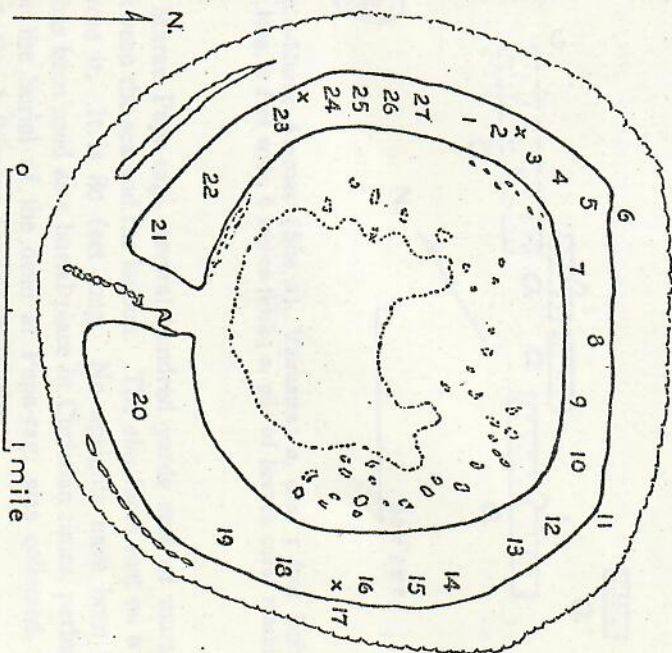


FIGURE 49.—Map of Pinaki based on a sketch survey made by the Albatross Expedition (1, pl. 206); x, marae locations; numbers refer to place names collected in 1930.

- | | | |
|-------------------|---------------------|---------------------|
| 1. Koutuariki | 10. Omannu | 19. Tukirigachoro |
| 2. Kopiripiri | 11. Tara-ruga | 20. Hao-roa-gai |
| 3. Pohakiri | 12. Opetu | 21. Te-motu-pukatea |
| 4. Pa-maragai | 13. Pofatu-tomo-kio | 22. Patakana |
| 5. Te-va-mahana | 14. Taururuga | 23. Omannu |
| 6. O-kio | 15. Gabei | 24. Taharuru |
| 7. Te-maru-o-keha | 16. Kerit-tanhu | 25. Taurufao |
| 8. Mahina | 17. Te-one-mahue | 26. Mahaka |
| 9. Pa-momo | 18. Varupoa | 27. Ohaki |

bling slabs remain. In Vahitahi I was told that this was really the site of Aturoa marae, and that the village was named Ahuroa.

Site 2. Marae Aturoa at Fakahoki, eastern tip of Puka-raro. (See fig. 51.)

Although by no means in good condition, this is the best preserved marae in the Vahitahi area. There are four small, rough *ahu* placed closely together as shown in figure 51. Worthy of note is the pile of branch coral at the side of the court. Two unusually large, unbroken *Tyridena* shells lay on the court, and these must have been used ceremonially. The several fallen uprights are simply squared. The facing stones are roughly squared, and the fill of the *ahu* consists of large pieces of coral from a shingle beach. A number of *Pisonia* trees grow about the site. In Vahitahi I was told that this marae was Takereran.

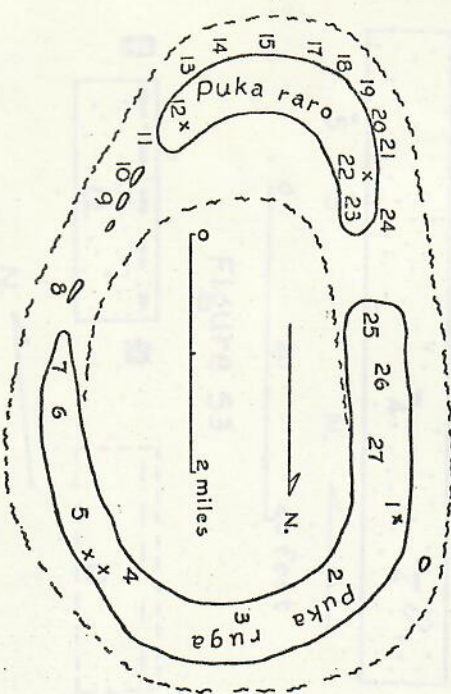


FIGURE 50.—Map of Vairatea: x, marae locations; numbers refer to place names.

- | | | |
|---------------------|-------------------|---------------------|
| 1. Ahu-roa | 10. Motu Tokatoka | 19. Te-rakan-fariki |
| 2. O Mapuhi | 11. Te-mapuna | 20. Te-maki-tagai |
| 3. Te-raho-maga-nui | 12. Fakahoki | 21. Pariragi |
| 4. O Fakaravanu | 13. Ohumu | 22. Fareka (marae) |
| 5. Ini-vaevae | 14. Te-ava-ruhi | 23. Tu-hau-roa |
| 6. Umutohao | 15. Te-hau-mota | 24. Te-puna-oho |
| 7. Para Tavake | 16. Te-pagapaga | 25. Mata-ka |
| 8. Ogaga | 17. Otora | 26. Tuhua-i-mahora |
| 9. Te-agare | 18. Fakahina | 28. Tuhua |

TATAKOTO

Tatakoto was discovered by Boenechen on October 29, 1774, and named by him "San Narcise's" Wilkes erroneously calls it "Pukapuka" on his map of 1842. On the charts the name is given as "Tatakoto," though the natives rendered it Takoto. The island was named "Humphrey Island" by Clerke, who saw it sometime before 1823 and believed himself the discoverer.

The five maraes in a good state of preservation at Tatakoto have low *ahu* like those to the west, five uprights instead of three, though one very small *ahu* has only three, or *ahu* identical with the high *ahu* of Reao. Some of the uprights of the maraes with low *ahu* are specially shaped like the Fagatau and Fakahina uprights. No enclosing court, walls, or pavements were seen, or piles of branch coral.

Site 1. Marae Ahu-tu at Ahuroa, west part of island on the lagoon side east of the village.

All the stones of the marae have been removed for building purposes except three uprights still standing in line. The first is 5 feet high, 2 feet wide, 5 inches thick. A hundred feet farther along is another upright, and 73 feet beyond this a third—both smaller. These uprights are simply squared. Pouvi, or Pouhi, is supposed to be another name for the marae.

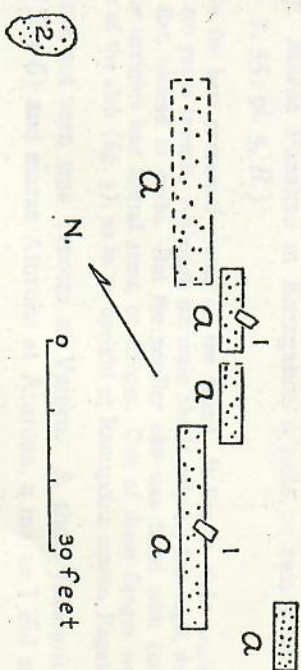


FIGURE 51.—Marae Aturoa (Site 2), Vairatea: a, *ahu*, 1 foot high; 1, fallen upright 3 feet long, 2 feet wide, 6 inches thick; 2, pile of branch coral reaching a height of 3 feet.

Site 2. Marae Papa-ragi, several hundred yards east of marae Ahu-tu, half-way between the sea and the lagoon. The *ahu* faces east on a creek and 50 yards from it. It is 80 feet long. No uprights have been preserved. The marae has been used as a burial place in Christian times, perhaps before. A chant for the burial of the dead at Papa-ragi was collected, and I am indebted to J. Frank Stimson for the translation:

Tanu ki te one o Papa-ragi, ki Nohi-
parapara,
Buried in the sands of Rock-foundation-
of-the-heavens, on the land called Eyes-
sealed-with-weeping,

Tagi te fakarua.
Now wails the northeast wind.
Tamariki i ga hare e tu maki aroha,
Children of the [bereaved] households la-
ment with sorrow as anguishing as

E anuanu a te parau e—
Oh, like a chill wind are the words—
E parau tanu ki te one.
The words of burial in the sands.

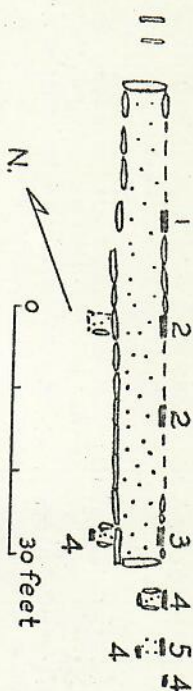


Figure 52

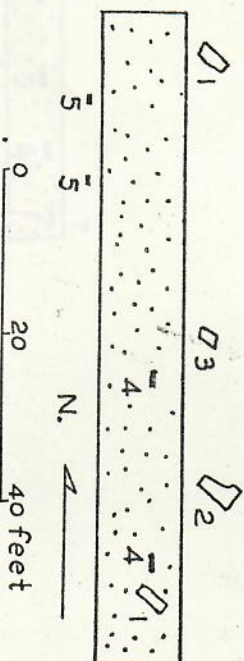


Figure 53

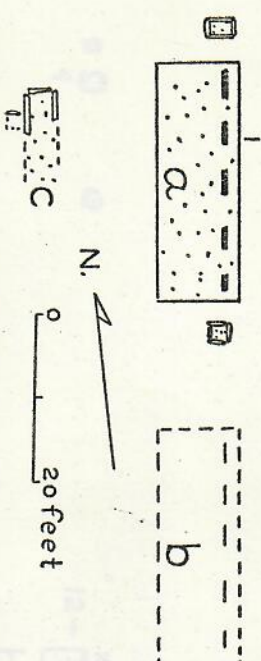


Figure 54

FIGURE 52.—Marae Titikokoka (Site 3), Tatakoto: *ahu* 58 feet long, 4 feet wide, and faced with thick slabs on edge, all 1 foot high, fill of sand and fine gravel; uprights simply squared; against face of *ahu* one very well preserved tiny platform 6 inches high with an upright 1 foot high at court end; 1-5, squared uprights; 1, 5 feet high; 2, broken; 3, broken but originally 5 feet high; 4, 1 foot high; 5, 2 feet high.

