you to my main informant, Senitenati Taliu, the Island Council of Nukufetau, Faasi Sopoaga and the people of Nukufetau whose hospitality was given in true Pacific style. Shell identifications were done by Terry Lambert and Ed Saul, on Rarotonga. Lastly I thank my husband for his encouragement. **Fakafetai lasi**

Glossary of common local names

Misa: Melambus luteus and M. fasciatus.

Pule kena: Cypraea obvelata and C. moneta.

Pule uli: Cypraea caputserpentis.

Taa: Processed pre-emergent coconut leaves, those tightly packed together in the coconut 'spike', known as '**rito**' in the Cook Islands.

- **Tui fafetu**: A shell necklace made of **pule kena** and **pule uli**. The central pattern is a star.
- **Tui pepe**: A shell necklace made from **pule kena** and **pule uli**. The central pattern is in the form of a butterfly.

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Shell money production in Langalanga, Malaita Province, Solomon Islands

by Akiro Goto¹

Introduction

Shell money has been one of the most important cultural items in Melanesia. There are several types: cowrie shells, beads, rings and drum-shaped, among others. The cowrie-shell type also occurred in mainland South-East Asia and East Asia and has been an important item for exchange and accumulation in Papua New Guinea. Shell beads can be used both as ornamentation and as money. This type is widely distributed in Melanesia, occurring in Papua New Guinea, the Bismarck Archipelago, Solomon Islands, New Caledonia and Vanuatu. In Western Province (New Georgia) of Solomon Islands, ring-type shell money (poata) was used. Poata is a large 7–15 cm diameter ring made from giant clam shells, and used for bride price and exchanged for slaves, stones, bark cloth, shields, necklaces and bird eggs. In the Choiseul Islands of Solomon Islands a drum-shaped money (kisa) made of giant clam shells was used. It had different exchange rates according to size (Miller, 1978).

Langalanga, of Malaita Province, Solomon Islands, is among the few areas where shell money is still produced. The approximately 2,000 Langalanga people inhabit the Langalanga Lagoon area of the central west coast of Malaita Island, one of seven provinces that comprise Solomon Islands (Fig. 1). For the study of resource use and shell money production among the Langalanga, I stayed for about a total of three months in Abalolo village¹. Abalolo villagers subsist mainly by fishing, gardening or collecting. Their main marine resource zones are the sea beyond the reef, outer islands, reefs around outer islands or, in the lagoon, the lagoon itself and coastal reefs. Their terrestrial resource zones are the coastal plain, mangrove between villages, rivers, river terraces and mountain slopes.

Shell-money production in Langalanga

The Langalanga produce the shell-bead type of shell money, which occurs widely in Central Solomon Islands. Four species of shells are used: **romu** (*Chama* pacifica), **ke'e** (*Beguina semiorbiculata*), kakandu

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^{2 11} August - 12 September 1990, 30 July - 31 August 1992 and 25 April - 31 May 1994.

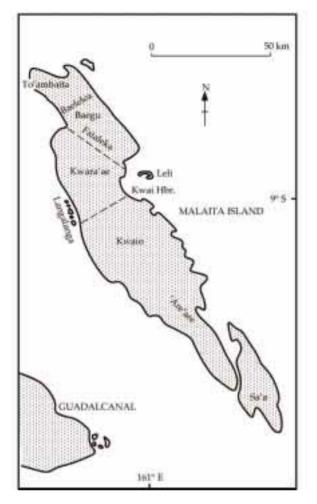


Figure 1: Malaita island

(Anadara granosa), and kurila (Atrina vexillum).

Shell beads are produced as follows. Shells are crushed with an iron hammer on a flat stone (**fou-li-ui**) to remove the hinges and other useless parts. Shell fragments (**kwai fuloa**) are then held with fingers and retouched with hammers, to make approximately 1 cm diameter round disks (**didia suiro**).

Disks of **romu** and **kakandu** shells, which retain a rough surface, are then smoothed on concave pieces of limestone (**fou-li-safa**). About 40–50 disks are placed on a half-cut smoothing stone (**ma'ai**), and are smoothed on the **fou-li-safa** by pushing down and moving the **ma'ai** with both hands. Water and crushed sandstone are used as grinding agents.

All disks are then drilled in the middle, from both sides. Traditionally, pump drills (**futa**) were used, but these have been replaced by more efficient store-bought hand-drills. Drilled disks (**kwakwa suiro**) are then pierced and strung together, a process called **urufia**. At this stage the disks can be used as shell money, but usually they are polished into smaller beads.

To make beads, strings of shell disks some 3 m long are placed on an elongated wooden stand, and ground with polishing stones. This is the hardest work in the production process, and is often done by males. It yields round beads with diameters of 3–5 mm.

