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Øystein Lund Andersen
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Introduction

Babrongko is located at the southern shore of Lake Sentani, in the Ebungfauw district. The greater Sentani area is situated at the north-east coast of Indonesian province of Papua. Lake Sentani extends from west to east for about 30km and is 10km wide. Geography around the lake is hillsides in the south, and the Cyclops mountain Range (Dafonsero) in the north, which separate the lake from the Pacific Ocean. The provincial Capital of Jayapura is located approximately 50km to the east of Lake Sentani.

The total population of native Sentani’s is at least 30,000 inhabitants, spread out over more than 30 villages. The Sentani language is classified in 3 slightly different dialects, the western, eastern and central dialect. The linguistic affiliation is ‘Trans-New Guinea phylum.

The neighboring people of the Sentani’s are: the Nimboran people living in the Southwest, the Tanah Merah bay people in the northwest, and the Tobati and Nafri people in the east.

These 5 tribes (including the Sentani people) have each their own language, although the languages are closely related to each other.

The fact that these tribes living very close to each other have their own distinct languages and that even the Sentani language has 3 different dialects can be understood by the effects of isolation. The geography in the area that once consisted of an even larger area of tropical forest, than is present today, must have had an considerable effect on the contact between these small-scale communities.

As people lived separated and the contact among them was limited, differences in language and custom must have appeared. When differentiations already had happened,

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1 The way of the objects p.43, Anna Karina Hermkens
2 Today the number of inhabitants in the Sentani area is higher because of the high rate of transmigration from other provinces in Indonesia.
3 SIL (Summer Institute of Linguistics) 1996
4 Except the Tobati language that belong Malayu-Polenesian Phylum
communication would gradually be affected, even with suspicion that could have led to conflicts and tribal wars, that was not that rare in the past.

The Sentani people that live in the Lake Sentani area have well adapted customs in exploiting the lake and the materials that is found in their surroundings. But the material culture of the people is gradually being more influenced by modern lifestyles and changes have already happened. Native belief in magical aspects has almost totally disappeared, as have also much of the objects that were in connection with it. Other changes can also be observed where old customs (of use) don’t have any practical function anymore and gradually fades away or being swapped by new inventions.

In this written report I will try to describe the Material Culture of the people living in the village of Babrongko. It will mainly focus on describing the objects, inventions and the habits related to them that are in use in the everyday life of this people.
Habitations

1.1 Houses in Baberongko. *(khogo)*

The houses built by the Sentani people have always been located at the shores of the lake, although today there are Sentani people who also live further inland. There are many reasons why the Sentani people have chosen to settle along the lake shores. For the Sentani people the lake bears food and water. Also after the canoe was invented back in history it must have been a breakthrough in transportation, trade and communication. Today the lake is the also very important for the same reasons.

Babrongko is located on the southern shore of Lake Sentani. Houses stand on stilts in the water; the front of the house is at shore while the back of the house has water underneath. Stilts are placed in holes that are dug by the men, and the floor, walls and roof is constructed upon these stilts. Floors are made of wood from the ‘Matoa-tree’ and dried sago stems is used for the walls. For roofing, either modern iron sheets are used or traditional sago-leaf roofing. Today only 5 households in Baberongko use the traditional sago-leaves as roofing.

Houses usually consist of from 2-5 rooms, but this depends on the size of the family. Girls and boys living in the house live in separate rooms. The “girl’s room” are usually the one located nearest the parents-room. If guests arrive and are in need of accommodation the boys in the house will be asked by the parents to find sleeping space with friends or relatives in the village so that their room can be used as a guest-room.
The kitchen is often constructed as a separate building, or in the room at the back of the house. The toilet is a very simple structure although not all houses have one. If one doesn’t have one people takes to the bush when in need. Toilets is constructed either as a separate building or is a part of the main building. There are no real toilet facilities but only a hole in the floor.

Houses can be constructed within a week if material and workforce is readily available, as it usually is, as reciprocity bonds until today ensures help with building houses.

1.2 The House of Custom (Balai Adat)

The ‘house of custom’ is the most important building in Baberongko and is located near the small village harbor. It is an open structure with a roof, but no walls. There are 12 poles that are connected to the roof which has different woodcarvings carved on it. The house of the Ondoafi (highest ranked man in the village political structure) is located behind the ‘house of custom’

‘The house of custom’ is regularly used by the villagers. If there is a village gathering or meeting, it is usually held here. It is also used in the settling of different agreements like, bride-price payments, ‘the payments of heads’, and in the settlement of various disputes. Today it is not just used in connection to issues that are linked with custom, but it is also given space to various medical teams that regularly visits the village and also to prayers organized by one of the four churches in Babrongko.\(^5\)

\(^5\) There are 3 different church organizations in Baberongko.
1.3 **Huts**

In the gardens, plantations and forests, there are often huts constructed. There are different styles of huts built by the villagers.