FIGURE 53.—Marae Goio (Site 4), Tatakoto: *ahu* 5 feet high, faced with a first course of slabs on edge and upper courses laid horizontally, measures 78 feet in length, 10 feet in width; uprights which stood on the top seem to have been knocked over by a tidal wave; the largest, 5 feet long, has an arm projection on one side; 90 feet out on the court, which is on the west side and in line with the center of the *ahu*, stands a little platform 1 foot high, 5 feet wide, 7 feet long, axis at right angles to *ahu*; 1, prone slab 4 feet long; 2, prone slab $\frac{3}{4}$ feet long, with one arm; 3, prone slab; 4, base of broken slab; 5, small upright 1 foot high.

FIGURE 54.—Marae Fareika (Site 6), Tatakoto: *a*, *ahu* 30 feet long, 10 feet wide, 3 feet high, faced with slabs on edge, base of all uprights in place but only one unbroken; *b*, *ahu* similar to *a*, but destroyed in the digging of a *maite*; *c*, apparently one end of a small *ahu*, the other end destroyed; 1, upright 5 feet high, squared.

Site 3. Marae Titikokoka, southeast part of the island, 200 yards from the ocean and 300 yards from the lagoon. The *ahu* is well preserved. (See fig. 52; pl. 5, A.)

Site 4. Marae Goio at Te-kai-a-te-keho, east end of island, north shore, 25 yards from crest of beach. The *ahu* is at right angles to the shore. No enclosing walls for the court were found. (See fig. 53.)

Site 5. Marae (?) 200 yards west of Site 4. The *ahu* is parallel to the sea beach and 20 yards from it. It is 4 feet high and at least 48 feet long. The court has no enclosing walls.

Site 6. Marae Fareika at Tautuhi, in ancient village of Tikaité, northwest part of island. It lies 100 yards from the lagoon and one of its two principal *ahu* has been completely destroyed by the excavation of a *maite*. (See fig. 54.)
Site 7. Marae Punakau at Karagatua, a mile or two west of Tikaité. (See figs. 7, 55; pl. 5, B.)

This is the best preserved marae on the island. It lies at right angles to the sea beach and 200 yards from it. Although the main *ahu* is only 1.5 feet high, the facing is of slabs laid flat, instead of curbs. But the smaller *ahu* was faced with curbs. At least three of the uprights had lateral arms, or flanges. One of these flanges was well down on the side of the slab (fig. 5), as in an upright at Ramapohia marae, Fagatau.

A marae not seen was Teotea at Vaioru. A short *fakatarā* for marae Fareika (Site 6) and marae Aturona at Aturona, a marae I did not see, was collected:

No Aturona, no Fareika e,
Ka pa i te ahnga.
E tini ma varu horuhoru farofaro ana ireira.
Taupeupe ana ireira.

REAO

Reao was discovered by Duperry on April 22, 1823, and named by him "Clermont-Tonnerre."

The marae ruins of Reao are more numerous and better preserved than those of any other of the islands visited. A list of 36 was furnished by two men, with the comment that there were many more. However, after exploration of the east and west end and the north coast, and after the location of maraes on the south coast had been pointed out as we sailed along a few feet outside of the reef, I would be surprised if a minute search of the whole atoll would reveal more than 50. The location of 28 maraes on the map of Reao (fig. 56) should give a very fair idea of the marae distribution. Undoubtedly there are more maraes at the east end, where there was an ancient settlement of importance, and also at the northwest end and the middle of the south coast.

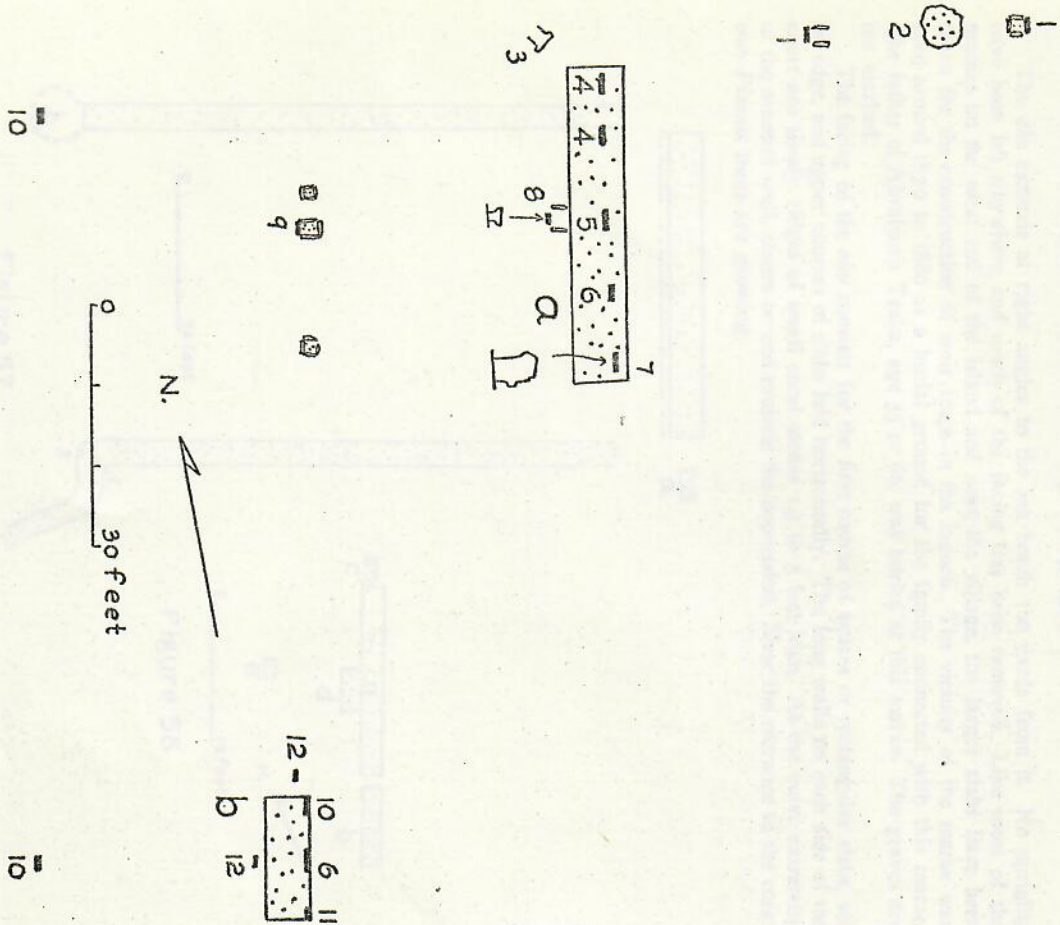


FIGURE 55.—Marae Punakau (Site 7), Tatakoto: *a*, *ahu* 39 feet long, 6 feet wide, 1.5 feet high, faced with slabs laid horizontally, all *ahu* uprights (*keho*) in place and unbroken; *b*, *ahu* 6 inches high, faced with curbs; 1, upright 2.5 feet high, against a tiny platform; 2, *Pisonia* tree; 3, fallen upright with lateral arms, 2 feet long, 1.5 feet wide; 4, upright 3.5 feet high; 5, upright 5.5 feet high; 6, upright 4 feet high; 7, upright 5 feet high with lateral flanges; 8, upright 1 foot high with arms; 9, upright 3 feet high against a tiny platform; 10, upright 2 feet high; 11, upright 3 feet high; 12, upright 1 foot high.

The *ahu* of the 21 marae studied range in length from 25 to 100 feet. Half of them, however, measure between 40 and 50 feet in length; three are between 75 and 78 feet; three are between 83 and 100 feet. The width of the *ahu* is 4 feet to 10 feet, though the majority fall between 6 feet and 8 feet. In height the *ahu* range from 2.5 feet to 5 feet. All but five, however, are between 3 and 4 feet high. The little platform called *ahu-taga*, in front

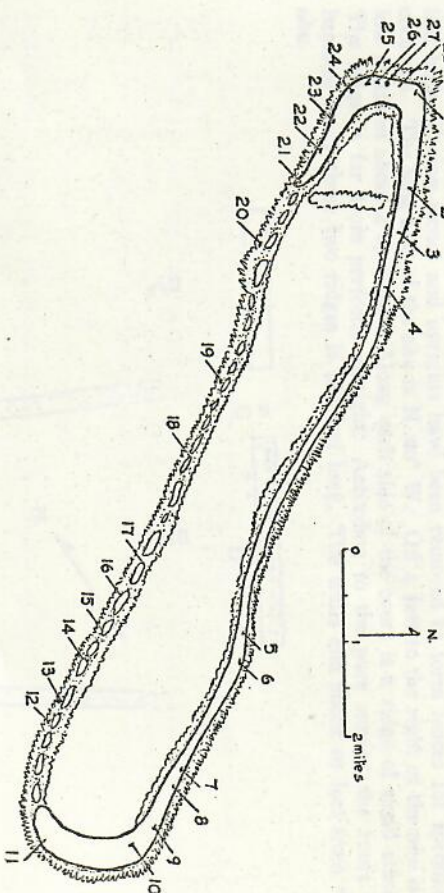


FIGURE 56.—Map of Reao based on U. S. Hydrographic Chart no. 78, with modifications; numbers refer to marae sites as follows:

1. Hiti-a-naunau
2. Marae at Te-papa-uru
3. Marae at Te-pa-hara
4. Marae at Te-ara-tavaka
5. Hitiaga-te-ata at Te-pa-hara
6. Pararutoga at Kohariki
7. Tevairaka at Ga-hara-tapa-ia
8. Te-ragi-tua-tini at Fare-pue
9. Temokoua at Tearero
10. Tearero at Tearero
11. Marae
12. Marae at Hiva
13. Te-pohatu
14. Marae at Mauorea
15. Marae at Turuturu
16. Teapai at Teapai
17. Taurokuku
18. Marae at Kakara-roa
19. Marae at South Tearero
20. Marae at Takuha
21. Tiave at Tiave
22. Poanio
23. Mauga-tapu
24. Teicka
25. Mannatika
26. Hekelini
27. Matatahi, or Te-gutu-kotaha
28. Poureva

of the *ahu* and midway between the sides of the court, averages 5 feet in length, 3 feet in width, and is placed 10 to 40 feet, or an average of 20 feet, away. The courts, when defined, range in length from 100 to 300 feet but average 150 feet. A composite picture embodying the common features and average measurements of the Reao marae is given in figure 2.

