

Some Trobriand Islands string figures

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ABSTRACT

The construction and execution of fourteen string figures from the Trobriand Islands is given, along with accompanying chants (in the original, and in translation) and comparative notes. The figures were made during a 1984 string figure performance by two ladies in the village of Tauwema, on the island of Kaile'una. The performance was filmed by a team of German researchers.

One of the figures appears to be not recorded before, and the construction method of another figure was hitherto unknown. Some of the other figures have their own peculiarities.

INTRODUCTION

In 1984 German researcher Irenäus Eibl-Eibesfeldt filmed a string figure performance by two women in the village of Tauwema on the island of Kaile'una, one of the Trobriand Islands. The filming was part of a study of the string figure repertoire in Tauwema, executed by German researchers Barbara and Gunter Senft.

Fourteen string figures and tricks, with their construction, were filmed. Transcriptions of the construction methods, along with annotations and comparative remarks, are presented here. Gunter Senft provided transcriptions and English translations of the accompanying chants.

*The Islands*¹

The Trobriand Islands are situated in the southeastern part of Papua New Guinea (151 degrees eastern longitude; 8-9 degrees southern latitude), in the middle of the Solomon Sea. French explorer D'Entrecasteaux, who visited the islands in 1793, named the islands after his first lieutenant. Since 1975, the islands are a part of the independent state of Papua New Guinea.

In the 1980s, approximately 18,000 people lived on the four larger islands; more than a hundred small islands are uninhabited. Kiriwina is the main island; some 12,000 people live there. The islands are mainly flat coral atolls. Due to their position near the equator, the climate is hot and humid. The main source of food on the island stems from gardening. The daily food for the family comes from taro and general garden vegetables (sweet potatoes, tapioca root, greens, beans etc.). Yams are not only cultivated for food, but they are also used for exchange, and as an indicator of economical and political power (Weiner 1988:84-86).

The people on the islands are often called Melanesians or Northern Massim. They speak Kilivila, an Austronesian language (Senft 1986). The islanders are involved in *Kula* (Malinowski 1922; see also Weiner 1988:139-157). This is a network of trade relations, connecting several islands in the Massim district of Papua New Guinea, in which *conus* arm shells are exchanged against *chama* shell necklaces; the exchange is based on equal value, not on gain. *Kula* is a social and cultural phenomenon. It has fixed rituals and is regulated by established rules and obligations.

The Trobriand Islands became renowned from the studies of Bronislaw Malinowski, a pioneer in modern anthropology, who stayed on the islands from 1915 until 1918. He published a number of monographs on aspects of small-scale societies, using his field-work on the Trobriand Islands. Malinowski is still studied today by anthropologists-to-be, although some of his interpretations have to be reconsidered in the light of newer developments in anthropology (Weiner 1988:1-9).

Games and string figure making

Various forms of games (*mwasawa*) occur on the Trobriand Islands: games with materials, dance-, song- and rhythm-games, role-playing games, construction games, fighting and competition games (Senft & Senft 1993:100).

The making of string figures is classified under *mwasawa*. Children often make string figures, but also adults, both women and men, although in general women know more string figures than men (Senft & Senft 1986:229). It is possible to make string figures on one's own, but it is often performed in front of other people. Usually someone starts making string figures; then others start to gather around to watch and comment on the play.

The Trobrianders make their string loop by knotting together both ends of a roughly 2 meter long piece of string. In the old days the string used to be made out of organic fiber (liana), which is still used by the older people, and which

gives string figures more stability. Younger players often prefer strings made out of synthetic material. During the string-playing season, the string is often worn around the neck, and women use it as a hair-ribbon (Senft & Senft 1986:102).

On the Trobriand Islands, making string figures is confined to particular seasons. Life on the islands is regulated by the horticultural rhythm of planting, growing, and harvesting. From August until the end of September, yams are harvested, a laborious period. From October until December, the new gardens are being prepared, which is also a period of much work. In March and April, no extraordinary investment of labor is required, so there is time for leisure activities, such as making of string figures (Senft & Senft 1993:104)².

German researchers Barbara and Gunter Senft stayed on the islands for 11 months in 1983. They collected 90 different string figures/games (called *ninikula*) in the village of Tauwema on the island of Kaile'una³. The results appeared in three publications (Senft & Senft 1986; Senft & Senft 1993; Eibl-Eibesfeldt & Senft 1987). All collected figures have specific names, and traditional chants (*vinavina*) accompany 38 of the figures. The names of the figures refer to plants, animals, natural surroundings, canoes, human activities, and people (Senft & Senft 1986:102). Almost all are single-player figures. Most of the figures are known on the other Trobriand Islands too, although names and chants may vary.

In the string figure chants a typical characteristic of Trobriand Islands language comes to the forefront: ambiguous word play (*biga sopa*, "joking or lying speech, indirect speech, evasive language"). In the chants, animals, plants or objects are often used as an allusion to sexual acts, excrements and taboos, but these are also spoken of directly. This gives the chants and games of the Trobrianders their specific wit. Although normally sex, excretory functions and nudity are to be avoided in public and in open conversation (Malinowski 1929:397), it is only under the use of *biga sopa* that talking about these things is acceptable (Senft & Senft 1993:108-109; Senft 2010:149-243). Should a listener be offended by the words of the speaker, the speaker can call upon the *biga sopa* speech mode and state that she/he didn't actually mean these things. In a playful way, verbally, breaking taboos and mentioning socially charged topics is sometimes explained as being a "safety-valve": tension in society resulting from keeping taboos, can be released freely without consequences during play (Eibl-Eibesfeldt & Senft 1987:5).

People on the Trobriand Islands make string figures not only for individual enjoyment, but also for an audience; *ninikula* have a social function⁴. This is not only accounted for by the text and chants accompanying the figure, but also by the fact that many figures end with a trick as they are being dissolved, thus containing an element of surprise for the observing public (Senft & Senft 1986:103).

In the collection of Barbara and Gunter Senft the string figures are presented in drawings and photographs, together with the accompanying chants and variants if applicable, both in Kilivila and in German translation. The drawings were made first; this allowed the Senfts to study the string figure knowledge of the people in Tauwema. Afterwards the whole string figure corpus was photographed. Whereas the photographs are exact reproductions of the string figure that was made, the drawings give only global indications of the form of the figures⁵. Sometimes there is a notable difference between a drawing and a photograph of the same figure. This could be an indication of a string figure variant⁶.

The Senfts were not the only researchers interested in the string figures of the Trobriand Islands; two other published sources exist. In one of his monographs Bronislaw Malinowski describes four string figures (Malinowski 1929:396-402). Three of them appear to be related to figures in the collection of Barbara and Gunter Senft (Senft & Senft 1986:106), although this relation is more textual than visual, since Malinowski describes and draws the figures in an abstract way. In 1985, Richard Harbison and Russell Reichelt published instructions for five figures that they collected on the Trobriand Islands. Four of them are related to figures in the collection of Senft & Senft (see Appendix I for a detailed comparison).

The film

The film (21 min, color, sound⁹) was shot by Irenäus Eibl-Eibesfeldt (film) and Renate Krell (sound) during the 1984 string figure season in Tauwema, a village of (then) 239 inhabitants on the island of Kaile'una.

In a session especially organized for the film¹⁰, two women are sitting in front of a crowd of men, women, and children from Tauwema. Inoma, then about 31 years old, sits on the right in the film, and Igogosa, then about 23 years old, on the left. The audience proposes particular figures, comments on them, gives advice and critiques them. The children are engaged in several other games, but can be heard picking up certain songs and verses from the string figure chants.

TRANSCRIPTIONS AND COMPARATIVE REMARKS

The string figures are presented below in the order in which they appear on the film. Many figures are not made in one linear attempt. The construction often goes wrong, is corrected, or is started anew. Both women often consult each other on what movement to perform next or on which string to pick up. The transcriptions below give the method for constructing each figure without the interruptions that were recorded on the film.

The film is basically a continuous shoot of the string figure performance, but at times the camera runs out of film, and has to be refilled. This explains some

gaps in the film footage.

When a gap occurs during the construction of a figure, its missing movements have to be reconstructed. These reconstructed movements are indicated below by square brackets [].

Each transcription is followed by a short description and interpretation of the figure, and by comparative remarks. An attempt is made to compare the figure with all string figures from the New Guinean area for which construction methods are known¹¹. After this, a comparison with selected string figure collections from Oceania is made. For this purpose the following areas and collections have been (more or less subjectively) selected:

- Melanesia: Solomon Islands (Maude 1978), New Caledonia (Maude 1984).
- Micronesia: Gilbert Islands (Kiribati) (Maude 1958), Nauru Island (Maude 2001).
- Polynesia: Marquesas and Society Islands (Handy 1925), Fiji (Hornell 1927), Hawaii (Dickey 1928).
- Australia: Haddon 1918, Stanley 1926, Davidson 1941.

At present there is no significant collection from Vanuatu (New Hebrides). The string figure collection from Palau (Laile et al. 2006) only has reconstructed instructions.

The comparative remarks can be used as an indication of the uniqueness of a certain figure, and of the degree in which there is variation in the construction methods, and in the names and interpretations of the figure. Comparisons could also indicate cultural relations between areas, although one has to be very careful in drawing conclusions here. String figures spread around the globe along complex and difficult to trace lines; individual creativity, simultaneous invention, face-to-face transmission between individuals, but also diffusion by means of books, films etc. come into play. Apart from this, hardly any existing string figure publication to date can claim to present an exhaustive collection of string figures from a particular area. Thus, when a certain string figure is not in a collection, this does not necessarily mean it is not known in the area covered by the collection.

TERMINOLOGY

See the *Nomenclature* section at the end of this volume.

STRING FIGURES

1. *Kapiva* ("wasp")

1. [Opening A.]
2. With R2345, from above, enter R1 loop and pick up R1n, lifting it over the top of R1, so that it becomes a dorsal R2345 string. With L2345, from above, enter L1 loop and pick up L1n, lifting it over the top of L1, so that it becomes a dorsal L2345 string.
3. On each hand there is a 2 loop, a 5 loop, and a 2345 loop. With 1 share 2345 loop, so that the 2345 loop becomes a wrist loop.
4. Turn 1 downwards towards the body over the near wrist string, away from the body under both wrist strings, then from below with 1 enter 5 loop and hook up 5f, turning 1 downwards, towards the body and up.
5. Release 5 loop, then with 5 pick up 2f.
6. Release 2 loop.
7. With 1 pick up 5n.
8. Bend 2 down over the palmar string, then pick up 1f.
9. Release 5 loop.
10. Release both 1 loops, and extend carefully (fig. 1).
11. Bring the figure towards the face, put your lips through the central diamond and sputter or laugh.
12. A second person with the right hand quickly touches the nose of the player. Try to catch the hand of this second person.

Based on its name, the figure probably represents a wasp. After the player has passed her lips through the central diamond of the figure, another person tries to touch the nose of the player. The player then quickly tries to catch or touch (the hand or side of) this person (Senft & Senft 1986:112, nr. 4; Eibl-Eibesfeldt & Senft 1987:6), probably imitating the sting of a wasp.

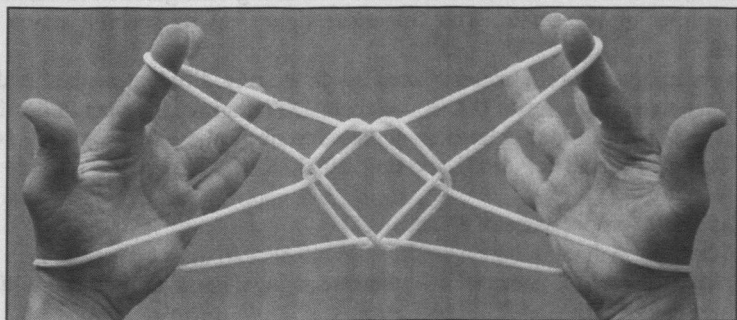


Fig. 1 - *Kapiva* (after movement 10)

There are five recordings known of a similar string figure from other regions of New Guinea. All construction methods are identical. Two recordings are from the Managalas and Musa district (Noble 1979:35-36, nr. 16 *sasa* ("white cockatoo") and Noble 1979:111-112, nr. 63 ("star variation")).

Three recordings from southern Papua and from the Fly River district have related names (Noble 1980:2 Echo, from southern Papua; Rosser & Hornell 1932:42, nr. 6 *idunitoto* ("mimicry/echo"), from near Port Moresby; Noble 2007:54-55, nr. 11 Imitation II, from the Fly River district). In both of these recordings by Philip Noble the player holds the figure in front of the face and passes his mouth and nose through the central diamond. The player now probably mimics and echoes the people around him. Although the name of the figure recorded by Rosser & Hornell indicates a similar action, no such action was described. The Trobriand figure carries another name, *kapiva* ("wasp"), but also in this figure the mouth and nose are passed through the central diamond of the figure, after which sounds or sputters are produced (in the film it looks somewhat like the player mimics other persons).

In the New Guinea area there occurs a related figure, which is slightly more complex. It starts with identical movements, as in movements 1-4 of *kapiva*, but differs afterwards (amongst others index loops are exchanged) (i.e. Noble 1979:140-141, nr. 85 ("stone"); Haddon 1930: 84-85, nr. 23 ("a Fly River turtle"); Jenness 1920:308, nr. 14 *kwalau'ta* ("the brush turkey"); Maude & Wedgwood 1967:209, nr. 6 *sa* ("the clam")).

A similar figure is known from the Solomon Islands, where it is known as *nepe* ("moon"). It is constructed exactly as in the Trobriand Islands (Maude 1978:1, nr. 1). No specific action is described for this figure. Another Solomon Islands figure (Maude 1978:77-78, nr. 58 *u'a* ("a crab")) uses similar initial movements (cf. *kapiva*, movements 1-7), to continue to a slightly more elaborate final figure.

In the Gilbert Islands a figure similar to *kapiva* is known, but it has quite different opening movements starting with a mouth loop (Maude & Maude 1958:27, nr. 9 *taai i* ("sun")). These result in a string configuration identical to *kapiva* after movement 6. The Gilbertese figure has no specific action attached.

In Palau, the figure is reconstructed by an entirely different method and is the final figure of a series (Laile, Reichelt, D'Antoni & Sherman 2006:135-136, nr. 67). The figure related to *kapiva* described above (Noble 1979:140-141 etc.) also occurs in Palau (Laile et al. 2006:88, nr. 25).

2. *Tobabane* (proper name of a man)

1. [Opening A.]
2. With the mouth, under all intermediate strings, grasp 5f, and draw it towards the body.
3. With the tips of L123, over all intermediate strings, grasp the left mouth

- string; with the tips of R123, over all intermediate strings, grasp the right mouth string. Release mouth strings.
4. There is a short *string segment* running straight from the tips of L123 to the tips of R123. Place this *string segment* (over all intermediate strings) over the R big toe. Release the string held by L123 and R123.
 5. Turn palms upwards. In the middle between both hands there is a *crossing* of the string running from L2n towards R1f and the string running from L1f towards R2n. With the mouth, over all intermediate strings, grasp this *crossing* and draw it towards the body.
 6. With the tips of L123, over all intermediate strings, grasp the double left mouth string; with the tips of R123, over all intermediate strings, grasp the double right mouth string. Release mouth strings.