**Simple hut/shelter**

This hut is easily constructed and there are no planning needed to make one. Four thin tree stems are raised, maybe 1.5-2.0 meters above ground. On the top, small tree stems are also used to make the roof construction and whatever large leaves that can be immediately found will be arranged as roofing. This simple hut can be made within 20 minutes and accommodate villagers in need for urgent shelter.

**Large huts**

The building of larger huts is often planned. They are bigger and more accommodating than the simple hut. These huts are built to last for a long time. They can be built with one or two floors and with or without walls. Planks are usually the main material for floors (and walls), and roofing is either made of coconut/sago-palm leaves or even iron sheeting.

These huts are built by villagers working in the gardens and plantations, but also by hunters that spend long days in the forest. The huts can accommodate these people if they are surprised by bad weather, as a place to eat, relax and to store their belongings. Frequently people also do spend the night in these huts, especially if they are far away from the village and/or are intending to get much work done.
1.4 Other Locations of Importance

Caves

In the nearby hills to the south of Baberongko a few caves can be found that have had some importance. I could not note any special beliefs in regard to them, apart from historical importance. During world war 2 the Americans and Japanese clashed many times in the area, and the old people in the village claim that the caves was a place villagers went if they felt threatened. They were used as shelters.

One of the caves I visited was for sure big enough to harbor at least 30 persons or more. In this cave I found several paintings on the walls. Two of the paintings resembled soldiers with guns. Some villagers claimed that these painting were made in the recent years by kids, and they might have been, although some claimed they were made during the war.

Locations of unusual deaths

Locations where people have been known to experienced unusual deaths, like the locations of accidents or places where a homicide have taken place, is feared.

In the night time people are mostly passing these places quietly, because it is said that if you talk in the places, you can be hunted down by the spirit of the dead person.

In Babrongko I have noted at least 2 such places, but there are probably more.

One of the places is the location of a murder where a man was killed. And the other is the location of a fatal car accident

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6 A few years ago, jeeps could reach Babrongko trough a trail from the District of Sekori in the South. Today the trail is overgrown and cars cant pass anymore.
1.5 Other Constructions

Furniture

Furniture like chairs, benches and tables are often made by the villagers. It can be made completely by wood, from rattan, or by a combination of these two materials. Both materials (wood and rattan) are readily available in the forest.

Rattan needs special attention before it can be used as building material. The villagers clean the rattan from spikes and dry it over open fire until it is completely dry. It is then rubbed with petroleum until it gets a white color. After this the rattan is considered ready for usage.

Simple stools can be made from coconut trunks, or another tree. The trunk is simply cut in the preferred size and the “stool” is then usable. These stools can be made to be used in for example gardens.

*Trunk of coconut palm used as stools.*
Fences

The people of Babrongko make at least two types of fences. Stone fences are used to mark property and can often be seen in front of houses or in gardens/plantations.

The other type of fences is those made of rattan, bamboo or planks. These can be built around plants, small trees and small gardens to prevent pigs and other animals in destroying them.

Fences are built to protect against scavengers, like the domesticated pig.
A traditional Lake Sentani house.

New trends. A more modern house at the shores of Lake Sentani.
In the kitchen, firewood is still used as fuel for the flame.

Toilets in Babrongko are often built as separate buildings.
Painting in a cave near Baberongko. The painting resembles a soldier with a gun.
Chapter 2

Vehicles on the Lake

The people of Babrongko rely almost completely on their canoes and motorized boats as vehicles of transportation. As the village is located on the southern part of Lake Sentani there are no road constructed that link the village with the City of Jayapura or Sentani. The nearest port that are connected with the road to Sentani/Jayapura is Yahim, located on the northern side of the lake, approximately 20min from Baberongko. Transportation to/from Yahim is organized 3-4 times daily.

A few decades ago the only means of transportation on the lake was traditional canoes, and completely depended upon for transportation and communication.

The situation today has changed slightly, as new vehicles of lake transportation has been introduced, although the canoe remains the most important craft on the lake.

In the past and until today, the Sentani people have constructed canoes based on gender, respectively Female-Canoes and Male-Canoes.

2.1 The Female Canoe (‘Kaji’)

The female canoe has traditionally only been used by woman among the Sentani People. The canoe itself is usually between 4-10 meters and is made from the iron-tree or matoa-tree (Pohon Besi, Pohon Matoa)

The typical female-canoe is quite bigger than the male-canoe, can harbor from 1-10 persons, and at the same time allow women to bring fishing equipment, water containers, and other heavy goods.

