

## The-Method of Dolphin Hunting and the Distribution of Teeth and Meat : Dolphin Hunting in the Solomon Islands 2

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## **The Method of Dolphin Hunting and the Distribution of Teeth and Meat: Dolphin Hunting in the Solomon Islands 2**

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### **INTRODUCTION**

There are many places where people hunt dolphins or whales using harpoons, nets, and driving techniques. As to the driving techniques of smaller delphinids, the Izu Peninsular in Japan and the Solomon Islands are well known [MITCHELL 1975].

People utilize these dolphins or whales for various purposes [AKIMICHI 1993]. For example, on Lembata Island in Indonesia, people hunt whales and dolphins from May until October for meat [BARNES 1991]. In Fiji they used the teeth of sperm whales for primitive money [QUIGGIN 1979].

Walter Ivens described the dolphin hunting of the Solomon Islands in his book [IVENS 1972], and in 1966 W.H. Dawbin reported on the hunting which takes place at Bitama village in north Malaita [DAWBIN 1966]. Based on my observation during my research at Fanalei village on south Malaita, I will describe hunting technique and distribution of prey.

In the former studies the words "porpoise hunting" are used, but I use "dolphin hunting" instead. In the Solomon Islands they hunt only Ocean Dolphins (Family Delphinidae), and therefore I want to distinguish between Porpoises (Family Phocoenidae) and Ocean Dolphins (Family Delphinidae).

### **1. DOLPHIN HUNTING**

#### **1) The History of Hunting**

An oral history is handed down by the storytellers of the village. According to this, a Polynesian woman named Barafaifu introduced dolphin hunting from Ontong Java atoll, 500 km north of Malaita Island. Barafaifu traveled around Malaita to find the best place for hunting. Finally she decided to settle in Fanalei. She gave the Malokwalo clan, already settled there, the magic stone (*taraa*) capable of gathering dolphins with the spell of the sea spirit and they started hunting. During that time they did not hunt dolphins every year as they do today. In the past they were required by the local chief to prepare a feast for visitors from other villages each time they held a hunt and such preparations were

considered to be troublesome.

The clan ceased hunting in the mid-19th century when Maesiora and his son Baena of the Malokwalo clan were the only transmitters of the spell. One day they were killed by a devil and the spell of hunting was nearly lost. Fortunately a young man named Oikada, who belonged to Fanalei's chief clan Ngora, had overheard Maesiora and Baena talking about dolphin hunting before they died. Oikada held a dolphin hunt only one time for the Malokwalo clan, when the Suraina clan demanded 10,000 teeth in compensation for a Suraina man's death. After that the Fanalei people ceased to hunt dolphins for about 50 years.

The oral history does not tell the exact reason why they stopped hunting. However, Christianity was introduced during this period, and that prohibited many traditional customs. Perhaps dolphin hunting was also prohibited at the same time. Furthermore, the most valuable dolphin called *robo au*, the melon-headed whale, (*Peponocephala electra*) was getting very rare, and this may have been another reason.

In 1948 during the Maasina Rule movement, William Masura, who was the Father of Fanalei, and other chiefs revived dolphin hunting under Christianity. In 1958 Father Martin Fia introduced dolphin hunting to Walande, the sister village of Fanalei, located 10 km north of the village. He propagated other Lau villages of North Malaita including Ata'a, Felasubua, Sulufou, and Bitama, and so dolphin hunting also started in these places. However, it is Fanalei that has been, and still is, the most active hunting place of all.

## 2) The Hunting Tools

The dolphin hunting of Malaita does not require modern tools. Only simple tools made of local materials are used. The canoe which is used for hunting in the middle sea is a single canoe without an outrigger. Large constructive canoes, such as *Saralaku*, *Beroko* and *Olaisula* have been used before, but today small dug-out canoes known as *Aigalua* are most popular. To drive the dolphins, the hunters hit two 15 cm diameter stones (*nagi*) under the sea. This very hard, unsplit flint is found in Rauafu island about 50 km north off Fanalei.

When a hunter finds a school of dolphins he will raise his flag (*boko*). This flag is about 80 cm square and is composed of a strikingly colored cloth attached to a 3 m length bamboo rod. By using the *boko* the visibility of each canoe is increased to more than 6 km. Hunters also use the flag to communicate with each other in the middle sea, as a means of showing which way to go, or for pointing to the present location of the dolphins. Besides these tools they use a net in the few cases when it is hard to drive dolphins in areas of mangroves.

## 3) Searching for Dolphins

Dolphin hunting is called "*oto asi kirio*" or "*ala ni kirio*". *Oto asi* means "to go out into the open sea" and *ala* means "to surround something". The canoe formation when driving dolphins is called *ala* and a group of dolphin hunters is

also called *ala*. *Ala* is usually formed with 20-30 hunters. There are 52 households in Fanalei, and they are organized into one *ala* or hunting group.