Beads of **ke'e** shell are then burned on an iron plate heated on a stove, to change their colour from dark purple to orange. This process, called **para**, and is one of the most important steps in shell money production.

If not heated enough, beads become improperly coloured; if heated too much they become too white, and so useless. The colour of **ke'e** shell is an important factor for the value and price of several types of shell money.

Shell money is produced in households by women. Children often help their mothers to reshape and drill the discs. But polishing strung shell beads is men's work, although women do it

occasionally. Men and children also string shell beads. In 1990, only women were observed burning **ke'e** shell beads, but in 1992, I noted that men occasionally do this work.

Kinds of shell money

The Langalanga people make various kinds of shell money, both for themselves and for other tribes. Their indigenous shell money used for bride gift is **isae galia**, made only of white beads of **kakandu** shell.

Isae galia are made of ten strings (**fula**) of **kakandu** shell beads with a diameter of about 10 mm. Each string is folded twice in the middle before being bundled. Thus **isae galia** appears to be made of 40 strings that are about 50 cm long. Since **isae galia** is the proper shell money for the Langalanga people, they hesitate to sell it to outsiders.

The shell money produced in Langalanga and distributed widely throughout the island is **akwala afu**. **Akwala afu** means

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'ten (strings) together' in the Langalanga language.³

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Akwala afu is subdivided into several types according to length, measured by parts of the human body: **awae-rarate** ('tip of the chin'), **obe-susu** ('over the chest'), **tari-bo'o** ('reaching the navel'), **gwae-uruuru** ('reaching the knee'), and **buigao** ('standing in the middle'). The longer the **akwala afu**, the higher the price.

A special type of **akwala afu**, **maifuo** ('net of diamond shape') is the most valuable shell money made by the Langalanga. To make **maifuo**, ten strings are combined into a net shape in the middle. On each string white (**kakandu**), black (**kurila**) and red (**ke'e** or **romu**) beads are arranged according to strict rules.

In former times only **romu** shells seem to have been used for red beads, but **ke'e** beads are substituted nowadays. However, **romu** beads are preferred in the middle part of strings. In particular, the netted parts of **maifuo** must be made from **romu**. The Langalanga are especially careful of the quality of **romu** shell. The most valuable kind is called **firai** and has a salmon pink colour. **Romu** shell lacking enough colour for shell money is called **romu ko**. A **maifuo** made only of **firai** is called **bata firai**. Such **maifuo** has a legendary reputation.

Several parts of akwala afu are distinguished according to the kinds of shell beads used. From the middle to the end are the firai romu, lige bata ke'e, lige kurila, **lige bata ke'e**, and **lige furu** (**lige** = side). **Lige furu**, at both ends of each string, consists of white and black beads arranged alternately. But the diameter of the black beads is smaller than that of the white beads. This imbalance looks strange, since the diameter of beads on one akwala afu should be the same. This has arisen because the black **furu** beads were formerly made of plant seeds named **furu**, but black shell beads with a small diameter have been substituted for original materials that are no longer obtainable.

Except for the **furu part**, the beads in one **akwala afu** all have the same diameter. But the Langalanga distinguish between **bata baela** ('big money') and **bata wawade** ('small money'). The beads of the former have a larger diameter. Among the Langalanga both types have equal value, but the Lau people seem to prefer **bata baela** to **bata wawade**, because they believe that since the former is newly-made shell money, it becomes **bata wawade** after being used for generations and so worn down. (However, **bata wawade** requires more labor than **bata baela**, since it requires more polishing.)

The shell money made most frequently in Langalanga is **safi**, which consists of a single string of **ke'e**. **Ke'e** is used among Kwaio and 'Are'are people, in the south of the island. They obtain **safi** from the Langalanga and rearrange them into their own shell money. When finished, strings of **safi** are either taken to the Honiara market and sold, or exchanged locally with the Kwaio and 'Are'are people.

For the Kwaio tribe, Langalanga people make several types of shell money⁴. I observed the production of **fafa'a** and bani**au**. **Fafa'a** is made of small white snail shell (**soela** in Langalanga, and **mamalakwai** in Kwaio). **Bane au** has six strings of **ke'e**, **kakandu** and **kurila** beads. Unlike **akwala afu**, this shell money is not symmetrical: one side is **ke'e/kakandu**, and another side is **kurila/kakandu**. The former is called 'head' and the latter 'tail.'

For people on Guadalcanal, the Langalanga make yet another type of shell money, **talina**. This type has three strings of **ke'e**, **kakandu** and **kurila**. Unlike **akwala afu**, **talina** has **kakandu** with **kurila** beads in the middle.

Bride gift and functions of Langalanga shell money

Isae galia and **akwala afu** are used today as bride gift and for other purposes, like funerals. **Akwala afu** is also used to obtain important items, such as pigs, canoes and yams from other tribes.