Women use this canoe on daily basis, it can probably be considered as their most important work equipment.
They use it when they lay/collect fishing nets, collect shells, fetch clean water from the middle of the lake, transport goods, or work at other locations. Female-canoes are owned by every family in the village, but it can be more than one if the work of the female members in the family demands it. Each of the canoes have different motives (fish, waves), names and sometimes the date when it was made, carved on it. Examples of names of female canoes are: ‘Nakoro Ya’ which means ‘let me be alone’. Another is ‘Mal Nip’ which means ‘The Way to the place’.

Today men also use the Female-canoe if they are in need, although it is the females that do most of the travel with this canoe.

### 2.2 The Male Canoe (ifa)

The typical male canoe is traditionally very small, can only harbor one person, and is considered un-stable on the water. It is so narrow that the user does not sit between the sides of the boat but on top of it. Sometimes one leg is dangled in the water to help preserve balance (Kooijman 1959:13).

In Babrongko today I could only count 3 complete male-canoes, and of these only one was in good enough condition for travel on the lake. The reason of the disappearance of the Male-canoe can be explained by the changing trends of transportation, its former function and value. Today men are more active working on land than on the lake, and if they are in need for transportation, there are often motorized boats/canoes available. In the old days, every man had his own private ifa [male canoe] and appropriate canoes would be made until the boy was able to make one himself (Kooijman 1959:13).
2.3 Canoe Oars

The Sentani people have been known to make two different types of oars, oars for women (mie reng) and oars for men (roh reng). The oars are often decorated with different motives.

2.4 Making a ‘dugout Canoe’

In Babrongko when a new canoe is to be made, the first thing to be considered is the wished size of the canoe. The consideration seems to lie in the family’s needs for size and the availability of decent wood.

The location of the work depends completely on where the suitable tree is taken down. Since much of the huge trees are not located in the nearby forest, the villagers usually locate wood for canoes in the primary rainforest, 1-4km south of Baberongko.

When a tree is chopped down, the length of the canoe will also be cut. The work on the tree-trunk itself won’t begin before the villagers believe the wood is ready, as they say the wood need 2-4 weeks “rest” before it is in condition that favors the shaping of the wood.

At the time the dug out work is completed, the canoe will be hauled down from the forest. The day the canoe is set for hauling, a team has been organized beforehand by the owner.

Before leaving for the forest, the men gather their strength while eating and singing. They receive no payment for the upcoming work, but enjoy free food, cigarettes and betel-nut, also prepared by the owner.

The hauling of the canoe is usually done in the morning hours before the sun is high on the horizon and temperature is still negotiable. Thick liana is used to tie up the canoe and makes a "pulling-rope" for the men. The pulling is then triggered by a song or a command.
As the canoe is pulled, young men and boys gather tree stems that they find along the way, and lay them down in front of the canoe. This is done while the other men pulls the canoe along the slope.
The laying of tree stems is continuously done and makes the canoe slide easier, and spares the men for some strength. Singing and humor among the men inspires the heavy work although when the canoe becomes heavy, either due to difficult terrain or lack of food/water, the brakes becomes more frequent.
Food and water is ensured the men at work, at least when the canoe is located far from the village.
When the men arrive in the village, curious villagers gather to watch. The greater the number of audience, the greater the spectacle in the village.
The canoe is taken to the shores of the lake, where it is usually tied up under the surface of the water.
It will remain there until the villagers believe the wood has become favorable for carving.
When the canoe is taken onshore again, a woodcarver will do the remaining work that includes; polishing the canoe and carving names and local Sentani motives on it.
The woodcarver usually doesn’t receive any payment in form of money, but will be supplemented with whatever needed for his work, included tools, food and beverages and betel-nut. This work directly strengthens the reciprocity relations among these particular individuals, with the family that receives the new canoe.

2.5 Motorboats

The motorboats have in recent times been introduced by the Indonesians. Baberongko have a few specimens’ that have been built in the village.
The owners are either persons who have high position in society (Ondoafi, Koselo etc) or shop owners.

The Ondoafi of Baberongko also has his own motorboat named Omandrow.
As this motorboat have distinct motives and a clear name (Omandrow) written on it, villagers on the lake will recognize it and know who the craft belongs too.
An aging male-canoe. At one time in history every man had his own, today only one functional remains in the village of Baberongko.

*The larger and daily used Female-canoe.*
Afai Wally and Peremenas Wally working on a female-canoe.

A newly built canoe is dragged through the forest.
A motorized boat can navigate under all weather conditions, and today offers the fastest transportation between villages on the Lake.
Chapter 3
The food quest

The villagers desired eating habits is three meals per day; Morning meal, mid-day meal and an afternoon meal.

