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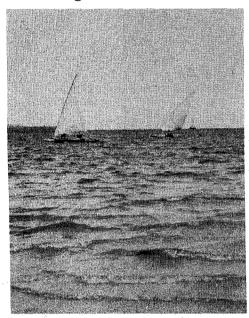
RFG - 23
Segeju Tribe
II - Fishing off the Tanganyika Coast

c/o Barclays Bank Arusha, Tanganyika June 19, 1956.

Mr. Walter S. Rogers
Institute of Current World Affairs
522 Fifth Avenue
New York 36, N.Y.

Dear Mr. Rogers:

An expected knock on the door woke me from a light sleep. I leapt out of bed, slipped into my shorts and shirt, and taking a bottle of cold tea and a cheese sandwich, prepared the night before, went out into the moonlight. A low hum of conversation came from the water's edge, twenty yards from the rest house, as the Moa fishermen prepared their outrigger canoes (hereafter to be called by their Swahili name ngalawa) for the day's fishing. It was 3:30 in the morning and the boats were going out to sea on the tide. Inwengo Hogo, the man who had waked me, was the captain or nahodha of an ngalawa. He had agreed to take me fishing with him that day and was waiting impatiently. The boat, named Dukuduku, was floating in about two feet of water, its minimum draught, and was ready for



Outrigger Canoes

sailing, with mast in place and fishlines neatly coiled. I waded out and was helped into the dugout by the baharia or sailor. The sail was hoisted and we started to sea with a light offshore breeze.

All about us were the sails of other ngalawa, pearly and translucent in the moonlight, for the whole fleet leaves each morning before the tide goes out, which would leave the heavy hulls stranded on the beach. glided noiselessly over smooth water so that soft talk from the other ngalawa could be heard. The silence of the night deepened as the light Out came the paddles, and breeze died away. for the next hour there was hard work to be done, relieved at intervals by a freshening of Moa is at the head of a the offshore breeze. Bay about three miles deep. At the entrance to the bay we dropped anchor in eight fathoms of water and fished on the bottom for bait -- a kind of herring which runs about eight inches in After catching a dozen or so of length.

these fish we started paddling again in a dead calm, but after a few minutes the first breaths of the ocean breeze struck us and we were again under sail. The dawn was now perceptible in the East, and for a brief minute the light from dawn and full moon were of equal intensity giving the sails and seascape a flat, shadowless aspect. Then the sun bobbed up out of the Indian Ocean and with it came a steady wind from the sea.

We set course southwards, sailing parallel to the shore for half an hour, till we came to a shallow coral bottom where cuttlefish were known to abound. There we cast anchor again and fished for cuttlefish, which are considered to be

the best bait for deep-sea fish. A herring was tied to a hookless line and cast out twenty or thirty yards from the boat, then drawn slowly up to the boat. The idea is to lure the cuttlefish close to the boat where they can be snagged with a large triple hook on the end of a short line. We tried for an hour but had no luck at all, though other ngalawa in the area were catching all the cuttlefish they wanted. Finally we gave up and were given a large cuttlefish—all we needed for the day's fishing—by a neighbor. During this time the sail had been lowered and the mast dismantled, the mast and spar being laid across the outrigger supports parallel to the dugout. Now the mast was again seated and the sail hoisted and we set off seawards to fish in earnest.

In broad daylight I was able to observe more closely the construction and rigging of our craft. The hull of a Segeju ngalawa is a dugout carved from the bole of a mango tree. In cross section it is narrow and pointed at the bottom, which has the effect of a keel and improves its sailing Because it floats low in the water and is not very buoyant, the sides are built up with hand-hewn planks from eight to twelve inches wide. thus giving it adequate freebord to keep out the ocean waves. bow is curved upwards and contains a small deck carved out of the solid log. The rudder is attached to the rather pointed stern with iron fittings. outriggers-two by ten planks, about twelve feet long and pointed at both endsare placed out about eight feet from the hull and are attached to two cross beams by short supports which drop them below the gunwhales. When an ngalawa is floating and balanced the plane of the outriggers is inclined about 30 degrees from the vertical, the bottom edge being closest to the hull, and they just clear the water surface. Their function is more for stability and to prevent the canoe from capsizing in a gust than to prevent side drift through their keel effect.