Site 1. Marae Hitiannaunau (Hiti-a-naunau). This seems to have been

the marae of greatest prestige. It is one of the few, if not the only marae, where human sacrifices were offered. (See fig. 57.)

The *ahu* extends at right angles to the sea beach 100 yards from it. No uprights have been left anywhere and much of the facing has been removed. Like most of the marae on the west end of the island and near the village, the larger slabs have been taken for the construction of weir traps in the lagoon. The vicinity of the marae was used around 1870 to 1880 as a burial ground for the family connected with this marae. The father of Abrahama Teaka, age 55 or 60, was buried at this marae. The graves are not marked.

The facing of the *ahu* consists for the first course of square or rectangular slabs, set on edge, and upper courses of slabs laid horizontally. The long walls on each side of the court are simply ridges of small coral stones 1.5 to 3 feet high. At the outer extremity of the seaward wall, stones on end encircle the depression. Near the entrance to the court two *Pisonia* trees are growing.

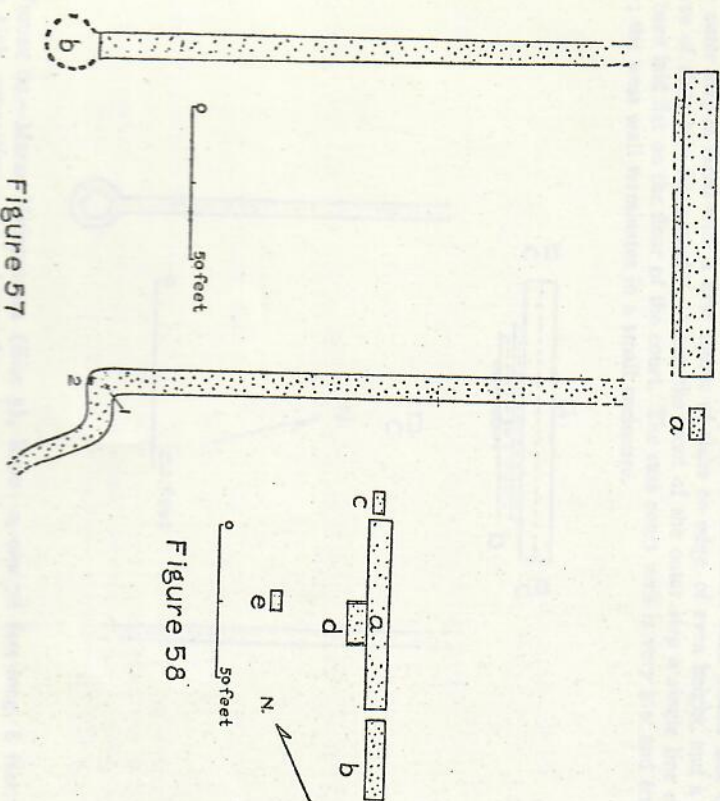


FIGURE 57

FIGURE 57.—Marae Hitiannuanu (Site 1), Reno: *ahu* 100 feet long, 10 feet wide, 5 feet high; step 2.5 feet high and 1 foot wide runs along court face; court is 192 feet long; *a*, platform 1 foot high; *b*, depression surrounded by small slabs on end; *c*, half of a great *Tridacna* shell; *d*, upright planted at edge of wall.

FIGURE 58.—Marae at Teapapuru (Site 2), Reno: *a*, *ahu* 62 feet long, 6 feet wide, 3 feet high; *b*, *ahu* 25 feet long, 5 feet wide, 2.5 feet high; each *ahu* faced with first course of slabs on edge, upper courses of slabs laid horizontally, top of *ahu* dressed with fine coral gravel; *c*, platform 1 foot high; *d*, platform 6 inches high; *e*, platform 1.5 feet high.

Site 2. Marae at Teapapuru. (See fig. 58.)

The *ahu* is at right angles to the sea beach and 100 yards from its crest. No upright stones remain in place. There is clearly no trace of side walls for the court. The low platform placed against the face of the *ahu* is distinct, as also the low platforms at each end and out on the court.

Site 3. Marae at Te-pa-hara.

In very poor state of preservation. The *ahu* extends at right angles to the sea beach and 30 yards from its crest. It measures 42 feet long, 8 feet wide, and is now only 2.5 feet high. Facing stones and uprights have been removed to form fences for sprouting coconuts. The long axis of the *ahu* is N. 20° W. Off 4 feet to the right of the *ahu* is a low platform about 4 by 8 feet. Along each side of the court is a ridge of small stones. The ridge is far from perfectly straight. According to the pace survey, the court as hemmed in by these two ridges is 280 feet long. The walls end about 20 feet from the *ahu*.

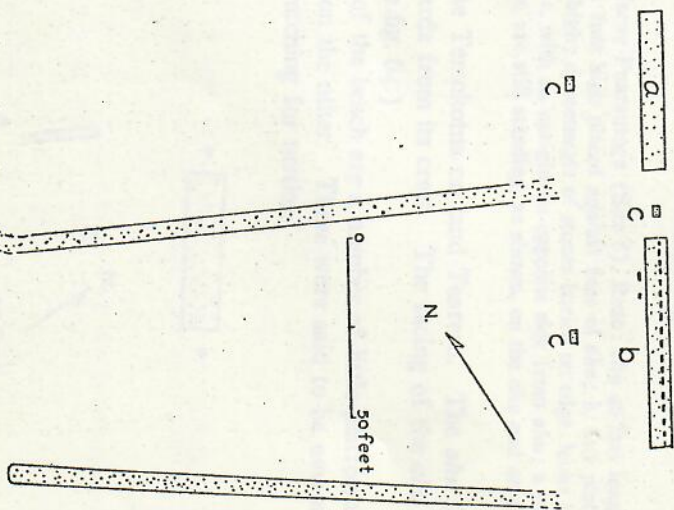


FIGURE 58

FIGURE 59.—Marae at Tearatavaka (Site 4), Reno: *a*, *ahu* 45 feet long, 7.5 feet wide, 3 feet high; *b*, *ahu* 60 feet long, 7.5 feet wide, 3 feet high, bearing a line of upright slabs; *c*, platform 1 foot high.

Site 4. Marae at Tearatavaka. There are two marae here lying side by side. (See fig. 59; pl. 7, A.)

The *ahu* are at right angles to the beach and the seaward *ahu* touches the crest of the beach. The inland *ahu* is remarkable for having nearly all the uprights still in place although the upper parts of nearly all of them have been broken off. I counted 28 of these uprights (*keho*). They average 2.5 feet in height, 1.5 feet in width, 3 inches in

thickness, and are placed about 3 inches apart, 2 feet from the rear edge, and 6 feet from the front edge. A *keho* fallen from about the center of the seaward *ahu* measures 3.5 feet high, 2 feet wide, 4 inches thick. The walls of the court of the inner marae are ridged heaps of coral.

Site 5. Marae Hitagataata, at Tepehara, north coast. (See fig. 60; pl. 8.)

The *ahu* extends parallel to the sea beach and 50 yards from it. Twenty-seven uprights are still in place along the top of the *ahu*, midway between the sides. The upper parts of many of these *keho* are missing. The unbroken *keho* average 1.8 feet in width and range from 2.5 to 4 feet in height.

Against the front of the *ahu* two narrow steps have been added. The outer step is 1 foot high, as is the inner, and separated from the inner simply by the projecting upper margins of the facing slabs of the inner step. In a row running the length of each of these steps, uprights of the same size as those on the *ahu* have been placed side by side. The outer step is faced with a first course of slabs on edge, of even height, and a second course of slabs laid horizontally. Along the front of the outer step a single line of slabs has been laid flat on the floor of the court. The east court wall is very low and fragmentary; the west wall terminates in a small enclosure.

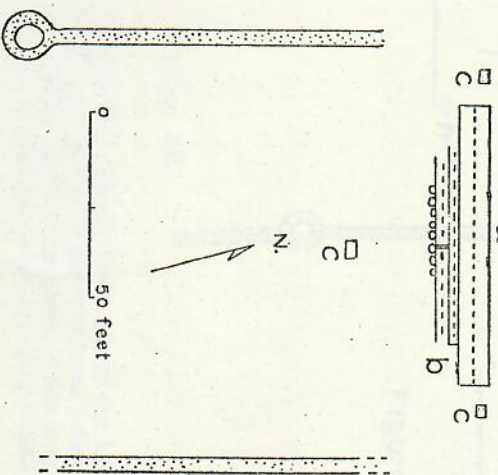


FIGURE 60.—Marae Hitagataata (Site 5), Reao: *a*, *ahu* 76 feet long, 8 feet wide, 4 feet high, supporting a line of uprights; *b*, step 1 foot high supporting a line of uprights; *c*, platform 1 foot high.

Site 6. Marae Paarantoga at Kotariki. The *ahu* is parallel to the sea beach and 50 yards from it. Of the wall on each side of the court only traces remain. (See fig. 61; pl. 9, A.)