But practically the villagers eat when there is food available and whatever that is available.

A usual morning meal can contain tea or coffee, some bananas or other fruit, and maybe some leftovers from the last evening meal.

Meals eaten at mid-day vary much since this is the part of the day many do the work outside the village, the food is gathered at the scene (in the forest or plantations) will do, if the meal isn’t skipped and delayed until they arrive back in the village.

Afternoon meals are easier to predict. At this meal, the days catch of fish or game is consumed and eaten with Papeda (sago), (and sometimes rice).

A Baberongko villager comments local eating habits:

“If there is plenty of food available we eat whenever we have the chance and if there are people walking by, we invite them to eat as well.

But if there is no food, we have to adjust and find another way”  

Gerados Ondy (75)

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7 Interview with Gerados Ondy 15/2 2006
3.1 Traditional food

Traditional protein rich food includes many species of fish, and animals caught in traps or taken down with arrows or air rifle (Forest-rats, Tree-kangaroos, Bats, Cassowary birds, wild-deer and wild pigs).
Domestication of animals is also done by almost every family. Pigs are the most typically domesticated animal, but chicken, goats, cows and ducks are also found.
Traditional carbohydrate rich foods of the Sentani people are fruits, nuts (coconuts) from the forests, bananas, potatoes and other vegetables from gardens. Sago-flour is obtained from the Sago-palm.

The Sago Palm and extraction of the sago-flour

Sago is the main carbohydrate stable for the Sentani people. As rice is for the Javanese and sweet-potatoes is for the Highlanders of New guinea.
Sago flour is the starch obtained from the sago-palm.

A palm that is mature for use is a palm has reached its height and produced its crown-leaves. The palm is often cut down with a chainsaw, although some still do it with a steel-axe. When the palm is securely on the ground, the palm-bole will be worked on by the men to obtain the sago grain. This can be done in two ways. Either with a sago-club or with a petroleum fueled machine that grains pieces cut from the bole.
Not surprisingly the machine is doing the job a lot faster than when the men do it manually with the club. The village of Babrongko today own one of this machines and it is used on an almost daily basis.
With the machine one man can finish graining from 3-5 palms (depending on their sizes) in one day, compared to 1 palm and three days if it is done by clubbing.
The next process is the women’s task. This is the process when the sago flour will be extracted from the grain. The woman makes a fence out of sago stems, and tie up a piece of cloth material on the inside. This will be the place where the sago flour will accumulate. On one side of this structure a piece of sago stem that functions like an open pipe for the sago flour to pass through is placed. And in the middle of this pipe another piece cloth is put up to filter away the empty grain, that is being produced, as the woman grinds the sago-grain on the top of the pipe. As the woman works, the sago flour will accumulate in the cloth material located under. And in the end of the day huge bags of sago-flour can be brought back to Baberongko.

Products of sago flour are Papeda and sago cake.

**Coconut Oil**

Cooking-oil can be made from coconuts. This is a time consuming process and it is a practice that is not done frequently. The reason might just be that cooking oil today is cheaply available from kiosks and that the time spent making coconut oil is considered too time consuming. But some villagers still produce it once in a while.

100 coconuts is said to make 5l of pure oil.
It is the white-meat of the coconut that is being used. It is placed in a big cooking pan and mixed with water. It is boiled until the white coconut meat disappears and become oil. The oil is left to cool down and it is filled on empty bottles.
3.2 Gardens and plantations

In the last decades the Sentani people have slowly begun strategically making different gardens/plantations that consist of papaya, sweet-potatoes, corn, papaya, cabbage, coconuts and cocoa beans.

In Baberongko the gardens are located in the South of Baberongko, approximately 1-4 km from the village itself.

Many villagers have today taken part of work on Cacao tree plantations, originally started as a project by the Department of Agriculture.

The cacao plantations are pure cash crops, and the people of Baberongko sell it to either shops in Sentani or to people in the district of Sekori in the south.

3.3 Storage and presentation.

Storage of different food like sago, fish, and meat has traditionally been in pottery. But nowadays plastic buckets are used as well.

Pottery found in Baberongko and the other villages in Sentani origin from Abor. The village of Abor, also located at the shores of Lake Sentani has long known to produce this pottery.

Clay pots and bowls of Abor (Hele)

-Big pots
The largest pots are used to store sago-flour. The pots I saw in Baberongko had a diameter of probably 50 cm and a height of 50cm as well.