Almost all adult men in the village go hunting every day of the season during the cessation of the trade winds (*ara*). Figure 1 shows events for the whole hunting season of 99 days in 1994. Hunting was not done on Sundays and was

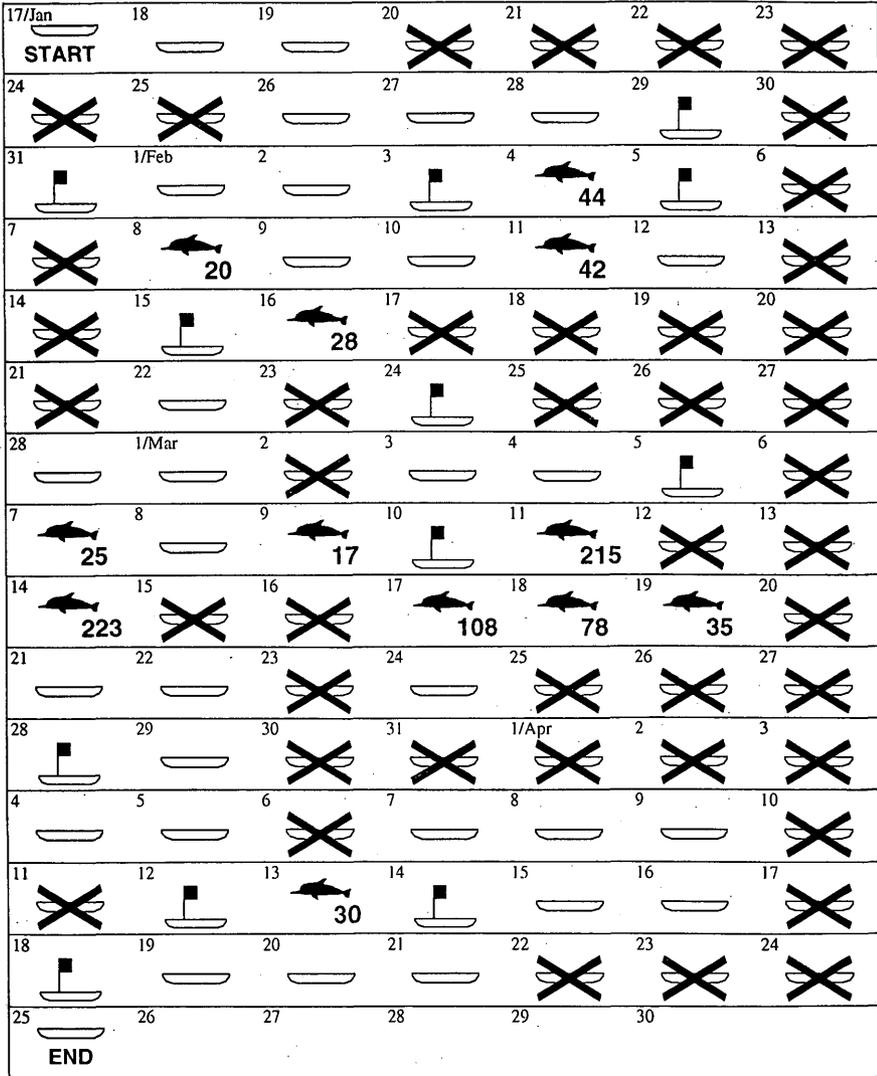
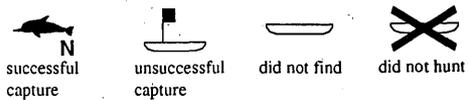


Figure 1. Record of the 1994 Dolphin Hunting Activity



also affected by bad weather and two tropical cyclones but they managed to go on 56 days. During 56 days they found dolphins on 24 days, and half of the time they succeeded in catching prey. Within 12 days of hunting 865 dolphins were caught. These numbers fluctuate from year to year but not by a large amount. The number of prey and days on which successful hunts occurred within each month, averaged over a 7 year period is shown in Figure 2.

Hunting starts at about 4 o'clock in the morning. A large trumpet shell is blown in the village and every hunter gathers at the meeting house (*tofi*), where they pray for success in the day's hunting. After the short service they leave the shore and set out to the dark open sea. Before dawn, the wind is comparatively weak and it is cool on the surface of the sea. During this time they paddle out as far as they can.

The hunters sometimes find dolphins near the shore. These schools are called *Raa fafonafo* but in many cases dolphins are swimming more than 10 km offshore. After moving out to the open sea, canoes are deployed to wait for the dolphins. The distance of one canoe from another is more than 1 km away (Figure 3), and it is difficult to see even the next canoe on the horizon. The visible limit in which the canoes can be seen depends on the weather or waves and at most is 3 km. No one knows when and where the dolphins will come. The hunters float on the sea in solitude to wait for the dolphins until midday.