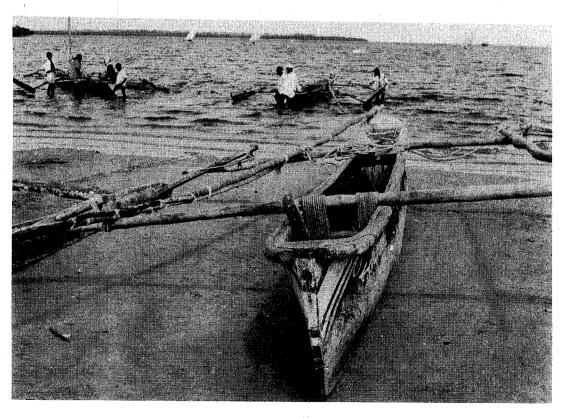
The mast step on an ngalawa is a sturdy plank between the gunwhales just forward of center. As a rule there are two other similar cross planks forward and aft of the mast which are used as seats or shelves for placing fishing gear. These cross planks are secured with iron spikes. All the other rigging, except for the rudder fittings, is fixed with rope lashings. stubby mast, about twelve feet high in the average ngalawa, is secured by a single shroud, tied to an outrigger support on the windward side and changed to the other side on a different tack. The lateen sail is suspended from a spar which is thirty to forty feet long. A single bamboo stem is used for a spar when available; otherwise several slender mangrove poles are lashed together to give the necessary length. A hoisting lanyard is tied to the spar Is a little below its center, so that the forward lower corner of the sail must be tied down to keep the sail up in sailing position. the bow or the forward outrigger support depending on the set of the sail The lanyard passes through a simple eye at the head of the that is desired. mast, and the hoisting of the sail requires the full weight of a sailor. The main sheet is tied to the aft cross pole with a hitch that can be undone quickly with a jerk by the nahodha. Most, but not all, of the ngalawa have an eye painted on the bow. According to the Segeju, this is for the purpose of aiding the vessel in seeing its way through the sea and has no other magical significance; for the Segeju fishermen, like many other seagoing people', regard their boats as living creatures. Decorations and names may be painted on ngalawa according to the fancy of the owner or nahodha.

As we sailed straight out to sea with a spanking breeze, the baharia got the fishing tackle ready. At Moa the fishing from ngalawa is done

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The Nahodha of an Ngalawa



Close-up of an Ngalawa

only with lines. The lines—stout twisted cords of cotton which are stiffened by applying a preparation of clay, black dye, and grease—are coiled on a stick laid across the gunwhales. Each ngalawa carries seven or eight lines, two lines being trolled at one time as a rule. If necessary several lines can be tied together to give more play to a large fish which threatens to break a single line. The handling of these lines without fouling them is a matter of great skill and requires considerable training. A single large hook is fixed by a wire leader to each line and the bait is tied to the hook.

Our cuttle fish was cut into strips six inches long, the hooks were baited and we started fishing. The first plan of the day was to try for the king fish and bonita which swim in the deep water inside the barrier reef seven or eight miles out from shore. Very shortly after putting out the lines a large bonita was hooked. The nahodha brought the boat into the wind to stop its progress and played the fish himself. bringing it in alongside the boat, but then it shook out the hook and The Segeju do not carry gaffing hooks of any kind and the landing of large fish presents them with their most difficult problems. the case of large sailfish and marlin, no attempt is made to bring the fish into the boat; after being subdued it is lashed outside the boat with ropes and lines, after the fashion of Hemingway's "Old Man of the Sea." Sege ju consider sail fish to be very dangerous, capable of killing a man Three sail fish about six feet long were brought to inside an ngalawa. the fish market during my stay at Moa.

After this initial encouragement there was a long barren period and for the next hour and a half we caught nothing. My lack of breakfast brought on hunger pangs and I ate my sandwich washed down with cold tea, which is very refreshing in such circumstances. I ate my sandwich guiltily, though I had been advised by the Africans to bring it, because they take no food or drink with them for the ten or twelve hours that they are at sea. From time to time we would sight some gulls and on drawing closer would see a turmoil in the water. This was caused by bonita following and feeding on schools of sardines. Occasionally a large fish would leap clear out of the water. We sailed through a number of these places but with no luck: the bonita were not biting.