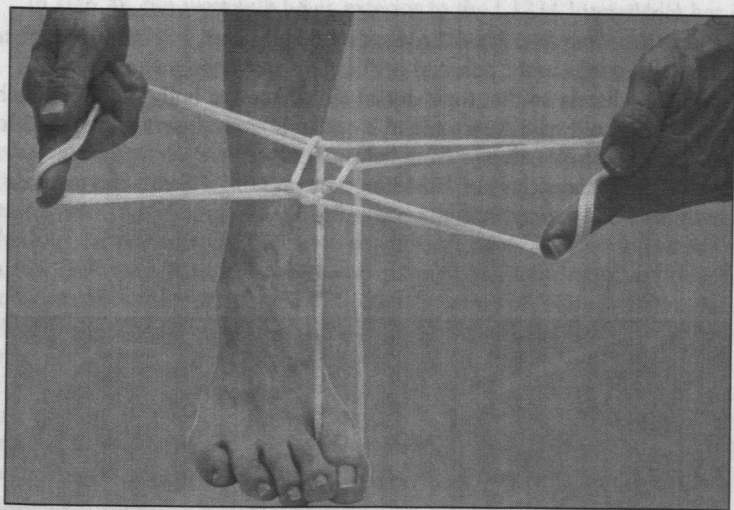


Fig. 2 - Tobabane (after movement 14)

7. Release the R big toe loop. There is a short *double string segment* running straight from the tips of L123 to the tips of R123. Place this *double string segment* (over all intermediate strings) over the R big toe. Release the string held by L123 and R123.
8. Release 5 loop and 2 loop and extend.
9. On the upper side each 1 loop is crossed by an *oblique string*. Pass 5 over 1f (close to 1) and pick up the respective *oblique string*; return 5.
10. On each side of the R big toe two strings form an "X" before going on to become a 5n string. With 2, over all intermediate strings, pick up the respective arm of the "X" that is closest to the R big toe. Release the R big toe loop and extend.

11. With the R big toe pick up 5f and return. Release 5 loop.
12. With 1, from below, share 2 loop.
13. With 345, from above, enter the shared 12 loop, then the lower 1 loop, and hook down the 12f and lower 1f strings to the palm. Remove 1 and 2 from the figure. Insert 2 into 345 loop from the same side (= from below).
14. With the tip of 2 pick up the double 2345n string. Turn the palms toward each other then toward the floor, with 2 pointing away from the body (a movement similar to the Caroline Extension) (fig. 2).
15. Keeping tension in the toe loop, move hands away from the body and back towards the body. Do this 6 times. During the repetitions recite once:

<i>Tobabane,</i>	<i>Tobabane,</i>
<i>kwakeye lumta;</i>	<i>you screw your sister;</i>
16. Recite

<i>kwalimati</i>	<i>you fuck her to death</i>
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 and at the same time bend 2 towards the body until it joins 345 in clutching their strings to the palm.
17. Invert the hands so that their dorsal sides face the body and the clutched strings are held with 5 on top and 2 on the bottom. Insert 1 into 2345 loop from the same direction (= from below).
18. Spread apart the strings of 12345 loop by pressing 1 down and towards the body, and 2345 away from the body (fig. 3).

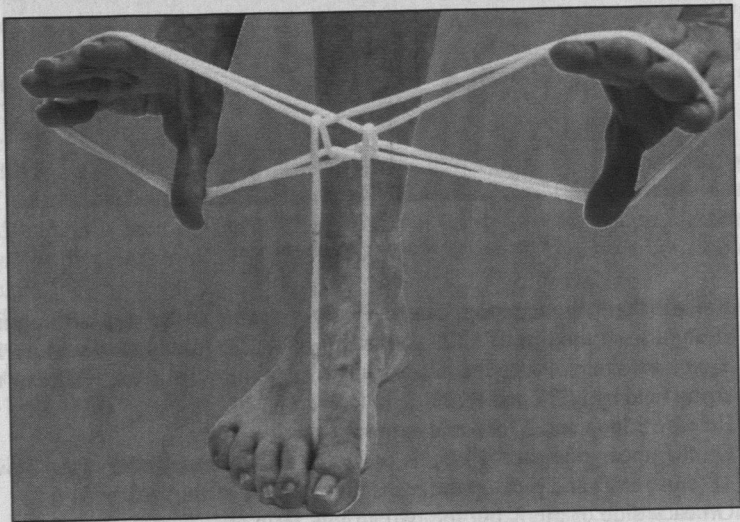


Fig. 3 - *Tobabane* (after movement 18)

19. Keeping tension in the toe loop, move hands down and up three or four times, meanwhile recite once:

<i>kusivilaga,</i>	<i>you turn around,</i>
<i>kuyomama</i>	<i>you feel weak and tired</i>
20. Turn palms towards the body and up and with 2345 grasp the string running along palmar side of 2345.
21. Withdraw 1 from the 12345 loop.
22. Repeat movements 14-21 twice.

Remarks

- In the film both women perform different movements for steps 16-18, and they display the final figure with different fingers and a different orientation. The description given above is for Inoma, the woman on the right.
- In step 18, the woman's L5 is exterior to the L1234 loop, while her R5 is in the same loop as R1234, even when she repeats the movements.
- The accompanying chant is described in Senft 2010:239.

Tobabane is the proper name of a man. The figure apparently represents the sexual act between a man and a woman. The accompanying chant (Eibl-Eibesfeldt & Senft 1987:6-7) corresponds to the first variant given in Senft & Senft (1986:154-156, nr. 45, *Tobabana* (sic)). There, another variant is given, which has approximately the same contents. It deals with an important taboo on the Trobriand Islands: brother and sister should not know anything about their sexual lives, let alone have an incestuous relation with each other (Malinowski 1929:462, 466, 520-522). The chant is related to that of figure 13, *Tokwelasi*, in the film (see below).

No construction method for this figure has been recorded before in other parts of New Guinea. The figure as such appears to be similar to a figure from the Watut and Banir River area (Fischer 1960:181, 201, nr. 25 *kang* (a bird-species)), where the toe-loop of *Tobabane* is pending loosely from the figure. Fischer mentions no specific movement of the figure.

An identical final figure is known from northern Australia (Haddon 1918:135-136 & plate 24, nr. 24 *etanga* ("the scrub-hen")); also found in Haddon 1930:107-108, nr. 32). Its construction method is however completely different from *Tobabane*. It has a somewhat different extension (the double loop is placed on the hands as for Position 1), but its movement, representing the scrub-hen scratching together its mound, is almost identical to that of *Tobabane* (including the turning over of the part on the hands cf. *Tobabane* movement 17). The Australian figure is dissolved in the end.

3. *Senube* (proper name of a woman)

1. [Place a loop on 1.
2. Bring the RH to the left to the near side of the LH. With R5 pick up L1n. Return the RH halfway to the right.
3. Pass L5, over all intermediate strings, to the near side of the RH, then pick up R1n. Return the LH and extend.
4. With 1 pick up 5n.]
5. Caroline Extension.
6. With the mouth Navajo the loops on 1, lifting transverse 1n over the tips of 1.
7. Touch the tips of 1 and 2 together and transfer 2 loop to 1.
8. Caroline Extension.
9. With the mouth Navajo R1; with the mouth Navajo L1. Bring hands into the Normal Position and recite:

*Senube, Senube,
avesom o pwapolasi?*

Gale, gale –

agumwaleta wa.

O, kuvigilema kauvala –

bitauveya, tau!

O mitaga evalalasi,

10. Release 5 loop and recite:

bwadagwa, o guvagava

11. Turn palms downward and away from the body, separate 1 and 2 far apart, 2 pointing upwards, 1 pointing down (fig. 4). Meanwhile recite:

emesi – tobobauva!

At the last word, the hands should be in the final position.

*Senube, Senube,
with whom do you go fishing?*

No, no –

I am just on my own.

Oh, pull out the punt pole –

we two want to shove it, man!

Oh, but here they come,

the brothers, at the guvagava-tree

they come – many of them!

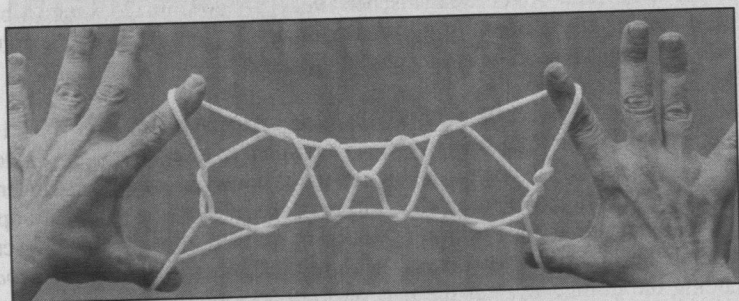


Fig. 4 - *Senube*

Recite further:

Apepela, alo

I hop, go

asiwa alakeva!

and sit on it!

Epepela, belei tau.

He hops, he ejaculates, the man.

Epepela – belesi!

He hops – and they ejaculate!

Remarks

- Movements 1-4 are not on the film, they have been reconstructed using Noble 2007:73-75, nr. 26 White cockatoo, movements 1-7.
- Both women dissolve the figure by bringing the figure down (palms facing the floor), and placing the middle of 2f over a big toe. They release the hands, and with one hand they pull the middle of 1n.

The string figure carries the proper name of a woman, and the accompanying chant, in clear-terms, hints at a sexual union. The chant in the film (Eibl-Eibesfeldt & Senft 1987:7) has two extra lines (the last two) when compared with the chant given in Senft & Senft (1986:122-123, nr. 14). Although stages in the construction of the figure could be linked to the recited text (i.e. a punt pole could be distinguished in the figure in movement 9), there seems to be no indication for this in the way the woman in the film behaves.

The final figure itself has not been recorded in the New Guinea area before. There is, however, a New Guinean figure that uses the same opening movements (*Senube*, movements 1-8), and is known both from the Managalas & Musa district and the Fly River district (Noble 1979:14-15, nr. 3 *umaha* ("cassowary and chicks"); Noble 2007:73-75, nr. 26 White cockatoo). Also from the Managalas & Musa district is a recording of this figure that uses alternative opening movements in which the head is involved (Noble 1979:131-132, nr. 78 Wallaby; Safia area). This results in an intermediate figure at the first Caroline Extension (cf. *Senube*, movement 5) which is equivalent (with instructions for left hand and for right hand exchanged) to both other recordings by Philip Noble.

A figure almost identical with the New Guinean *umaha*, both in form and construction, is known from Nauru (Maude 2001:36-37, nr. 15, No name known; here LH and RH are exchanged).

Figures identical with *Senube* are known in Oceania. In a recording from Northern Queensland, Australia (Stanley 1926:81, 85, Seagull flying down/seagull flying up) only the two intermediate figures of New Guinean *umaha* (movements 1-8) appear, identically constructed¹².

The New Caledonian Flying Fox is constructed exactly as the Trobriands *Senube* (Maude 1984:30-32, nr. 28), as is *Kaimanga te tei* ("Kaimanga the younger") from the Gilbert Islands (Maude & Maude 1958:111-114, nr. 99f). In both recordings, the intermediate figures (cf. *Senube*, movements 5 and 8) receive separate names (which is not the case in the Trobriand Islands). In New

Caledonia some of these names seem to suggest some kind of story that could be told along with the construction of the figure.

There are two more recorded figures from Oceania that look similar to the final figure of *Senube*, and that use related movements. In each of these, however, the opening movements differ substantially, which in one case result in an essentially different first intermediate figure (cf. *Senube*, movement 5), and a different final figure.

Such is the case for the Fijian figure *mbelo* ("crane"), during the *tambana* stage (Hornell 1927:32-33). The first intermediate figure here (in Fiji not distinguished as such) occurs after movement 6, after which slightly different movements follow, and arrive at the final figure, which is displayed differently (using indices, thumbs and little fingers, instead of the thumbs and indices in Trobriands *Senube*). The Solomon Islands figures *baru/fau* ("canoe"/"stone") (Maude 1978:116-118, nr. 89) uses the same opening movements as *mbelo*, but continues differently to a final figure *mai* ("reef").

The opening movements of the North Australian figure recorded by Davidson are again different (Davidson 1941:860-861, nr. 49 Second Flying Fox). The first intermediate figure (here again not distinguished as such) occurs after movement 4; it is identical to that of New Guinean Wallaby, described above (Noble 1979:131-132, nr. 78). After the figure equivalent to Trobriands *Senube* it is possible to continue the series with two more figures (Davidson 1941:861-863, nrs. 50 & 51 Third and Fourth Flying Fox).

4. *Sem* ("little fish")

1. Opening A.
2. Release 1 loop.
3. With the mouth, over all intermediate strings, pick up 5f and return.

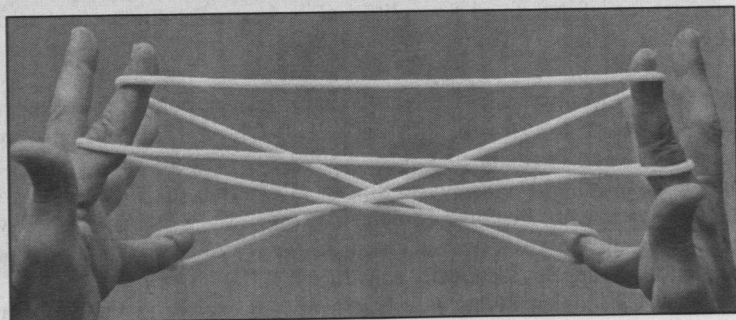


Fig. 5 - *Sem* (after movement 6)

4. With L2, over the L mouth string, pick up the R mouth string.
5. With R2, under the R mouth string, pick up the L mouth string.
6. Release the mouth string (fig. 5).
7. Pass 1 between 2n strings and pick up both 2f strings. Return 1 between 2n strings.
8. Pass 3 over upper 2n, to the far side of lower 2n, and pick up lower 2n.
9. With the mouth grasp both R1n strings; release R1 loops, then with R1 over double R mouth strings, then pick up the string passing across the palm of R3 (continuation of upper R2n). Release the mouth strings.
10. Similarly, perform movement 9 on the L side of the figure.
11. Pass 4 and 5 over 3f, and close them to the palm.
12. Remove 3 from its loop, then close it down to the palm over the (palmar) string held down by crooked 4 and 5.

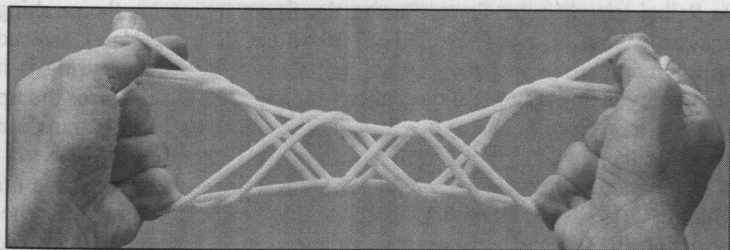


Fig. 6 - *Sem* (after movement 13)

13. Extend with the palms facing each other, and 2 pointing away from the body (fig. 6). Recite:

Sem, sem, sem

bara, bara

kunopi'e kada sem

sem

little fish, little fish, little fish

hop, hop

just snap at our two little fish

little fish

14. Recite:

Salalalala.

they spurt off

and simultaneously release 1 loop and unfurl 345.

15. Repeat movements 7-14 twice.

Remarks

- Movement 4: Iogosa, the woman on the left, uses R2 to pick up the L mouth string (movement 5: she uses L2 to pick up the R mouth string accordingly).

- Movements 9 and 10: the first and third time, Inoma, the woman on the right, performs these movements with the help of her mouth. The second time she doesn't use her mouth to hold the double 1n strings.

According to the accompanying chant (Eibl-Eibesfeldt & Senft 1987:7-8, identical to Senft & Senft 1986:120, nr. 12), the figure seems to represent two little fishes, which spurt off at movement 14, and appear again at movement 15.

The figure has been recorded four times in other regions of New Guinea. Except for minor details, the recording by Philip Noble is exactly the same as *sem* (Noble 1979:74-75, nr. 40). In the Managalas & Musa district the figure is known as "fight of small birds", where releasing thumb, middle, ring, and little finger in movement 14 of *sem* signifies that the small birds are being frightened. On the northern coast the figure is called "rain", and movement 14 represents lightning. On Goodenough Island the figure is known as *matafwa'si*, but what that signifies is unknown (Jeness 1920:306, nr. 10). Its construction matches that of *sem*, but no action similar to movement 14 of *sem* is known.

On Saibai Island in the Torres Straits, the figure represents the mashing of *gomakiam*, a kind of taro (Maude 1987:16-18, nr. 13 *gomakiam*). Instead of using the mouth as in *sem* movements 3-6, the far little finger string is here hooked up by the right index finger, after which the left index shares the upper right index loop from below. After forming the figure twice, it is transformed into another figure.