-Medium/small pots
The medium and small sized pots are used to store fish and meats. But are also regularly used as bowls, which can be filled with Papeda and then used in dining.
Wood plates (*Hote*) (*Piring kayu*)

The carved wooden plates of Sentani are widely known by collectors of New Guinea art, and are today produced more for the art than the function it once was valued for. In former times the wooden plates was regularly used for serving prepared meats and fish. Today the plates are seldom used; only at an occasional village meeting or feast will the plates again serve their real purpose.

The plates always contain carved Sentani motives, as the head of a fish or turtle in the front, and other motives on the back of the plate.

To make the plates look more attractive, the wooden-plates are smoked over fire until they become black.

### 3.4 Food preservation

The people of Baberongko rarely preserve food over long periods. Vegetables and fruits can be stored in the kitchen over a few days but is usually cooked and eaten right away. Yields from gardens are usually sold in the markets in Sentani, or elsewhere, so there is no reason in bringing too much home.

Fish and various meats are often preserved. The meats are smoked over the fire for one day, and will then be in condition to be stored for a few weeks, although it rarely happens that meat remains uneaten for long periods.

If there is a big catch of fish for example, much of it can be sold to the markets in Sentani or will be given to family or neighbors, rather than preserved for a long time. The smoking of meat over fire is although a very practical preservation-technique for hunters that often catches big game in the forests.
3.5 **Appliances for fishing**

**Fishnets**

Fishnets are either bought from shops or it can be made by the villagers themselves. Nylon is mainly used as material today, and the woman know how to twine it into large fishing nets. All fishing nets that get damaged while used, can be fixed by the woman.

**Small Drag-nets**

These nets should not be misinterpreted as the large drag-nets used by boats at sea. The drag-nets used by the Sentani people are of small size and is attached to a circle of bent wood. They are usually used by the woman who catches small fish from their canoes, near the shores and in small rivers. The small fish (*ikan halus*) that are caught in the nets are either taken alive to the permanent fishnets (see under) or eaten.

**Spears for fishing** (*Kosing*)

Spears are often used to catch fish along the shores of Lake Sentani. The spears have different sizes, ranging from 20cm to 200cm and are mainly made of bamboo. The spear tips are either made of steel or of wood.

Small spears can be launched with rubber bands from above the surface and even from underneath the surface. Underwater launching is difficult, but with enough practice it is possible.

Larger and longer spears are used especially for fishing in the swamps where fish often lay their eggs and hide. Adult men as well as young boys do catch fish with these spears.
Permanent Fishnets

Many people today have constructed permanent fishnets outside or under their houses. Fish is either bought from outside the village or gathered in the lake, and thereafter placed in these nets. The fish is kept until it is considered big enough for sale, but can at difficult times also be eaten by the families. Leftovers from meals are often thrown in these nets, but apart from this the fish doesn’t get any further attention.

3.6 Appliances for Animal Domestication

Pig stalls

Stalls for pigs are constructed for one purpose, and this is when a family receives new pigs for domestication. The already domesticated pigs of the family move on their own in the village, and are for the most of the time free to go anywhere they like. The difference between newly arrived pigs and pigs that have been around for while is that the latter know the family and know where they belong.

The newly arrived pig will be put in the small pig stall and fed, for approximately 1 week until the pig is familiar with the new family and surroundings.

The stalls are constructed from wooden planks and are located near the house.

Stalls like this are also constructed for ducks and chicken.
Chicken Nests

Nests are constructed for hens. These nests are made of twined coconut leaves, filled with grass and attached under the roof or in the trees. The hens find their way to the nests themselves and lay their eggs here. The owners usually collect the eggs in the morning.

3.7 Appliances for Hunting and Trapping.

Hunting and trapping is frequently done by the villagers in Baberongko. Most of the game available is found in the forests behind the village. The activities are of course a men only activity, but are not done by everyone. In the village there are men that are often out looking for game, some go only when the fish catch is scarce, and there are men who have never been involved in hunting.

Hunting

Hunting is rarely done at nighttime, but between sunrise and sunset. There is a belief among the hunters of Baberongko that a man who is leaving for a hunting-trip in the forest should not eat his wife’s food before leaving. If this is done, the hunter has to expect no catch or even experience potentially dangerous bad luck on the trip.

The hunters bring with them bows and arrows or air-riﬁles on their trip. Air riﬁles are preferred but the bows are always brought in case a big animal is caught. Animals that are hunted are as follows; birds, forest-rats, Tree-kangaroos, Bats, Cassowary birds, wild-deer and wild pigs.
The traditional bow are made of tree and rattan. The arrows of bamboo and steel/wood tips.

**Trapping**

Trapping is also frequently done by men. But young boys also know how to make traps from a young age, and often bring home forest-rats and birds caught in the woods nearby the village.