³ It is known as tafulia'e among the Kwara'ae and Lau, a more widely-used name (e.g. in Solomon Islands National Museum exhibitions) than the Langalanga term.

⁴ In 1994, I observed shell money production in the Kwaio village of Kwa'a. There women were drilling and stringing white snail shells (mamalakwai) but men were responsible for arranging the shell money for bride gift. The kinds of shell money used among the Kwaio are: lakwalaka (one string of mamala kwai), genilabi (2 strings), sauoru (3 strings), fafa (4 strings), nima ae (5 strings), baniau (6 strings), ono galia safi afuafu (6 strings with red safi), and fiu galia (7 strings mixed with safi and mamal kwai).

In Langalanga, the boy's family has to pay engagement money (**galina**) to the girl's. **Galina** means 'to close (or taboo) the girl to other boys.' If the engagement is set, the boy's side starts accumulating shell money for bride gift (**kwatena**)⁵.

Traditionally, only **isae galia** was used for bride gift, but nowadays both **akwala afu** and **isae galia** are used. The Langalanga regard two **isae galia** as equal to one **akwala afu**, although the cash price of the latter is much higher than the former. They count the number of **akwala afu** by recalculating it by the number of **isae galia**. The amount of shell money paid for bride gift is negotiated beforehand between the two sides.

In addition to the bride gift, **wainuma** must be paid to the girl's mother, to express special thanks to her for having raised the girl⁶. A **maifuo** should be used for **wainuma**.

On the day of the engagement payment, the boy's relatives go together to the girl's village. Shell money is placed on the ground in front of the girl's house, where a specialist is usually employed to count it. After the engagement payment has been made, a refund (**du'una**), consisting either of shell money, strings of **isae galia** or cash, is paid by the boy's relatives to those of the girl.

Shell money production in transition

Cooper (1971) noted that shells for production of money were exhausted in the late 1960s, since the Langalanga were either buying shells from other areas or going elsewhere to collect them. The situation seems worse now. Although **ke'e** and **romu** can still be collected in Langalanga Lagoon, supplies are insufficient. During one month in Abalolo in 1990, I observed that village women went diving for these shells only once. In 1992, I noted that one villager paid a diving specialist to collect **romu** shells from deep beds near the mangrove.

Nowadays, people usually buy bagged shells in the Honiara market. Each bag is supposed to contain 25 kg. **Romu**, the most valuable shell, is sold by the piece. Shells are also sourced from Malaita and neighbouring islands, as well as from such distant islands as New Georgia. Among the three basic elements for shell money (red, white and black), the red shells seem to be the most crucial. Traditionally, the fishing grounds of **romu** shell were strictly managed, and only men who observed proper rituals could dive for them. But **romu** is now too scarce and expensive, so **ke'e** shells are used for all except for the central part of **akwala afu** and **maifuo**. But recently **ke'e** shells also have become expensive.

The red elements of shell beads other than shell money tend to have been replaced by non-traditional shells, such as **se'ere**, small snail shells with a red interior part. For instance, I have collected **sau-sako** (chest band for ceremony) and modern necklaces made with red beads of **se'ere**. This process of replacement of materials appears to have begun with peripheral items or those for informal use and is proceeding toward central items or those for more formal use.

Modern necklaces and other ornaments that are either worn for personal adornment or sold as souvenirs seem to have the least strict rules for production. As a result products with totally new elements, such as a purple element made from sea snails, are now being produced. Technological change does not appear to occur simultaneously for all the products or parts. For shell money, production of which is under strict rules, the speed of change is slower than for other items.

Tools used to make shell money are also changing. Nowadays store-bought iron hammers are used to crack and shape shells. Traditionally long pebbles collected in the rivers were used. Traditionally, too, pump drills (**futa**) were used for drilling. They were made of wooden sticks with disks of turtle bone. A pointed flake of chert (**ladi**) was attached to the end of the stick. Polishing was traditionally done with sandstone from the rivers, but nowadays store-bought grinding stones have been substituted.

Shell money was produced either for marriage of families and relatives or for exchange of important items. Thus production labour was not evaluated in cash. But nowadays some villagers temporarily employ others, usually women, for shaping and drilling shell beads. Men are often

⁵ Kwatenah has been translated as 'bride price' by Westerners, but the villagers prefer to translate the term as 'bride gift'.

⁶ The same custom was reported among the Lau (Ivens, 1930: 95–96).

employed for polishing. The pay is \$1.50 to drill a 200 g fish can full of shell disks, and about \$3.00 to polish a string of **safi**.