The morning wind died and there was dead calm. The sun was hot and the sea and sky glittered dully like thick bottle glass. Mwengo, our nahodha started singing to keep awake. He had the most unmusical voice I have ever heard. Hamsa, the baharia, succumbed and went to sleep, balanced precariously over the water on an outrigger support -- a five-inch pole. We were then five miles out at sea. I tried to worry about how we would ever get back without wind, then I also dozed off in spite of Mwengo's singing, braced against the side of the dugout, because it is too narrow to sit down in. A year or two ago a Moa fisherman who was sleeping on the cross pole as Hamsa was now doing fell off and sank into the sea never to be seen again. He had been seized by a jini (from the Arabic jinn). the absence of any corpus delicti, it is commonly believed that he may still be living in a watery village at the bottom of the sea with these super-Fishermen who know the place of the accident sometimes natural creatures. leave offerings there for the jini. The Segeju believe profoundly that luck in fishing and safety at sea are entirely in the hands of jini.

At eleven o'clock the wind sprang up again blowing away our day-

dreams and setting our boat in motion. Almost immediately there was a strike on one of the lines, and Mwengo hauled in a dolphin fish. it trail beside the boat for a moment before landing it. Its color in the water was incredibly beautiful -- irridescent like a rainbow decorated Slender and streamlined, with a blunt nose like with comely polka dots. the bow of a airplane, the dolphin is one of the swiftest swimming of all This one was about three feet long and weighed between ten and Out of the water its color quickly turned into a dingy twelve pounds. green, like a dying leaf. The line was rebaited and thrown out again and soon another dolphin was hooked. This time the fish was left trailing on about twenty feet of line to lure other fish of the school, because dolphins like to follow a leader. Other lines were put out; one to manage myself and instantly I caught a dolphin. Handling the line to pull in even this comparatively small fish hurt my hands, but the Segeju fisherman never wear gloves and haul in fish up to 150 pounds with their Two more dolphins were caught before we lost that school. bare hands.

The breeze had become quite brisk by now, blowing from the northeast. This day in late March was the very end of the northeast monsoon. For the following week or two the winds were variable with frequent calms, and during that time the rainy season started. Then the southeast trade winds sets in to blow steadily for four or five months. Six weeks later, when I revisited Moa and again went out in an ngalawa, I was actually frightened: the southeast wind blew so hard that the boat was barely manageable in the heavy seas. The fishermen dislike the period of the trade wind and are often forced to stay in a day or two each week because of excessive wind. But this morning the wind was ideal for sailing and we tacked briskly through the sea searching for another school of dolphin.

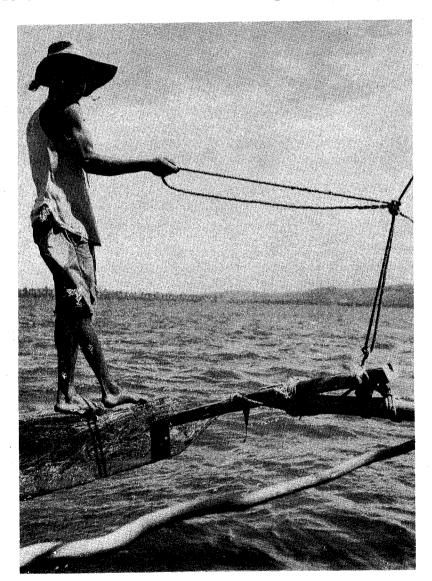
The ngalawa was surprisingly stable with its deep, narrow, thirtyfoot hull. It rode nicely on large swells, but had a tendency to plow through choppier waves and ship water because of its weight. For the same reason it is not very responsive to the rudder. In changing tack, the boat is not brought into the wind, but is sailed away from the wind in a circle, which results in considerable loss of course. This involves an extensive maneuver, as the lanyard must be loosened, the spar shifted to the other side of the mast, and the shroud supporting the mast changed to the windward This work is done by the baharia who balances himself on the gunwhales, as there is no deck to stand on-only the narrow bottom. is capable of sailing quite close to the wind, with the close-hauled sail almost parallel to the hull. Then the baharia stands out on the cross pole to counterbalance the heeling of the boat, steadying himself by grasping the In order to let himself farther out on the pole, he sometimes ties a short rope to the shroud.