Site 7. Marae Tevairaka at Galatrapaka. The *ahu* lies parallel to the shore and 100 yards from the crest of the sea beach. The uprights on the

ahu have been thrown over. They range in height from 2.5 to 3.5 feet. (See fig. 62; pl. 9, B.)

Site 8. Marae Teatigatani at Farepue, northwest coast. The *ahu* lies parallel to the sea beach and 40 yards from it. The walls along either side of the court are very rough, irregular, and low. (See fig. 63.)

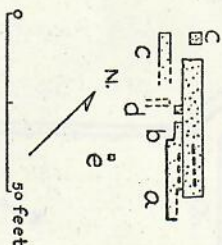


FIGURE 61.—Marae Paarantoga (Site 6), Reao: *ahu* 40 feet long, 5 feet wide, 4 feet high; *a*, platform 1 foot high placed against face of *ahu*; *b*, tiny platform 8 inches high; *c*, platforms 1 foot high; *d*, rectangle of stones buried on edge, looks like a grave; *e*, platform 1.5 feet square, with an upright on opposite side from *ahu*; a number of *keho*, from 2 to 3 feet in height, are still standing, as shown, on the *ahu* and on the step in front.

Site 9. Marae Temokotua on land Tearero. The *ahu* lies parallel to the beach and 100 yards from its crest. The facing of the *ahu* has been entirely destroyed. (See fig. 64.)

• On the crest of the beach are a number of little platforms made up of flat slabs placed one on the other. These were said to be new and were made as seats for those watching for turtles.

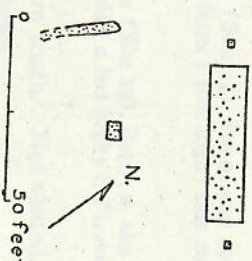


FIGURE 62.—Marae Tevairaka (Site 7), Reao: *ahu* 42 feet long, 10 feet wide, 4 feet high; on either side a tiny platform 1 foot high; on court another platform 1 foot high; on west side of court traces of wall consisting of a ridge of coral.

Site 10. Marae Tearero at Tearero, east end. The *ahu* lies parallel to the seashore but is situated midway between lagoon and sea. It was completely destroyed about 1928 except for the stones embedded in the ground. Next to the marae is a grove of *Pisonia* trees.

Site 11. A *marae*, name unknown, was searched for in this vicinity but my guide failed to locate it.

Site 12. *Marae* at Hiva. The *ahu* lies parallel to the crest of the beach and 120 yards from it. No uprights are standing, but a number lie fallen on the outside. (See fig. 65.)

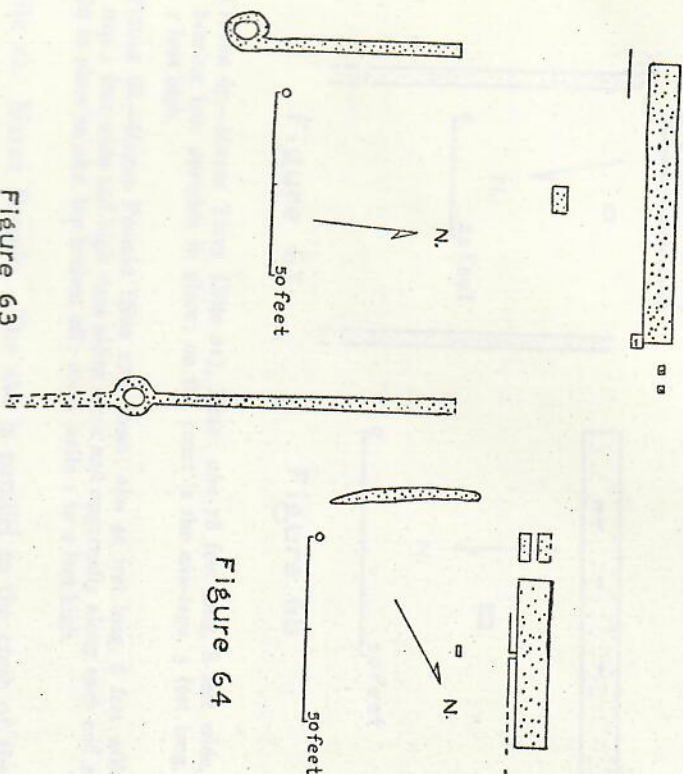


Figure 63

Figure 64

FIGURE 63.—*Marae* Teragithatini (Site 8), Reao: *ahu* 75 feet long, 8 feet wide, 4 feet high, stripped of uprights, at right end three tiny platforms 1 foot high, one of which bears a single upright; on court a platform (*ahu-taga*) 8 feet long, 4 feet wide, 1 foot high, on which stand a number of uprights; small enclosure in each side wall of court.

FIGURE 64.—*Marae* Temokotua (Site 9), Reao: *ahu* 46 feet long, 8 feet wide, 3.5 feet high, at south end two small platforms 1 foot high, along front a step 1 foot high in about the middle of which a separation (*aha*?) 6 inches wide is well marked by a long slab forming facing of each side; traces of crude wall along west of court.

Site 13. *Marae* Tepohatu, southeast coast. The two *ahu* lie parallel to the beach crest and 50 yards from it. (See fig. 66.)

Site 14. *Marae* at Manorea. A large *marae*, not visited.

Site 15. *Marae* at Turuturu. Not visited.

Site 16. *Marae* Teapai on land of same name, on property of Teaka. A large *marae* with walls and standing uprights. Not visited.

Site 17. *Marae* Taukotuku. Not visited.

Site 18. *Marae* at Kakararoa. Not visited. In the vicinity is *marae* Rapiuia, also not visited.

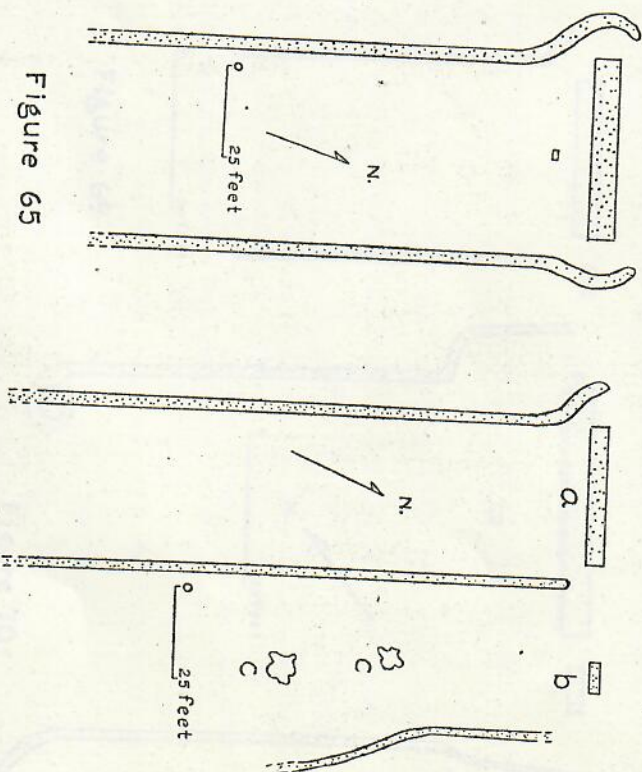


Figure 65

Figure 66

FIGURE 65.—*Marae* at Hiva (Site 12), Reao: *ahu* 49 feet long, 7 feet wide, 3.5 feet high; in front of *ahu* a tiny platform 1 foot high; side court walls are ridges of coral 2 feet high.

FIGURE 66.—*Marae* Tepohatu (Site 13), Reao: *a*, *ahu* 32 feet long, 4 feet wide, 3 feet high; *b*, *ahu* 9 feet long, 3 feet wide, 2 feet high; *c*, *Pisonia* trees.

Site 19. *Marae* at Teareo south. Not visited.

Site 20. *Marae* at Tukuhuga.

The *ahu* is parallel to beach crest and 30 yards from it. It is 49 feet long, 6 feet wide, and 3 feet high. A pair of rectangular slab uprights stand against the middle face of the *ahu*. Each measures 3.5 feet high, 2 feet wide. The side walls of court and the *ahutaga* have been destroyed.

Site 21. *Marae* Tiave on land of same name, southwest coast. (See fig. 67.)

The *ahu* lies parallel to the beach and 100 yards from it. If formerly there existed a step along the front, no trace of it now remains. It would seem from the appearance of the facing of the inner face and the clear level space before it that no step existed.

The facing of the back of the *ahu* is broken down in the middle, revealing a slab about 10 inches high, 4 feet long, placed and embedded in the ground and running into the structure, suggesting one side of a small secret vault.

Four uprights of very hard limestone 4 inches thick are in place in a line along the middle of the top of the *ahu*. The two at the east end are broken off short; the remaining uprights are 2 feet high.

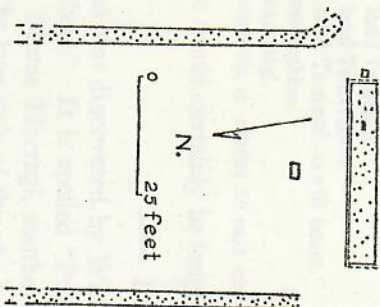


Figure 67

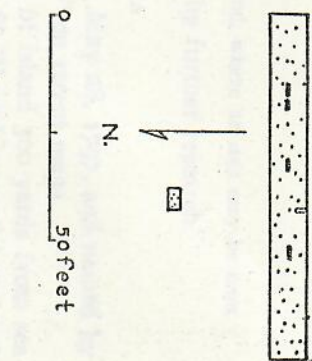


Figure 68

FIGURE 67.—Marae Tiave (Site 21), Reao: *ahu* 78 feet long, 8 feet wide, 3.5 feet high, bearing four uprights in place; on the court is the *ahu-taga*, 5 feet long, 3.5 feet wide, 1 foot high.