Since 1990 drilled ke'e disks have been sold at the village store at \$0.20 for 30 disks. Villagers sell ke'e disks to the store, and then buy items with the money. Traditionally, shell beads obtained a value only after being properly arranged into shell money, but nowadays they constitute a form of cash among the Langalanga. For example, in 1992 one household killed a pig, and sold pieces of meat to other villagers, some of whom paid with strings of ke'e. In Gwa'edalo, one man buys shells for shell money, and distributes them to the other villagers. He then pays cash for drilled disks returned to him. Thus it is evident that a small-scale division of labour and a cottage industry are emerging as a new form of shell money production.

Economic efficiency of shell money production

By the 1960s Cooper (1971) had already observed that the shell-money production of the Langalanga was in transition. Shell money is one of a few ways that the Langalanga can obtain cash. My time-allocation (Goto, 1996) study demonstrated that people spent 2–5 hours a day at this work, and that both men and women devote most of their time to shell-money production. Thus it is by far the most important economic activity among the Langalanga, and the penetration of the cash economy must have had a profound social impact.

One of the most important changes is that shell money itself can now be sold for cash; each type has a specific price, so the value of shell money has come to be equated with cash. Shell money together with shell ornaments can be either sold locally or taken to the Honiara market for sale.

To estimate the economic efficiency of shellmoney production, I measured the time spent for each stage of **safi** production, except for polishing (which takes several hours), estimated the average number of shells contained in one rice bag, counted the number of tablets made from a half shell, and estimated the wastage rate during the production process. In this way I estimate that it takes about 14–15 hours to finish one string of **safi**, and that about 10 strings of **safi** can be made from one rice bag of **ke'e**. (These estimates accord well with those made by villagers interviewed on the topic.)

Since one string of **safi** is sold for \$30.00, one hour of shell-money-production labour is worth \$2.75 (after the purchase price of the **ke'e** is deducted). But this is an estimate of ideal situations, since it assumes that the rice bag is full of shells, whereas they usually contain less than 25 kg, and that the wastage rate during production of shell tablets is only a minimal 10 per cent. But in reality other factors reduce the profitability of production labour. First, several tools must be purchased; rubbing stones (one stone for 6-10 strings of safi costs \$3.00-6.00), strings (40 yards for \$1.80), drills (\$20.00 each), and drill-needles (\$2.00 each). If the final product has to be taken for sale in Honiara, transportation costs and living expenses are incurred. Further, not all the purchased shells are made into shell money for sale. Some shell money is retained for traditional exchange or for gifts, and some shells are used to make ornaments for the maker's own use. Given these additional factors, the profit from shellmoney production is much lower, probably around \$1.00 per hour of labour input.

Conclusions

The Langalanga have retained a central role in the local Malaita economy (*cf.* Ross, 1978). In the exchange economy between the 'sea' and the 'bush' peoples, the Langalanga, together with the Lau, have traditionally supplied marine resources to the inland tribes. In particular, the Langalanga have been the sole supplier of the shell money that has been the keystone in social transactions.

The Langalanga make shell money (**isae** galia) for use among themselves. At the same time they also make shell money (akwala afu) both for exchange within their society and for trading with other peoples for a restricted range of items (e.g. pigs, canoes, yams). The Langalanga also make the shell money or string (e.g. safi for the Are'are and Kwaio and **fafa'a** for the Kwaio) purely for exchange. The penetration of the cash economy into this system has thus created a new cycle of exchange: 'shell money fi cash fi a wide range of items.' In addition, among the Langalanga shell beads (before being composed into shell money) have entered this new cycle as a kind of cash.

Unlike other areas, where shell money production has ceased (e.g. Belshaw, 1950), shell-bead craft (i.e., making shell money and ornaments) among the Langalanga has thus been accommodated within on-going socio-economic changes. Although shell money as 'bride gift' is still the basis for social bonds among the Langalanga, this craft has attained economic importance under the increased influence of the cash economy (Cooper, 1971). The availability of local raw materials for shell beads has diminished, so that shells must now be supplied from other areas. In addition, the introduction of new tools, such as drills and polishing stones, has increased productive efficiency.

Analyses of food consumption indicate that introduced foods, such as rice and canned fish, have become increasingly important in local diet. To purchase these requires cash, so more time is spent making shell beads. But even more cash is required to cover the increasing cost of shells and to purchase tools.

Analyses of time allocation (Goto, 1996) demonstrate that the time spent on shellbead production competes with the time required for other productive activities, such as gardening and fishing. Since commercial fishing is still underdeveloped, the shell-bead-production craft is almost the only way of coping with the penetration of the cash economy.

The concentration of the younger generation, especially single women, on shell-bead craft could lead to a decrease in gardening and collecting. Young men tend to migrate to Honiara to seek wage labour. One of the serious effects of this is the declining interest in managing gardens and fishing grounds.

As elsewhere in Melanesia, Langalanga society is in transition. Although many societies have given up their indigenous technology, the Langalanga continue shell-bead production. Moreover, to cope with socio-economic changes they seem have become increasingly dependent on this traditional craft.

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