In the Buna district a figure similar to *sem* is known under the name *bidigi* ("lightning") (Rosser & Hornell 1932:45, nr. 10). There is a small difference in construction (the thumb is released simultaneously in movement 6 instead of movement 2 in *sem*), and a notable difference in extension: after movement 8 in *sem*, the ring and little finger pass under 3f, and then hook down upper 2n to the palm; the now finished figure is extended with the palms facing the body. Rosser and Hornell describe no action connected to the figure.

The figure is known from the Solomon Islands (Maude 1978:21-22, nr. 17 *onga* ("lightning")). Its construction is identical to *sem*, except for movement 12, which is omitted in *onga*. *Onga* has a similar action as *sem* (cf. *sem* movement 14), but this is not repeated.

An almost identical figure was recorded in Australia (Davidson 1941:843, nr. 33 Rain). The opening movements are slightly different; a typical movement called "Movement Z" (Davidson 1941:839-840) is used to arrive at the configuration cf. *sem* after movement 6. The little fingers are used instead of the middle fingers to pick up the lower near index finger string cf. *sem* movement 8, and subsequent movements are thus slightly different to arrive at an almost identical extension as *sem* after movement 13, except that in the Australian figure the index fingers are closed to the palm over the palmar string. No action is described for the Australian figure.

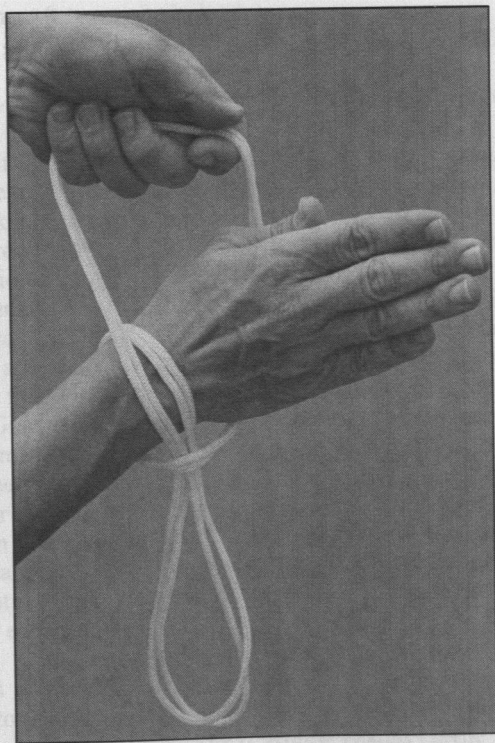
5. *Sopa* ("a joke")

1. [Double a string loop.]
2. Hold the doubled loop with the LH, knuckles facing the floor, L1 pointing right. A long (double) pending loop now hangs down from the LH.
3. With the RH palm facing the LH, from the near side enter the LH pending loop, and bring the side of the RH with a chopping motion towards the floor, thus stretching the loop. When the RH is at the end of the loop, recite:

<i>O voa?</i>	<i>Oh, what's that?</i>
---------------	-------------------------

 Withdraw the RH from the L pending loop.
4. Repeat movement 3, but recite instead:

<i>Sopa</i>	<i>A joke</i>
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5. Repeat movement 4, including the recited text.
6. With the RH palm facing the floor, from the near side enter the LH pend-

Fig. 7 - *Sopa* (movement 7)

- ing loop, turn the RH a quarter turn counterclockwise so that the R palm faces right. Move the RH to the right, then downwards, towards the body and up, wrapping the L near pending string around the R wrist.
7. Move the RH between body and the LH towards far side of the L far pending string, then away from the body, and with the RH (palm facing upwards) enter the LH pending loop from above (= towards the body) (fig. 7). During the performance of movements 6-7, recite once:
- | | |
|-------------------------|-------------------------------|
| <i>Sopa, sopa, sopa</i> | <i>A joke, a joke, a joke</i> |
| <i>Sopa, sopa, sopa</i> | <i>A joke, a joke, a joke</i> |
8. Quickly move the RH (its palm facing the LH) towards the right (fig. 8). Recite:
- | | |
|-----------------|---------------------|
| <i>Nasasopa</i> | <i>A funny girl</i> |
|-----------------|---------------------|
- The RH is freed from all its strings.

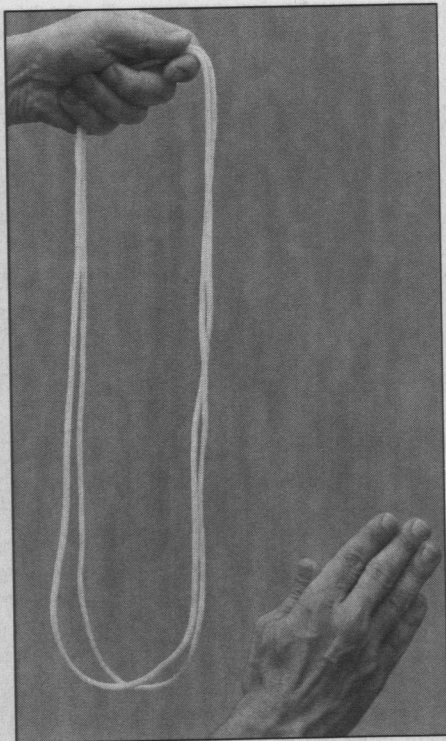


Fig. 8 - *Sopa* (movement 8)

This figure/trick is not described in Senft & Senft 1986. Its chant can be found in Eibl-Eibesfeldt & Senft 1987:8. The trick itself is the same as the next figure *Mwada*, although the accompanying verses differ. Comparative remarks are given after figure 6 *Mwada*.

6. *Mwada* ("as if")

1. [*Sopa* movement 1.]

2. *Sopa* movement 2.

3. *Sopa* movement 3, but recite instead:

Waga

A canoe

4. Repeat *mwada* movement 3, including the recited text.

5. Repeat *mwada* movement 3, including the recited text.

6. *Sopa* movements 6-7, but recite instead once:

mwada, mwada, mwada,

as if, as if, as if,

mwada, mwada, mwada -

as if, as if, as if -

nagoa -

crazy girl -

7. *Sopa* movement 8, but recite instead:

vota! O gi!

(as if it had) a sail! Oh look!

Just like the previous figure, this figure/trick is not described in the collection of Senft & Senft 1986; but its chant is given in Eibl-Eibesfeldt & Senft 1987:8. In *sopa* the chant describes the figure simply as a trick, in *mwada* it seems to represent a canoe.

A similar trick has been recorded five other times in the New Guinea area; in all these recordings the principle movements of the trick are the same. Both in the Daga region (Noble 1979:170-171, nr. 116 mosquito) and on Goodenough Island (Jenness 1920:325, nr. 43 *nimo'ga* ("a mosquito")) the trick refers to a mosquito. The freed right hand in *mwada* movement 6 quickly nips an onlooker on the arm, and thus represents the mosquito nipping the arm (Daga region), or if the thigh of an onlooker is slapped, it represents the beating away of a mosquito (Goodenough Island). On Goodenough Island, the figure is, as a rule, only performed in the season when mosquitos appear.

The other three recordings are from the Torres Straits, where it is called *monan* ("lizard") or *maita* ("intestines of a turtle") (Rivers & Haddon 1902:152, nr. 11; Haddon 1912:339, nr. 26); on Saibai island it is called *yawa* ("goodbye") (Maude 1987:7-8). These recordings do not give an interpretation of the movements, although Haddon 1912 gives a short song ("Lizard rolls to Peibri a fruit for eating") after the release of the right hand.

In other regions in Oceania the trick is also known, its principal movements being identical to those in the Trobriand Islands. In some cases the trick bears no real name, or only an abstract name (Caroline Islands (Jayne 1906:337-339, unnamed trick); New Caledonia (Maude 1984:64, nr. 55 trick); Solomon Islands (Maude 1978:171, nr. 115 ("wrist loop trick"))). In the Marquesas Is-

lands the trick represents the way an eel slipped through the fingers (Handy 1925:52 *koe* ("to slip through the fingers like an eel")). In Hawaii the trick is also related to an eel in the song that accompanies it (Dickey 1928:152-153 *e loli e* ("turn")). On Hawaii it was also a gambling or betting trick. In New Caledonia the trick is usually performed when it is time to stop playing with the string (a use which the Saibai name of the trick, "goodbye", also suggests).

The chopping motion of movement 3 in *mwada* has not been described elsewhere.

7. *Neya* ("ginger-root").

1. Opening A.
2. Pass 1 under all intermediate strings and insert it from below into 5 loop, turn 1 downwards, towards the body and up, thus hooking up the 5f string in the process.
3. Release 5 loop.
4. With 5, under all intermediate strings, pick up the double 1f string and return.
5. With 1, from below, share 2 loop.
6. With the mouth Navajo the L1 loops and the R1 loops, passing the lower and middle loops over the upper loop, and over the tip of 1 to the palmar side.
7. With 1, from above, remove 2 loop.
8. Caroline Extension with the continuation of the double 5n string that forms one side of the triangular 1-space.
9. Release 1 loops (fig. 9), then recite:

Samtala neya,

One ginger-root,

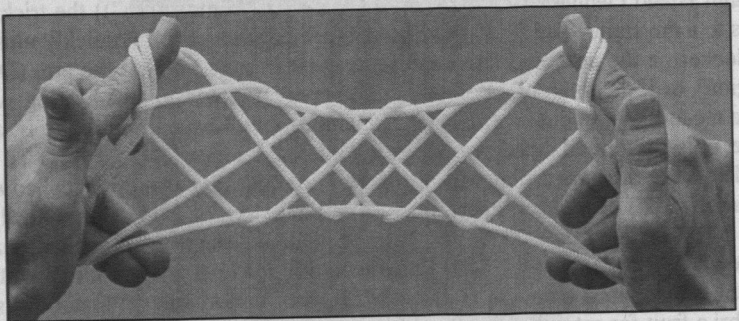


Fig. 9 - *Neya* (after movement 9)

10. With 1, from below, enter the figure close to 5, and pick up both strings encircling the double palmar string. Release 2 loops.
11. Repeat movements 8 & 9, but recite instead:

samyuvela neya,

another ginger-root,

solved in a similar way to *neya* (one should in *neya* movement 14 hook up the double near little finger string with the index, middle and ring fingers instead of the index finger only, after which in movement 15 the thumb as well as the little finger should be released).

The figure is known in other areas of Oceania as well. The recordings from Fiji (Hornell 1927:49-50), the Society Islands (Handy 1925:57-58 *Rurutu* (name of an island)) and the Solomon Islands (Maude 1978:5-6, nr. 6) are related to each other. Their construction method is similar to that of *neya*, except that in *neya* movement 4 one should hook down the double far thumb string to the palm by entering the double thumb loop from above. In the Solomon Islands this is done with the little finger only, in Fiji with middle, ring, and little finger together, and in the Society Islands probably with the ring and little finger¹³. This results in a slightly different extension of the figures cf. *neya* after movements 8 and 9.

In Fiji the figure cf. *neya* after movement 8 is called *mataka lai-lai* ("early morning") and represents dawn. After releasing the thumb the figure becomes *mataka levu* ("great morning"), representing the full day with the sun in the sky. The sequence of figures is not repeated as in *neya*, and there is no specific dissolution. On the Solomon Islands, the figure is known under several names (*banui* (a tree species), *manu* ("flock of birds") and *mani imoro* ("some pilchards")). Only the figure cf. *neya* after movement 9 is considered here as a separate figure. The figure called *manu* is dissolved by inserting the thumbs away from the body into the triangles having an apex around the double 2n-5n strings, and then releasing all the other fingers. It represents birds flying away.

Two other recordings, from Nauru (Maude 2001:28, nr. 7 *oeron* ("rain")) and from the Gilbert Islands (Maude & Maude 1958:98, nr. 89 *kanukia* ("wanting to open")), are again similar to *neya* and related to each other. They use a technique different from *neya* movements 4-7. The index loop is bent around the double near thumb string using the middle finger and mouth. It results in a figure that is identical to *neya* after movement 9, using a similar extension (in the extension of the Gilbertese figure the little finger is closed to the palm). In both recordings only the figure cf. *neya* after movement 9 is considered a separate figure.

In Nauru one chants a verse (about the rain that falls and stops) after the figure is extended, and at the end of it the figure is dissolved in a way similar to that of the Solomon Islands *manu*. For the Gilbert Islands figure no specific dissolution is described.

8. *Ebwesi* ("he urinates")

1. Insert the R big toe into one end of a loop, With the L palm facing the body insert L12345, from left to right, into the other end of the loop so that the string sits halfway over L12345. There is a L palmar string and a L dorsal string.

2. Move R2 (R palm facing L palm) under the L palmar string, then through the space between L1 and L2 and over the L dorsal string; hook down this L dorsal string and pull it towards the body under the L palmar string. Turn the tip of R2 towards the body and up, creating half a twist in the R2 loop.
3. Bring the tips of L2 and R2 together. With L2, from above, remove R2 loop.
4. Move R2 (R palm facing L palm) under the string running along the palmar base of L2 and L3, then through the space between L2 and L3 and over the string running along the dorsal base of L2 and L3; hook down this L dorsal string segment and pull it towards the body under the L palmar string segment. Turn the tip of R2 towards the body and up, creating half a twist in the R2 loop.
5. Bring the tips of L3 and R2 together. With L3, from above, remove R2 loop.

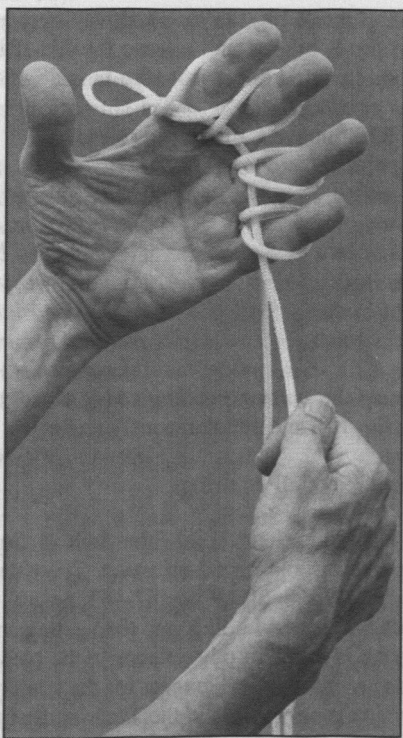


Fig. 11 - *Ebwesi* (during movement 13)

6. Move R2 (R palm facing L palm) under the string running along the palmar base of L3 and L4, then through the space between L3 and L4 and over the string running along the dorsal base of L3 and L4; hook down this L dorsal string segment and pull it towards the body under the L palmar string segment. Turn the tip of R2 towards the body and up, creating half a twist in the R2 loop.
7. Bring the tips of L4 and R2 together. With L4, from above, remove R2 loop.
8. Move R2 (R palm facing L palm) under the string running along the palmar base of L4 and L5, then through the space between L4 and L5 and over the string running along the dorsal base of L4 and L5; hook down this L dorsal string segment and pull it towards the body under the L palmar string segment. Turn the tip of R2 towards the body and up, creating half a twist in the R2 loop.
9. Bring the tips of L5 and R2 together. With L5, from above, remove R2 loop.
10. With the RH grasp the R big toe loop halfway between the toe and LH. Lift the loop off the R big toe and release the RH string. There is now a large *pending loop* hanging down from the far side of the LH, with a *palmar* and a *dorsal pending string*.
11. With the tips of R12 remove L1 loop and release it.
12. Look at the LH palm and recite:

<i>Isulusulu,</i>	<i>She is cooking</i>
<i>Isulusulu, inam.</i>	<i>She is cooking, your mother.</i>
<i>Kamkwam bivokwa.</i>	<i>The meal will be finished.</i>
<i>Ivadidi, vam lilu,</i>	<i>It goes down, your sun,</i>
<i>O dabala Bulivada.</i>	<i>above (the island of) Bulivada.</i>
<i>Kuvataina o susuna –</i>	<i>You turn around over there where</i>
	<i>the rubbish is –</i>
13. With the RH grasp the *palmar pending string* close to L5 and pull it towards the right (fig. 11), and simultaneously recite:

<i>Selururururu.</i>	<i>piss – piss – piss.</i>
----------------------	----------------------------

 The LH becomes free of all its strings.