FIGURE 68.—Marae Poanio (Site 22), Reao: *ahu* 40 feet long, 6 feet wide, 2 feet high, step 1 foot wide and high runs along front and apparently along each end also; one upright in place on *ahu*, top broken off; court walls 1 to 2 feet high.

Site 22. Marae Poanio. The *ahu* is parallel to the crest of the beach and 150 yards from it. It lies between two creeks. (See fig. 68.)

Site 23. Marae Maugakapu. The *ahu* lies parallel to the beach crest and about 100 yards from it. It has been reduced to a shapeless pile 40 feet long, the stones having been taken to form a fish weir in the lagoon.

Site 24. Marae Teureka. (See fig. 69.)

A meaning of *taka* is "penis," and the marae is said to have been one especially for the rite of incision (*vaitava*). This marae is about 25 minutes' walk south of the village. The *ahu* lies parallel to the beach crest and 200 yards from it. The facing has been entirely removed to furnish material for weir traps.

Site 25. Marae Manuaitika. The *ahu* lies parallel to the sea and 100 yards from the crest of the beach. All *ahu* uprights are missing. (See fig. 70.)

Site 26. Marae Heketini. (See fig. 71; pl. 10, B.)

The *ahu* lies parallel to the crest of the beach and 150 yards from it. All *ahu* uprights are missing. The inner facing of the *ahu* has been removed for fish weirs. Remarkably long, ridged walls, 3 feet high, close in each long side of the court. The east wall has an upright upon it, probably a boundary stone.

Site 27. Marae Matatahi or Te-gutu-kotaha. The *ahu* lies at right angles to the beach and about 100 yards from it. It measures 37 feet long, 5 feet wide, and 3 feet high. The court is not enclosed by walls, but by rough, uncleared ground.

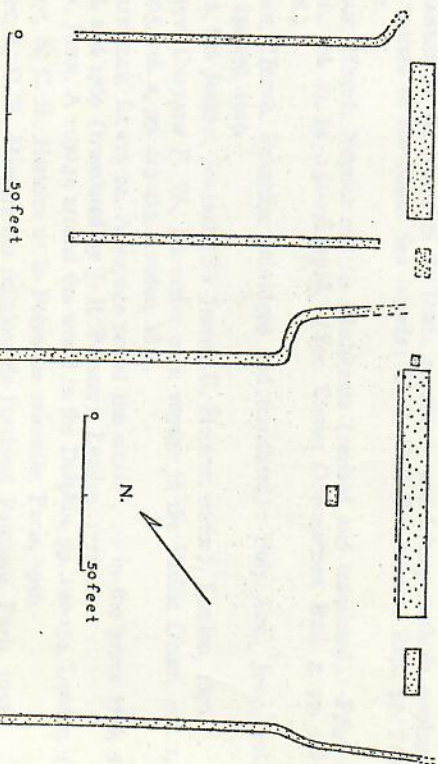


Figure 69

Figure 70

FIGURE 69.—Marae Teureka (Site 24), Reao: *ahu* 50 feet long, 8 feet wide, 3.5 feet high; traces of small, low platform on right.

FIGURE 70.—Marae Manuaitika (Site 25), Reao: *ahu* 83 feet long, 10 feet wide, 4 feet high, a step running along front 1 foot wide and high; left and right end out on court are low platforms 1 to 1.5 feet high; court platform pointed out as the *ahu-taga*; court walls ridges of fine coral about 2 feet high.

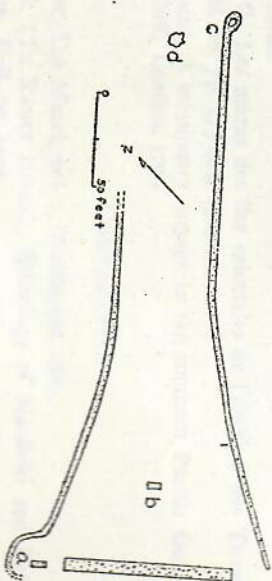


FIGURE 71.—Marae Heketini (Site 26), Reao: *ahu* 90 feet long, 6.5 feet wide, 3.5 feet high; a, platform 1 foot high; b, *ahu-taga* 1 foot high; c, enclosure; d, *Pisonia* tree; 1, upright 2 feet high and wide.

Site 28. Marae Poueva. This marae occupied the position of the present Catholic Church. A number of great *Pisonia* trees belonging to it are still growing. The *ahu* and walls have been completely removed.

Other maraes mentioned but not visited are as follows:

29. Teatavaka, at Teatavaka south, on Abraham Teaka's property.
30. Paio or Paioa land. A large marae here, east of Tiave.
31. Pukamau land.
32. On land Takeaka.
33. On land Tarrarua.
34. On land Torarui, north coast.
35. Tauramahina.
36. Kakamatai.
37. Tainga-ti, a marae at east end of island, where an *ama* may be seen.

The list would certainly be lengthened by further research.

— PUKARUA

Pukarua was discovered by Wilson on May 28, 1797, and named by him "Serle's Island." It is spelled "Pukarua" on recent maps.

Site 1. Marae Haeragi, southeast end of island 300 yards from sea and lagoon. The long axis of the *ahu* bears N. 8° W. and is parallel to the shores of the island. The *ahu* is irregular in shape and no uprights were found. The court was clearly on the lagoon side.

Site 2. A small marae 10 yards from the edge of the sea beach east of Haeragi marae.

A rough construction 10 feet long, 5 feet wide, 2 feet high, built up of flat slabs laid on one another and faced with slabs on edge. Said to be a marae for turtle, *uru*, and other large fish. No uprights were found. I took the structure to be a lookout station for turtle.

Site 3. Marae (?) at Tahiri, north coast, near southeast end of island.

The *ahu* is parallel to the seashore and 150 yards from it. It bears N. 12° E. and is 60 feet long, 10 feet wide, and 5 feet high, faced with slabs laid horizontally as at Reao. No uprights are standing and the structure has been badly damaged by the removal of stones by the natives. Thirty-two paces out on the court, which is on the lagoon side, and in line with the center of the *ahu* but at right angles to it, is a small platform resembling a grave, 10 feet long, 3 feet wide, 1 foot high. I could find no trace of court enclosing walls.

Site 4. Marae (?) 300 yards northwest of Site 3.

The *ahu* bears N. 28° W. and was at least 65 feet long, about 10 feet wide, 4 feet high, and faced like Reao maraes. It lies parallel to the beach crest and about 200 yards from it. No enclosing walls or uprights were found.

Site 5. Marae Anatepo at Rapiuia, back of the church in the present village at the west end in a great grove of *Pisonia* trees. This has been completely destroyed.

Site 6. Marae Katagarua, in the village, on land called Tearara. Completely destroyed.

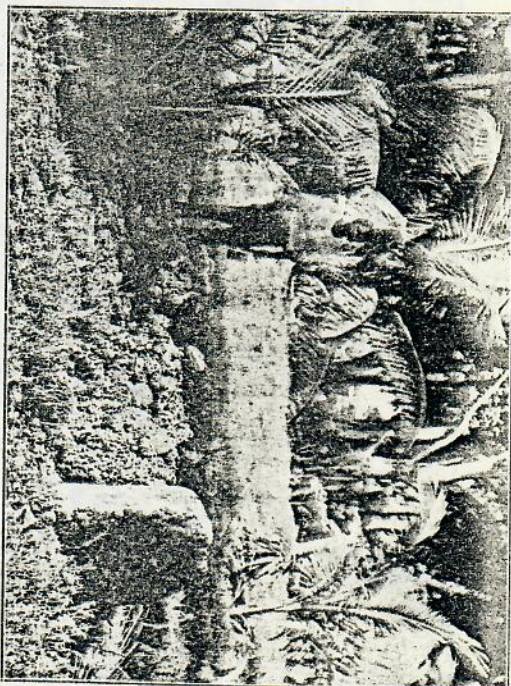
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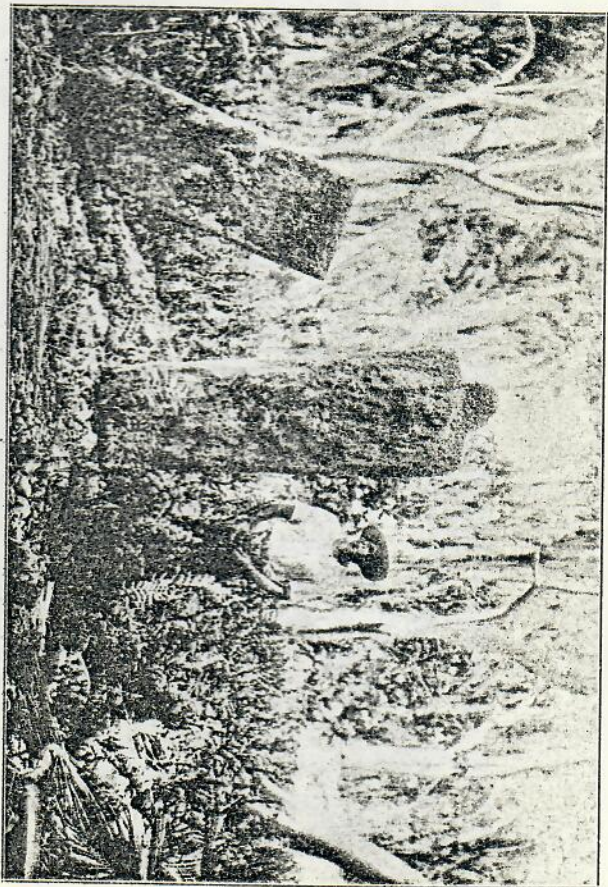
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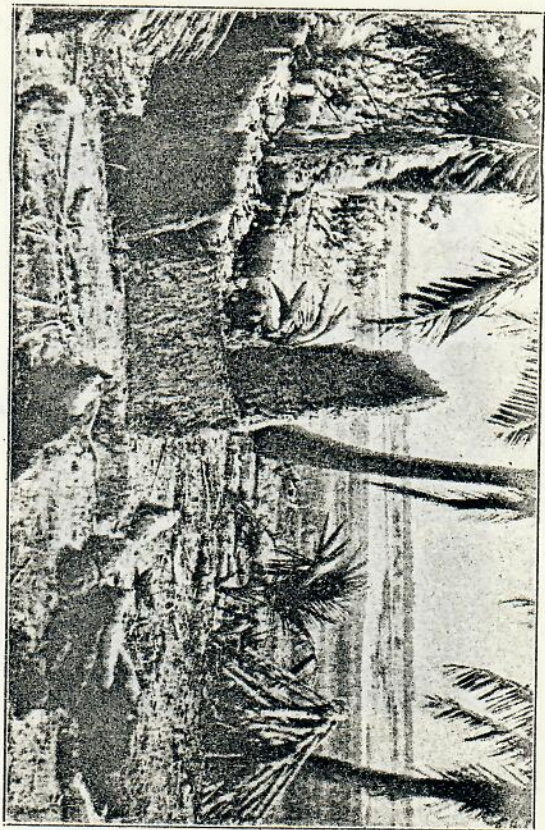