If a hunter is fortunate in finding a school of dolphins, he quickly follows the school and moves his canoe to the outside of them, then he raises a flag as a sign that he has found dolphins. The other hunter who sees the flag then raises his flag. Thus the information of having found dolphins is transmitted to all canoes. The visible limit of the flags is about 5 km. By using the flag hunters can recognize

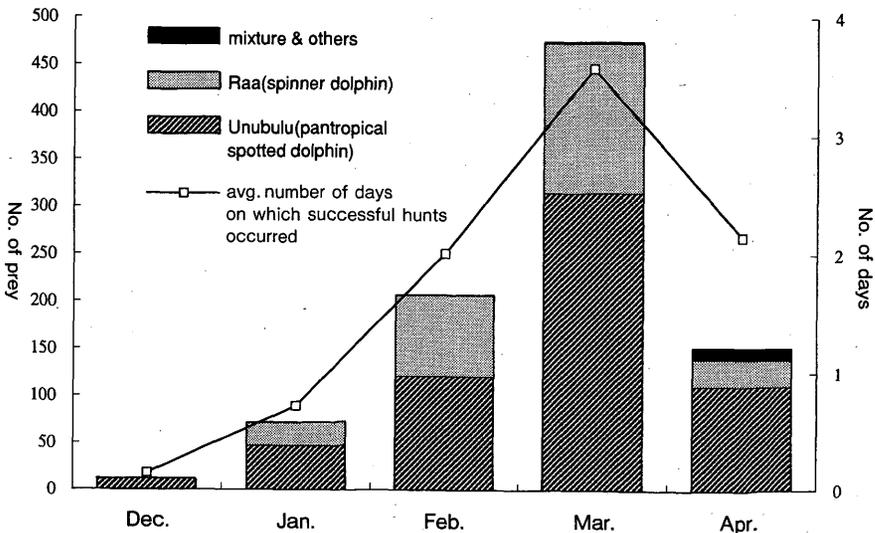


Figure 2. Monthly Dolphins Hunting Records

canoes which are farther away. Each hunter must decide the correct direction to move by his relative position and by the location of other flags. It requires high skill to organize a "U" shaped formation in good order and yet keep each canoe about 1 km apart.

For example, if dolphins are found by an offshore canoe as in Figure 4, the other hunters must not move straight to the flag. The canoes on his land side should move parallel to the shore and those on his outside should move in the direction of the village. If it were possible to observe from the sky, we could easily understand the movement required, but for each hunter, the whole shape of the formation cannot be seen, and only a few canoes are barely visible. The hunter is required to realize the situation with limited information and if dolphins are found in different locations, the direction of movement of the canoes are of course changed.

#### 4) Driving the Dolphins

After the formation is set, the hunters start driving the school of dolphins. A hunter located by the side of the school hits two stones together under the sea (*alu fou*). The dolphins rush directly away from the sound, with their echolocation system confused. When the school of dolphins approaches another canoe the

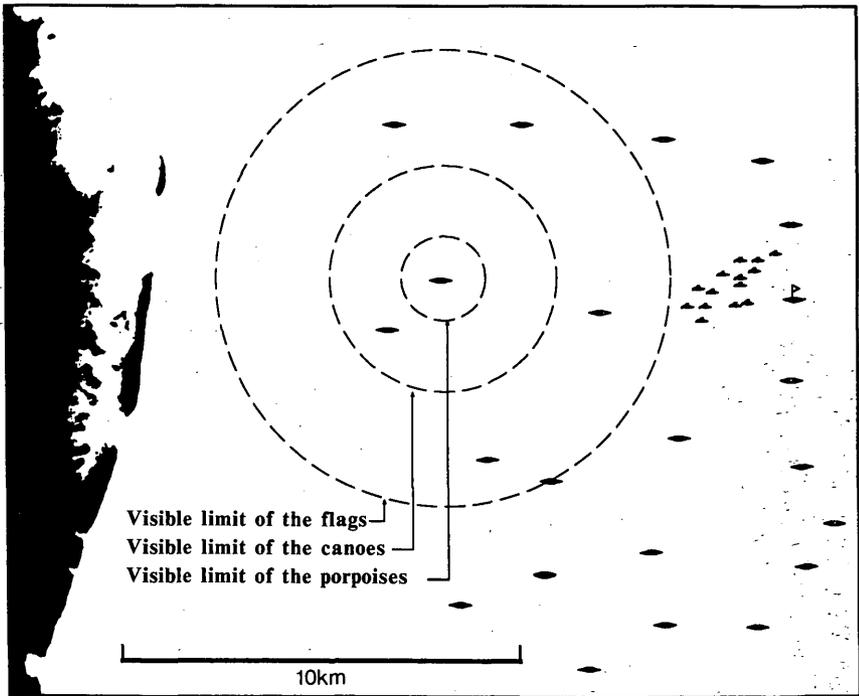


Figure 3. Visible Range of a Dolphin Hunter from his Canoe and Other Canoe Positions when Searching for Prey

hunter in this canoe also starts to hit his stones. He must make a sound by the side of the school so as not to split the school into groups. Thus, as if in a football game where the ball is passed and directed towards a goal, hunters drive a school of dolphins toward the Port Adam passage in front of Fanalei village. It usually takes from 1 hour to 4 hours to drive the dolphins (Figure 5).