Based on the accompanying chant (Eibl-Eibesfeldt & Senft 1987:9-10), the figure appears to represent cooking and urinating. The chant is identical to the first variant given by Senft & Senft (1986:162-163, nr. 50). The second variant given there deals with bathing and oiling, and then eating and urinating.

A similar figure/trick is found at other places in the New Guinean area. The construction methods are all identical, except for the stretching of the string by means of the foot, which is only found in the Trobriands *ebwesi* (movement 1).

In the Torres Straits the figure (cf. *ebwesi* after movement 11) represents the ear of a mouse appearing through a crack. The player makes a squeaking noise to imitate the sound of the mouse. A second player (the cat) tries to catch the

mouse, but the first player pulls the palmar string (cf. *ebwesi* movement 13), and the mouse quickly disappears (Haddon 1912:339, nr. 27 *kebi mokeis* ("the mouse")); the same recording is described in Rivers & Haddon 1902:152, nr. 12 *kebe mokeis*, Jayne 1906:340-343, The mouse, and Haddon 1911:80-81, trick 2 *kebi mokeis* ("the mouse").

In other areas of Oceania an identical figure/trick is found; its construction method is the same everywhere.

New Caledonian *fek alou* ("uprooting maniania") has a story attached to it. The figure on the left hand (cf. *ebwesi* after movement 10) represents a maniania root, firmly fixed in the soil. The pending loop represents its aerial shoot. When a large and strong man tries to pull the root out of the soil (pulling the pending loop with the right hand), the root remains fixed in the ground. But when small and weak Ouleoule tries (release the left thumb loop cf. *ebwesi* movement 11, and then pull the pending loop), the root comes up easily (Maude 1984:61-62, nr. 52).

In one Hawaiian version of the figure a little story is contained in a verse (Dickey 1928:151-152, *Kele-opa* ("lame Kele")); in this recording the figure is constructed on the right hand instead of on the left hand). The disappointed fisherman Kele limps tired to the beach, with nothing but his bait (cf. *ebwesi* after movement 11). The bait bursts (represented by pulling the pending loop) and leaves Kele with nothing. In Hawaii, the figure is also known under other names: *pua-kala* ("thorny flower"), with a small verse, and *puhi palemo* ("gliding eel") (Dickey 1928:151-152).

On the Solomon Islands the figure is known as *narihe* ("centipede") or as *kaekae ivera* ("lying very much"). This last name suggests some kind of story, which is unfortunately not given (Maude 1978:170, nr. 113). The recording from the Gilbert Islands (Maude & Maude 1958:149, nr. 119) has no name. In North and West Australia the trick is called 'bullocky', 'fingers caught', or it is unnamed (Davidson 1941:880-881, nr. 71).

9. *Togesi* (proper name of a man)

1. [Opening A.]
2. With 2, from above, enter 5 loop, and hook 5n as well as 2f. Continue to rotate the tip of 2 under its own 2n string, towards the body and up. 2 now has two loops surrounding it. Release 5 loop.
3. With 345 hook the double 2f string to the palm.]
4. With the mouth, from above, enter 1 loop, and grasp the oblique R2n string. Release R1 loop, and with R1, from below, remove the mouth loop.
5. With the mouth, from above, enter L1 loop, and grasp the oblique L2n string. Release L1 loop, and with L1, from below, remove the mouth loop (fig. 12). Then recite:

*Togesi, Togesi -
yatala kwega!*

*Togesi, Togesi -
a spicy leaf!*

6. Rotate clenched hands so that the knuckles point down, and the palm side of the hand faces up. As you do so, your elbows come toward your body. Note that the central portion of the double 345f string pops up, and out of the figure (fig. 13). (This action occurs when a somewhat stiff string is used). During this movement recite:

Ge'i, ge'i, kauya okwa.

No, nothing, the bag is empty.

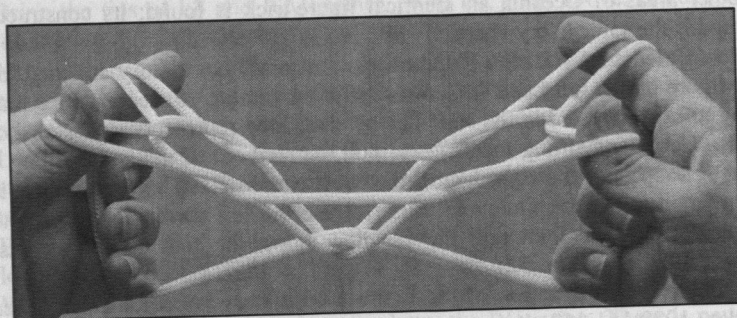


Fig. 12 - Togesí (after movement 5)

7. Return the hands to their original position by rotating them in the opposite direction. Then recite:

*Togesí, Togesí -
yayuvela kwega!*

*Togesí, Togesí -
two spicy leaves!*

8. Repeat movement 6, including recitation.

9. Return the hands to their original position by rotating them in the opposite direction. Then recite:

*Togesí, Togesí -
yatolula kwega!*

*Togesí, Togesí -
three spicy leaves!*

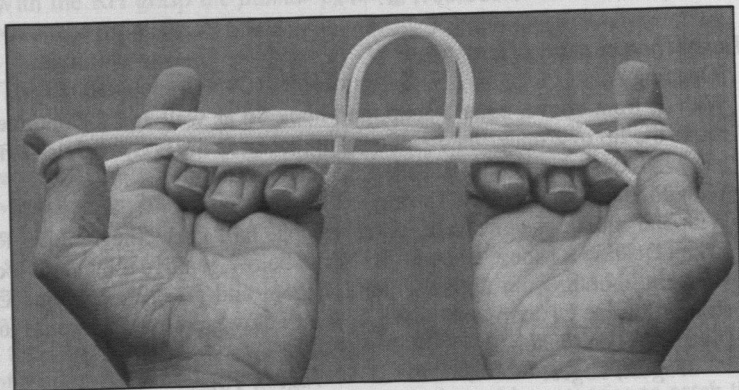


Fig. 13 - Togesí (during movement 6)

10. Repeat movement 6, including recitation.
11. Return the hands to their original position by rotating them in the opposite direction. Then recite:

<i>Eyam - kadanadana</i>	<i>Day breaks - we cut it off</i>
--------------------------	-----------------------------------
12. The central part of the figure consists of an inverted double-walled triangle. With the mouth grasp the double strings of the inverted triangular base. During this movement speak:

<i>Lagela takapitunisi</i>	<i>Today we snip it off</i>
<i>guyau ala kauya.</i>	<i>the chief's bag.</i>
13. Release the LH from all its strings. With the LH fingers grasp the double L mouth string. Release mouth strings, and simultaneously release the RH from all its strings.
14. Insert the RH away from the body into the figure (through the former inverted triangular space). Orient the RH as if it was a knife, and slide it down between strings. The strings will separate.

The figure is named after a certain man Togeni, but it is also called *kauya* ("men's little bag"). Turning the figure upside down in movement 6 demonstrates that the bag is empty; there are no spicy leaves inside to chew upon. The accompanying chant (Eibl-Eibesfeldt & Senft 1987:10-11) is almost identical to that given by Senft & Senft (1986:113-114, nr. 6), but the 1986 publication has a final line "we take it, it burns" added.

The figure itself is quite common in the New Guinea area, and has been recorded several times. The principle of its construction is identical, except for minor details.

A number of recordings use middle, ring, and little finger together to hook the double far index string to the palm in movement 3, as in the Trobriand Islands (Jenness 1920:303-304, nr. 5 *fo'se* ("the basket"), from Goodenough Island; Maude 1987:21-22, nr. 19 *gul* ("canoe"), from the Torres Straits; Shishido & Noguchi 1987:53-54, nr. 16 Cane bridge, from the Mount Hagen area; Noble 2007:45, nr. 1 Canoe, from the Fly River district). In two cases using the same construction method, the figure itself is not displayed, but developed immediately into another figure (Harbison & Reichelt 1985:18-19 *hembihomoe* ("flying fox"), from the Sepik area; Maude & Wedgwood 1967:214-215, nr. 12 *ruayo* ("the marriage"), from the north coast¹⁴).

Some recordings use only little fingers to hook the double far index string to the palm (Rivers & Haddon 1902:149, nr. 2 *ti meta/gul* ("the nest of the Ti bird"/"a canoe"¹⁵), from the Torres Straits; Noble 1979:127, nr. 73 Well for cooking fat, from the Managalas & Musa district; Haddon 1911:26-27, nr. 16 *kokowa* ("the crab"), from the Torres Straits). Using this construction method, but not displaying the figure itself is a recording from the Gulf of Papua (Holmes 1924:280 *ura* ("a bed")).

In the recordings from Mount Hagen, the Fly River district, and in the Maude 1987 and Haddon 1911 recordings from the Torres Straits, the figure has a continuation and is part of a series.

The method of pulling the oblique 2n strings through the original thumb loop and then again picking them up with the thumbs (*Togesi* movements 4 and 5) varies in the recordings. The Trobriands recording is the only one found where the mouth aids in this process.

Usually the thumb loops are released gently, thumbs are inserted from the opposite side and then pick up the respective oblique near index strings close to the hand and pull these through the original thumb loops.

In the Mount Hagen recording and Maude's 1987 recording from the Torres Straits the middle fingers assist. They remove the thumb loops from below and keep it in place for the thumbs to enter from the opposite side. After the thumbs have picked up the oblique near index strings, the middle fingers are withdrawn from the thumb loops.

In the recording from Goodenough Island, the middle fingers are used to open up the figure in the extension; they pick up the upper near index string (running straight from left index to right index), and pull it to the far side of the figure.

The Goodenough Island figure comes close to the Trobriands figure when it comes to name, meaning, and action. The Goodenough Island figure represents a basket, which is turned over when another player asks for a betelnut, to show that there are not any.

The figure most often represents a canoe, but can also be a bird's nest, a cane bridge, or a well for cooking fat.

Figures similar to *Togesi* are common in other parts of Oceania as well, and a distinction in construction methods, as above, can also be made here. Inserting middle, ring, and little finger together in the index loop to hook the double far index strings to the palm is used in the Gilbert Islands (Maude 1958:129-130, nr. 105 *te baenelte kumete* ("a basket"/"a wooden bowl")); a doubled string is used, the Society Islands (Handy 1925:76-77 *apoo mahai ahaana* ("great hole for breadfruit paste")) and Fiji (Hornell 1927:20-21 *velovelo* ("dugout canoe"), with a song).

Using only the little fingers to perform this is done in New Caledonia (Maude 1984:34-35, nr. 32 *tung* ("the well")), on the Loyalty Islands (Haddon 1911:17-18, nr. 10 *tim* ("the well"); Haddon 1934:20-21, nr. 11 the well), on the Solomon Islands (Maude 1978:106, nr. 80 *daho* ("wooden food bowl")), and on Hawaii (Dickey 1928:101-102 *waa* ("canoe")).

The figures from the Loyalty Islands (in both recordings) and the Society Islands have a continuation. In the construction of the Hawaii and the Society Islands figure the middle fingers assist, as in two of the New Guinean figures (Mount Hagen area and the Torres Straits (Maude 1987)).

In none of these recordings is the mouth used during the construction process, as is done in the Trobriand Islands.

10. *Mina Kaibola* ("You (people) from (the village) Kaibola")

1. With the RH, hold one end of a string loop. Hold the LH so that the L palm faces down and the fingers point right. Bring hands together, inserting the LH into the RH loop. The RH releases its loop onto the LH wrist. There is now a long pending loop hanging down from the LH wrist.
2. With R123 grasp the LH far pending string. Move the RH towards the body passing the string around the palmar side of the LH wrist, then move the RH away from the body, over the dorsal base of L1234 and pass the string down between L4 and L5 towards palmar side of the LH. Release the string held by R123.
3. Pass the RH to the left between the body and the LH loop, then turn it to the right, and from below, enter the LH pending loop. Turn the RH away from you, go around and pick up L4f so that it becomes a RH dorsal wrist string. Pass R5 over the LH palm base wrist string and hook down that string (fig. 14). R5 carries its hooked string under the LH near wrist

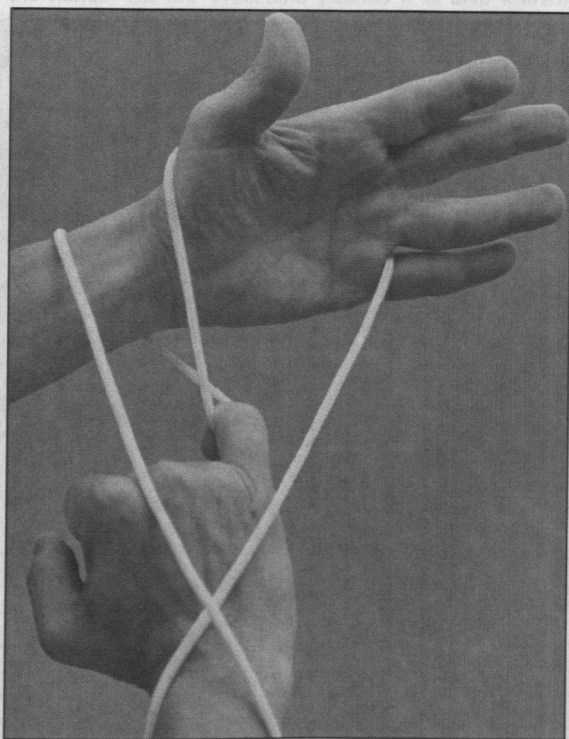


Fig. 14 - *Mina Kaibola* (during movement 3)

- pending string, and then rotates towards the body and up. Extend to the Normal Position.
4. Pass L1 over all intermediate strings, to far side of R5, and hook up R5f, twisting L1 towards the body and up.
 5. With the mouth grasp the RH near wrist string, lift it over the tips of the RH fingers, and place it on R1.
 6. With R1 pick up R5n.
 7. Caroline Extension with RH only.
 8. Bunch together the LH fingers. Bend the tips of L12345 down into the space between L234n and L234f and spread the fingers, allowing the LH dorsal wrist string to slide off the wrist, LH palm facing the floor.
 9. Display vertically, with the RH above the LH, LH palm facing the floor and fingers pointing away from the body, RH palm pointing away from the body (fig. 15) and recite:

*Mina Kaibola,
mina Kaibola:*

*You from Kaibola,
you from Kaibola:*

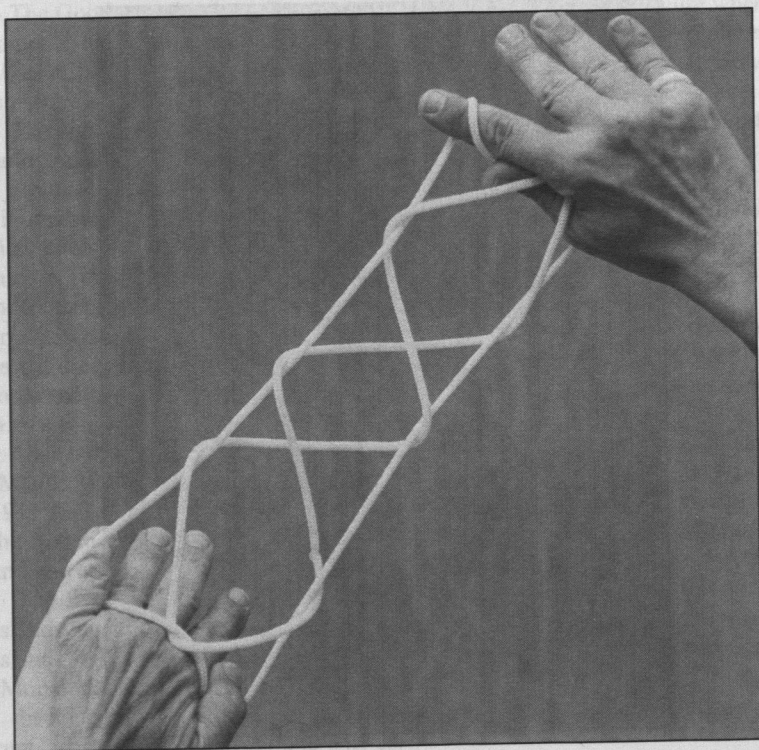


Fig. 15 - Mina Kaibola (after movement 9)

<i>utusa mivaga!</i>	<i>rise your (steering) paddles!</i>
<i>Talibita okubububa –</i>	<i>we two are fondling our fronts –</i>
<i>taikulasi.</i>	<i>we two paddle.</i>
<i>Mitava, baivola –</i>	<i>But no, I will paddle –</i>

10. Perform a rowing movement once with the figure to the left of the body, as if it is a paddle, and at the same time recite:

<i>Kupsi - kupsi.</i>	<i>splash - splash.</i>
-----------------------	-------------------------

11. Bring back the figure to original position and at the same time recite:

<i>Mitava, baivola –</i>	<i>But no, I will paddle –</i>
--------------------------	--------------------------------

Perform a rowing movement once with the figure to the left of the body, as if it is a paddle, and at the same time recite:

<i>Kupsi</i>	<i>splash.</i>
--------------	----------------

12. Repeat movement 11 three times, including recitation.

The figure must represent a paddle, which becomes clear from the way it is moved with the hands. On the Trobriand Islands it is also known under the name of *kaikela baola* ("his paddle I will insert"). Its accompanying chant (Eibl-Eibesfeldt & Senft 1987:10-11) is more or less identical to that given by Senft & Senft (1986:135-136. nr. 27). The chant is also found in a *vilowosi* ("village song", a subgenre of songs sung on the Trobriand Islands), which has an accompanying dance with sexual connotations (Senft 2010:232). Kaibola is a village on Kiriwina Island.

