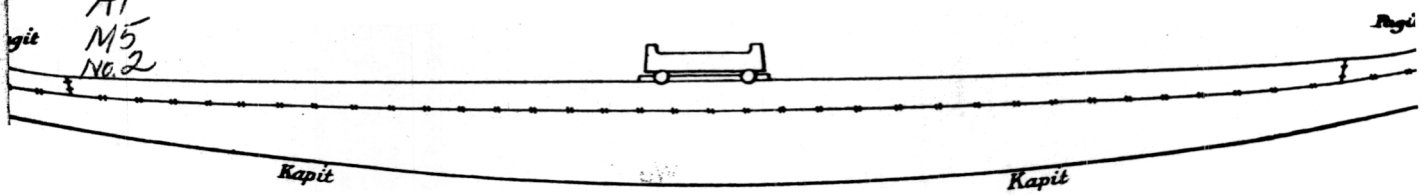
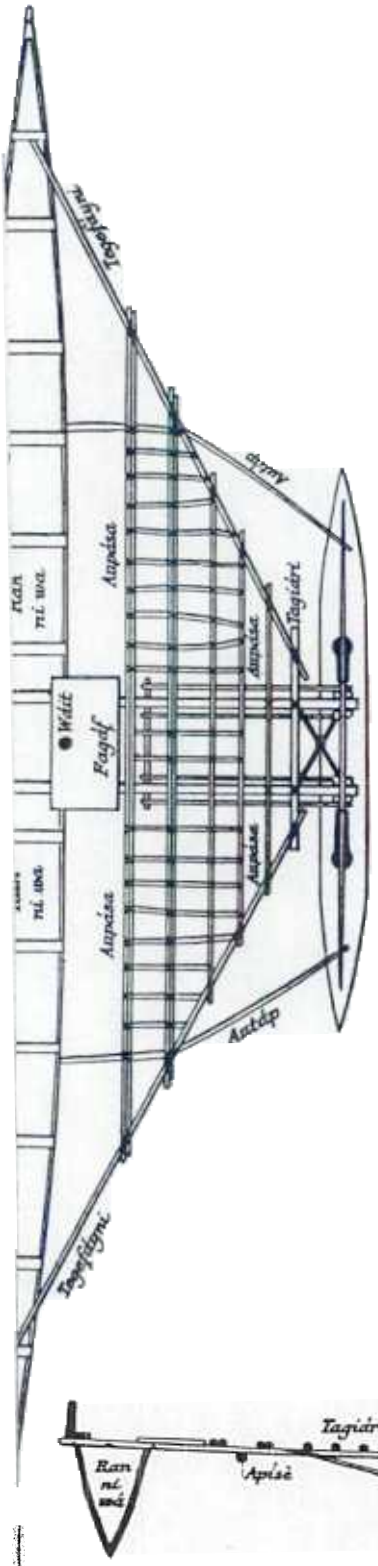
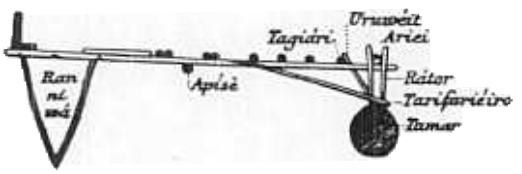
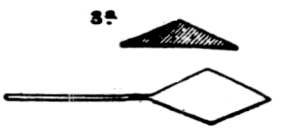
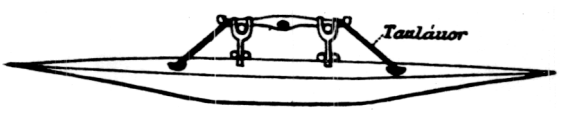




Canoes in Micronesia







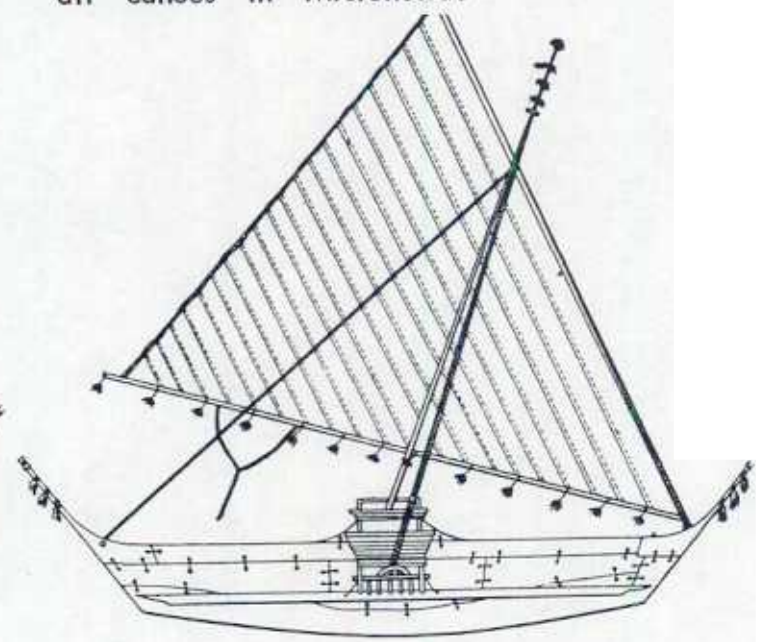
MICRONESIAN WORKING PAPERS

Number two April 1970

University of Guam Gallery of Art

David Robinson, Director of Galleries

We intend in this book to introduce the art of the sailing canoe and to give some idea of its place in Micronesian culture. To this end we have not attempted to include all types of canoes from each district, all of their uses, and all details of construction, but rather to discuss and illustrate some commonly found canoes of each district, and to explore some general principles pertaining to all canoes in Micronesia.



Yap and Marshallese Canoes

and

Cover, Palauan Canoe, drawings from Kenntnes des Karolinen Archipels, 1889.

THE MICRONESIAN CANOE

The vast Pacific Ocean, sparsely dotted with tiny land masses, produced the most adventurous and skilled seagoing race in human history. To sail through a thousand miles of open sea, to make a landfall on an island no bigger than a few square miles, that possibly is the most remarkable feat of the Pacific peoples. It required sophisticated navigational techniques developed millenia ago, and far beyond the capabilities of European navigators until early in the last century. The best known Micronesian navigational aid is the Marshallese stick chart. Similar techniques of navigating by waves and currents were utilized by other districts in Micronesia. Oral tradition has passed this knowledge on, and even now most of it still exists.

In 1686 the pirate William Dampier visited Guam. He describes Micronesian sailing canoes capable of navigating the 1500 miles from Guam to Manila in just four days. He further describes the speeds as well in excess of twelve knots; this places them among the most efficient sailing crafts in history. There can be no doubt that all but the most sophisticated racing yachts of today would be hard pressed to match the Micronesian sailing canoe in efficiency. No less remarkable is the art and craft of building the outrigger sailing canoe. Among the canoe types of the Pacific the outriggers of Micronesia are unique in their high speed and performance in the open sea.

All canoes of Micronesia are of the outrigger type. The catamarans and trimarans of Polynesia apparently never were developed here. We have instead great seagoing outrigger canoes, sometimes as long as fifty feet. These great canoes had much more refined sailing characteristics than the great catamarans of Polynesia. Though Micronesian canoes lack the elaborate decoration of Polynesian and Melanesian canoes, it must be remembered that in Micronesia everything else was subordinated to the primary requirements of speed and performance in any sea conditions. The canoe was the lifeline of Micronesia, a working rather than a ceremonial craft. This, coupled with the more limited physical resources of Micronesia, precluded the development of a more elaborate canoe style.

Micronesian outrigger canoes are double-ended dugouts with planked sides and a small deck. The sides are shaped with an adze and tied in place with sennit twine. The outrigger is also lashed in place. Even today no nails or metal fastenings are used, as this would destroy the canoe's flexibility, which allows it to withstand shocks of wave and current and reef without breaking up. The outrigger platform is designed to allow for lateral movement of the outrigger independent of the hull, much as in the independent suspension of a modern automobile.

