

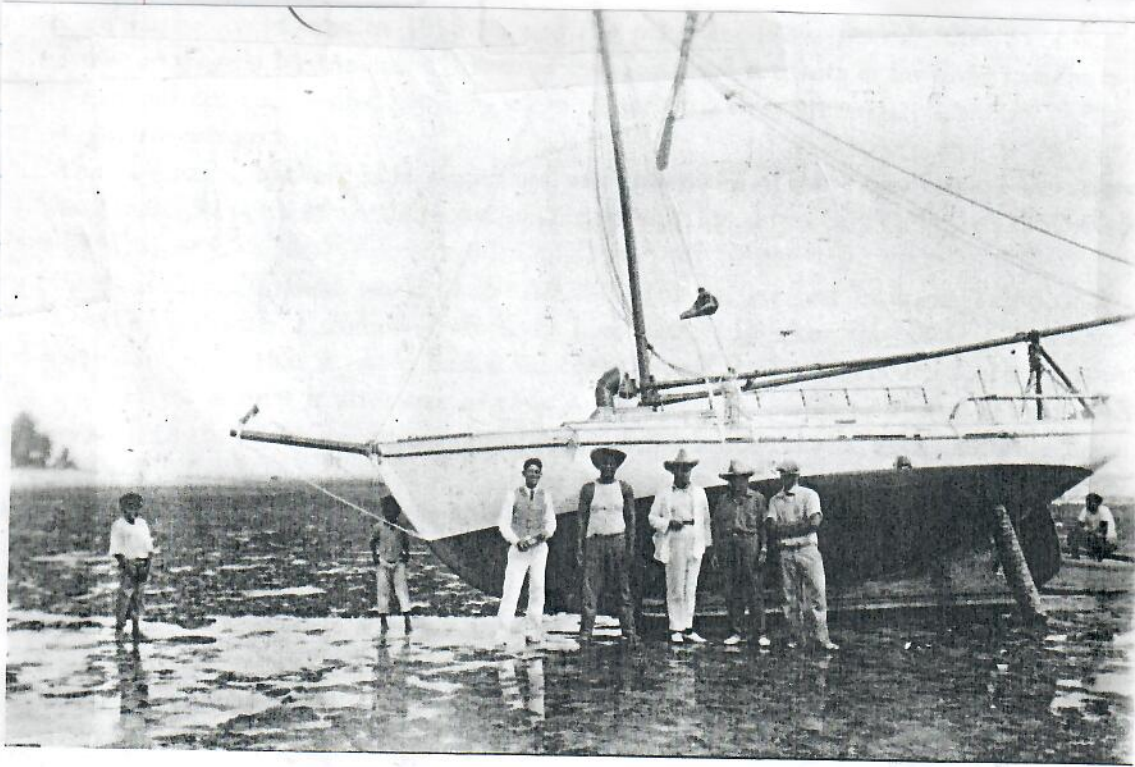
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*MATERIAL CULTURE  
OF THE TUAMOTU ARCHIPELAGO*



Frontispiece. Bishop Museum Tuamotu Expedition Ship *Mahina-I-Te-Pua* and crew at Vahitahi, July 1930. Adoption of the Tuamotuan level keel enabled the *Mahina-I-Te-Pua* to be hauled over the reef. Left to right: Kenneth P. Emory, sailor Tane, J. Frank Stimson, Capt. Vanaa Gooding, and sailor.

coconut leaves to keep the sides from clinging together. It was laid breast down (*tipapa*) as a rule, legs tucked under, but might be placed on its back if it was desired to keep the juices from running out. The intestines of the pig were cut in small sections, and either turned inside out (*chure*) or split lengthwise for cooking.

## BIRDS

Birds (*manu*) were plucked (*hutihuti*) of their feathers, placed over (*paina*) the flame of the fire to burn off the down (*huhuru tahinano*), then disemboweled (*konaē*) and baked; or the skin was stripped off with the feathers before cooking. A bird might be speared on the end of a stick (*huki i runga i te rakau*), and then roasted over an open fire till the fire burned to coals (*ngarahū*), then the bird was placed directly on the coals. Young birds were especially sought because they were tender and fat. After the bird was plucked and singed of the down, it was baked a short time in the ground oven; this short-time baking was called *kofa* at Anaa.