The figure is known also from Kiriwina island, the largest of the Trobriands Islands (Harbison & Reichelt 1984:24-25, *menakaibola* ("people of Kaibola"), with the informant stemming from Kaibola himself). The figure here also has an accompanying chant, which closely resembles that of *mina kaibola* given above. Harbison & Reichelt state that the figure and its action represent the people of Kaibola returning home from a *kula* expedition. Its construction method is identical with that of *mina kaibola*.

In another recording from the New Guinean area the figure represents a sea bird (Noble 1979:118-119, nr. 68 *em*, Managalas and Musa district). After finishing the figure, wriggling of the left hand mimics the movement of the bird's tail. Construction again is identical.

A figure recorded by Diamond Jenness on Goodenough Island (Jenness 1920:322, nr. 38 *voi* ("a paddle")) shows some similarity to *mina kaibola*. Both figures represent a paddle and share some similar movements.

The figure is not known from other areas in Oceania.

11. *Kalipudou* (bird-species)

1. [Murray Opening (Hold the loop between the tips of R123, so that it hangs down from the RH. There is a *left string* and a *right string*. Bring the LH towards the RH and with L123 grasp *left string* approximately 15 cm below the RH. Bring the hands to the same level. Move the RH away from the body and to the left to make a *small hanging loop*. Pass 2 away over

the strings held by 123 then towards the body through both *hanging loops*. Bring the fingertips of 2 upwards, unfurl 1 and 3, and extend. There are now two loops on 2, with upper and lower 2f strings crossing.)]

2. With 1 between 2n strings, pick up lower 2f.
3. With 1 over upper 2n, pick up upper 2f.
4. With 5 over upper 2n, pick up lower 2n.
5. There is a *triangle* at the palmar base of each 5, formed by an upper 2n string, a 5f string, and a 5n string running along the palm of the hand to become a lower 2n string. With R2, from above, enter the RH *triangle* and hook up the upper R2n string, turning R2 towards the body and up. With L2, from above, enter the LH *triangle* and hook up the upper L2n string, turning L2 towards the body and up.
6. Release 1 loops and extend, with palms pointing away from the body, and 2 pointing up.
7. In the middle of the figure there is a "*W*"-like structure, formed by strings that originate as lower and middle 2f strings. With 1, from below (away from the body), enter 5 loop close to 5, then pick up the respective double side-arm-strings of "*W*"-like-structure in the figure.
8. With the RH remove all loops from L2 and release them; with the LH remove all loops from R2 and release them. Extend the hands.
9. Caroline Extension (fig. 16). Recite:

<i>E, uula, ina -</i>	<i>Yes, the reason for this, mother -</i>
<i>la bwala Kalipudou</i>	<i>is the house (nest) of the Kalipudou-bird</i>
10. Bring hands together, so that fingers of each hand point towards each other. Separate R1 and R2 slightly, then with tips of R12 grasp L2f string close to L2. Release L2 loop, at same time separating L1 and L2 slightly. With R12 lift former L2f string over tip of L1. Keep hands in position, then with tips of L1 and L2 grasp R2f string and lift it over tips of R2 as well as R1. Slide each 1 in the loop surrounding it, so that the former 2f string becomes the 1f string. During this movement sing:

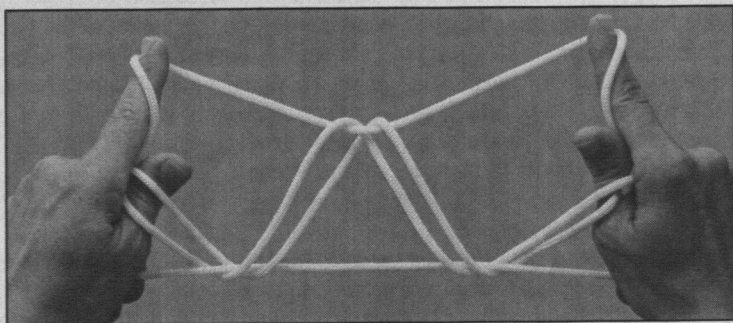


Fig. 16— *Kalipudou* (after movement 9)

- | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------|
| | <i>Kalipudou dou dou</i> | <i>Kalipudou dou dou</i> |
| | <i>Kalipudou dou dou</i> | <i>Kalipudou dou dou</i> |
| | <i>Kalipudou dou dou</i> | <i>Kalipudou dou dou</i> |
| 11. Caroline Extension, then recite: | <i>E, bogwa ekato'ula</i> | <i>Yes, he is already ill</i> |
| 12. Repeat movement 10, including song. | | |
| 13. Caroline Extension, then sing: | <i>Tuade, mnuveaka!</i> | <i>Brother, big bird!</i> |
| 14. Repeat movement 10, but sing instead: | <i>Kume! Kwiyuwisegwe!</i> | <i>Come! take me away!</i> |
| 15. Caroline Extension, then sing: | <i>Babweno Kalipudou.</i> | <i>Then I will feel fine, Kalipudou.</i> |
| 16. Repeat movement 10, including song. | | |
| 17. Caroline Extension (fig. 17). | | |
| 18. Bring hands together, so that fingers of each hand point towards each other. Separate L1 and L2 slightly, then with the tips of L12 grasp R2f close | | |

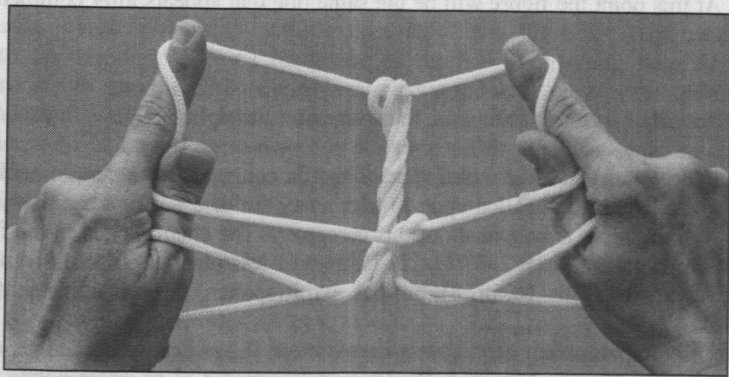


Fig. 17 – *Kalipudou* (after movement 17)

- to R2. Release R2 loop, and at same time separate R1 and R2 slightly. With L12 lift the former R2f over the tip of R1. Keep hands in position, then with the tips of R1 and R2 grasp the L2f string and lift it over tips of L2 as well as L1. Slide each 1 into the loop surrounding it, so that the former 2f string becomes a 1f string. During this movement sing:
- | | |
|-----------------------|----------------------|
| <i>Kalipuyumanegu</i> | <i>Bring me back</i> |
| <i>kalipuyumanegu</i> | <i>Bring me back</i> |
19. Caroline Extension, then sing:
- | | |
|---------------------|--------------------------------|
| <i>tuade,</i> | <i>bring me back, brother,</i> |
| <i>pwaisisigwe.</i> | <i>little bird.</i> |

20. Repeat movement 18, but sing instead:
Kume! Kwiyuvisegwe! *Come! take me away!*
21. Caroline Extension, then sing:
Babweno Kalipudou. *Then I will feel fine, Kalipudou.*
22. Repeat movement 18, but sing instead:
Kalipuyumanegu *Bring me back*
23. Caroline Extension, then sing:
kalipuyumanegu *Bring me back*
24. Repeat movement 18, but sing instead:
tuade,
pwaisisigwe. *brother,*
Kume! Kwiyuvisegwe! *little bird.*
Come! take me away!
25. Caroline Extension, then recite:
E boge, *And already,*
e boge bwena. *and already it is good.*
Ikaliai la bwala. *He is building his house (nest).*
E, bwena! Desi! *Yes, good! Enough!*

At this point the figure will be the same one that appears after completing step 9.

Remarks

- Described as made by Inoma, the woman on the right.

The figure is named after a bird-species that is connected to a certain healing ceremony. The bird is called upon to take away the disease from the sick person. Nothing more is known about this ceremony. The chant recited in the film (Eibl-Eibesfeldt & Senft 1987:11-12) is more or less identical to that given by Senft & Senft (1986:116, nr. 8), but has extra (spoken) lines at movements 9 and 25.

The figure occurring at *kalipudou* movement 9 has been recorded several times in New Guinea. Maude & Wedgwood recorded it as an intermediate figure in a two-player series (Maude & Wedgwood 1967:223, nr. 20 *asea* ("The bag"), movements 1-6, North Coast). Philip Noble and Shishido & Noguchi recorded an identical figure *Mount Hagen axe*, both in the Mount Hagen area (Noble 1979:149-150, nr. 95; Shishido & Noguchi 1987:39-40, nr. 2). Jules Camps filmed it in the West New Guinean highlands (Camps & Claassen, in this volume).

A sequence of figures identical to *kalipudou* is found in the New Guinean Daga region (Noble 1979:168-169, nr. 113 Sick man). The figure cf. *kalipudou* movement 9 represents a man, who gets sick (*kalipudou* movements 10-11). Various medicines are tried (*kalipudou* movements 12-17) until the right medicine is found and the man starts to feel better again (*kalipudou* movements 18-25). In the Daga region series the movement cf. *kalipudou* movement 10 is performed three times in all, compared to the four times in Trobriands *kalipudou*.

The description given to the Daga region sequence of figures would also fit those of the Trobriands *kalipudou* sequence, and is consistent with the accompanying song text.

Hans Fischer describes a similar figure and story from the Lower Watut and Banir River area (Fischer 1960:179, 196-197, nr. 5/5a *kosok* ("witchcraft")). A man is healthy and well-fed, but another man practices witchcraft and his victim gets slimmer and slimmer, until the magic is again dissolved. Although no construction method is given, the drawings and description make clear that it must be the same figure and sequence as *kalipudou*.

The figure occurring at *kalipudou* movement 9 is also known elsewhere in Oceania. H. Maude recorded it as an intermediate figure several times on the Solomon Islands (Maude 1978:112-113, nr. 86 *bosu*; Maude 1978:115, nr. 87 *ru*; Maude 1978:134-135, nr. 96 *wouho* ("freshwater eel")). On New Caledonia the figure is called *ophlehle* (Maude 1984: 27-28, nr. 26 *okubase/ophlehle*). A development of the figure as in *kalipudou* is not known from these parts of Oceania.

Kalipudou is an example of a sequence in which a figure is stepwise turned into another figure (using the same movements each step), then stepwise turned back into the initial figure (again using the same movements each step). The next figure in the film, *mamala/talia* is another example of such a sequence. It is interesting to note that in one case the figure is again associated with the concept of sickness and healing (Shishido & Noguchi 1987:44-45, nr. 7 Family sickness; see below).

12. *Mamala/Talia* ("low tide/high tide")

1. Opening A.
2. Release 1 loop.
3. Pass 1 under all strings to the far side of 5f, then return to the near side of 2n, picking up 5f, 5n, and 2f on its back.
4. Pass L1 over L2n, down and away from the body, then towards the body and up, bending down L2, and in the process allowing the L2 loop to slip off. Pass R1 over R2n, down away from the body, then towards the body and up, bending down R2, and in the process allowing the R2 loop to slip off.
5. With 1 pick up 5n.
6. Caroline Extension (fig. 18).
7. Release 1 loops.
8. Pass 1 under all intermediate strings to far side of 5f, pick up 5f and 5n on its back and return.
9. Insert L1, from below, into L2 loop, turn L1 away from the body over L2f, then downwards under all intermediate strings and up, bending down L2, and in the process allowing the L2 loop to slip off. Insert R1, from below,

into R2 loop, turn R1 away from the body over R2f, then downwards under all intermediate strings and up, bending down R2, and in the process allowing the R2 loop to slip off.

10. With 1 pick up 5n. During movements 7-10 sing:

Mamala, mamala, teni, teni. *Low tide, low tide, shallow, shallow.*

11. Caroline Extension. During the extension sing:

Mamala, mamala, teni, teni. *Low tide, low tide, shallow, shallow.*

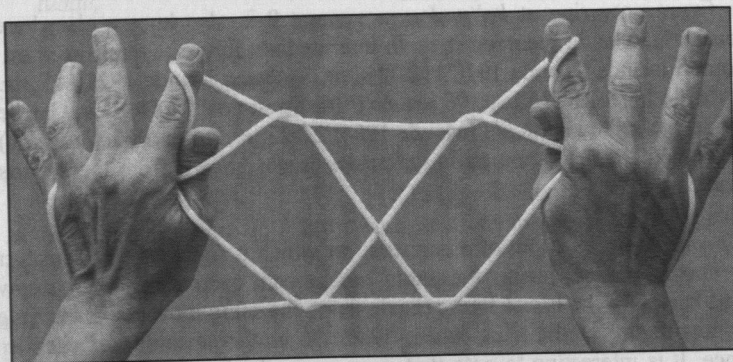


Fig. 18 - Mamala/Talia (movement 6)

12. Repeat movements 7-11, but adjust the song:

During construction of the figure (movements 7-10) sing:

Mamala, mamala, teni, teni. *Low tide, low tide, shallow, shallow.*

During the Caroline Extension sing:

Tapo – kevala, *It comes – not much,*
Lukwa, lukwasi *low, lowest*

13. Repeat movements 7-11, but adjust the song:

During construction of the figure (movements 7-10) sing:

Mamala. *low tide.*

During the Caroline Extension sing:

Mamala, mamala, teni, teni *Low tide, low tide, shallow, shallow.*

14. Repeat movements 7-11, but adjust the song:

During construction of the figure (movements 7-10) sing:

Mamala, mamala, teni, teni. *Low tide, low tide, shallow, shallow.*

During the Caroline Extension sing:

Tapo – kevala, Lukwa, lukwasi: *It comes – not much,
low, lowest:*

15. Repeat movements 7-11, but adjust the song:

During construction of the figure (movements 7-10) sing:

Mamala. *low tide.*

During the Caroline Extension recite:

E gugwadi, e! *Hey you kids, yes!*
Kulosi kulakilisi kweta vigoda! *go and get some shells!*
Kugisi dakaulasi – *Look, our food –*
Bogwa eteni – *already it's getting shallow –*
Bukulalumwelosi *and you forget it*

16. Repeat movements 7-11, but adjust the song:

During construction of the figure and Caroline Extension sing:

Mamala, mamala, teni teni *Low tide, low tide, shallow,
shallow.*

17. Repeat movements 7-9, but adjust the song:

During construction sing:

Mamala, mamala, teni teni. *Low tide, low tide, shallow,
shallow.*

18. [Repeat movements 10-11.