During the course of the morning we struck two more schools of dolphin fish and caught twelve fish altogether. They were all of exactly the same size. Other ngalawa, some of which had been fishing outside the reef, now came into sight as they converged on Moa Bay. We brought in the lines and set course for home, churning through the water at full speed in the same direction as the waves. A hundred yards off our beam a sailfish leapt out of the water in a flashing arc. A second time it shot straight up, balancing its six-foot length for a moment on its tail before toppling over on its long spiked nose. The tide was in again as we ran up on the

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beach at two o'clock after being at sea for ten and a half hours. We were thirsty and tired and looked forward to the hot meals which our wives should have waiting for us.

Mwengo and Hamsa were satisfied with the catch, which brought in This money was divided three ways, according 30 shillings at the market. The nahodha received 12 shillings, the baharia 10, and to Segeju custom. The latter was an old retired fisherthe owner of the ngalawa 8 shillings. man named Machemba Manga who had saved enough money to invest in an ngalawaabout 500 shillings. Besides the ngalawa he also furnished fish lines and tackle and paid for all repairs, and in return he received somewhat less Very few of the ngalawa are owned by the men than a third of the catch. who sail them: the ownership belongs to older men like Machemba as a rule. Mwengo had been dubious about taking me fishing with him in the first place. He likes to carry two baharia whenever possible, and felt that I would be dead weight and might impede the fishing. We had agreed that I would pay a day's rent for the ngalawa (25 sts) if no fish were caught or only a few. it turned out I was not a dead weight but did my share of paddling, baling,



Counterbolancing an Ngalawa

and fishing, and the catch was above average for that season. Nevertheless I gladly paid a fee for my first lesson in ngalawamanship.

The scene now changes to a small beach on Boma Peninsula about 12 miles south of Moa. It is a month later and Betty and I have established a camp at Boma Beach. which is used as a landing place by the fisherman of the village of Bomandani. The men of this village fish with traps and go to sea in dugout canoes which have no outriggers--these are called mitumbwi (sing. They are also mtumbwi). carved out of mango trees but are different in shape: a cross section resembles a broad U instead of the narrow V of the ngalawa. I was fascinated with these from the first time I saw them under sail. Why didn't they tip over? (They carried 200 square feet of sail and more.) still do not quite understand now they

keep their balance, but in fact they do sometimes capsize. On our first visit to Boma one of the mitumbwi had failed to return from fishing on the previous day and the crew was presumed to be drowned. Just as we were about to leave, a truck from Tanga drew up to the village honking its horn as it approached. The people understood that this meant good news: the canoe had tipped over in a squall far out at sea and the crew—a man and his son—had drifted for five hours in the current; then they were picked up by a passing dhow which brought them safely to Tanga. Thanks to the protection of the jini they had not been attacked in the water by sharks.

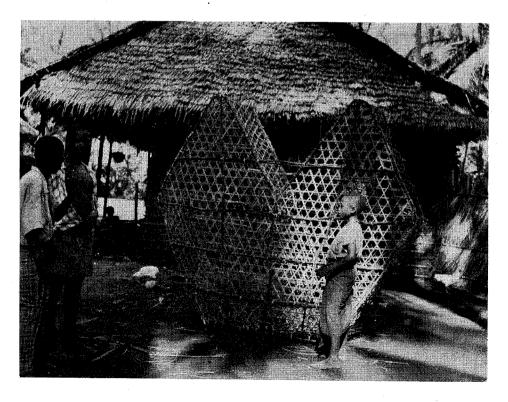
My first voyage was in the mtumbwi owned by Arajabu Angua, an experienced fisherman who served as baharia on that trip. Mohamed Abdallah, a strapping youth of twenty acted as nahodha, having recently completed his apprenticeship in sailing and fishing. We pushed off at six o'clock in the morning, after having spent the previous half hour on The tide was almost out as we hoisted sail and the beach collecting bait. moved seaward on a gentle south wind. After half a mile out we just cleared the inner reef, to which Betty and I sometimes waded at low tide in order to "goggle" in the deeper water outside. Arajabu's traps were all at the outer reef at this time. Later in the season, when the sea got rougher, he would have to bring them in to more sheltered positions. We sailed straight out to sea for over an hour (I did not bring a watch because, as I had been warned, we were drenched with spray much of the time). The beach gradually dropped out of sight below the horizon, then our camp which was situated a The reef here is eight miles out from shore. few feet higher. water near the reef was very clear and silky green in color. bottom could be seen twenty and thirty feet down. Here the reef itself was covered with about two feet of water at low tide, although further north long banks of golden sand could be seen standing six feet above the water.