The entrance to the passage is one of the vital points because dolphins often hesitate to go inside. There is a mangrove bay, called Suu-Baita, in the passage. When driving a school inside the passage many villagers, including woman and children, join to help the hunters. Finally, the dolphins swim into the mangrove bay, where everyone jumps into the sea to catch the dolphins. Every villager holds a dolphin softly by its mouth and swims with it toward a canoe. Then they put all the dolphins into canoes and go back to the village.

### 5) Canoe Formation for Hunting

The "U" shaped canoe formation is called *ala* (Figure 6). *Oga na ala* is the main position from which to hit stones for driving the dolphins. During the hunt the dolphins usually swim near *oga na ala*. *Ana ala wane baita*, literally the big man of the hunt, commands all the canoes from the middle of *oga na ala*. As for Fanalei hunters, they do not have a particular leader, but a well-experienced hunter usually occupies this position.

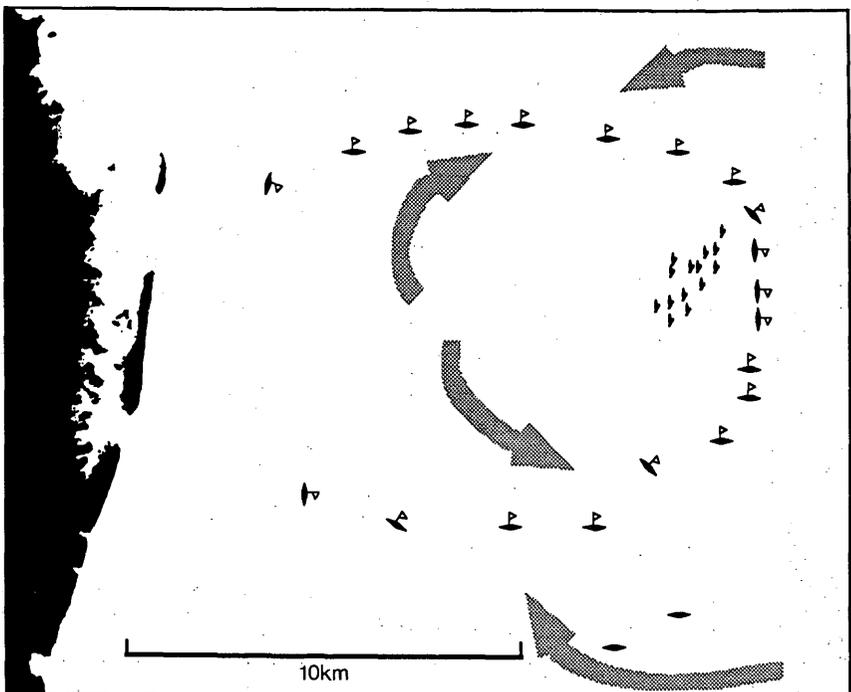


Figure 4. Following Dolphins and Making the *Ala* Formation

The closest canoe to both ends of the *oga na ala* are *oi saakai*. These two canoes work as a kind of hinge between *oga na ala* and *bara na ala*. *Oi saakai* control the alignment and direction of the canoes in *bara na ala*. The wings of the *ala* formation are *bara na ala*. *Bara na ala* controls the shape of formation in order to keep the dolphins inside *ala*. Hunters say that "If any canoe of *bara na ala* lies in a zigzag line the dolphins can escape from that place." *Bara na ala* must line up straight. When only a few canoes stand by and they are still far from the shore, *bara na ala* close both ends and make an "O" shaped formation (*lo gosi ala*). If the range of vision is limited because of fog or waves both *bara na ala* keep a narrow distance and make a "V" shaped formation (*koko fono*)

The landward side of the canoes of *bara na ala* are called *kwate ai* and *galo aro*. The *kwate ai* men in each wing lead *ala* in the correct direction, and the other canoes follow *kwate ai*. *Kwate ai* is also the next most important position to *ana ala wane baita* (big man of the hunt). *Galo aro* assist *kwate ai*. When a school of dolphins runs very fast and nearly goes out of *ala*, *galo aro* move in front of the school and make them turn back.

Canoes that come from the village after hunting has started to help in driving the dolphins are called *boiola*. They usually weave into *bara na ala*.