19. Release 2 loop.

20. With the mouth, from near side, grasp the double L1n strings close to L1.

21. Release the LH from all its strings.

22. Bring the LH towards the RH over all intermediate strings, with the tips of the LH and RH pointing towards each other.

23. Insert L5, from above, into R5 loop; insert L1, from above, into double R1 loop. Release the RH from all its strings.

24. With the tips of L123, with the tips pointing towards the mouth, grasp the mouth loop at the right cheek. Release the mouth loop and turn the LH a quarter turn so that the tips of L123 point towards the right.

25. There are two loops hanging down from between the tips of L123. One is *larger* (former L5 loop) than the other (*smaller* loop, the former L1 loop). With R1, away from the body, enter both the *larger* and *smaller* loop. With R5, away from the body, enter the *larger* loop only. Release the strings held by the tips of L123.

26. Rotate 1 down, out of 5 loop, then toward the body and up.

27. With 1 pick up 5n.]

28. Caroline Extension.

While displaying figure sing:

Taliapou dudu dudunu *High tide bang boom.*

29. Repeat movements 7-11, but adjust the song:

While constructing and displaying the figure sing:

Taliapou dudu dudunu *High tide bang boom.*

30. Repeat movements 7-11, but adjust the song:
 While constructing the figure (movements 7-10) recite:
O, gugwadi – Oh children –
Kukeosisi, kumemesi. you are dancing, you come back.
Bogwa emamala, ke? it's already low tide, isn't it?
Bogwa etalia. it's already high tide.
- During the Caroline Extension sing:
Taliapou dudu dudunu High tide bang boom.
31. Repeat movements 7-11, but adjust the song:
 While constructing and displaying the figure sing:
Taliapou dudu dudunu High tide bang boom.
32. Repeat movements 7-11.
 While constructing the figure (movements 7-10) sing:
Taliapou dudu dudunu. High tide bang boom.
 While displaying the figure exclaimate:
E bogwa kugisesi – and already you see it –
latebiyegu. I cut myself.
Da'usi – bimemesi – Their shouts – they will come –
Bogwa etalia. it is already high tide.

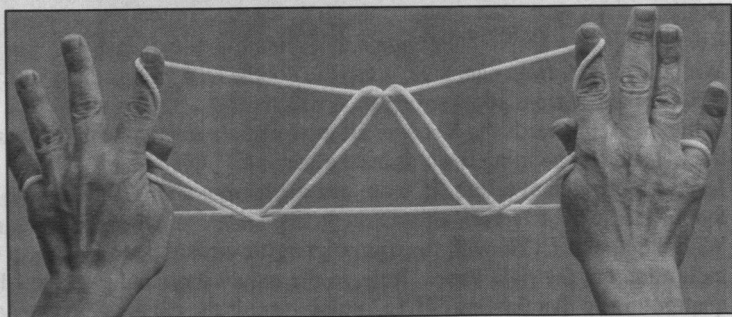


Fig. 19 - Mamala/Talia (movement 34)

33. Repeat movements 7-11, but adjust the song:
 While constructing and displaying the figure sing:
Taliapou dudu dudunu. High tide bang boom.
34. Repeat movements 7-11 (fig. 19), but adjust the song:
 While constructing and displaying the figure sing:
Taliapou dudu dudunu. High tide bang boom.
35. Repeat movements 7-11, but adjust the song.
 While constructing the figure (movements 7-10) sing:
Taliapou dudu dudunu. High tide bang boom.
 While displaying the figure (fig. 20) recite:

E, bogwa etatu
Etaga – emama –
Talia.

Yes, already it hits (the reef)
but now – it gets weaker –
the high tide.

Remarks:

- Movements 18-27 are not on the film and have been reconstructed.
- In the film, the series is halted after movement 35. It is possible to go back after movement 35 and thus repeat the series endlessly (c.f. Eibl-Eibesfeldt & Senft 1987:12) as follows:
 36. Repeat movements 19 through 27
 37. Repeat movements 6 through 37.

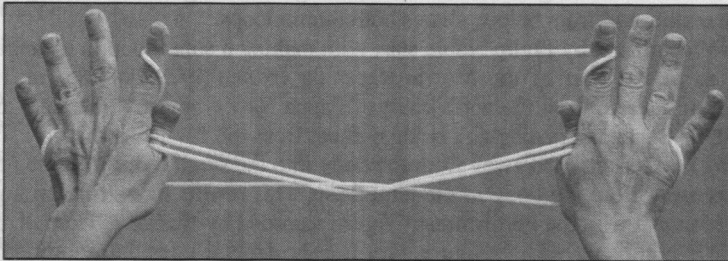


Fig. 20 - *Mamala/Talia*, movement 35

The accompanying chant (Eibl-Eibesfeldt & Senft 1987:12-13) contains both variants given by Senft & Senft (1986:109-111, nr. 2), but has some extra lines (i.e. "I cut myself" at movement 32).

In the publications there is some confusion about the names of the figures in this series, and whether the series can be continued endlessly or is performed only once. This confusion could be caused by the fact that the recordings stem from different informants at different times¹⁶.

In the film the informant sings the word *mamala* repeatedly when making the diamond figures in movements 1-18; during movements 28-36 she sings the word *taliapou* repeatedly. Thus it is assumed here that the diamond figures are called *mamala*, and the zigzag figures *talia*. The series can then be interpreted as follows: As the tide goes out more rocks appear (the number of diamonds increases). Eventually the left and right hand strings are swapped, and the incoming tide causes the rocks to disappear (the number of diamonds decreases).

Series similar to this one are known from several other places in New Guinea, although the opening movements differ. Starting the figure exactly as *mamala/talia* movements 1-6 have curiously not been recorded elsewhere in New Guinea, but are known from New Caledonia (see below).

K. Haddon recorded the figure *gabo* ("a path") at Kiwai Island (Haddon 1930:78-79, nr. 19), Maude described the figure *yout* ("the men's house on the *kod*") from Torres Straits (Maude 1987:34-35, nr. 29), and Shishido & Noguchi collected Family sickness in the Mount Hagen area (Shishido & Noguchi 1987:44-45, nr. 7). These three recordings deviate from the *mamala/talia* opening movements by passing the thumb, from below, into the little finger loops instead of the far side of the little finger loops in movement 3. This results in a first extended figure with four horizontal lines, instead of the two-diamond figure in *mamala/talia* movement 6.

Such an opening figure with four horizontal lines is made differently in a recording from the Port Moresby area (Rosser & Hornell 1932:42, nr. 5 *komada* ("surf")). It starts with Position 1, after which the left thumb picks up the right near thumb string and lifts it off the finger. The right thumb then, from the near side, and from below, shares both thumb loops.

Two recordings by Philip Noble start with making a small loop in a hanging loop, as at the start of the Murray Opening (Noble 1979:184-185, nr 132 Waves of the sea, from the north coast of Papua New Guinea; Noble 2007:64-66, nr. 17 Bananas ripening and being picked, from the Fly River district). The thumbs are then inserted away from the body into the small loop, with the little fingers away from the body in the large loop. This results in a string arrangement identical with the Port Moresby figure recorded by Rosser & Hornell, but here it is not displayed as a figure with four horizontal lines, but modified to arrive at a two-diamond figure.

In *mamala/talia* the first two diamonds are made with similar but slightly different movements than the other diamonds (compare movements 3-4 with movements 8-9). This difference is avoided in the other New Guinea recordings, which employ another opening sequence allowing for exactly the same movements for increasing diamonds right from the start.

The movements to increase the number of diamonds (*mamala/talia* movements 7-11 above) are the same in the whole New Guinea area. But there are different ways to turn over the figure (*mamala/talia* movements 19-27).

In two recordings (from the Torres Straits and Port Moresby) the figure is not turned over but ends with a certain number of diamonds (16 in the Torres Straits, 8 in Port Moresby). In two recordings the mouth assists in turning over the figure (on Kiwai island and in the Mount Hagen area). The fingers of the other hands are used in two other recordings (from the Fly River district and from the North coast)¹⁷.

In all these cases, the turning over results in a figure with diamonds. The Trobriands series *mamala/talia* however is unique in having a zigzag-figure here. This change must have been achieved during the turning over of the figure, which was not filmed (in the above transcription reconstructed in movement 26).

Names and meanings attached to the figures of the series differ widely.

The figure with the four horizontal lines is on Kiwai Island an empty path. Each diamond that is added in subsequent movements represents a man going along the path to work in the garden. After the turning over movement, they return from the garden and go home, until the path is empty again.

In the Mount Hagen area the four horizontal lines represent a mother, or the process of cooking using fire. The diamonds that are added represent the family (mother, father, son, daughter). When there are more than four diamonds, these extra diamonds represent the family growing ill or getting more and more hungry. After the turning over movement, they start to feel better, or are less hungry.

A link with food is made also in the Fly River district, where the figure starts with two diamonds; each diamond representing a ripe banana. More and more bananas get ripe, until (figure turned over) they are being picked and disappear.

On the north coast the series is, as on the Trobriand Islands, connected with the tides of the sea. Here the increasing and decreasing number of diamonds represents the tide coming in and going out (compare with our interpretation of *mamala/talia* as tide going out/coming in). In the area around Port Moresby, where the figure is not turned over, it represents the racing forwards of successive lines of breaking surf. In the Torres Straits, the figure with an increasing number of diamonds represents the men's house on the *kod*. There appears to be a song accompanying it, which unfortunately has been lost.

A similar series is also known from other areas in the Pacific.

Two versions of the figure are known from New Caledonia (Maude 1984:25-26, nr. 24 The sardines; Maude 1984:26-27, nr. 25 The sardines II), which differ in their opening movements. The first version has identical opening movements as *mamala/talia*, the second version as the recordings from the Fly River district and the north coast. The figure, which is not turned over, represents sardines, which in the end are eaten up by two large fish.

The series from the Solomon Islands (Maude 1978:118-120, nr. 90 *nelo* ("the tide")) shares with *mamala/talia* the connection with the tide. It starts with a figure with four horizontal lines, made as in the recordings from the Fly River district and the north coast. The increasing number of diamonds represents high tide. After turning over the figure, high tide disappears until it is again low tide.

In the Australian series (Davidson 1941:847-849, nr. 38 Men coming to a fight), the first figure is that consisting of four horizontal lines, which is made from the Navajo Opening. After this, there are only movements increasing the number of diamonds; the figure is not turned over.

The figure is also known from Nauru, where three variants have been recorded (Maude 2001:40, nr. 16 *Emor I*, "flying fish") which differ in their opening movements. The first variant has opening movements not recorded else-

where (starting with Murray Opening). The opening of the second variant (*ngamungama* opening) is identical to that of *mamala/talia*. The third variant has almost the same opening movements as the figure from Port Moresby, except that the figure with four horizontal lines is skipped over. Neither of the Nauru figures is turned over. The figure is named after a flying fish.

13. *Tokwelasi* (proper name of a man)

The figure is best done when seated on the floor with legs spread wide, knees bent, and heels almost touching.

1. Opening A.
2. With 1 under all intermediate strings, from below, enter the 5 loop; keep 1 there.
3. With each big toe, from above, enter the respective 1 and 5 loop, and pick up 1n and 5n.
4. Return hands, with 1 and 2 pointing towards the floor.
5. Turn the tips of 2 towards each other then up, picking up the respective string running from 1 to the toe; allow the original 2 loop to slip off.
6. Release 1 loop.
7. Release 5 loop onto lower legs but do not extend. Instead, allow the released loop to form a relaxed transverse near toe string.
8. Bring hands together so each 2 is near one another. With the RH grasp the 2 loops of both hands halfway between your feet and 2; on each hand withdraw 2 from its loop.
9. With the LH remove the RH loops, and give them a ½ clockwise twist.
10. With the RH remove the LH loops, and give them a ½ clockwise twist.
11. Repeat movements 9 and 10 four more times.
12. Pass the twisted loops to the far side of the relaxed transverse near toe string, between the heels of the feet; press the heels together to hold the twisted loops in place, releasing them from the RH.
13. Of the two far big toe strings, remove with each respective hand the far big toe string of the previously released 5 loop; uncross the strings held by the hands by exchanging the R string over the L string.
14. Place the loop you are holding on 1 and 5 of each hand (Position 1); with 2 pick up the palmar strings as in Opening A.
15. With 2 hook 5f, drag it through the original 2 loop (which slips off the back of 2), and then rotate 2 towards the body and up.
16. Release 5 loop (fig. 21).
17. Separate hands and bring them close to the ground. Bring hands together and lift them away from the ground.
18. Repeat the up and down motion of movement 17 eleven times.

During the last 8 repetitions recite once:

*Tokwelasi, Tokwelasi
kwakeye lumta.*

*Tokwelasi, Tokwelasi
you screw your sister.*

19. Allow the loops to come off of 1 and 2, but use the remaining fingers to catch and untangle the string as the hands are lifted away from the ground. In the meantime speak:

Ela

he goes

20. Now toss the untangled string away from you over the pressed heels of your feet. Then recite:

emaga –

he really comes –

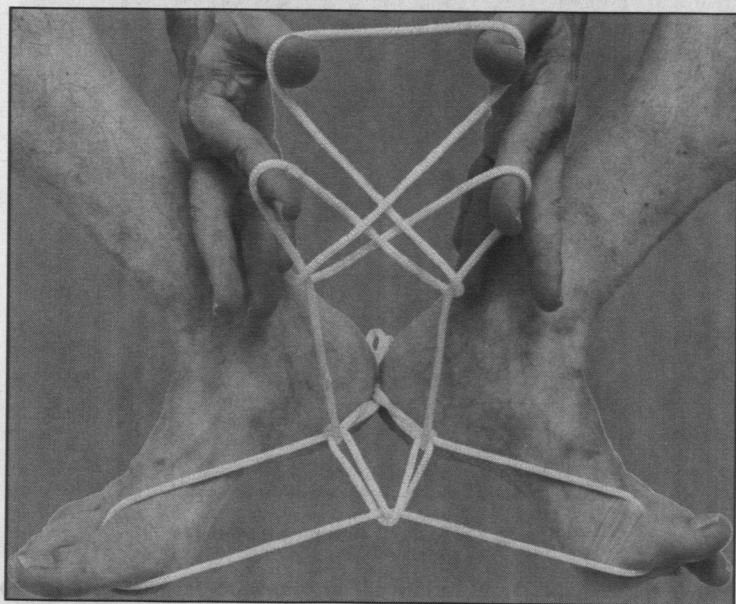


Fig. 21 - Tokwelasi (after movement 16)

21. The continuation of the tossed string of movement 20 passes towards the body through the figure. Note that it passes at each side first *under*, then around and over the near toe string. With 2 catch the respective *under* string segment as shown in fig. 22.
22. Share the 2 loop with 345; draw out the strings you are holding by raising both hands; transfer the LH loop to the RH, inserting R2345 into the L2345 loop from the fingertip side so that no twists are introduced.
23. The LH grasps the far RH string segments close to the feet. Then recite once:

*Ebikelasisi –
mtona Tokwelasi.*

*Ela – emaga
la mwala*

*He has affairs –
this one there, Tokwelasi.*

*He goes – he really comes
her husband*

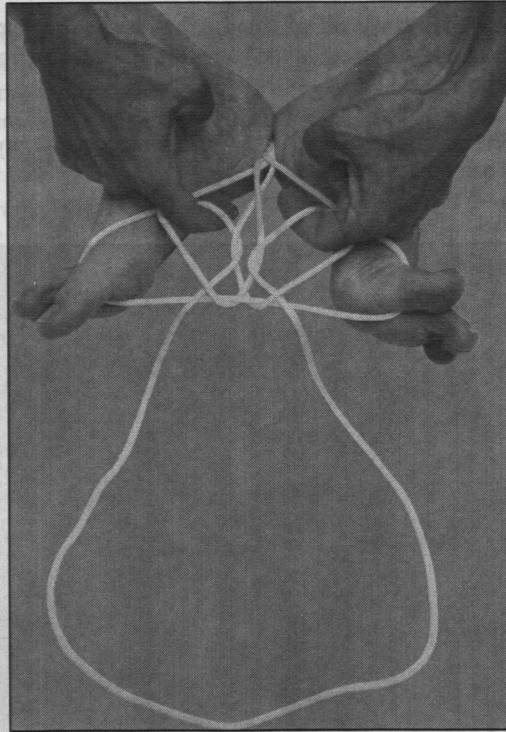


Fig. 22 - Tokwelasi (during movement 21)

24. Move the RH and the LH simultaneously toward the feet and then up 13 times, and recite once.

Tolimwala.