Normally the canoe hull is made of breadfruit or Mammea logs, with mangrove and bamboo used for parts of the deck and outrigger assembly. Originally the sails were woven of pandanus fiber, though now canvas is most common. They are lateen sails suspended from a hinged mast allowing for the entire sail to be turned around to change the direction of the boat. The outrigger must remain on the windward side in order to prevent the sail from collapsing.

Whether it be a small three-man fishing canoe or a fifty-foot seagoing version, the canoe is built under the close supervision of the local master canoe builder and stored in the village canoe house. This is more than just a shelter for the canoe--it also functions as a combination meeting house and workshop for the production and repair of fishing and sailing equipment.

Traditionally, decoration of the canoe is limited to fairly simple abstract prow figures and rather severe geometrical decorations in red, black, and white. Pigments used to make colors for decoration are found in the natural dyes of certain plants and soils. Mangrove sap apparently is used in some parts of Micronesia as a binder and vehicle for the pigment. This sap seems also to function as a wood preservative. Today, of course, we find a greater variety of colors and decorative motifs, owing to the availability of commercial paints. These provide wider latitude for artistic expression and greater protection for the canoe.

The prow is usually carved separately and lashed into place. Various prow types within each district denote the canoe's use and status, though even here local variations between islands can be noted. For example, in Yap, four prow types exist, although only the popow or albatross tail type is common today (illustration 1). Types no longer in existence are the chugpin and gaprum. The thowabib type (illustration 4) is rarely seen. Today, its function as a cargo carrier and as an indicator of the owners' status is being usurped by the outboard launch. The popow is the backbone of the remaining sailing and fishing fleets of Yap.

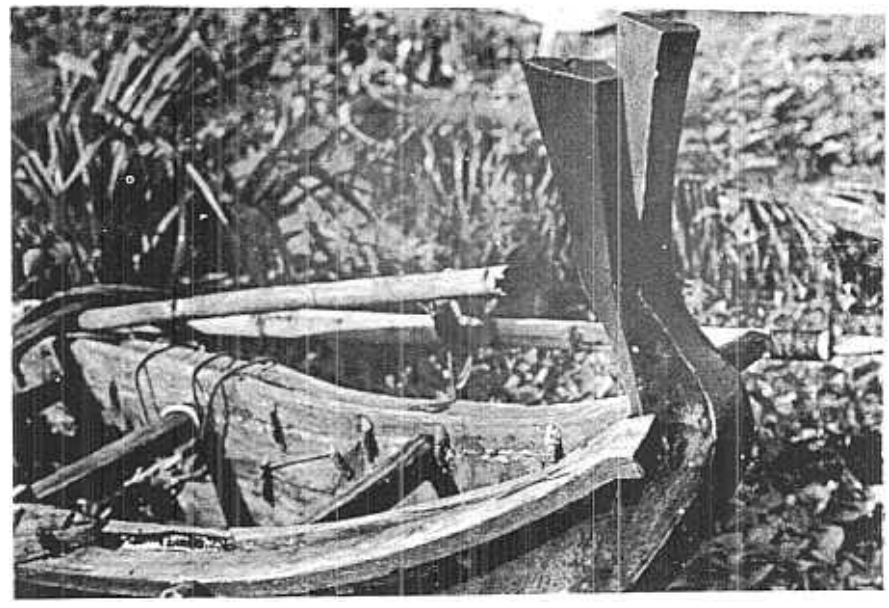
Because an outrigger canoe has no fixed bow or stern (it depends on which way the sail is set), it can have no fixed rudder for steering. Instead, a long pointed paddle is held overboard in the wake of the craft to act as a rudder.

Remarkably similar in style and construction to the sailing canoe is the Micronesian paddling canoe. Paddling canoes from two districts, Yap and Truk, are illustrated in this book. In general, the paddling canoe differs from the sailing canoe in being longer for its beam and draft, with a longer, lighter, more flexible outrigger. These canoes, used primarily for short distance trips, fairly skim across the water.

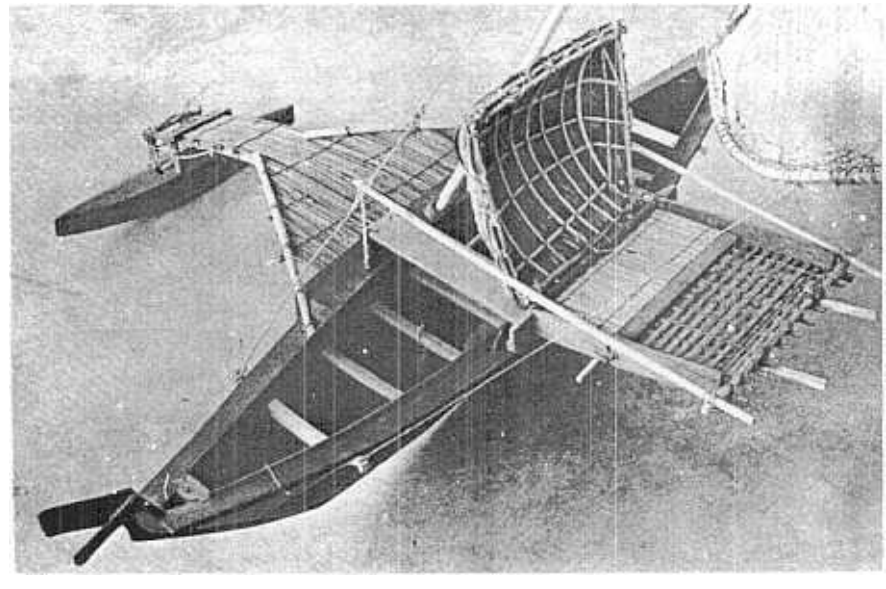
More and more the art of building and sailing the Micronesian canoe is being lost. The outboard launch is replacing it in fishing and transportation, and, with the automobile, the motorcycle, and the airplane, is making an anachronism of the sailing canoe of the Pacific

- David Robinson
Assistant Professor
of Art

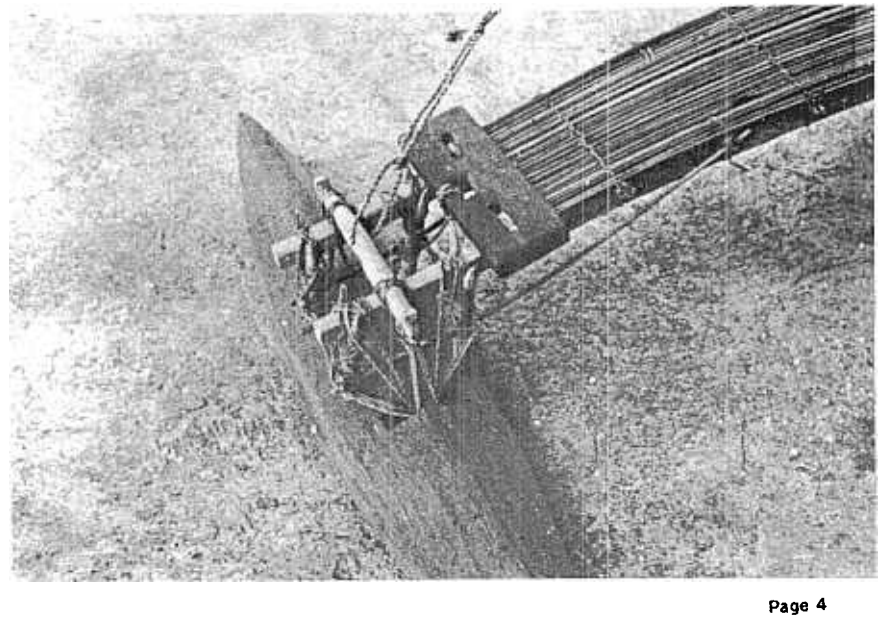
. Albatross tail prow of a Yapese canoe of "popow" type. Common throughout Yap District.