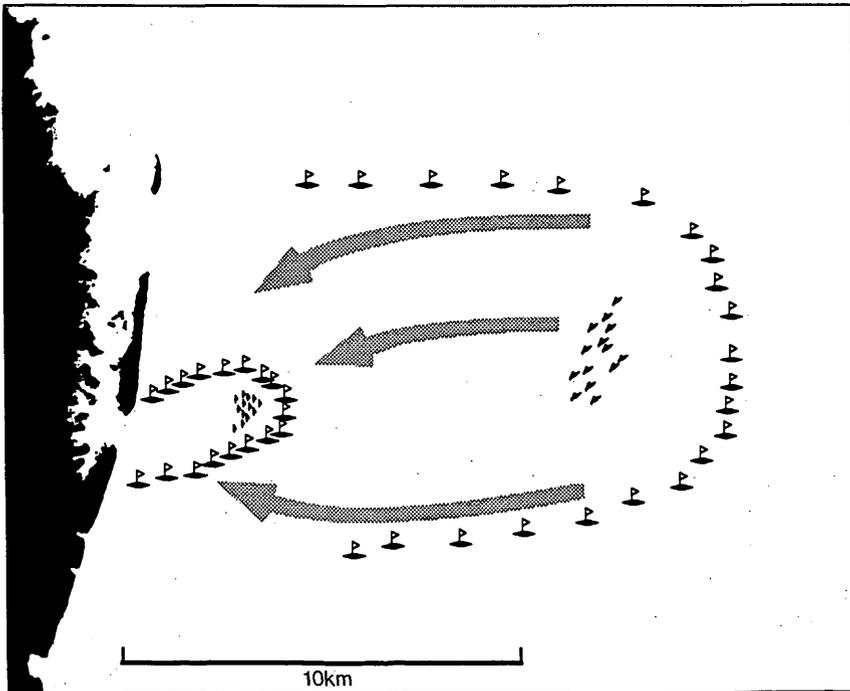


Figure 5. Driving Dolphins to the Fanalei Passage

## 2. DISTRIBUTION OF DOLPHINS

### 1) Hunting Statistics

Figure 7 shows the number of prey by species, and the number of successful hunts for each year. The average number per year is 840, and the average per hunt is 115.5. *Unubulu*, the pantropical spotted dolphin (*Stenella attenuata*) and *Raa*, the spinner dolphin (*Stenella longirostris*) are the main game. They are caught in hunting 7.3 days per year, but as I have mentioned there are about eight times that many days spent in vain. The state of dolphin hunting mainly relates to the weather. When it is windy and the sea is rough, it is very hard to go far from the shore in a small dug-out canoe. During such days, the proportion of *Raa* which swim near the shore increases. The catch for 1986 is the highest record in the last 20 years. I was told that in usual years the trade wind starts in the middle of April, but in 1986 the weather continued to be fine until the end of April. In May of the same year the strong cyclone Namo did great damage to Fanalei village.

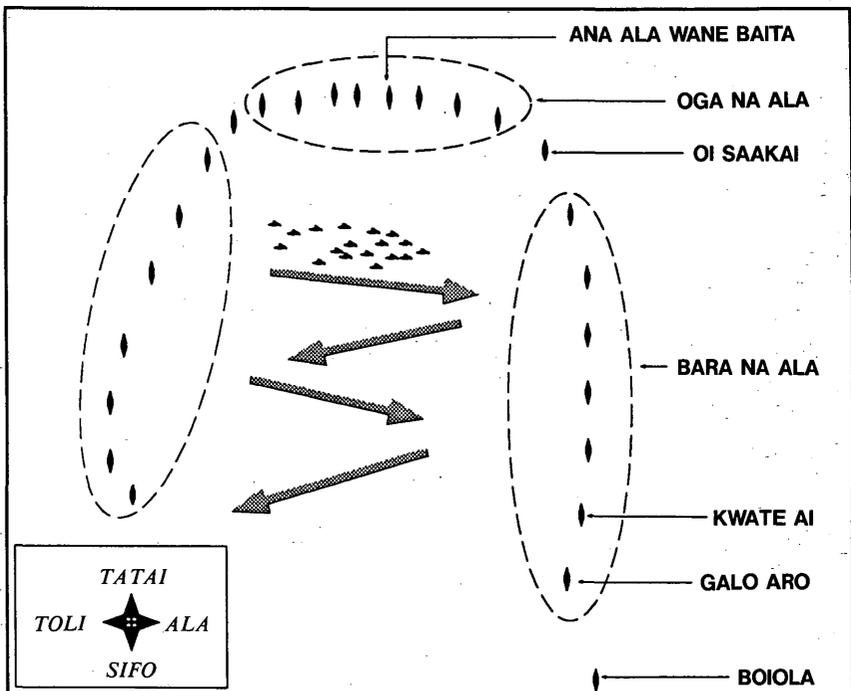


Figure 6. The Canoe Formation of Ala during Dolphin Hunting

## 2) Dividing the Dolphins

Village people carry all the dolphins by canoes from the mangrove bay to the main beach of the village where the number of prey are counted and divided. Before starting the slaughter, they hold a conference about prey distribution at the meeting house.

To divide the dolphin the head is first separated from the body. Then after removing the internal organs, the body is cut into 6 long sections along both body lines. A single section is called *mani ia* and a quarter of *mani ia* is called *mariko ia*, a unit of about 2.5 kg of meat when trading. Thus the villagers will cut 24 *mariko ia* from a dolphin for distribution. The meat of the head (*lete ia, sate ia*), the fins (*bobo ia*), and the heart (*mango ia*) are the share for the man dividing the dolphin. Some internal organs are left for feeding pigs and the rest is thrown away (Figure 8).