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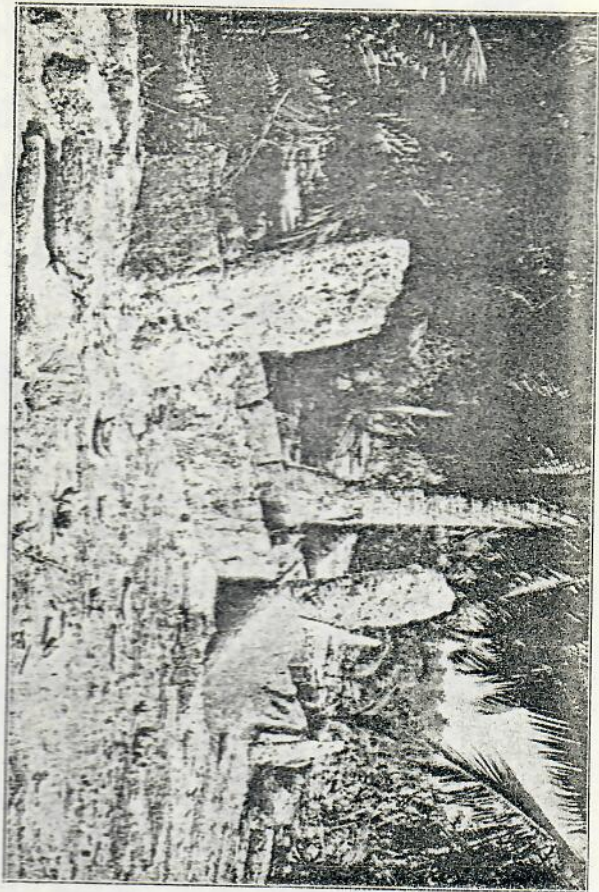


B

MARAE RAMAPOHIA, FAGATAVA: A, ALTAR TO RUAHATU, FROM WEST; B, ANU UPRIGHTS (NOS. 5 AND 6, FIG. 29), FROM SOUTH.

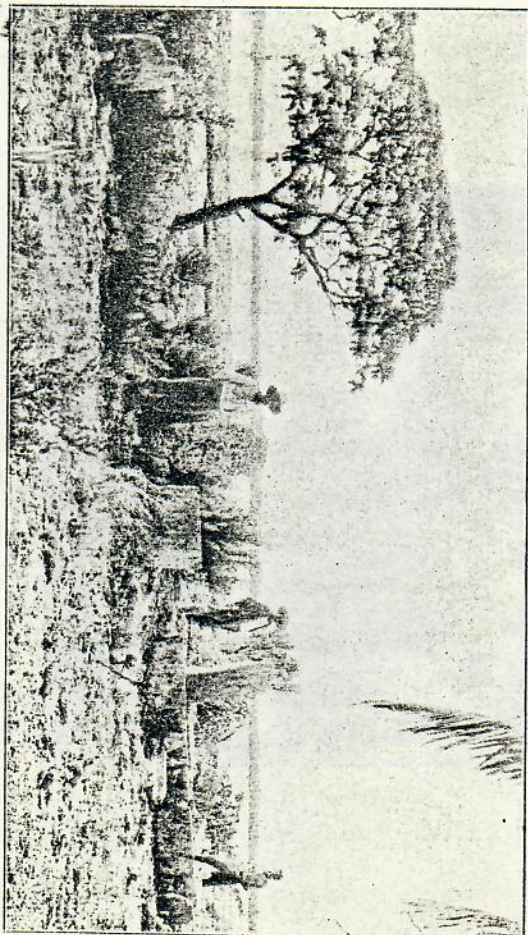


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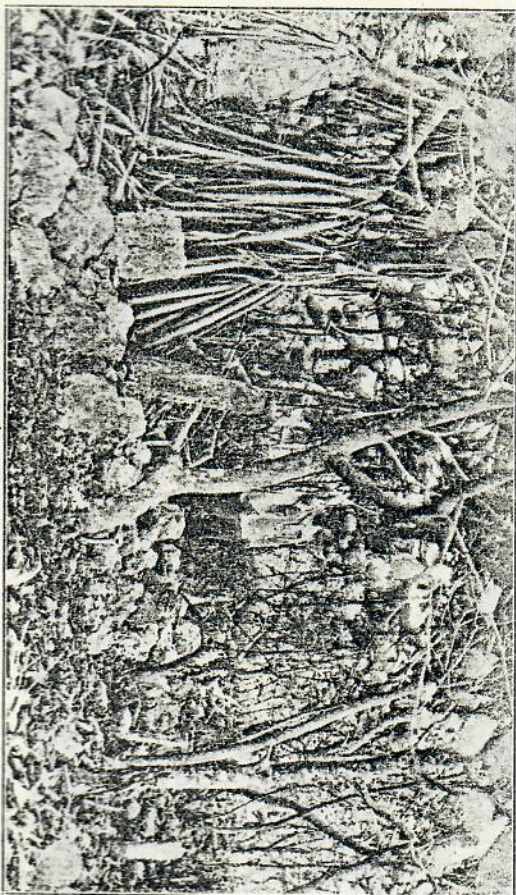


B

WEST AHU OF MARAE POTIREVA, FACATAU: A, VIEW FROM INLAND SIDE; B, VIEW FROM LAGOON SIDE.

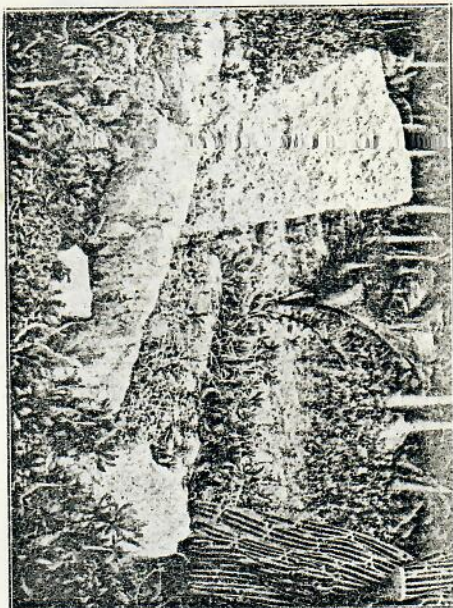


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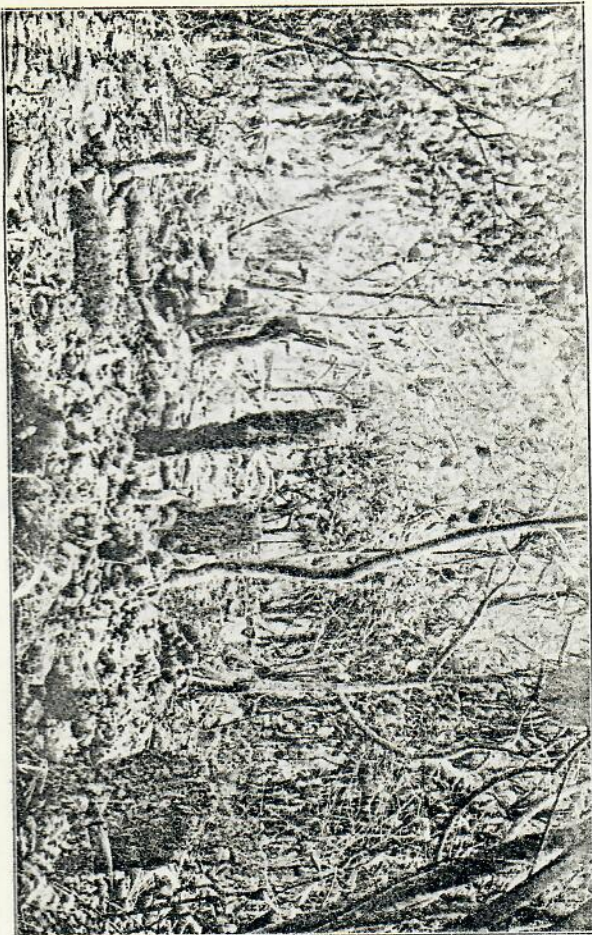


B

FACATAU MARAES: A, MARAE AHUTU, FROM WEST; B, MARAE RACHIOA, WEST AHU FROM THE SOUTHWEST.