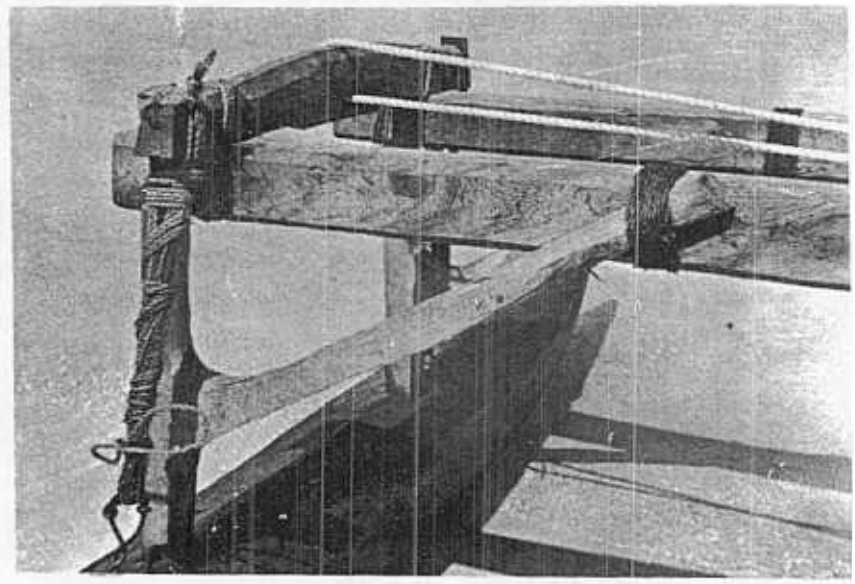


2. Model of a seagoing Yapese sailing canoe from Satawol Atoll; built by Juan Remai, master canoe builder of Satawol.

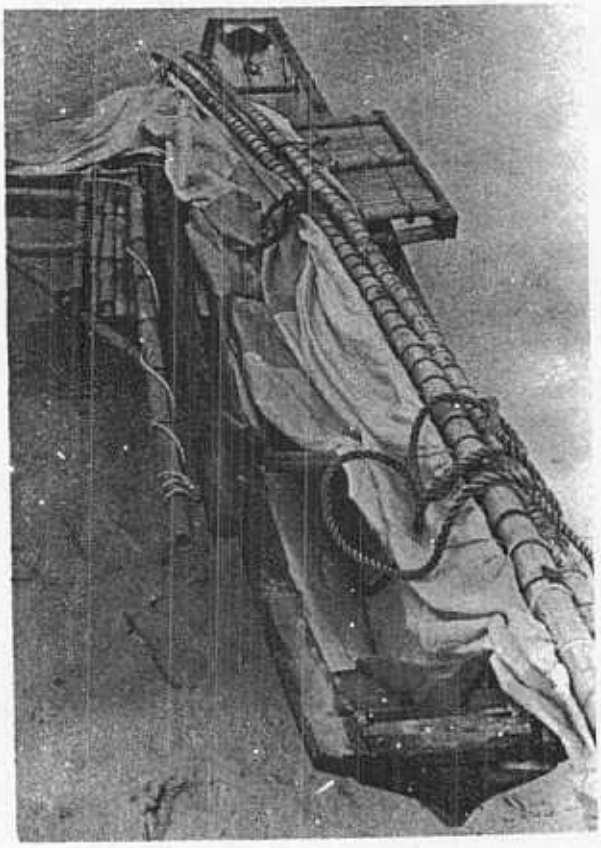


3. Outrigger of Satawol canoe.

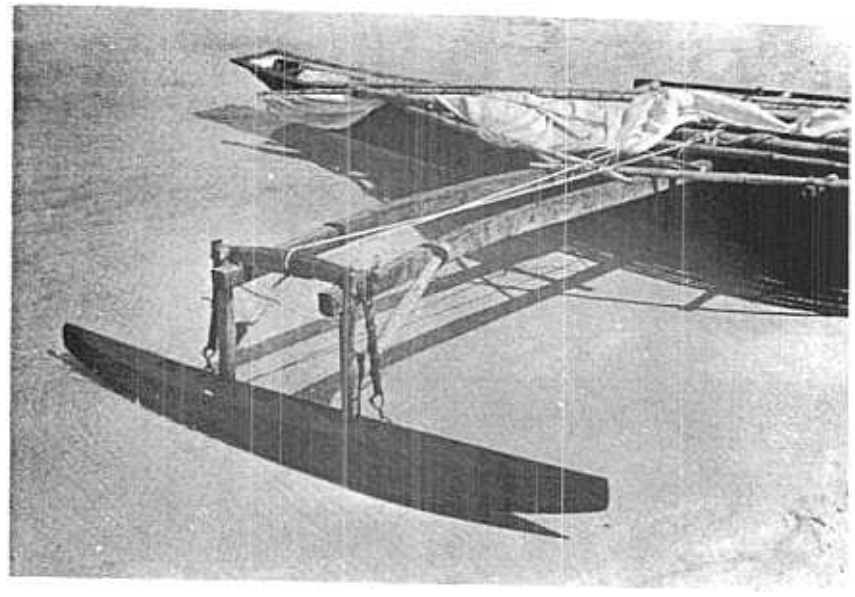




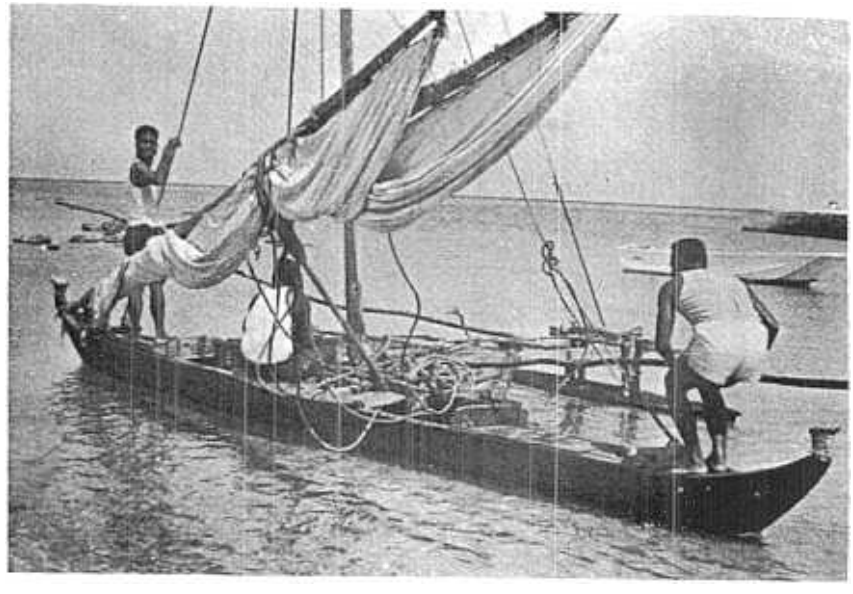
4. Detail of "thowabib" outrigger.



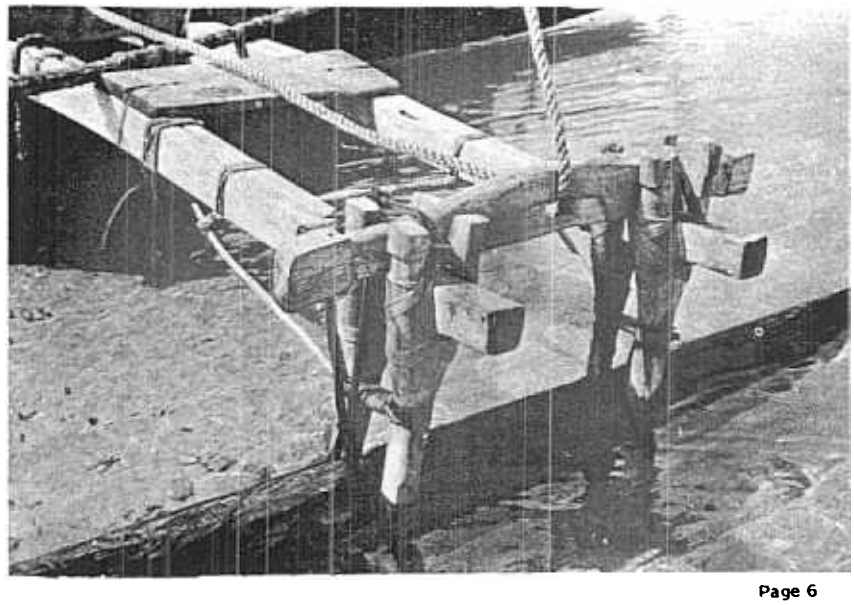
5. Sailing canoe from Yap,
of the "thowabib" type.