The teeth are the most important part for the village people. *Raa* and *unubulu* usually have more than 160 teeth. Some teeth are useless because they are too small or broken, so the village people count one full dolphin head as 120 teeth. A full head is called *teke te ia*, and half of *teke te ia* is *saakai*. Half of *saakai* is *bali*, and a quarter is *kaido*, about 15 teeth. *Saakai, bali* and *kaido* are the divisional units for sharing the dolphin teeth (Figure 9).

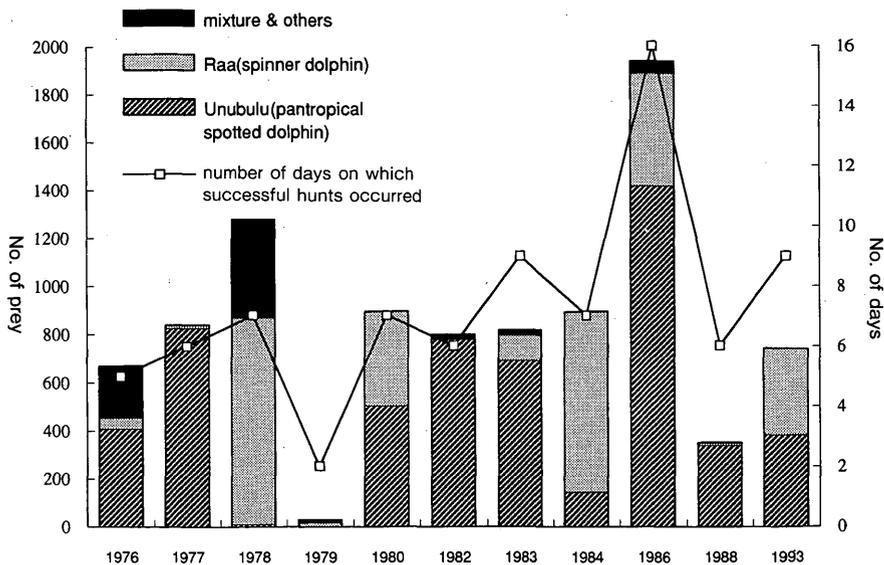


Figure 7. Yearly Dolphins Hunting Records 1976-80 [MELZOF 1983], 1982-88 [FILEI 1994], 1993 [TAKEKAWA 1993]

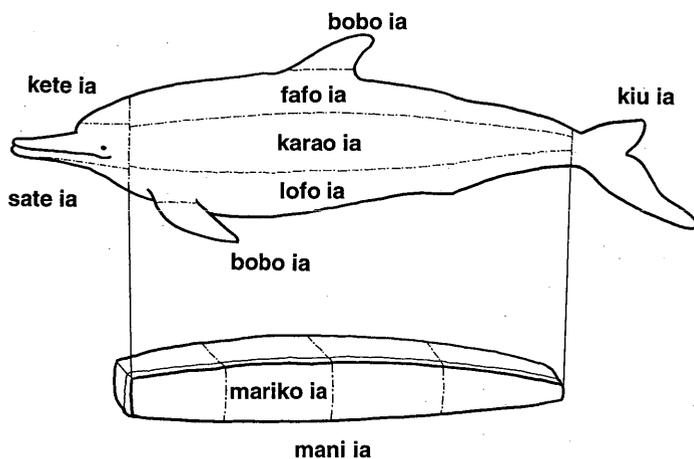


Figure 8. Names of Dissected Dolphin Parts

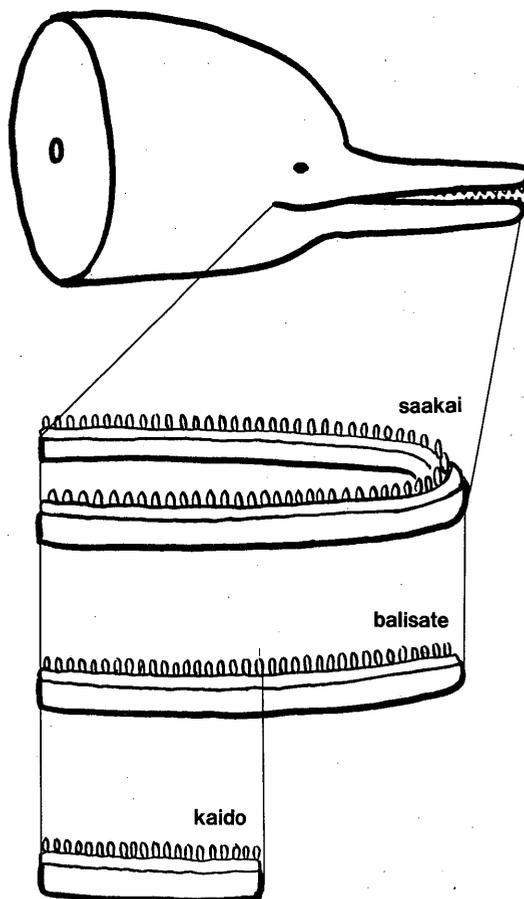


Figure 9. Names of Divisional Units of Dolphin Teeth

### 3) Distribution of Meat and Teeth

The Fanalei community has different rules about sharing meat and teeth. The shared meat is equal for every household headed by a married man and does not depend on whether he went hunting or not. When more than 200 dolphins are caught, every household can take as much as they want. After all meat is shared in the village, some is consumed and some sold to other villagers by each household.