Bird eggs (*tono*) were of course eaten, but to what extent we did not find out, or whether they ate them raw or cooked. We did learn, however, that the eggs of the *kaveka*, or sooty tern (*Terna fascata*), will keep for three weeks or more packed in sand. Our yacht, the *Tiare Tahiti*, picked up several hundred of these eggs at a deserted island and kept them packed in sand; we were dining on some of them, still palatable, a month later.

## TURTLES

Of all the food, none—except perhaps human flesh—was held in higher esteem than the turtle (*honu*); it had to be shared with the gods at the *marae*, and was forbidden to women and children. The turtle season was from July to December,

when they approached the land and the females came ashore to lay their eggs. While some islands might not have been visited by a single turtle during some years, in two out of three years an atoll was likely to receive them in such numbers as to enable the capture of 50 to 100. When many were taken some were confined in pounds (*tipua honu*). Typically these were rectangular palisades of stout poles planted upright, 15 cm apart, in the shallow waters of the lagoon (Fig. 14). At Akiaki, a salt-water pool bounded by bluffs of limestone that a turtle could not scale served as a place of confinement.

A turtle was not slaughtered until a few minutes before it was to be placed in the oven of first cooking, the *umu rau toto* (blood-absorbing oven), or, at Vahitahi, the *auahi pirikana*. The turtle was kept alive, turned on its back. It was dispatched by cutting its throat with an eel-jaw knife, and the blood was caught in coconut cups. The transverse opening at the throat was made large enough for the insertion of the arms to draw out the intestines and, if the turtle were female, the egg sack. All other organs were left within during the first cooking.

The turtle was placed breast down on a bed of *puka* or *ngatae* (*Pisonia*) or *tohunu* or *ngeōngeo* (*Messerchmidia*) leaves laid on the hot stones of the oven. Strips of *kere* (coconut-leaf stipule) were laid over it, and the whole was covered with sand. The turtle was left in this oven for at least an hour.

Taken from the first oven, the organs were removed and the fat and flesh were cut up in pieces for the second oven, called the *auahi koea* (flesh oven) at Vahitahi. The second oven was placed a few feet from the first, and its stones were red hot and ready for the second cooking by the time the turtle was dismembered. The two ovens, prepared in advance and ready for lighting, are shown in Fig. 1. Each oven was about 1.3 meters in diameter and occupied a hollow 30 cm in depth. The heat from one oven was not sufficient to cook such a large animal protected by its



Fig. 14. Turtle pound, *tipua honu*, at Vairaatea.

shell and thick hide, but the first cooking melted the fatty tissue binding organs together and made the separation of the turtle flesh an easy matter. In the 1930s, with long and sharp knives of steel, the turtle was sometimes cut up and cooked in a single oven.

We saw the blood (*tikahiri*) poured into halves of coconut shell embedded in smouldering husk, a little flour added, and the mixture eaten after it had been allowed to warm a few minutes. Paea of Anaa said that the fat and flesh from the turtle were cut up in small pieces, kneaded in the blood, the mixture put into the emptied large intestine (*roeroe toreu*), and baked in the ground oven.

The developing eggs (*rama*) in the egg sac (*here*) were wrapped in separate, green pandanus leaves, pinned to hold them together, and baked.

The *roeroe* or intestines (removed before the turtle was put in the first oven) were variously identified—*roeroe taratara* or *roeroe vanavana* (literally, rough intestines), *roeroe hiro* (twisted intestines), which have thick walls, and *roeroe*

*noa* (plain intestines). The *roeroe taratara* were cleaned, scorched on the open fire, and eaten, as also, I believe, were the others. The head belonged to the *makona*, the one who captured the turtle, but in former days it was obligatory on his part to give it to the chief. In the 1930s he gave it to whom he wished, even to a woman; if on his next expedition he was successful he would present the head to the same person. This he would continue to do as long as good fortune favored him in his turtle hunting. The heart (*upoupo*) was also the property of the *makona*. The Adam's apple (*farona*) was dried and put on the *marae* with the *una*, or entropastron.