6. Outrigger of a "thowabib" canoe.

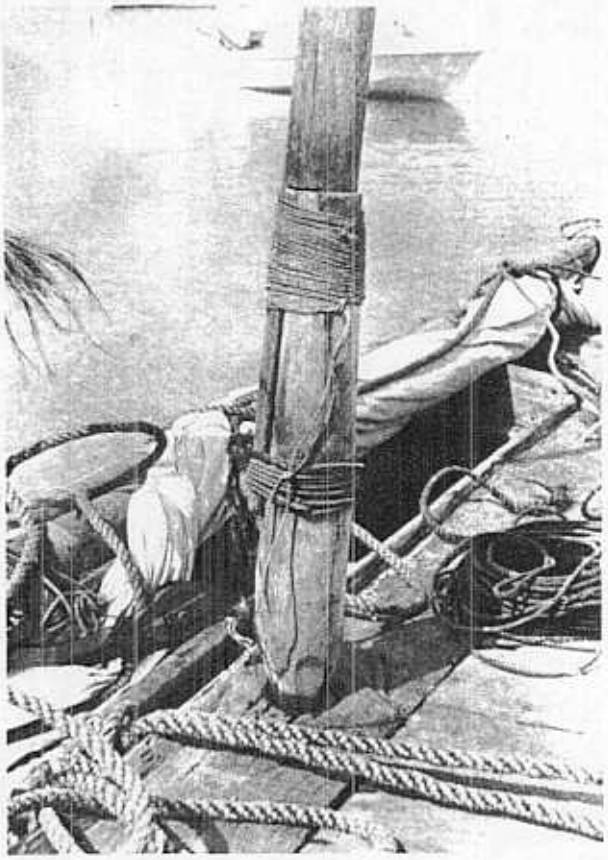


7. Truk District canoe.



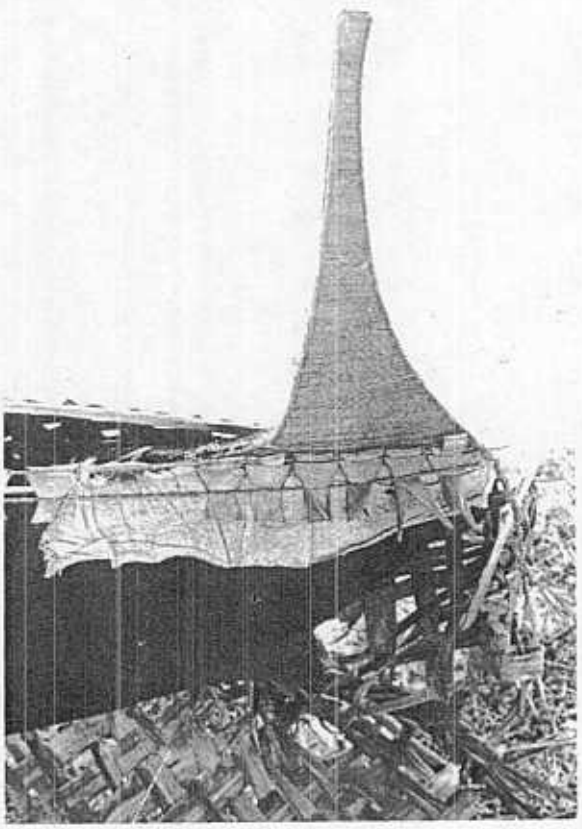
8. Outrigger of a Truk canoe.

9. Outrigger detail, Truk.



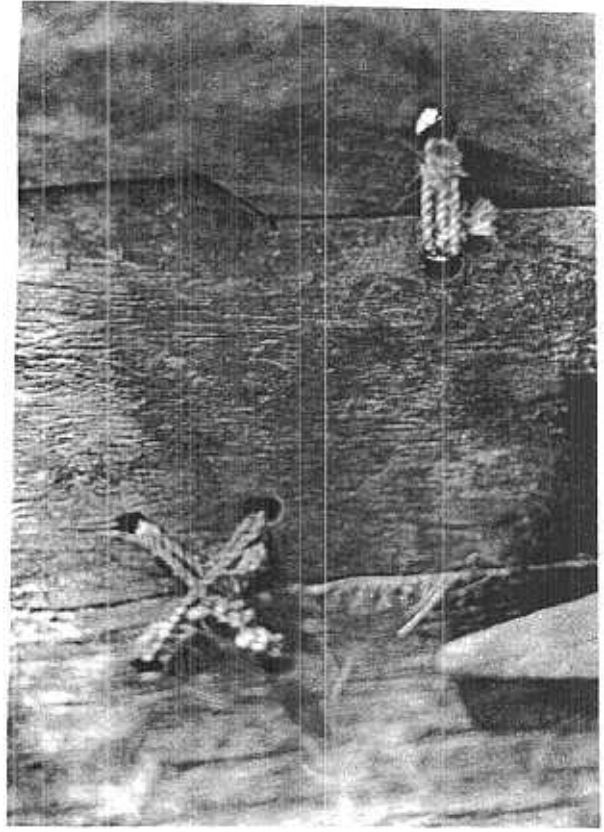
10. Mast step, Truk.

11. Method of lashing plank sides.

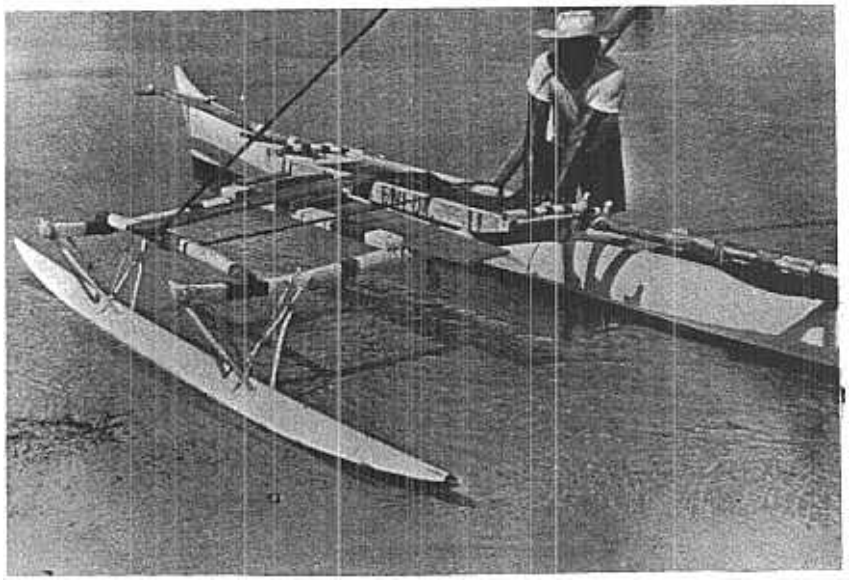


12. Sennit wrapped canoe prow, Truk.

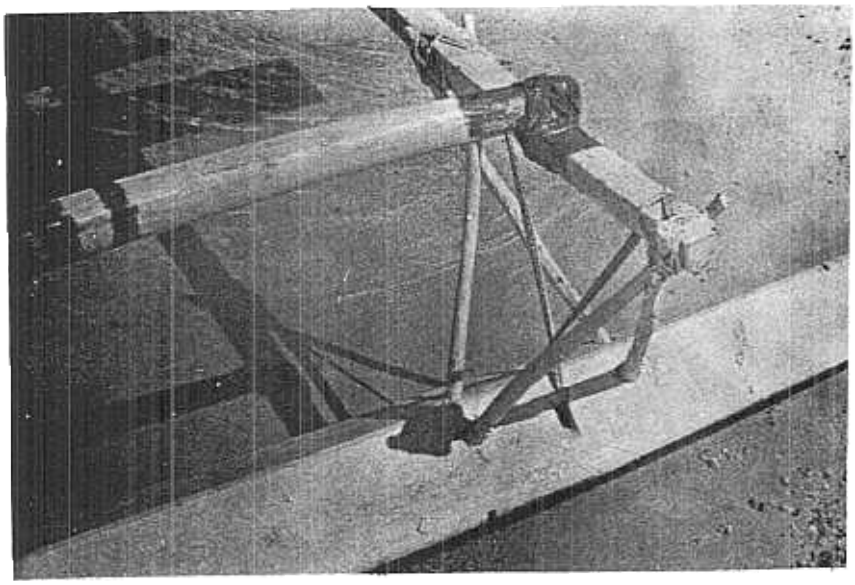
13. Ponape canoe.