On arriving at the reef we dismantled the sail and mast, and as there were no convenient outrigger poles to lay them across they were an Arajabu knew the reef by heart and poled the encumberance in the canoe. mtumbwi straight to his first trap, which was located in a shallow basin in the coral about five feet below the water. These traps were placed so that at high tide fish swimming over the reef could enter them, but they must be well below the surface so that they are never left high and dry, or too much The traps are flat and have the shape of two agitated by surface waves. diamonds joined together at their obtuse angles and with one of the open V's The funnel-shaped entrance is located at the point of the In size they are five to eight feet in diameter and one to two uncovered V. The smaller ones are woven with strips of palm leaves, reinforced feet thick. by a frame of finger-sized sticks. The larger ones are sturdier and are made from slips of tough green wood obtained by splitting thin branches of The traps rest on the bottom of the sea, and in shallow mangrove trees. places stones are placed on them to prevent them from being moved by the waves.

When the first trap was located, the anchor—a lump of coral—was cast and Mohamed went over the side and brought up the trap. It was balanced across the gunwhales of the canoe, one of the seams was unfastened, and the two or three small fish that it contained were slipped through the opening into one of the large pouches of woven palm leaves which had been brought for that purpose. The trap was then rebaited with handfuls of moss and



Mitumbwi - Dugout Canoes



Fish Trap Used at Boma

echinoderms, put back in the water, and weighted down with stones. were located on the reef and altogether they only produced a dozen fish, none weighing over a pound and a half. One of the traps was empty and had a large hole smashed in the side, apparently made by a shark or some other large fish in order to get at the small fish inside. The mtumbwi was then poled to the edge of the reef (poles are used in preference to paddles whenever the bottom is within reach) and then paddled for a half mile through the deep water inside the reef to where a big trap was located. Arajabu took careful sightings on landmarks and peered down into the rippled water. satisfied with the location, he tossed over the anchor. Mohamed grasped the end of a rope, jumped over the side, and disappeared below the water. a minute later there was a tug on the rope, which was a signal for Arajabu to start hauling on it even before Mohamed reappeared.

The big trap was pulled up onto the canoe. In addition to a few small fish, it contained eight large ones averaging five or six pounds in weight and representing four different varieties, all of them good eating. corner of this trap a large hook was tied to a line not more than ten inches Occasionally a large baracuda, kingfish, or shark is caught on these hooks; the shortness of the line prevents it from swimming away with the trap. A few hundred yards further north, in somewhat shallower water, a second large This could be seen from the boat, so it was not necessary trap was located. to dive for it. Arajabu threw in a three-pronged wooden hook weighted with coral, snagged the edge of the trap, and pulled it up with the attached rope. This trap had an even larger catch. Our two large pouches were filled to overflowing and a half-dozen fish lay loose on the floor. One of the largest fish flopped over the side. Mohamed was after it in a flash and almost recovered it before the fish regained its senses and made off. the Segeju have a healthy respect for sharks, I asked Mohamed if he was not afraid of being attacked while diving in these waters. He answered, fatalistically, that no shark would attack a man unless ordered to by the jini. the jini were offended with a fisherman, they had many other ways of harming Therefore one could only try to stay on good terms with the jini him at sea. and hope for the best. Arajabu took up the discussion on the return voyage and told several stories involving eyewitnesses of jini. Nevertheless, many



Mtumbwi Sailing at Boma Beach

of the Bomandani fishermen are afraid to dive
and always place their
traps in shallow water.
Evidently the belief in
jini represents the kind
of faith which requires
an effort.