Dolphin teeth (*nifo ia*) are one of the most valuable properties for Malaita people as bride wealth, adornment, and primitive money. When they hunt dolphins 10 % of the teeth are distributed to the church and the community, then the rest (80 %) are shared among the village people.

There are three ranks of division. The first prize, as they say, is given to the married men who went hunting that day. The second prize, half the amount of the first prize, is given to the other married men who stayed in the village. Then the third prize, a quarter of the amount of the first prize, is for widows or old men. If a non-married man goes hunting, he is considered to represent his father. When the number caught is small (under 50) only the first prize is given.

### 4) Trading and Circulation of Meat and Teeth

The dolphin meat, baked several times in an earth oven, tastes like beef jerky and can be a big blessing to villagers in particular seasons. When mountain people hear the news that Fanalei hunters have caught dolphins, they descend to exchange potatoes for dolphin meat. Even if hundreds of dolphins were caught at one time, none will be wasted. The demand for dolphin meat is high. Women of Fanalei sometimes visit the other side of Malaita Island to sell the meat, and in 3 to 4 days all the meat is spread throughout the area.

Only 4 types of dolphin teeth [TAKEKAWA 1995] are used as property by the Malaita people (Figure 10). Among them *robo au*, the melon-headed whale (*Peponocephala electra*) has the most valuable teeth, but it has seldom been caught in the last 100 years. *Robo au* teeth are passed down in some houses as heirlooms. The most popular teeth today are *raa* and *unubulu*.

The Fanalei people decided that "one tooth = Solomon\$ 0.4" in a village conference (this rate has since risen to Solomon\$ 0.5 in 1994: Solomon\$ 1 = U.S.\$ 0.31 in 1994). This means they can use dolphin teeth as hard currency at their village store and if anyone wants a tooth they also exchange at this rate.

A unit of a thousand teeth is called *toni ia*. *Toni ia* has important meaning for the villagers as a special purpose currency. In Malaita *toni ia* is often required when canoes, pigs, and houses are bought. Especially as bride wealth *toni ia* is used among Lau, To'ambaita, Baelelea, Mbaegu'u, Fataleka and Kwara'ae speaking people. The necessary amount for bride wealth is different in each case. The usual custom on Fanalei is that the bridegroom must prepare 1000 teeth (*toni ia*) and 5 red shell monies (*tafiliae*).

Dolphin teeth are also used for adornment. Several kinds of decorations are produced to decorate a woman's body, mainly by the South Malaita people. These adornments are passed down from mother to daughter.

### 3. FANALEI PEOPLE AS DOLPHIN HUNTERS

I observed 38 different fishing methods at Fanalei. They are selected in accordance to time, place, and fish type [TAKEKAWA 1992]. In other words, dolphin hunting is merely one of these methods. Dolphin hunting requires more skilled team work and heavy labor than other kinds of fishing. If a Fanalei fisherman goes fishing instead of dolphin hunting, he can easily get enough fish for