The adult men don’t make small traps, but aims for bigger game. The traps that young boys and men prepare are of same kind, but the traps set up by adults are larger.

Often many traps are set up along a track in the forest. The traps are usually not put in random places but in the tracks of animals, as the chance of catching something increases with the skill of knowing where to set your trap.

A smart hunter can notice and differentiate between the tracks of pigs, deer and forest-rats.

### 3.8 Other Appliances

**Noken**

The noken is a string bag that is well used by the people of Baberongko. It is traditionally made of twined bark fiber, but are today also made from other yarns.

Bark fiber are made from trees that have suitable fiber. Today just a handful of the woman in Baberongko know how to make twined bark fiber. The result is that the majority of string bags seen in the village today are made of modern yarns bought from the city.

The String bag is usually attached to the head, and the bag itself rests on the back of carrying person.
In the old days people made two different type of string bags, notably ‘the woman string bag’ and ‘the men string bag’.

Differences in these two types were mostly in their sizes and their usages. The bags owned by men were small in size and was mostly used for carrying tobacco and betel nuts. The string bag used by women are larger than the men’s, and do reflect the heavier loads carried by woman. Today it is the woman who usually wears string bags. It is used when bringing home yields from the plantations and gardens.

3.9 Stimulants

Betel Nut (areca nut) (pe)

It is considered a narcotic-stimulant by scientists and is found in Oceania, Southeastern Asia, as well as in New Guinea. Populations chewing the areca nut have an increased incidence of oral cancer. The nuts are harvested from the Betel Palm (Areca catechu), that are planted by the villagers themselves but also found in the wild.

Betel nut is chewed with betel vine (afe) and lime (au). Betel vine is found and collected from the betel vine tree. Lime is produced from shells. It comes in two varieties, lime made of sea-shells and lime made of shells from the lake. Lime made from lake-shells does have a white-gray color and are considered mild in strength. The variety made from sea-shells is pure white in color and has a much stronger effect. People in Babrongko prefer the local lime.

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8 World health Organization (WHO) Control of oral cancer in development countries Bull world health organ 1984 p.817
When betel nut is chewed, the betel-vine is used to dip into the lime and is then chewed together with the betel nut. If enough lime is chewed together with the betel nut, a red color will develop and the person will develop a weak sensation (feel hot). If too much lime is added, or the person is not a regular chewer, the person will start to sweat and can become dizzy. Lime can also cause a burning sensation in the mouth (lips), as the skin can be damaged.

Betel nut is chewed by almost everyone in Baberongko, young people as well as old people. It is chewed many times daily by the villagers. Sometimes even children aged 2-3 years old can be seen chewing on a piece given by their mother.

It is believed by the villagers that chewing betel nut makes the teeth stronger\(^9\) and it is also thought that betel nut prevents people from developing a bad breath. In the old days when people from different villages met, or people who wasn’t sure about the status of their relation met, betel nut functioned as an interpreter. When betel nut was exchanged, a successful exchange was a symbol of mutual respect and good relationship. If the offer was not readily accepted this meant that there was underlying reasons for this. Even today the betel nut serves as a icebreaker and a way of making contact.

**How Lime is produced**

Shells (keka) are collected from the lake. Sago stems are collected from the sago palms and dried under the sun. When the stems are dry they are spilt in thinner pieces and arranged in a single layer on the ground. On top of this layer the smallest shells is placed. On the next layer of sago stems larger shells are placed. And there are as many layers made as there are shells to be burned. When the last layer has been placed the shells are ready to be burned. The fire is started from above and it gradually spreads from the top layers until it has burned threw the last layer. The fire is not started from the bottom because, according to the woman who frequently do this, the shells will turn black and become unusable.

\(^9\) Even though old people who have been heavy betel-nut chewers their whole life have heavy worn red to black colored teeth.
After the layers have been turned into ashes and the fire has naturally died out, the shells are once again collected.

The burned shells are now placed in a cooking pan and are crushed until it turns into powder. The powder is then boiled with water until the water has been boiled away. The result is fine lime-powder.

**Traditional lime containers**

Containers for the storing of lime were in the old days owned by every betel nut chewer. Today some traditional containers are still in use but many people today use other plastic containers or boxes. The traditional containers have been known to be produced from either coconut shells (big containers) or from another smaller sized fruit shells. At the top of the shells a hole is made and the inside will be emptied. The empty shell will now be dried under the sun until its completely dried. The shell will now usually be decorated with carvings or even paintings.
From Palm to starch

Pieces of the sago palm bole are grained.

Sago grain is mixed with water and grinded.
Sago starch is the main carbohydrate stable of the Sentani People.

Papeda is the main product of Sago Flour.
Nests for the hens are placed under the roof.