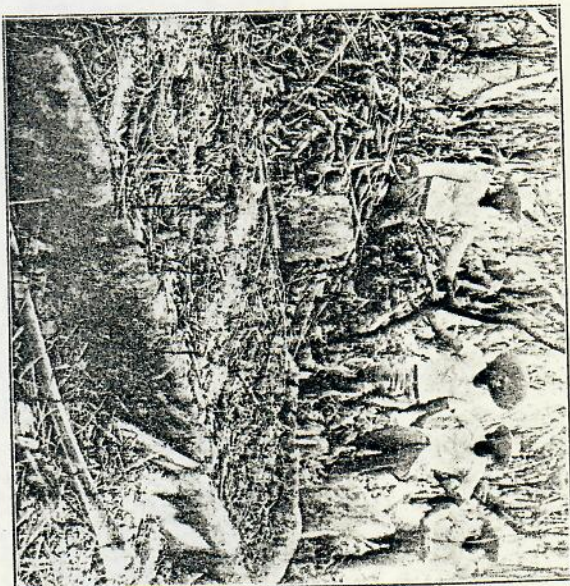


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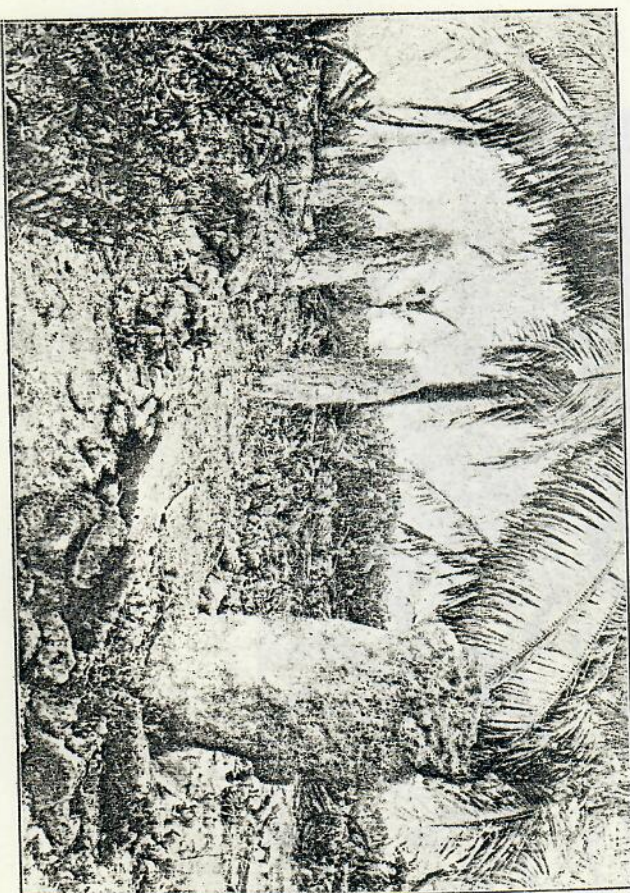


B

TUANOTUAN MARAAS: A, CHIEF'S SEAT ON COURT OF MARAE TAHI'I-NUI, FAKAHINA; B, MARAE MARUATA, IIAO, FROM EAST.

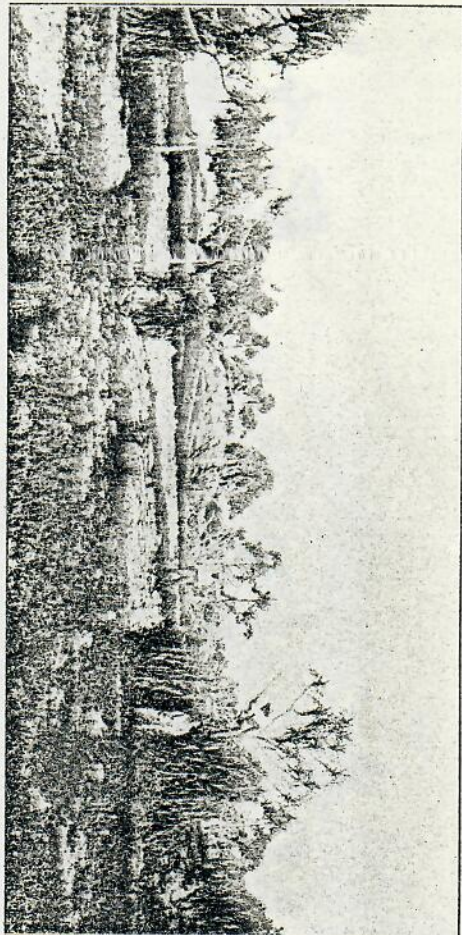


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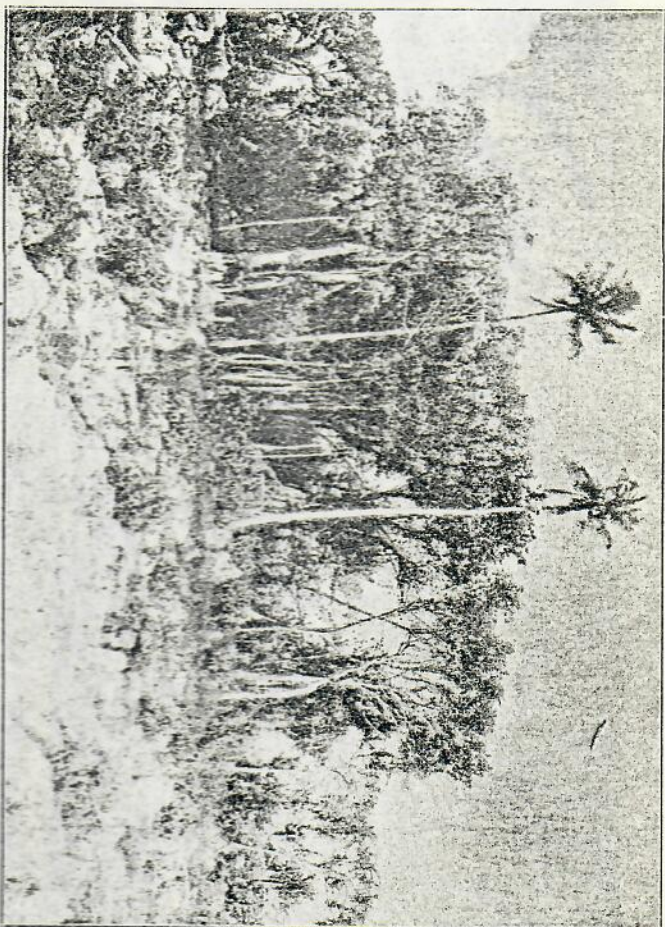


B

MARAAS OF TATAKOTO: A, SOUTH END OF AHU OF MARAE TTIKOKOTA, FROM SOUTH; B, AHU OF MARAE PUNAKAU, FROM SOUTHWEST.

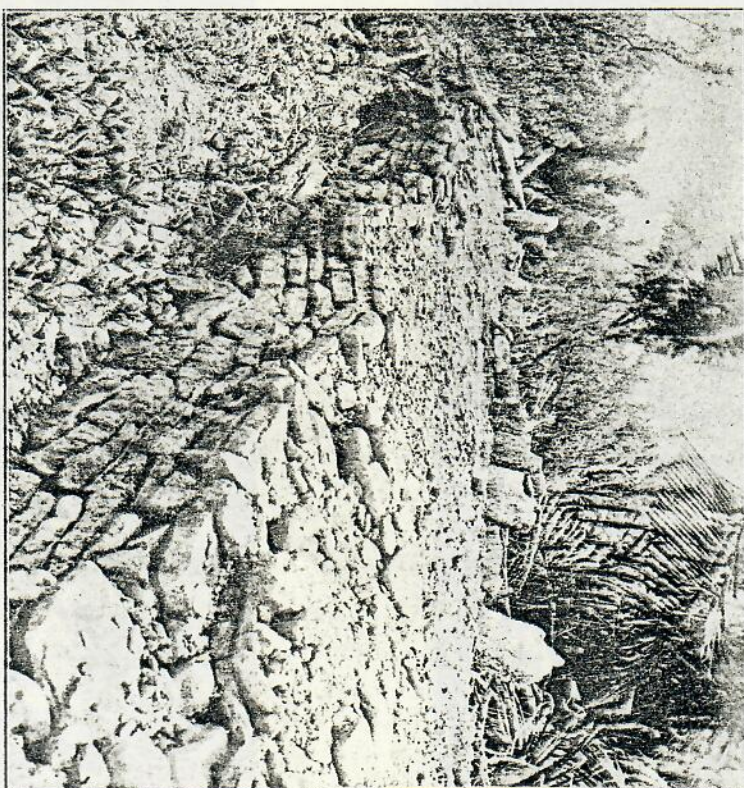


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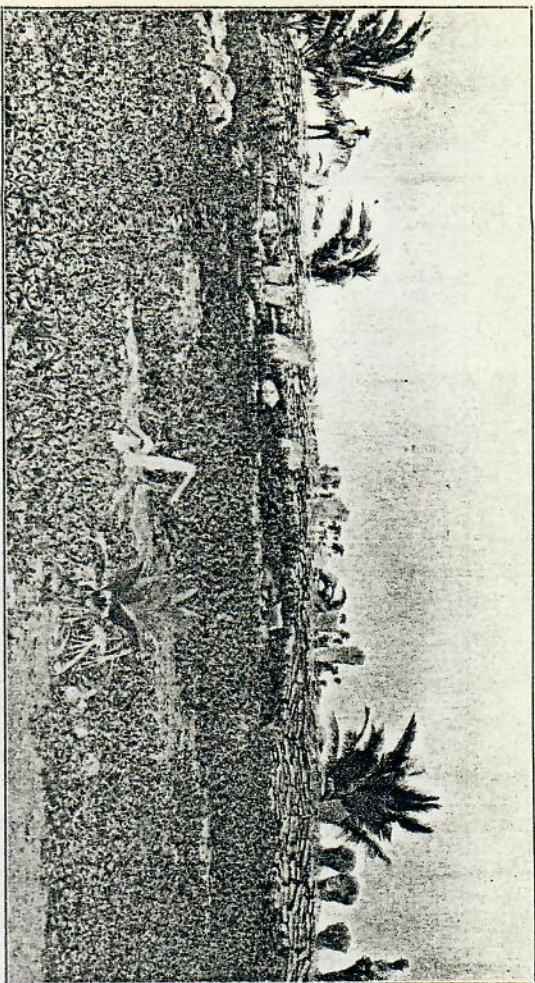