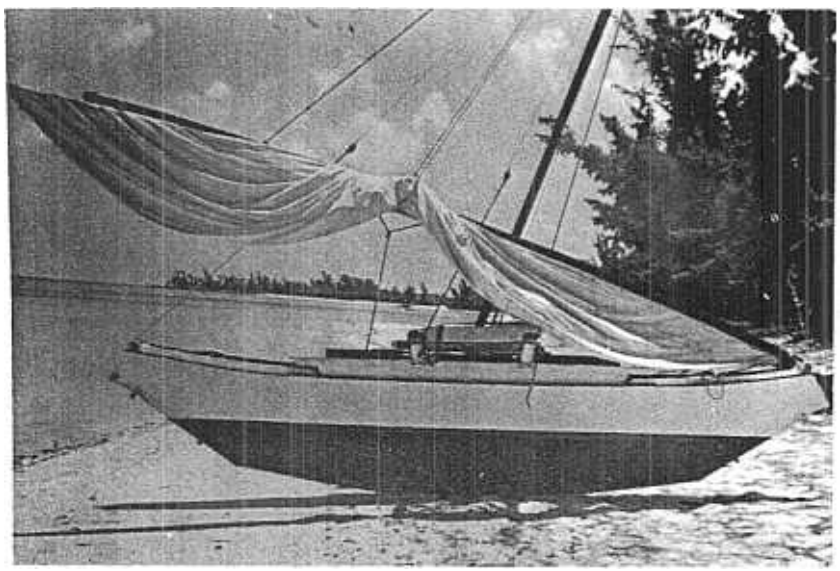
14. Detail of sennit lashings.



15. Ponape canoe.

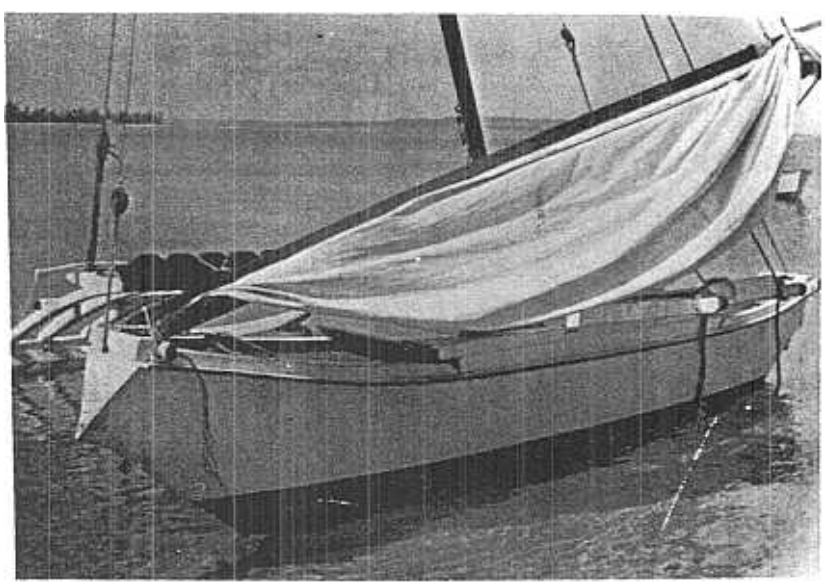


16. Detail of outrigger, Ponape.

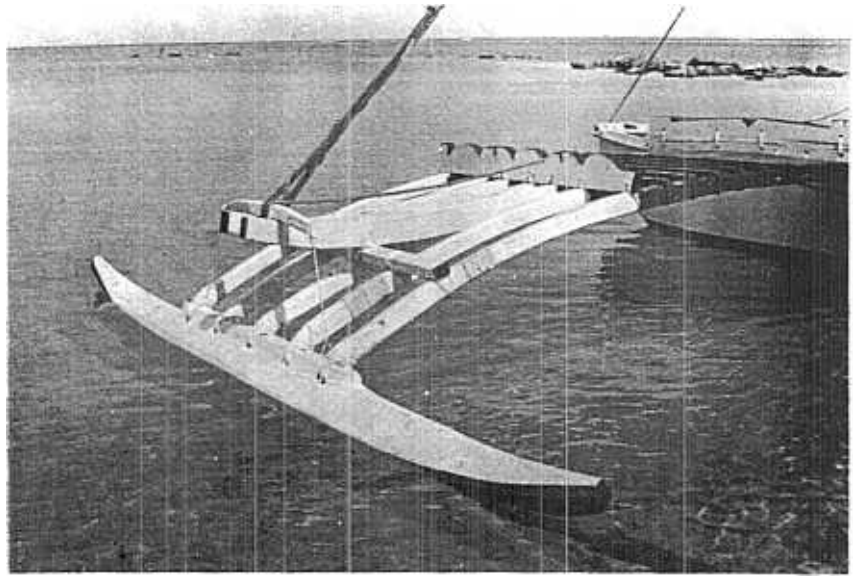


17. & 18. Canoe from Marshall Islands built by Marshalls High School in Majuro;

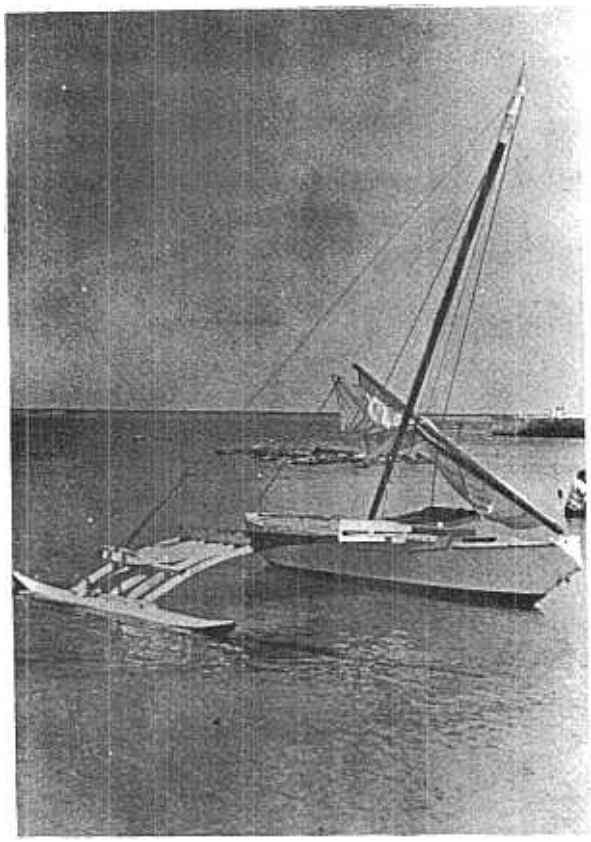
a "korkor" (interlagoon) type.