The trap-device looks simple, but is known to trap 20kg pigs.
A proud boy and his catch, a forest-rat caught in a trap.
Habits of cleanliness do often rely heavily on the access to clean water. If there are clean water available, people have the privilege of a good foundation for personal hygiene and healthy habits of cleanliness. Babrongko is surrounded by water and the inhabitants have had an unlimited supply of clean water at all times of the year. As for this good basis the people of Sentani have not, as far as I know, been victims for any epidemic disease. Low population rates and little pollution have probably contributed to this.

Today quite a few people live by the shores of the lake, in the areas surrounding the lake, and the impact has started to show.

In the province of Papua (especially in the cities) many people throw trash wherever they are. In the streets, in the forest, and in rivers. No garbage system are functional enough to be able to take care of the large amount of trash being produced, so much is burnt or is left to nature.

In the Lake Sentani area a similar trend has been going on for a while.

4.1 Trash

Organic discharge

Organic discharge from animals and humans are increasing due to the increasing population. Pigs especially do wander around freely and contribute to a lot of the organic discharge spilled in the lake.

Food thrown away by the humans is eaten by the pigs, ducks and chicken, and for the inhabitants it makes sense to throw (food) leftovers almost randomly.
The majority of the toilets in Babrongko are also constructed on the lake, and the discharge is spilled directly in the lake.

**Inorganic discharge and chemicals**

Plastics and tins are the trash that are starting to show up along the shores of the lake (and probably at the bottom of the lake as well).

The village administration in Baberongko or the villagers themselves don’t have a uniform way of dealing with this kind of trash. Trash is sometimes collected directly after it is being produced and burnt when it has reached a certain amount. But very often it will just be thrown from the house (into the lake). Villagers complain that when winds create certain lake-currents, the trash will again reappear along the shores. Sometimes this result in that some villagers start to collect some of the trash and burn it.

Chemical waste is maybe the biggest threat to the water condition/quality itself. The increasing population in the Sentani area (Sentani City) is more frequently using the rivers as a place to dump trash. In a few rivers as well, cars are cleaned by ‘car cleaning operators’ and this result in chemical spill into the lake. A rumor also has it that a new hospital has been built near the lake that dumps some of their waste in one of these rivers.
4.2 Personal hygiene and care

The people of Baberongko usually take their baths and clean themselves at the backside of their houses. Modern soap and shampoo are regularly used, but coconut milk can also be used as a cleaning substance. The coconut milk (santan kelapa) is also claimed by the villagers to be healthy for the hair as well as it leaves a gentle aroma.

To make “Santan Kelapa” (coconut milk), the coconut meat is being grinded until it becomes a watery-grain. This milky grain is then used in the same way as any other shampoo.

Drinking water

Water that is intended to be used as drinking water or in cooking, are daily fetched by the villagers from further out on the lake. Buckets will be brought with the canoes and the water brought back to the kitchen. The water close to the house arrangements are by the villagers today not thought as clean enough water for cooking. But although the water brought from the middle parts of the lake is thought as “cleaner” than the water close to the shores, it will be cooked before its being drunk by the villagers.
Chapter 5

Stones, beads and bracelets

Stones, bracelets and beads discussed in this chapter have traditionally had a considerable value for the Sentani people, as for the people of Baberongko. Nowadays the stones remain valuable, but I suspect that a large portion of the stones have been traded away to collectors, museums and the occasional tourist. Since money today has become the most common medium of exchange, the function of the stones has been challenged.
In the period of my research I followed a few settlements were stones, beads and bracelets were used.

These valuables are nowadays placed in some kind of cloth\(^{10}\) (often socks for stones) and thereafter placed in a chest or hidden somewhere in the bedroom of the owner. Young children should no be exposed or touch any of these valuables. Even adults after handling these stones are required to wash their hands. Because it is believed that people who touch them without washing the hands can get ill (influenza, sore throat)

Traditionally the stones bear a certain strength that is related to the history of each of the stones. Stones that have been used as payments for settling homicides can be especially powerful, and the villagers who possess stones like this claim the stones at certain times make sounds. Old valuables that have been within the family for a long time, is believed to have an attracting power, which functions to maintain the prosperity of the family.

It is prestige to own many of these valuables. When a father dies, his valuables will be passed on to his eldest son.

\(^{10}\) In the past the villagers wrapped them in palm-leaves.
5.1 The stones (*höfa*)

(From stone adzes)

The stones usually have black-grey or black-greenish color and are found in different sizes. They are believed to origin from Ormo, a village northeast of Tanah merah Bay. Probably have these stones been traded in from the Tanah merah area, since the stones are very common there as well.