Tolimwala.

Eyokova tau wala.

He makes it, just the man.

Starting from the 9th moving towards the feet, bring the hands bit by bit closer to the body, pulling the figure out. During this movement recite:

Eyosi - ve -

He feels it - uh -

eyosi - va.

he feels it - ah,

25. Release strings from between the heels (fig. 23), and recite:

Talisi kwilim.

The two of us we jerk off.

Eventually finish with the LH over the RH. The figure ends here.

Remarks

- In the photographs of this figure (Senft & Senft 1986:210-211) the upper part of the figure (movements 14-16) appears to be made in a slightly different way. It can be reconstructed by replacing movements 15 and 16 above with the following movements:

15. With 1 pick up 2n. Navajo the loops on 1. With 5 pick up 2f, then bend it away from the body, down under the string running from 5n towards the toe and up. The original 5 loop slips off in the process.
16. Release 2 loop.

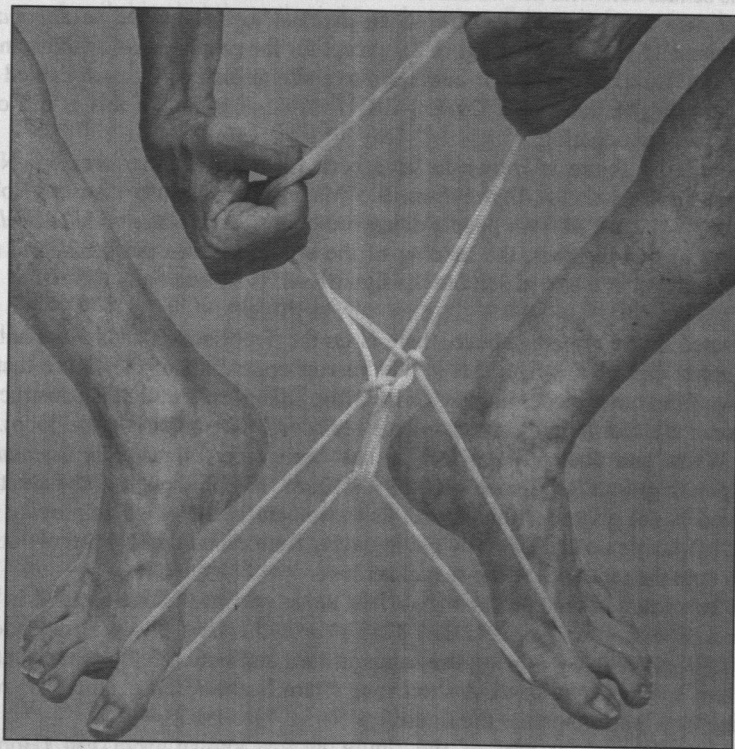


Fig. 23 - *Tokwelasi*, movement 25

- Eibl-Eibesfeldt & Senft (1987:13) state that *Tokwelasi* is directly developed out of the final figure of *mamala-talia*. The film gives the impression that this indeed is the case in Inoma's construction, but a close study of the film shows that there is a gap in the film footage exactly at this point. Igo-gosa can be seen beginning the figure from Opening A. Therefore, the above transcription is based upon Opening A.

Tokwelasi is the proper name of a man, whose sister is married to Tolimwala. The figure probably represents the sexual act between two men and a woman. Its accompanying chant (Eibl-Eibesfeldt & Senft 1987:13-14) contains elements of the second variant given by Senft & Senft (1986:210-211, nr 88), but has an extra element in the arrival of the husband Tolimwala, who also performs sexual acts with the woman.

The text recited at movement 18 is identical to that recited at *Tobabane* movement 15 (see above at figure 2), except for the proper name of the man in question. The figure seems to be related to a similar named figure recorded by Malinowski (Malinowski 1929:400-401, *Tokaylasi*), although this is difficult to see (see Introduction).

No similar figure is known to have been recorded in other areas of New Guinea or Oceania. A figure from the Managalas & Musa district (Noble 1979:135-137, nr. 81 Two people doing something) does share with *Tokwelasi* the use of two big toes, the holding of the string between the heels, and the representation of a sexual act; but the figure itself is substantially different.

As stated in the remarks above, there is on the Trobriand Islands a variant of the upper part of the figure. It is this variant upper part of the figure that is known from other places in New Guinea (the *Tokwelasi* part that is constructed between the feet is in these recordings replaced by a simple big toe loop). In the Watut and Banir River area it has been recorded as *kijm lesanarau* ("copulating dogs") (Fischer 1960:184, 210, nr. 63). Although a construction method is not given for this figure, its movement is described as moving the middle triangle up and down by pulling away from each other the thumb loops. Also note the reference to the sexual act here.

A construction method for the variant upper part has been recorded in the Torres Straits (Haddon 1912:324-325, *sirar* ("the tern"); see also Haddon 1911:10, nr. 4)¹⁸. By moving the hands inward and outward the movement of the tern's wings is imitated. A short song ("tern feathers, tern feathers, on rock on my land") accompanies the figure.

The variant upper part of the figure is also known from Fiji (Hornell 1927:15-16, *lulu* ("owl")). Its construction method matches that of the Torres Straits figure, except that the order of movements differs slightly, and that the use of the mouth in the construction is not explicitly mentioned. In the figure the thumb and little finger loops are moved up and down by alternately spreading and closing the fingers holding these loops. This represents an owl rising and falling in flight over the grass, searching for his prey. The figure also has a short song.

14. Tokopu kutu ("lice-catcher")

1. Position 1.
2. Bring the LH towards the RH. With the tips of L123 grasp R1n and wind this once around R1 in a clockwise direction (when looking at the tip of R1). Release the string held by L123.
3. With the tips of L123 grasp the string segment at the palmar base of R1 and pull this slightly to the left, so that a small loop is formed at the palmar base of R1.
4. With L2, from below, share the small R1 loop (just formed). Return L2.
5. With R2, from above, enter L2 loop, then pick up the LH palmar string (running at the palmar base of the LH fingers from L1f to L5n). Return R2.
6. With L2 over all intermediate strings, from above, enter R2 loop, then pick up the RH palmar string (running at the palmar base of the RH fingers from R1f to R5n). Return L2.
7. Release the RH from all its strings. Close L2345 to the palm at the palmar base of L1 over all intermediate strings. Hold the LH so that the knuckles are pointing upwards.
8. There are two string segments at the dorsal base of L2. With the tips of R123 grasp upper dorsal L2 segment and pull this upwards, so that a small loop arises from the dorsal base of L2. Release the string held by R123.
9. With the tips of R123, from above, enter the upper dorsal L2 loop (relative to L2), then grasp the lower dorsal L2 segment and pull this to the right through the upper dorsal L2 loop. A new upper dorsal L2 loop has been formed; the earlier upper dorsal L2 loop has become the lower dorsal L2 loop. Release the string held by R123.
10. Bring the RH above the LH, with the RH fingertips pointing towards the body. With R1, from below, enter the upper L2 dorsal loop; with R5 from above enter the lower L2 dorsal loop. Release L2 loop and simultaneously unfurl L2345. Extend.
11. With 2, from above, enter 5 loop close to 5, then hook up 5n and 1f by turning 2 towards the body and up.
12. Pass 345 towards you under double 2f and close them to the palm over the 1n string segment.
13. Withdraw 1 from its loop, then with 1 pick up double 2f on its back. Release 2 loops.
14. Straighten 34 and 5 (making sure that 5 keeps its dorsal string segment).
15. Caroline Extension (fig. 24).
16. Place the figure on the hair of a second player. Twist hands so that palms face the body (the figure now closes), then remove the figure from the hair of the second player.
17. Repeat movements 15 and 16 several times.

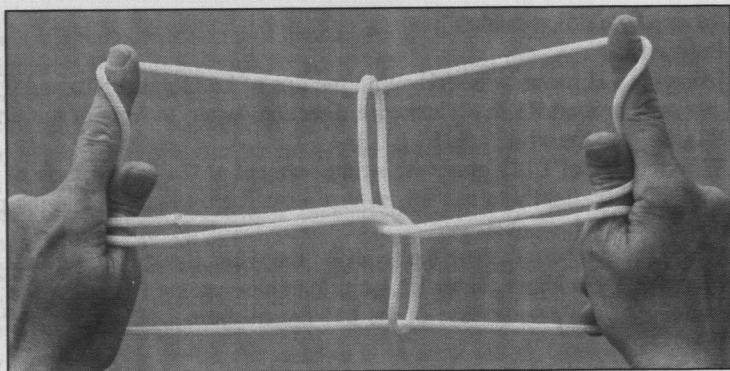


Fig. 24 - *Tokopu Kutu*

According to the descriptions (Senft & Senft 1986:113, nr. 5, Eibl-Eibesfeldt & Senft 1987:14-15), the player makes clicking noises to imitate the cracking of a louse. The figure thus probably represents a louse in the hair of another person (movement 15) that is being destroyed.

The figure has been recorded four times in other regions of New Guinea. In the Managalas and Musa district it is called *zissoci* (perhaps a distortion of "scissors") (Noble 1979:41-42, nr. 21). On Goodenough Island it is known as *lausisi* ("a hiss") (Jeness 1920:316, nr. 27). People in the Torres Straits see in the figure a looper caterpillar (Haddon 1934:38-39, nr. 27), and at the north coast of East New Guinea and in the Sepik area it is known as *keef* ("snake") (Maude & Wedgwood 1967:209-210, nr. 7).

In all the above methods, after Position 1, the right hand winds the left near thumb string around the left thumb, whereas, for *tokopu kutu*, the left hand winds the right near thumb string around the right thumb. Except for this, the opening movements (*tokopu kutu* movements 1-7) for all recordings are identical. Variations start to occur at *tokopu kutu* movements 8-10, where two loops at the dorsal side of the index finger are picked up by fingers of the other hand. The version of Goodenough Island is exactly the same as on the Trobriands; in the Torres Straits and on the north coast, the principle remains the same, but it is executed slightly differently. The version from the Managalas and Musa district differs here considerably: the upper index loop is picked up from above by the thumb and little finger of the other hand as in Position 1, and the lower index loop by the thumb of the other hand. This brings these strings already in position for the final (Caroline) extension of the figure.

In *tokopu kutu* movements 9-14 strings are rearranged to allow for the Caroline Extension of movement 15. The recordings are different from each other here too. The principle of the Torres Straits version matches that of the Trobriand Islands. In the Goodenough Island and north coast version the other hand is brought into play to rearrange the strings around the thumb and little finger;

this is done on both hands. In the version from the Managalas and Musa district this only has to be done on one hand; the thumb and little finger strings on the other hand are here already in place because of the particular way in which the index strings were picked up (see above).

In the Managalas and Musa district the figure seems to represent a pair of scissors. The figure here is held to a person's head to be manipulated as if cutting the hair. Such an action is similar to that on the Trobriand Islands. In the Torres Straits, a similar action is performed, but not on the hair of another player; the figure here represents a caterpillar walking along by contracting and elongating. The two other recordings mention no action connected to the figure, although the north coast version has an accompanying chant (which is not translated).

The figure is known in other parts of Oceania as well. The recordings from New Caledonia (Maude 1984:1-2, nr. 2 *wauyibadet* ("caterpillar")), the Gilbert Islands (Maude 1958:105-106, nr. 94a *te roata* ("the centipede")) and Nauru (Maude 2001:30, nr. 9 *ami* ("male dancer")) show construction methods that are identical to each other. As in all New Guinean figures (except *tokopu kutu*), after Position 1 the right hand here winds the left near thumb string around the left thumb. The two loops on the dorsal side of the index finger are picked up by the fingers of the other hand using a similar principle as that of *tokopu kutu* (cf. *tokopu kutu* movements 8-10). Re-arranging the strings to allow for the Caroline Extension of the final figure (cf. *tokopu kutu* movements 9-14) happens as follows: for each hand, the tips of the thumb and index fingers of the other hand grasp the far thumb and near little finger strings, then the thumb is released and inserted, away from the body, in the original thumb loop as well as (from below) in the little finger loop (this resembles the way the thumb is inserted in the figure in *tokopu kutu* movement 13). No action is described for these figures.

The recordings from the Caroline Islands (Jayne 1906:253-259, *pilun* ("a chief")) and Fiji (Hornell 1927:19-20, *banuve* ("caterpillar")) resemble those from New Caledonia, the Gilbert Islands and Nauru in the principle used in the part of *tokopu kutu* movements 8-10. In rearranging the strings for the Caroline Extension they also use the other hand (as in the New Guinean north coast version and in the figure from Goodenough Island), but here each thumb loop is removed, given half a twist towards the body and then replaced (although in the Caroline Islands figure this can also be done using the index finger of the same hand (Jayne 1906:257¹⁹)).

The opening of the Fijian figure is identical to *tokopu kutu* movements 1-6. Its final figure is made to crawl from side to side by 'rolling' the hands slightly from side to side. A short chant is sung about a caterpillar that is going to pick some taro leaves.

In the opening movements of the North Australian figure (Davidson 1941:809-810, nr. 9 Blackfellow/*ngaiman* ("penis")) a small loop is formed

around the left little finger instead of around a thumb, and its palmar base string is hooked up by the right index finger. This gives rise to slightly different movements in what follows. The picking up of the dorsal index loops (cf. *tokopu kutu* movements 8-10) differs, and the rearrangement of the strings for the Caroline Extension is done by placing the figure on the lap and releasing from and re-inserting the thumb into the figure. A variant method for rearranging the strings has also been recorded (Davidson loc.cit. movement 6A): indices from below remove thumb loops, the thumbs from below shares the little finger loops, and the thumbs from above remove the index loops. No action is described.

In the Gilbert Islands a variant figure is known (Maude 1958:87, nr. 79 *na keketi* ("Mr. Dragonfly")) which is identical to Gilbertese *te roata*, except that the thumb loops are given half a twist *away from the body* instead of towards the body.

CONCLUDING REMARKS

When a comparison is made with the string figure literature from New Guinea and Oceania (listed in the Introduction above), the string figures displayed in the film show some unique traits. One of them has as far known not been recorded before (nr. 13 *Tokwelasi*) (except of course for the publications by Barbara & Gunter Senft). A figure similar to nr. 2 *Tobabane* has been observed in the New Guinean area and in Australia, but the construction method used in the Trobriand Islands is different from that in Australia, and for the other New Guinean occurrence no construction method has been recorded. Series similar to *mamala/talia* (nr. 12) are known from other areas in New Guinea, from Melanesia and from Micronesia, but the way the second half of the series is constructed in the Trobriand Islands is unique. Unfortunately, the important part in which the figure is turned over is not on the film. Although related to other figures in the New Guinean area, the final figure of *sem* (nr. 4) from the Trobriand Islands described here is the only known recording from New Guinea.

Besides nr. 13, two other figures/series appear to belong to a specifically New Guinean repertoire (nr. 10 *Mina Kaibola*, nr. 11 *Kalipudou*); two figures (nr. 2 *Tobabane* and nr. 4 *sem*) seems to be limited to Melanesia and Australia (nr. 4 *sem*). All other figures have parallels in Melanesia, Micronesia as well as Polynesia, except for nr. 12 *mamala/talia* which appears to be unknown in Polynesia.