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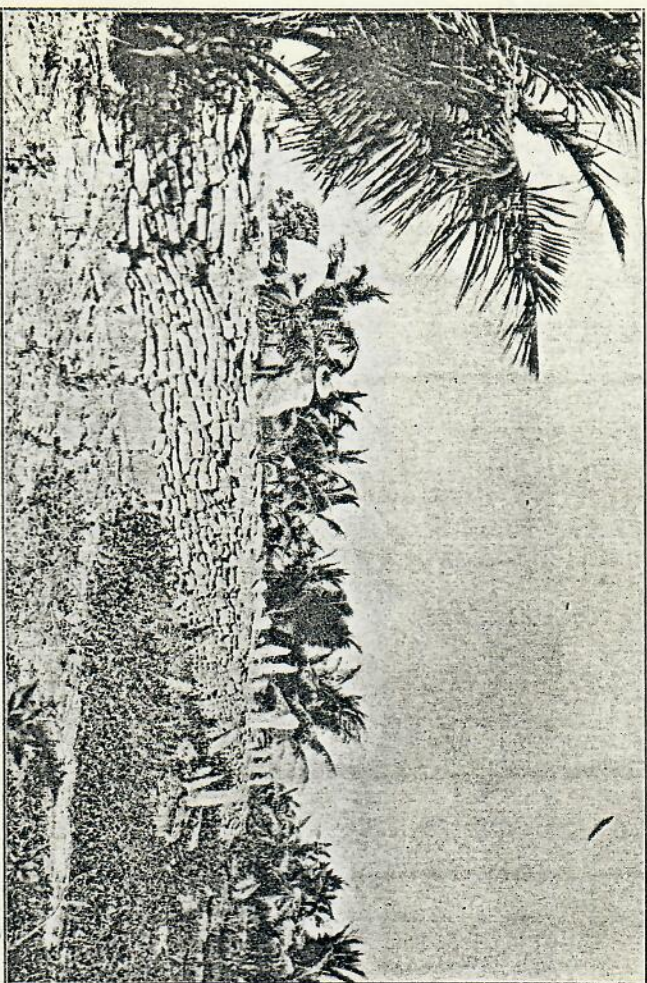
LOCATION OF TUAMOTUAN MARAE: A, MARAE GOTO (MAN STANDING ON AHU), TAPAKOTO, FROM SOUTH; B, GROVE OF PISONIA IN WHICH IS SITUATED MARAE KAIUPU, MAKATEA.



AHU OF MARAE TEARAVAVAKA, REAO, FROM WEST.

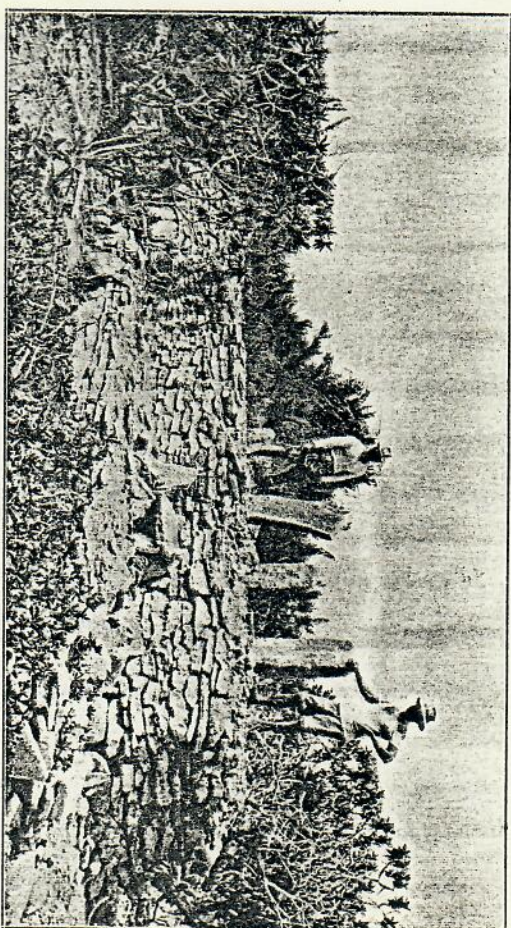


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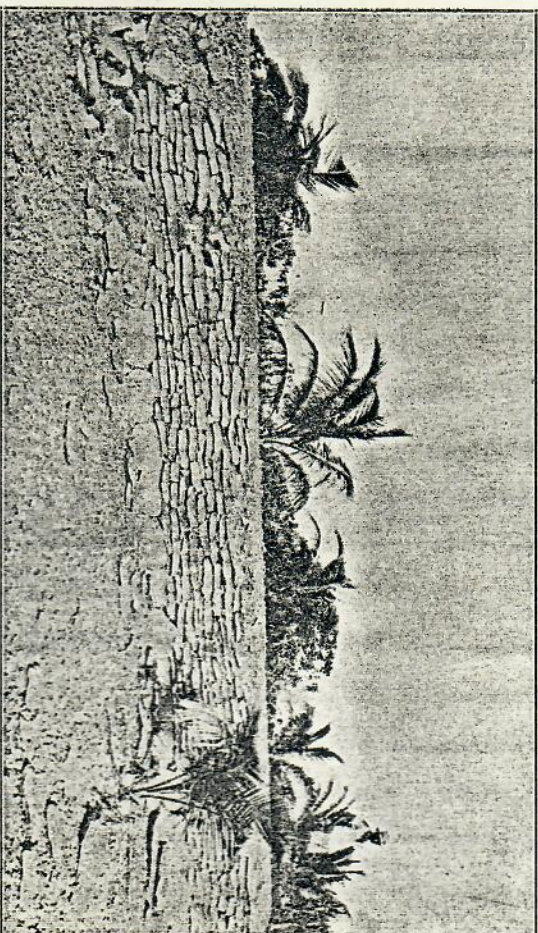


B

MARAE HITIAGATEVA, REAO: A, AHU AND COURT, FROM SOUTH; B, AHU FROM WEST.

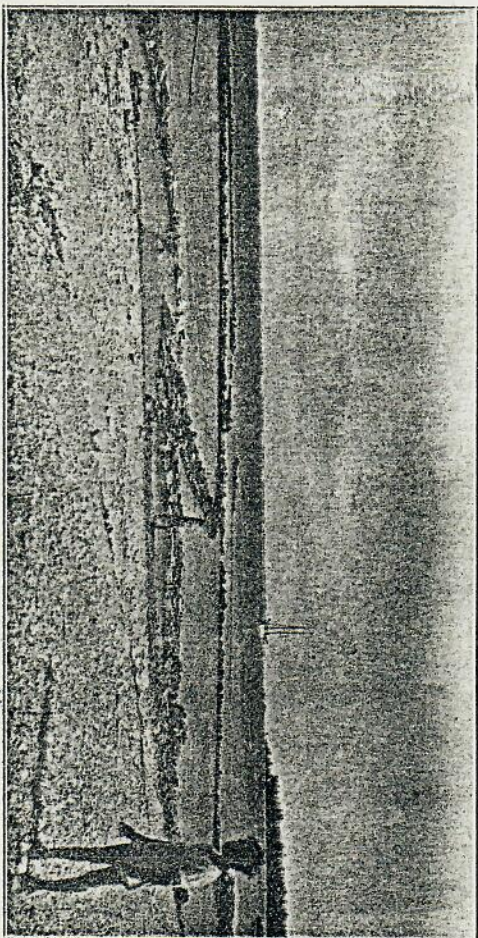


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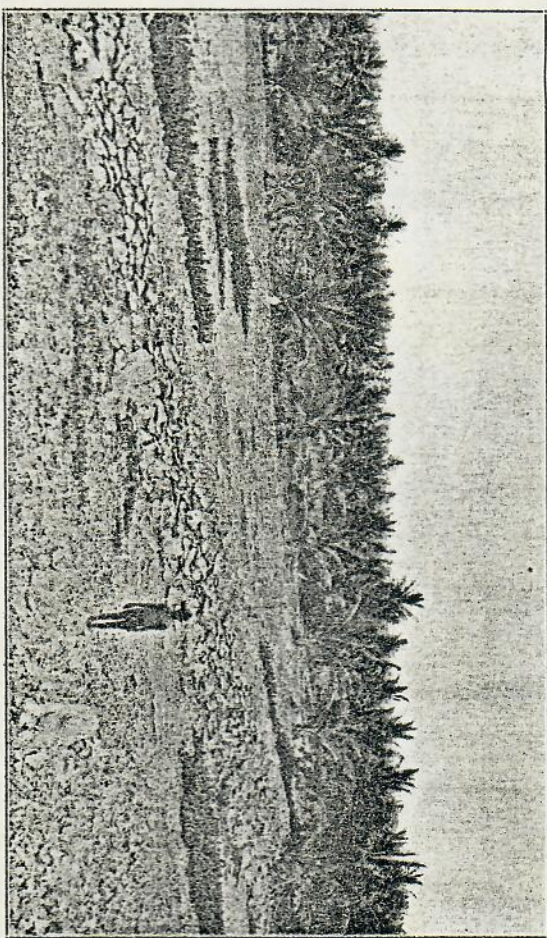


B

MARAE OF REAO: A, AHU OF MARAE PUARAUOGA, FROM SOUTH; B, AHU OF MARAE TEVAIRAKA, FROM WEST.



A



B

FISH WEIR AND KARAE: A, WALLED TRAP AT VILLAGE, AMANU; B, AHU OF KARAE HEKETINI, REAO, AND COURT BEYOND, FROM WEST.