**Höfa yaha**

*Höfa yaha* have a greenish-black color, and the specimens I observed in Baberongko had a length of 20-40cm.

These stones are also the most valuable of the yaha stones and are used for payment of bride price. It is said that these stones are only used in bride price payment when the girl origins from an important family. A special dance is performed as a rite of the passage of the stone.

If these stones are submitted for bride price to a poor family, the custom says that the family should not accept the offer, because of the strength the stone harbors.

**Höfa Riahahi**

Riahahi in the Sentani Language means girl immediately (Ria=girl, hahi= immediately), this underscores the value of these stones.

The character of these stones is very like the *höfa yaha* but it seems like the *höfa riahahi* stones are more grayish in color.
Höfa Moefoli

Höfa yaha have a greenish to black color, and the specimens I observed in Baberongko had a length of 15-30cm.
The stones are regularly used in bride price payments and in settlements of paying heads (i.e. when a woman dies, the family of her husband has to pay the dead woman’s family) The amount of stones used in ‘bride price’ and ‘paying heads’ settlements depends on the demand from the girls family.

5.2 The beads (homboni)

The beads are found in 3 different colors which are valued differently. Blue beads (nokhom), green beads (hawah) and yellow beads (haje). Sizes of the beads I observed in Baberongko varied from 0.5cm-1cm in diameter.

The beads are claimed (kooijman 1959:15) to have their origin in mainland Asia. Many of the elders in Baberongko claim these beads used to grow on special trees, but that these trees were not found anymore.

The beads are often found in a set of 3, respectively green, blue and yellow (hawah, nokhom, haje).
These beads are owned by most people and are used in a variety of different payments. Haje malo is the name of a larger special type of yellow beads that are specially used settling a dispute.11

11 Not yet observed
The bracelets (\textit{ebha})

The bracelets are found in colors ranging from green, blue and red\textsuperscript{12}. They are circle-shaped and made of stone. The specimens I observed in Baberongko (February 2006) had a diameter ranging from 2cm-6cm in diameter.

\textbf{Ebha Nokhom}

The \textit{ebha nokhom} bracelets have a blue color, ranging from pale blue to navy blue. \textit{Ebha nokhom} means ‘blue bracelet’. The specimens I observed in Baberongko, had a diameter of 4cm. I did only observe three of these stones. The bracelets have been used as bride price payments, as well as in payments from land.

\textbf{Ebha Hawa}

\textit{Ebha hawa} means ‘green bracelet’. The specimens I observed in Baberongko, had a diameter of 4cm. The stone are frequently used in bride price payments. When the bracelets are used in bride price payments, it will adopt the name of the girl it was used for. But when the bracelet is used in another payment, it will be renamed again.

Examples of \textit{Ebha Hawa} names are: \textit{Ebha saphira} and \textit{Ebha siva}

\textsuperscript{12} Though I haven’t observed any red bracelets myself.
**Roh Halau**

*Roh Halau* means ‘white man’

The bracelet is pale green in color, and has a diameter of 4 cm.

These stones have also been known to be used in bride price payments. I could only find one of these stones in Baberongko (feb 2006)

**Höfa Royung**

Rohyung in the Sentani Language means ‘man head’ (roh=man, yung= head)

These stones are used in settlements of homicides.

In Baberongko the only *höfa royung* bracelet was owned by the Ondoafi of Baberongko, and it is said that these stones should only be in the hands of either the Ondoafi’s or Koselo’s of the Sentani people, because of the potential strength the stones harbor.

If a homicide takes place among the people of Baberongko, it is enough that the bracelet will be shown publicly by the Ondoafi, and another type of stone paid by the family of the man who committed the homicide to the family of the victim.

If the homicide takes place between two villages, then the Ondoafi who harbors the person who committed the homicide has to pay the other Ondoafi from the victim’s village, a *höfa royung*. 
This collection of valuables that is owned by the Ondoafi of Baberongko (feb 06)
The cloth seen attached to the bracelets are used as wrappings to ensure that the valuables won’t be damaged.

**List of valuables:**

1. Höfa Riahahi
2. Ebha Hawa
3. Ebha Hawa
4. Ebha Hawa
5. Roh Halau
6. Höfa Royung
7. Ebha Nokhom
8. Höfa Kimani
9. Höfa Kimani
Bibliography

Echols, M John 1989 Indonesian-English Dictionary
Goodale, Jane C 1996 The Two-Party line, Conversations in the field
Hammersley, 1983 Martyn Ethnography, Principles in Practice
Haviland, A William1985 Antropologi Jilid 1&2
Hermkens, Anna Karina The way of the objects.
Hoogerbrugge, Jac 1967, Mythe en Ornamen, Sentani.