Reserve in these comparative observations is necessary, because only a sample of the string figure literature of Oceania has been taken into account.

For five figures the exact opening movements have not been filmed. But if the reconstructions given are correct, seven out of the fourteen figures start with Opening A (nrs. 1, 2, 4, 7, 9, 12 and 13) and three figures start with a loop over

the left wrist (nr. 10, a doubled loop for nrs. 5 and 6). One figure in the film starts with the Murray Opening (nr. 11).

The Caroline Extension is used to display five figures, three times exactly (nrs. 11, 12 and 13) and twice in a modified form (nrs. 1 and 7). In the extension of three figures toes are used (nrs. 2, 8 and 13).

Twelve out of the fourteen figures in total have accompanying chants. What the figures and transformations actually represent in the eyes of the performers and local observers has unfortunately not been recorded in detail systematically. In several cases this seems to be clear enough, with the accompanying chant giving clues (i.e. a paddle and rowing in *mina Kaibola* (nr. 10) and a bag which is turned around in *Togesi* (nr. 9)). In other cases however this is not at all clear (i.e. *Kalipudou* (nr. 11), and the confusion about the figures of *mamala/talia* (nr. 12) described above). Besides, one has to be on guard for possible double-entendre expressions, figures and actions, by which the figure simultaneously can represent something else. In all cases, these are no more than educated guesses. A detailed description of the meaning of each (part of a) figure, its action and resolution in the eyes of local people is an important undertaking for future researchers on string figures in the area. Because of this, only some general observations can be made on the relation between the chants and the figures with their actions.

During the construction of the first figure, there is no accompanying chant. The chant starts when or after the (first) figure is displayed. A slight exception is *Senube* (nr. 3), where the chant starts (at movement 9) just before the final figure appears (in movement 11)²⁰. In cases where a first figure is stepwise transformed into other figures and then transformed back again (*kalipudou* (nr. 11) and *mamala/talia* (nr. 12), each transformation and further display is accompanied by a simultaneously recited chant²¹.

Six figures (nrs. 5, 6, 7, 8, 9 and 13) have specific ending movements, with which the figure is resolved. These ending movements are in all cases accompanied by a simultaneously recited chant²².

Three of the figures with their accompanying chants explicitly refer to the sexual act (nrs. 2, 3 and 13), of which two also mention the taboo on (knowledge about) sexual intercourse between brother and sister (nrs. 2 and 13). Other figures could refer to sex implicitly (i.e. nr. 10). One figure with its chant explicitly refers to urinating (nr. 8).

It is remarkable that in the accompanying chants human beings are as a rule not addressed in general terms ('a woman' or 'a man'). Instead, they have a personal name, or are linked to a named person (the sister of Tobabane in nr. 2, the sister of Tokwelasi in nr. 13)²³.

Further research on the living string figure tradition of the Trobriand Islands is desirable. All construction methods and chants of the figures should be recorded, so that one can get an impression of the originality of the Trobriand Islands

string figures, and of the relation with the string figure repertoires of surrounding areas.

In the recordings it should be established what (a part of) a string figure or action represents in the eyes of the performers and local observers. Only then is a more detailed study on the relation between string figure movements, chants and actions possible.

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- Prof. Irenäus Eibl-Eibesfeldt for his permission to use in this paper the film he made in 1984.

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APPENDIX I

OTHER COLLECTIONS OF STRING FIGURES FROM THE TROBRIAND ISLANDS

Besides the collection of Barbara and Gunter Senft, there are two other printed sources for string figures from the Trobriand Islands. Here the figures in each collection are compared with those in the collection of Barbara and Gunter Senft.

a. The four figures described by Malinowski

- *Kala kasesa Ba'u* ("the clitoris of Bau") (Malinowski 1929:398-399) is in name related to *ala kasesa Imbau* ("the clitoris of Imbau") (Senft & Senft 1986:141, nr 32), although the figures themselves look different.
- *Tokaylasi* ("the adulterer") (Malinowski 1929:400-401) has a name sounding similar as *Tokwelasi* (name of a person) (Senft & Senft 1986:210-212, nr. 88), and in both figures hands, big toes and heels are used. The final figures however do not look alike. See also string figure nr. 13 in the main paper above.
- *Sikwemtuya* (name of a hero) (Malinowski 1929:401-402) and *Tokemtuya* (name of a person) (Senft & Senft 1986:149-150, nr. 41) are both personal names, and both figures have four loops. Yet the middle part of each figure is different; the Malinowski figure appears to be kinetic in nature.
- *Kaita* ("copulation") (Malinowski 1929:400) was known among the informants in Kaile'una under the name of *keta* (not translated), but they refused to perform it, because it is very indecent (Senft & Senft 1986:106).

b. The five figures collected by Harbison & Reichelt

- *Soulava* ("kula necklace") (Harbison & Reichelt 1985:26-27) is the same as *misima* (the name of an island in the Louisiade Archipelago) (Senft & Senft 1986:162, nr. 49), although its name differs.
- *Menakaibola'* ("people of Kaibola") (Harbison & Reichelt 1985:24-25) is the same figure as *kaikela baola* ("I will insert his paddle") (Senft & Senft 1986:135-136, nr. 27). Eibl-Eibesfeldt & Senft 1987:11 calls this figure *mina kaibola*.
- *Meto* (name of the game) (Harbison & Reichelt 1985:23-24) is more or less identical to *mweta/bweta* ("Meta-tree"/"floral headband") (Senft & Senft 1986:121-122, nr. 13).
- *Bweta* ("floral headband") (Harbison & Reichelt 1985:25-26) seems to be known to exist but is overlooked as a separate figure in the collection of Senft & Senft⁸.
- *A fish* (Harbison & Reichelt 1985:23) is not found in the collection of Senft & Senft.

END NOTES

1. The description of the Trobriand Islands, its people and culture, are based on the studies of Weiner (1988) and the Senfts (1986; Senft & Senft 1993).
2. Eibl-Eibesfeldt & Senft (1987:4) mention the whole rainy season (from the end of October until the end of April) as the string figure season. Malinowski states it is the rainy months from November to January (Malinowski 1929:398).
3. 89 figures are described in Senft & Senft 1986; an additional trick (*sopa/mwada*) was documented in Eibl-Eibesfeldt & Senft 1987.
4. Senft & Senft (1986:100-101) gives examples of occasions on which string figures were made.
5. String crossings are not always clearly indicated in the drawings; some string crossings in the drawings are impossible to produce using a string loop.
6. Figure 13 *Tokwelasi* in the current publication, is an example.
7. In the accepted orthography of the Kilivila language its name is spelt *mina Kaibola*.
8. There is clearly a dissimilarity between the photographs and the drawing in Senft & Senft 1986:121-122, nr. 13. *mweta/bweta*. The photographs show a three diamond figure, while the drawing shows a four diamond figure. As a rule a three diamond figure is constructed rather differently from a four diamond figure with a similar extension. The drawing and the photographs of *mweta/bweta* must be of two different figures.

Because of the similar sounding names (*mweta* vs. *meto*) of two figures, it is possible that two different figures have been mixed up here. The three diamond figure *meto* (Harbison & Reichelt 1985:23-24) is almost identical to the two photographs given for *mweta/bweta* (to arrive at the photographs in Senft & Senft, one should, in movement 6 of Harbison & Reichelt, use the index fingers instead of the middle fingers to pick up the strings). The first two lines of the accompanying text in Harbison & Reichelt are also more or less identical to the first three lines given by Senft & Senft, as is the movement of the figure (a waving movement from left to right), and its use as a catch.

The drawing for Senft & Senft 1986:121-122, nr. 13 however shows a four diamond figure, which fits the instructions for *bweta* ("floral headband") (Harbison & Reichelt 1985:25-26). Other photographs and drawings of similar four diamond figures in the collection of Senft & Senft are *nibogi* ("tonight") (1986:192, nr. 76) and *e'uva usi* ("it grows, the banana") (1986:159-161, nr. 48), which is part of a four figure series. But because of the similar-sounding names, it is likely that the informants of Senft & Senft knew of a four diamond figure called *bweta*, which was mixed up with another (three diamond) figure *meto* in the recording process.

9. Film E 2958 of the Institut für den Wissenschaftlichen Film (IWF), Göttingen. IWF closed in December 2010.
10. A string figure performance for an audience as large as in the film does not normally occur in the Trobriand Islands.
11. The following references contain string figure instructions: Camps & Claassen 2010; Eguchi & Sato 1996; Fischer 1960; Haddon 1911; Haddon 1912; Haddon 1930; Haddon 1934; Harbison & Reichelt 1985; Holmes 1924; Inayama 1980; Jayne 1906; Jenness 1920; Landtman 1914; Maude & Wedgwood 1967; Maude 1987; Noble 1979; Noble 1980; Noble 2001; Noble 2007; Noguchi 1978; Noguchi

- 1980; Noguchi & Shishido 2003; Rivers & Haddon 1902; Rosser & Hornell 1932; Shishido & Noguchi 1987.
12. The instructions for this figure given by Stanley contain a mistake. The correct movement 2 should read: "Passing the right little finger distally towards the radial side of the loop around the left thumb, insert it into this loop from the proximal side, and with the back of the digit draw back the radial strand of the left thumb loop". A related movement 2 is given by the author for a figure starting with identical opening movements (Stanley 1926:89,91-92, The canoe).
 13. The recording of Society Islands *rurutu* (Handy 1925:57) is not consistent here. Movement 5 mentions middle, ring, and little finger, whereas in movement 9 only ring and little finger are mentioned. The drawing of the figure mentions only ring and little finger in the final extension of the figure.
 14. Although not stated explicitly in movement 3 of *ruayo* (Maude & Wedgwood 1967:214-215, nr. 12), it is likely that the middle finger is also inserted from above in the index loop, in order to be inserted in the thumb loop from below in the same movement.
 15. The same figure is described in Haddon 1912:329, nr. 11 *ti meta*, and it is used as the basis of the description in Jayne 1906:85-87, A well.
 16. Compare the drawings, photographs and descriptions of Senft & Senft 1986:109-111 with those of Eibl-Eibesfeldt & Senft 1987:12-13. Senft & Senft suggest that the first figure, after movement 6, is called *talia*, the multi-diamond figure at movement 18 is called *mamala*, and that the series ends there. That is not how the series is performed in the film.
 17. Noble's 1979-recording (Noble 1979:184-185, nr. 132) describes a method to turn over the figure by placing it on the lap. As it is described there, it is partly incorrect at this point. Corresponding instructions should read:
 8. Repeat movements 3 and 4. Caroline Extension.
 9. Release 2 loop. There are two loops: a thumb loop, and a shared thumb-little finger loop.
 10. Lay down the design on the lap and turn over the whole design from right to left. Left finger loops become loops on the same fingers of the other hand. Repeat movement 5.

Philip Noble recalls he had simplified the description of the turn-over moves. Instead of placing the figure on the lap, his informants in reality used the fingers of the other hand to turn over the figure (Philip Noble, personal communication). To accomplish this, the above movement 10 should be substituted by the following movements:

- a. Bring the LH over all intermediate strings to the RH, then from above grasp the double R1n strings between the tips of L2 and L3. Gently release the RH from all its loops.
- b. Bring the RH to the near side of the LH, from above, and grasp the double L1n strings between the tips of R1 and R2. Release the strings from L1 and L5 (but keep the strings held between the tips of L2 and L3).
- c. Move the RH slightly away from the body, then with the tips of R2 and R3 close to palmar side of L23 grasp the double strings held between the tips of L23 (the tips of L23 and R23 point towards each other in this process). The LH releases all its strings.
- d. Twist the RH in an anti-clockwise direction until the RH fingers point towards the body.

- e. From between the tips of R23 two loops hang towards the left and down, a *large R23-loop* and a *small R23-loop*. With L5, away from the body, enter the *large R23-loop*; with L1, away from the body, enter both the *large* and the *small R23-loop*. Release the strings held between R23.
 - f. Move the LH towards RH, so that the fingers of each hand point toward each other. With the tips of L2 and L3 grasp the double strings held between R12 at the dorsal side of R12. Release the RH strings. Hold the LH so that fingers point away from the body.
 - g. From between the tips of L23 two loops hang towards the right and down, a *large L23-loop* and a *small L23-loop*. With R5, away from the body, enter the *large L23-loop*; with R1, away from the body, enter both the *large* and the *small L23-loop*. Release strings held between L23.
18. The drawing of this figure as given in Haddon 1912 and Haddon 1911 does not exactly represent the figure as it is made. In the drawing the right little finger loop has been turned $\frac{1}{2}$ twist away from the body.
 19. The following method must be meant here:
 - a. With 2, from below, remove 1 loop.
 - b. With 1, from above, remove 2 loop.
 20. *Sopa* and *mwada* (nrs. 5 and 6) look like being exceptions too, but their first figure is quickly arrived at after only two movements.
 21. *Sem* (nr. 4) consists of the cyclic repetition of two figures that are quickly transformed into each other. Here the transformation of the first into the second figure and back again to the first figure has no accompanying chant.
 22. In the film figures *Togesi* (nr. 9) and *Tokwelasi* (nr. 13) have a specific ending, which is not described in Senft & Senft 1986. For *sem* (nr. 4) Senft & Senft 1986 describe a specific ending, which is not in the film.
 23. Exceptions are "your mother" in *ebwesi* (nr. 7) and "a funny girl" in *sopa* (nr. 5).

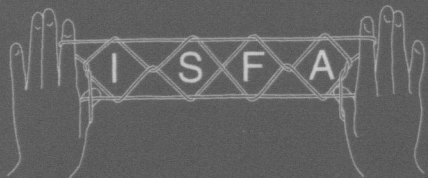
String Figures are designs woven on the hands with a loop of string. The designs portray a variety of subjects, both concrete and abstract, and often require a high degree of dexterity to make.

Prior to Westernization, nearly all pre-literate societies were familiar with string figures, including those of Oceania, Southeast Asia, Australia, Japan, Africa, the Arctic, and North and South America. The extent of their distribution suggests that string figures are ancient — perhaps even relics of the stone age.

Although the original purpose of making string figures remains obscure, they now serve primarily as a form of amusement. Like all games, the making of string figures dissipates surplus energy, strengthens friendships, dispels monotony, and provides mirth.

The International String Figure Association was founded in 1978 by Dr. Hiroshi Noguchi, a Japanese mathematician, and Rev. Philip Noble, an Anglican missionary stationed in Papua New Guinea. The primary goal of our organization is to gather and distribute string figure knowledge, so that future generations will continue to enjoy this ancient pastime. We also encourage the invention of new figures, and enjoy sharing them with others.

Much of our research has already appeared in *Bulletin of String Figures Association* (Tokyo: Nippon Ayatori Kyokai), which was issued in 19 volumes (1978-1993). *Bulletin of the International String Figure Association* replaces the earlier periodical, expanding its scope and distribution.



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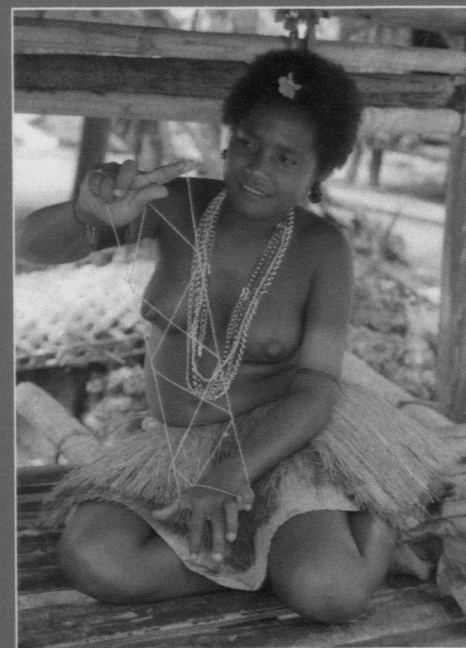


Photo by Gunter Senft

On the Problem of String Games
String Figures from the Faroe Islands, Sweden,
the Trobriand Islands, the Highlands of West New Guinea,
and Burkina Faso