Various organs, such as the lungs (*papahia*) were put in coconut-leaf baskets (*tongini*) lined with *Pisonia* leaves to kill the taste of smoke, and thus baked. The fats (*havene*) were tied up in the stems of the yellow dodder (*kainoka*; *Cassytha filiformis*) before baking.

The various fats were considered very choice and were named, according to Tetumu of Faite:

*kanoe*, yellow fat next to stomach, considered the choicest

*havene miti runga*, fat on either side of upper part of breast, also called *ngako* at Pukarua (see also *poe manava*)

*havene ngenengene*, fat on either side of base of neck  
*topio*, hard fatty substance on each side of *miti runga*  
*poe manava* (according to Fariua of Fangatau, this is another term for *havene miti runga*)

*pereta*, fat on either side of liver

*huakotuku*, fat clinging to, or next to the *topio* (called *fatu rangi* at Fangatau).

At Akiaki, while watching the fats being removed from a large turtle that had just been baked on the adjacent *marae* site, I was shown a fat called *nohirei* located near the breast. Still another fat, from between the *nohirei*, was called *peva*—this fat is not present in lean animals. The various meats to be divided among the people were named:

*koea kahora*, flesh on either side of liver

*koea takaki*, flesh from neck to shoulder

*koea tangenengene*, flesh rearward of *takaki*

*koea turituri*, flesh of the lower jaw

*koea pererau*, flesh from the four flippers (called *fanga* at Vahitahi).

These names were fairly universal in the Tuamotus, for most of them were collected also from the people of Vahitahi, on whose descriptions I have largely depended for their identification.

Turtle eggs (*take*) were eagerly sought after. Father Fierens, writing in 1871, said, "The coconut, fish, and turtle eggs form the diet of the inhabitants of Takoto" [1872:129 (trans. by [?])].

## FISH

Most of the fish occurring in Hawaiian waters appear also in the Tuamotus, as well as others. Paea of Anaa gave the names of 14 kinds of sharks, 13 eels, 167 fish of various kinds, and 30 crustaceans and mollusks. We had with us copies

of Fowler's *The Fishes of Oceania* [1928], and at many of the islands secured the names of the fish illustrated by Fowler, besides long lists of others. These names were recorded by Stimson [1964] and the scientific names of those mentioned in this text will be found in Appendix B.

The fact that many of the fish near the reef and within the lagoon were poisonous (*takero*) to eat during part of the year at many of the atolls, or parts of the atolls, seriously interfered with the food supply. It was necessary to become acquainted with local conditions through the local natives, or to proceed very cautiously. How the people learned when fish could be eaten safely and when it was dangerous to eat them, I do not know. Feeding them to dogs and watching their effect on these animals would answer the question. When in doubt, natives cooked the fish with the juice from the *nono* apple, which counteracted the poison. Ordinarily the poisoning manifested itself in more or less violent stomach pains, headaches, and partial paralysis, and the effects sometimes did not wear off for many days, but it was rarely fatal.

The common explanation for this phenomenon—of fish being poisonous part of the time at certain places—is that seaweed upon which they feed produces, at certain times of the year, a poisonous substance. This may also explain the fact that the Tuamotuans did not eat seaweed, several varieties of which are so palatable to the Hawaiians.

The following fish, said Paea of Anaa, were eaten raw with coconut meat, after being pounded (*rure*) and left to soak in lagoon water for a while: the *tengatenga*, *homohomo*, *kukina*, *kutu*, and *titeketeke* (parrotfish); *ngavere* and *nonga* (wrasse); and *tutuke* (boxfish).

Fish were sometimes roasted simply by suspending them over a fire, tied by the tail to a horizontal pole resting on two forked sticks. *Kokiri* fish were spitted on the end of a stick and held over a fire till the oil had melted from their fat, then they were roasted on coals.