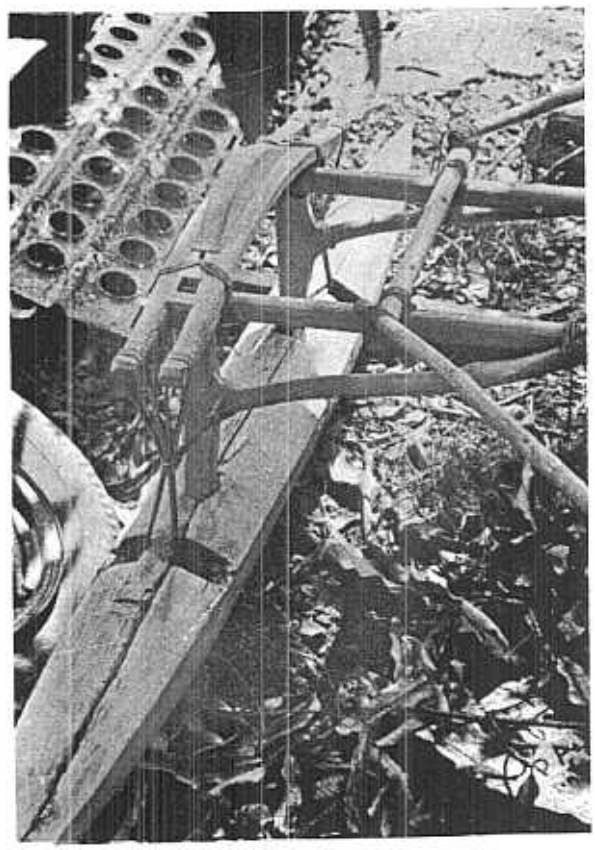
Outrigger detail Marshall Islands.

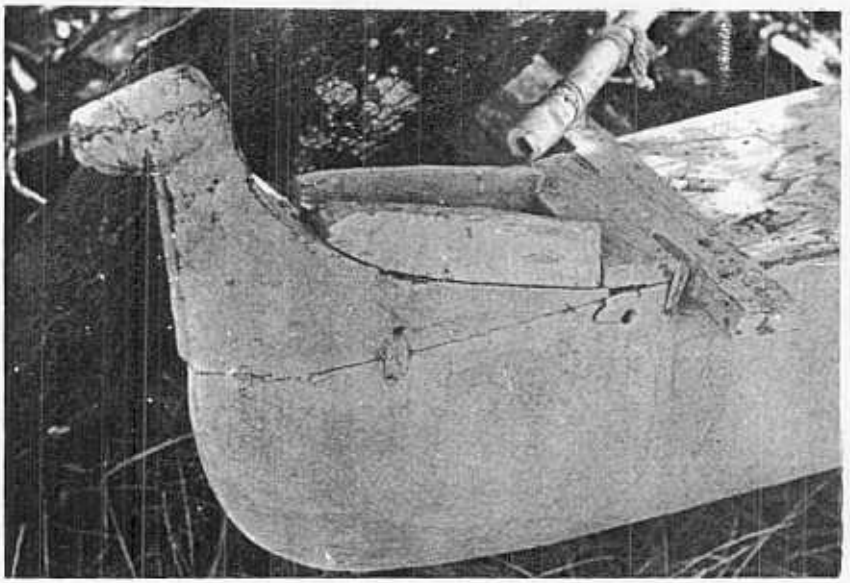


20. Sailing canoe, Marshall Islands.

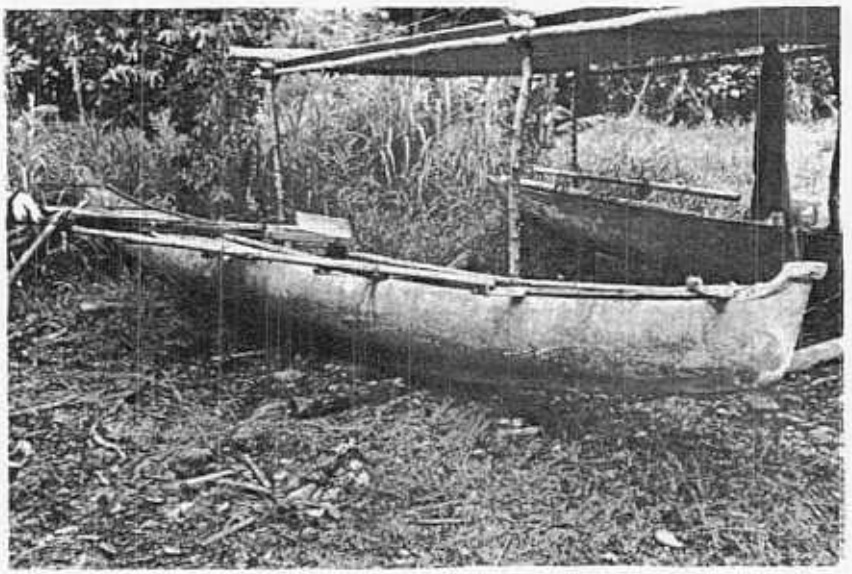


21. Detail of outrigger Palau

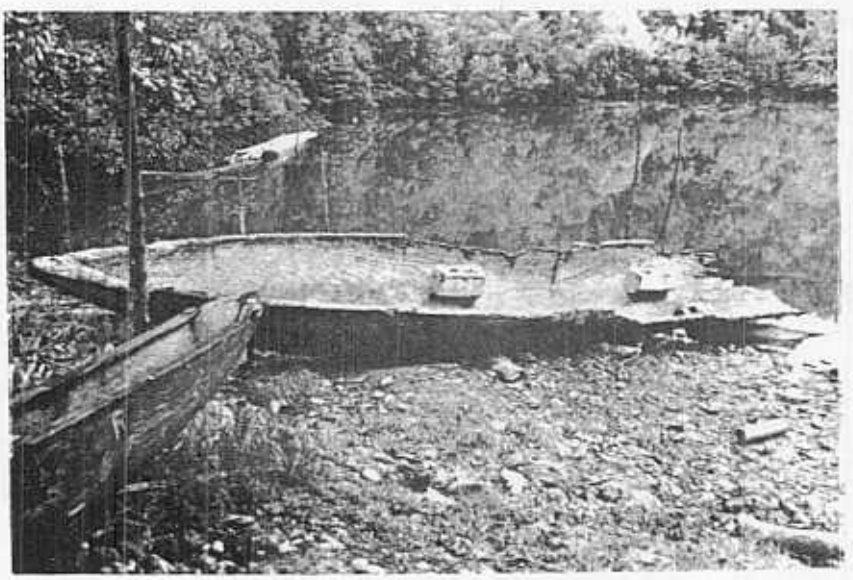




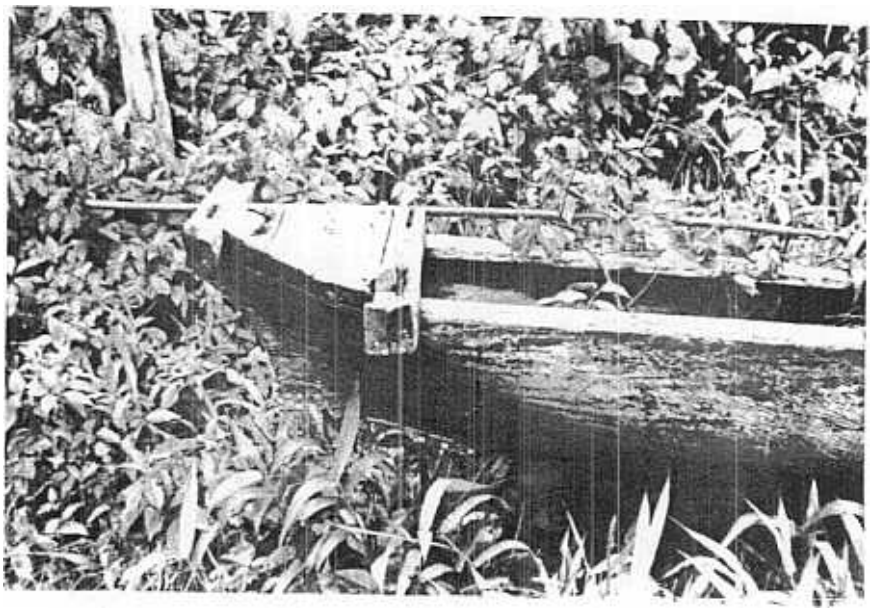
22. Prow, Palau.