The stepping of the heavy mast, as the dugout wallowed in the choppy waves, brought a short prayer to the jini to my own lips.

Before the sail could be hoisted it had to be retied to the spar in several places where it had come loose; this was done with strips of palm leaf. The rigging

of <u>mitumbwi</u> is done more casually than in the case of <u>ngalawa</u>. The Moa fishermen use sound rope for all their tying and lashing, but on this voyage we had only brought a bundle of leaves from the wild date palm to be used for that purpose. Even the rudder of our <u>mtumbwi</u> was tied to the stern with leaves. We had spent about two and a half hours tending the eight traps, and in the meanwhile the south wind had freshened. The trip back to shore took less than an hour, and we landed at twelve o'clock. The <u>mitumbwi</u> usually came in from the outer reef by eleven o'clock, because they are not able to cope with the high winds and seas later in the day.

Sailing in an mtumbwi is more exciting than in an ngalawa. The whole crew are required to lean back into the wind in order to counterbalance the boat, and there are no cross poles for support. The nahodha must change his course and the set of the sail more frequently to allow for small changes in wind. The mast of a mtumbwi is located further forward than in an ngalawa, which makes it more stable at the cost of some reduction in sailing speed. The lateen sail, attached only to a spar across the top, spills a certain amount of wind under the bottom of the sail, which is loose. This is one reason that it is possible to sail such a wobbly craft. If it were rigged with a triangular sail attached to the mast and a lower spar, it would no doubt blow right over.

After we had taken out all the fish we needed for our own use, the remainder were sold to a buyer on the beach for thirty shillings, which was considered an excellent day's profit by the Boma fishermen. At Moa they would have bought a higher price--perhaps forty-five shillings. of Bomandani possesses a fleet of ten mitumbwi. They normally go fishing with This work accounts for three quarters of the able-bodied a crew of three. Two of the boats were absent when we first came to men of the village. They had gone to Dar es Salaam several months earlier, making the voyage in three days with the north east monsoon. One of the boats returned before we left; they had sailed back on the southeast trade wind. in miniature, is the same principle of using prevailing winds which is followed by the dhow fleet that sails between southern Arabia and East Africa. Ngalawa sometimes go mitumbwi also sail as far north as Mombasa and Lamu. to Zanzibar and Pemba. The incentive for these long fishing trips to foreign water is partly, at least, merely to see the world. The profits are not particularly large, because wherever they go there is competition from local Boats from other places also come from time to time to fish short periods out from Moa and Boma. There is no idea of having exclusive proprietary rights to the fishing off one's own shore.

Fishing by line with ngalawa and by trap with mitumbwi are the two Moa, with its fleet of forty-five principle methods used by the Segeju. outriggers, considers that it possesses the ngalawamen par excellence of the whole coast, while the Bomandani fishermen think that they have best mastery Most of the fishing villages have mixed fleets of of the tricky mtumbwi. Sibutuni, for example, which is larger than both kinds of sailing canoes. Bomandani and has a landing place two miles north of Boma beach, possesses A number of other fishing methods are also ten ngalawa and seven mitumbwi. used -- weirs, small traps, nets, and spearing and clubbing fish at night by torchligh-but these are distinctly minor and are often carried out by women Several Segeju villages in Mansa Bay possess small dhows and and children. long nets, a mile or more in length. These are used for seining fish on

broad shallow reaches of water and require a large group of men to man them. Sometimes they make large catches, but on the only day that I was able to observe them they had little luck.

Segeju fishing methods in general appear to be much the same as the methods used in other parts of the coast. If there are differences in detail, I lack the comparative information to distinguish them. The Segeju believe that their style of fishing is unique, at least in quality. They seem to take joy and pride in their fishing, which makes it something more than just an economic activity. It also sets the Segeju off from the coastal people living further inland who subsist mainly by agriculture, and is no doubt a factor supporting the strong sense of tribal unity which they possess, despite the leveling influence of the common Swahili culture in which they participate.

Robert F. Dray

Robert F. Gray

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