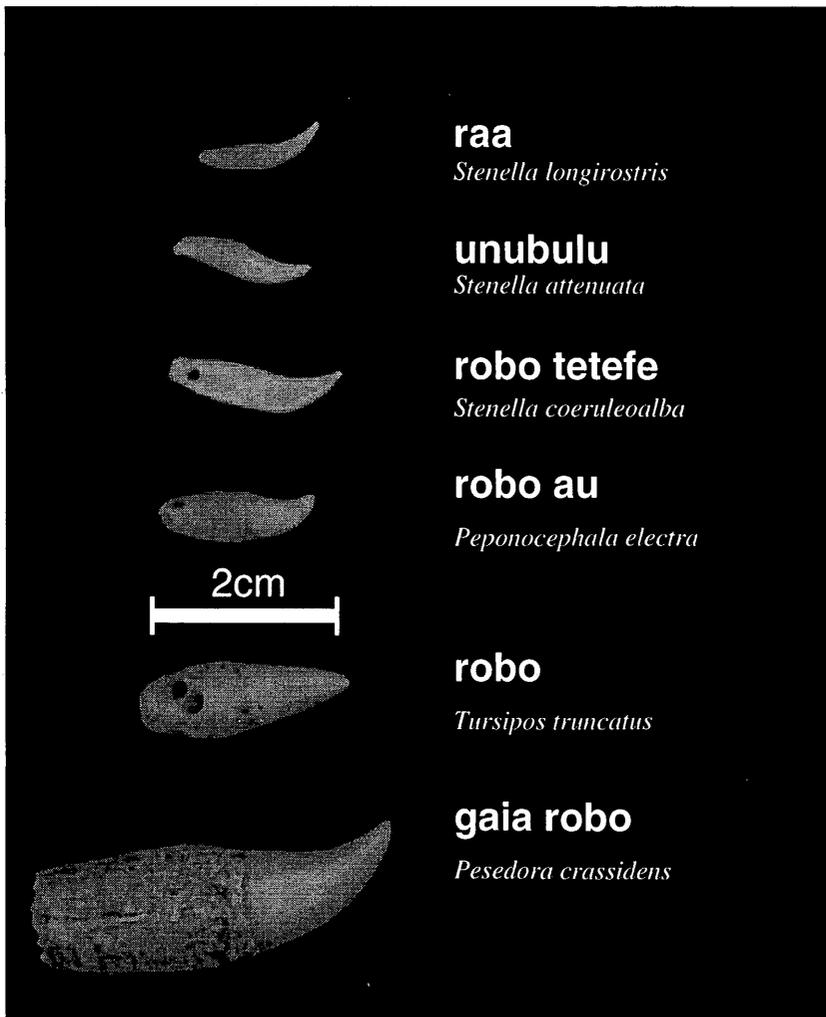


Figure 10. Types of Dolphin Teeth

his family. On the other hand the probability of success in dolphin hunting is not so high. For those people who mostly subsist on local foods, dolphin hunting is rather risky work. Even though they can get about 100 dolphins at one time, if they fail too often they cannot eat any meat during that period.

Nevertheless, Fanalei people still go hunting when the hunting season starts. When Christianity was not yet introduced to Malaita Island, only Fanalei and Bitama were the locations of dolphin hunting. Today Fanalei is the only village which constantly continues to catch dolphins on a regular basis and the people are proud of this traditional status. Fanalei people produce about 100,000 teeth every year. They are almost all supplied for Malaita and the neighboring islands. In this sense, Fanalei is a special village concerned with the circulation of dolphin teeth, equivalent to a few Langalanga villages in the case of red shell money [COOPER 1971].

In order to discuss succession and certification of hunting techniques, lectures are held at the meeting house several times during the hunting season. Dolphin hunting involves systematic group hunting. To perform this hunt successfully with limited information in the middle sea, the people must talk together about various aspects of driving dolphins.

As we can see, the word *ia*, which literally means "fish" in Lau language (although it is sometimes used as a pronoun for "dolphin"), reflects that the dolphin represents the typical fish for the Malaita people. The revival of dolphin hunting in the 1940s is of course based on this feeling. There is an exquisite sense amongst the Malaita people for the shape of dolphin teeth. Young girls are ornamented with beautiful shell beads and dolphin teeth, and young boys and their parents collect many teeth as property in order to take these girls for wives. Dolphin teeth are one of the items used to form a network among the people of the area.

## BIBLIOGRAPHY

AKIMICHI, T.

- 1993 The Surviving Whale-Tooth: Cultural Significance of Whale Products in Oceania. *Bulletin of the National Museum of Ethnology* 17 (1): 121-142.

BARNES, R.H.

- 1991 Indigenous Whaling and Porpoise Hunting In Indonesia. In S. Leatherwood and G.P. Donovan (eds.) *Cetaceans and Cetacean Research in The Indian Ocean Sanctuary*, Marine Mammal Technical Report Number 3, San Diego: San Diego Natural History Museum, pp. 99-106.

COOPER, M.

- 1971 Economic Context of Shell Money Production in Malaita. *Oceania* 41 (4): 226-276.

DAWBIN, W.H.

- 1966 Porpoise and Porpoise Hunting in Malaita. *Australian Natural History* 15 (7): 207-211.

## FILEI, J.

1994 Unpublished Mimeograph.

## IVENS, W.G.

1972 *Melanesians of South-East Solomon Islands*. New York: Benjamin Blom, Inc. (first published in 1927)

## MELTZOFF, S.K.

1983 *Custom Versus Civilization: A Japanese Fisheries Multinational in Solomon Islands Development: 1971-1981*. Ph.D. Dissertation. Michigan: University Microfilms International.

## MITCHELL, E.

1975 *Porpoise, Dolphin and Small Whale Fisheries of the World: Status and Problems*, IUCN Monograph No. 3, Morges: International Union for Conservation of Nature and Natural Resources.

## QUIGGIN, A. H.

1979 *A Survey of Primitive Money—The Beginnings of Currency*. London: Methuen and Co. Ltd. (first published in 1949)

## TAKEKAWA, D.

1992 Fishery and Canoe Transportation in Fanalei, Malaita, Solomon Islands. *An Interim Report: A Study on the Cultural Adaptation and Strategies on the Use and Management of Coastal Marine Resource in Papua New Guinea and Solomon Islands*. (unpublished manuscript)

1993 Field Note.

1995 Ecological Knowledge of Fanalei Villagers about Dolphins: Dolphin Hunting in Solomon Islands 1. In T. Akimichi (ed.) *Coastal Foragers in Transition, Senri Ethnological Studies* No. 42, Osaka: National Museum of Ethnology, pp. 55-65.