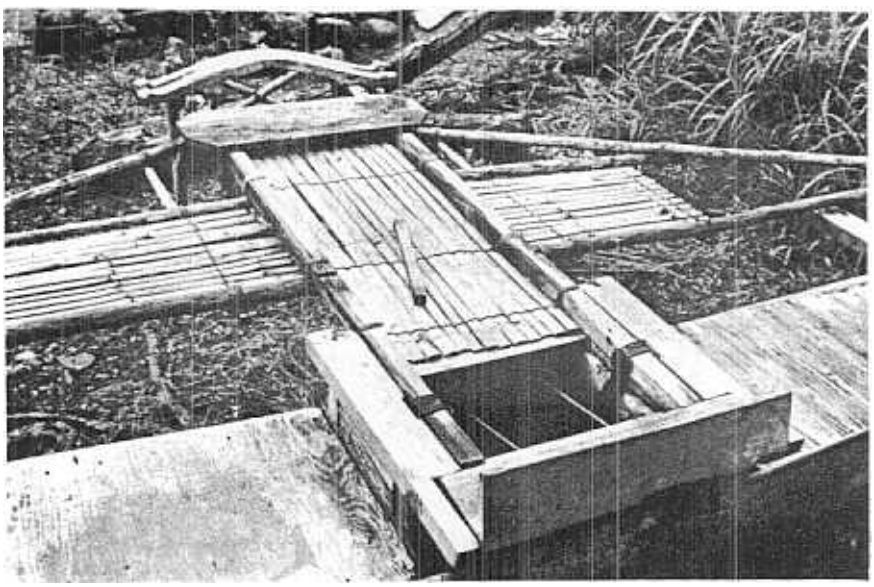
23. Partially disassembled sailing canoe, Palau.



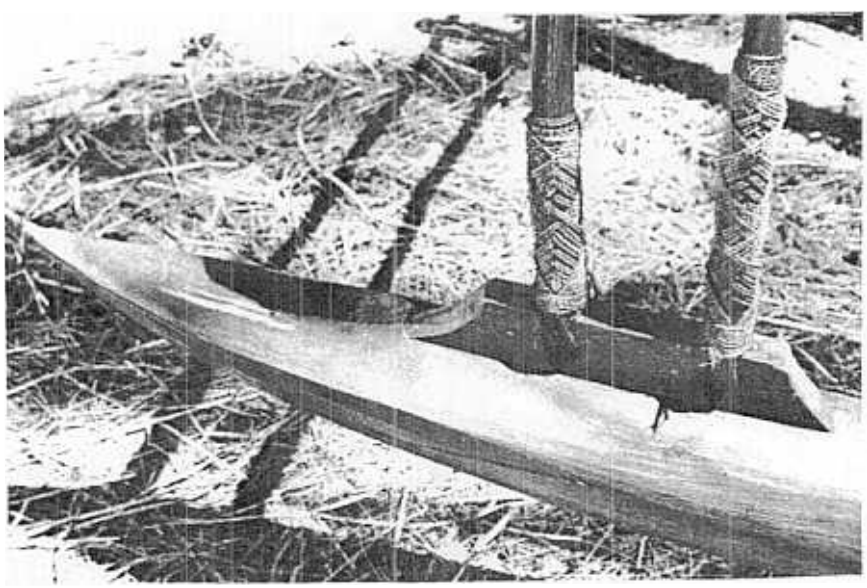
24. Hull of large sailing canoe, Palau.



Prow Palau



Deck detail Palau



Outrigger detail

Yapese paddling canoe.

28. Paddling canoe, Truk.

29. & 30. Paddling canoe, Yap.

photographs by David Robinson

ART AND THE CANOE HOUSE ON SATAWOL

Satawol has no lagoon. Waves break against the two miles of fringing coral reef a few hundred feet from the shore. The helmsman of a boat or canoe approaching a landfall must use much caution in order to find one of the few entry points where the edge of the reef is lowest. The deft boat handling necessary to survival on a coral island is expected of visitors so the excitement manifested by spectators on the beach has to do with greeting guests rather than any fear of mishap.

The passage to the reef with the quieter waters inside it as well as the broad white beach might be seen as an almost direct entry to the canoe house where the life of the sea meets the life of the land.

The massive structure with its thatched roof supported by three foot thick tree trunk pillars fitted with heavy crossbeams is about 70 feet long and half again as wide. Toward the front of the building, where the afternoon sun offers sufficent light for work, an old man can be seen shaping the yellow-colored log of a breadfruit tree. The tool in his hand is a steel adze made from a wide chisel blade lashed to the handle with sennit cord. This tool has retained its traditional shape except that the metal blade was introduced into Micronesia about one hundred years ago, replacing the original one made from the Tridacna or giant clam shell. Canoe outriggers, nets, fish traps and poles of various sizes are stored on the crossbeams above his head. These will eventually be repaired and absorbed into daily use.

Some men are napping in canoes or on top of them, while others talk quietly as they repair fish traps. Two men, their backs resting against a newly repaired canoe, are making new ropes by rolling coconut fibers against their thighs with efficient practical motions. Off to the side, kneeling in freshly piled wood shavings, a group of carvers are at work on bowls or fishing tackle boxes which will later be used or saved to be sold to a traveller on the inter-island ship. Later they may find their way to a shop at the district center in Yap.

As evening puts an end to the work of the day the men who belong to the canoe house will drift in for conversation and to drink tuba made from freshly gathered coconut sap and now fermenting in five gallon jugs.

The talk may consist of the work of the day disposal of the bags of copra stored in sheds and awaiting the field trip ship which drops anchor just outside the reef for a day or two every few months.

When the evening's drinking and talk are over, young unmarried men will sleep on woven palm leaf mats amid the wood chips piled up as a result of the efforts of the canoe builder.

On the day that the copra trading vessel arrives, the tempo of activity at the canoe house will increase. The bags of dried coconut fragments will be weighed there by the buyer before they are taken to the ship. Business involved in the trade will be transacted there and payment made for the newly traded crop.

The canoe house is the center of a man's activity on the island and the canoes within it visible symbols of his role. Since every canoe in frequent use must undergo some repairs each year, the characteristics of each of the canoes become familiar to the members of the canoe house work group. New craft are frequently being constructed. A small paddling canoe may be built by one or two men within two months,

while a large sailing canoe may require more than a year to construct. Such a large canoe may take two or three weeks to repair depending on whether the seams as well as the sennit cord lashing are renewed.

The small size of the reef hardly provides sufficient fish for the entire population. Open ocean or blue-water fish in the surrounding waters include bonito, wahoo, mackerel tuna and marlin. These provide the greater part of the protein in the Satawolese diet. A man's most important subsistence task is fishing, while a woman's is gardening. Men will assist in the harvesting of taro and women may help in certain fishing tasks such as gathering shellfish or turtle hunting. Women are seen in canoes usually only as passengers. Occasionally young girls will help take a paddling or a small sailing canoe out to the field trip ship.

In Satawol, as in other Micronesian communities, children are assigned tasks seen as appropriate to their sex roles. At the age of six or seven a child will spend less time playing with his friends and begin to help adults in their everyday tasks. By the age of twelve, the boys who have been accompanying the men in fishing are often going out in small groups themselves to fish. Canoe building and navigation will be taught in the natural course of events throughout youth. On attaining manhood no one will have the right to belong to one of the canoe houses simply because he is a man. When married he will ordinarily join one of the canoe houses of his wife's clan.

As William Alkire outlines in his description of work groups on Lamotrek, "the fundamental rules followed for affiliation to a canoe house are

> A man retains rights to and obligations at the canoe house of his matrilineage.
>
> 2. At marriage, a man gains certain rights to the use and obligations for the maintenance of the canoe house of his wife's matrilineage.
>
> 3. A man may claim similar rights to a canoe house traced by more distant relationships (e.g., adoption, patrilateral) if he is unable or unwilling to make a claim to one by a more direct matrilineal relationship."

On Satawol, category two seems to prevail among work-social relationships.

The canoe house, then, is a place of vital importance to the men of the island. To be a man is to be identified with a canoe as fisherman, sailor, navigator, or canoe builder. The fish that are caught through his activity mean the difference between life and death. Times of bad weather, when sailing is difficult or impossible, are times of great hardship. The sparse livestock--a few pigs, chickens, and dogs--though equally shared among these cooperative people, are insufficient to sustain life satisfactorily for long periods.

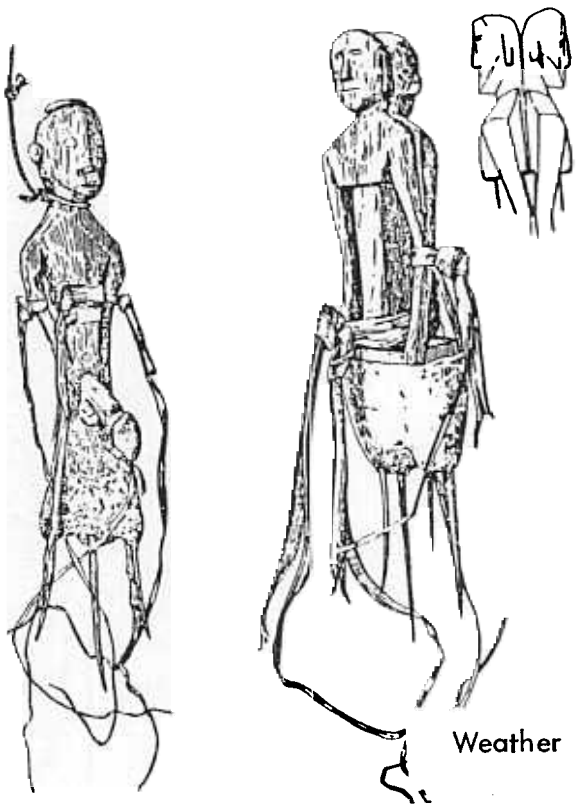
For such times the lore of fish magic is sometimes utilized. All navigators and canoe builders can seek the help of their patron spirits to invoke success in the vital enterprise.

A weather effigy is created using from two to six stingray spines which can be seen as legs or tentacles. These are attached to a simplified wooden carving, consisting of a trunk and head, by means of coral cement and coconut fiber rope. They are never taken to a dwelling but kept at the canoe house after an appropriate chant at a particular coconut tree--perhaps one given to the singer by his mentor in navigation This is usually located near the canoe house. The effigy or hos as it is sometimes called in reference to the stingray spines at its base, is used to ward off bad weather during voyages, and to turn away storms from the island.

The canoe house itself serves a quasi-magical function, gaining its power as the repository of the valuable canoes. Here anxiety is relieved by the presence of the canoes themselves as well as the navigator's magical paraphernalia. It represents coming back safely to the home island after long voyages, and the emotions attached to situations where canoes did not return. It represents growing up to manhood since unmarried young men sleep at the canoe house rather than at the family residence. It is the corner drugstore, town meeting, village square and artistic center of the community. Here the vital skills necessary for mastery of

the environment are taught. Here disputes are settled and informal court is held, as well as school.

Although the canoe house is essentially the base of operations for the men's work group, women are frequently found there attending community meetings, bringing food and stopping to joke or gossip.



Weather effigy

Children run in and out, playing in its shade or listening to the conversation. Last summer at one of the canoe houses it was decided that the older boys, many of whom were on vacation from the Outer Islands High School on Ulithi, should undertake navigation training. An elderly navigator was selected to instruct the high school boys in some of the traditionally oral and formally prescribed navigation rituals. The boys appeared with notebooks and ballpoint pens as they had learned to do in high school.

Canoe building techniques are much the same as Augustin Krämer has described them in the proceedings of the German South-Seas Expedition of 1908-10. The steel adze is more efficient than its shell predecessor, and canvas sails lighter and stronger than pandanus fiber ones, but the essential canoe form remains the same. The keel section is taken from a single tree to which additional adzed planks are fitted. The canoe sections are sewn together by coconut sennit twine. The canoes are functional and dynamic because of this construction method, so that the action of the waves literally puts them together rather than weakens them.

The word for adze, the single most important tool in canoe building, is the same as the word for the title given to the senior male clan member involved in political decision-making. He is called telalihailing or, literally, "adze of the clan."

In a culture where art and life are integrated, the nature of art and its functions are easy to see, but the border between art and other everyday activities is blurred.

Often extremely well designed, the carved or woven objects of Satawol serve a useful or sometimes ritual purpose. Although the craftsmanship and form of well made objects are admired, they are never made solely to be looked at. Micronesians will often respond to the notion of an art separated from function by saying, "We don't have any on our island."

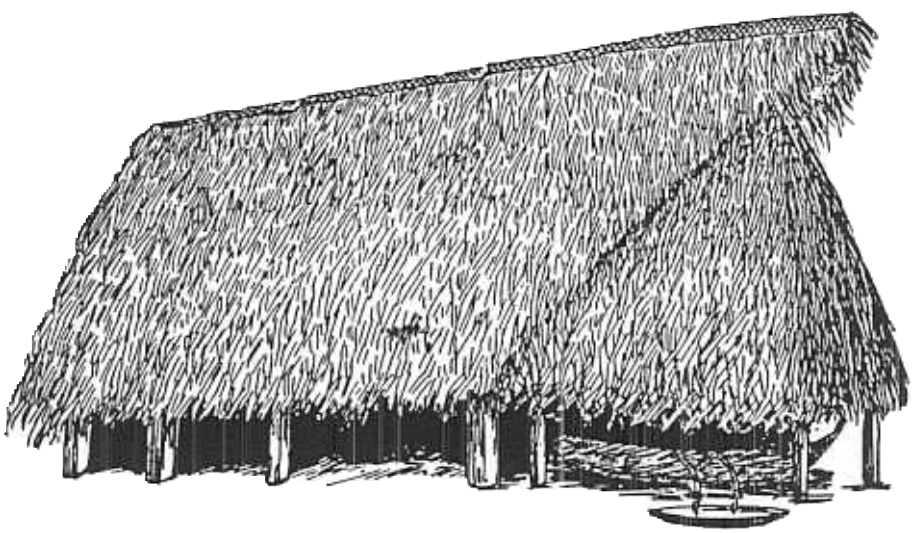
In a more land-centered larger island community such as Yap, other forms may remain much the same as they have been, but the canoe has undergone change and gradual decline. In the outer islands, however, the canoe house has a function connected to the basic adaptations of life. There a canoe is seen and admired for its form and craftsmanship as well as its service to the community. The history of each craft can have an almost mystical significance depending on the adventures undergone by its crews. The carved prows and painted eye symbols add embellishment quite beyond function. Its constant use in the working day lends it a value hardly separated from life itself. The skills of the carver support and enhance its function and grace.

In the district centers where traditions are undergoing constant change, the indigenous arts suffer from cultural shift. As manufactured household articles are more easily purchased, fewer are made within the community. The canoe is neglected and finally abandoned in favor of the outboard motor. The skills required to construct it are known only to a few older men. Hopefully, other arts may develop applying fine

craftsmanship and intense forms of expression in the service of the community, but the traditional artistic expression of which the canoe is a powerful example has become more detached from the central concerns of daily life.

More complex living, other goals and greater participation in the industrial-commercial society are reshaping the Micronesian community's social matrix. It may be said for the present, though, that for the people of Satawol the experience of the canoe house serves as an intensification ritual during which life is reaffirmed by art.

- Marvin Montvel-Cohen
Associate Professor of
Anthropology and Art



Canoe house

(Drawings, Ergebnisse der Südsee-Expedition, 1908-1910.)

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