

Chapter 11

“*Masawa—bogeokwa si tuta!*”: Cultural and Cognitive Implications of the Trobriand Islanders’ Gradual Loss of Their Knowledge of How to Make a *Masawa* Canoe

Gunter Senft

*Kwatuyavesa waga, Turn round the sail of the canoe,
rakeda milaveta! its course is to the open sea!*

(Oruvekoya song cycle, first stanza)

A few days after I had set foot on the Trobriand Islands for the first time in 1982,¹ I spied a *masawa* canoe sailing close-hauled toward Kiriwina, the main island of the Trobriands. Although I had seen Malinowski’s (1922/1978) photographs of these impressive canoes in his monograph *Argonauts of the Western Pacific*, I was overwhelmed by the grace and beauty of this sight. Three weeks later I had the opportunity to sail on such a canoe from Kaibola, the northernmost village on Kiriwina Island, back to Tauwema, the village on Kaile’una Island that has been my place of residence during my field research on the Trobriands for more than 25 years now. My sailing experience with a *masawa* canoe is one of my dearest memories so far.

In Malinowski’s times Kaile’una Island as well as Vakuta Island, Kitava Island, and the village of Sinaketa on Kiriwina Island were known as the best centers for canoe-building and as the places where most expert canoe-builders and carvers lived (Malinowski 1922/1978, pp. 121–145). In 1982 Tauwema had eight *masawa*,

¹This chapter is based on more than 40 months of field research on the Trobriand Islands. I thank the National and Provincial Governments in Papua New Guinea; the Institute for PNG Studies, especially Don Niles; and the National Research Institute, especially James Robins, for their permission for and assistance with my research projects. I express my great gratitude to the people of the Trobriand Islands and, above all, to the inhabitants of Tauwema and my consultants for their hospitality, friendship, and patient cooperation over all these years. Without their help, none of my work on the language of the Trobriand Islanders (Kilivila) and on the Trobriand culture would have been possible.

G. Senft (✉)

Max Planck Institute for Psycholinguistics, 310, 6500 AH Nijmegen, The Netherlands

e-mail: gunter.senft@mpi.nl

each of which had a proper name and were proudly owned by men living in the village.² In 1992, when I returned to Tauwema for my third period of field research, only one of these canoes remained (Nusai's *Seguvagava*), and ever since 1996 there have been no *masawa* in Tauwema anymore. My fascination with these canoes led me to collect descriptions of how to make a *masawa* from Kilagola, at that time both the chief of Tauwema and a *toliwaga* (an owner of a *masawa*), and from Tosulala, another *toliwaga* in Tauwema, during my first 15 months of field research in 1982 and 1983. Mokeilobu, an expert on sails, told me how to make one, and Kilagola described how canoe prows are carved. He also informed me about canoe magic (as did Yoya, another expert magician in 1989). The men of Tauwema greatly appreciated my interest in their big canoes. I was thus quite shocked to observe the gradual loss of the *masawa* in Tauwema over the years. In 1996, when I asked former owners of such canoes why nobody in Tauwema had taken the initiative to build a new *masawa*, their answer was simply, "*Masawa—bogeokwa si tuta!*" (*Masawa* canoes—their time is over!).

In what follows I draw on the collected descriptions³ to describe how the Trobriand Islanders of Papua New Guinea used to construct their large seagoing *masawa* canoes and how they used to make their sails, what different forms of knowledge and expertise they needed in order to do so during various stages of the construction processes, how this knowledge was socially distributed, and what the social implications were of all the joint communal activities necessary before a new canoe could be launched. I then try to answer the question of why the complex distributed knowledge of how to make a *masawa* has been gradually getting lost in most of the village communities on the Trobriand Islands. Lastly, I outline and discuss the implications of this loss for the culture of the Trobriand Islanders, their social construction of reality, and their indigenous cognitive capacities.

The Art of Making a *Masawa* Canoe

The Trobriand Islanders differentiate between six types of canoe⁴:

1. *kekwaboda* the smallest outrigger canoe (Malinowski 1922/1978, p. 112) (*kewo'u*)

²The names of the canoes and, in parentheses, the names of their owners were *Seguvagava* (Nusai), *Tovivila* (Tosulala), *Mogerai* (Bulasa), *Meraga* (Topiesi), *Dedayasi* (Tosobu), *Vaneyaba* (Moligogu), *Genare'u* (Taidyeli), and *Topasi* (Tomtava). All these canoes used traditional sails made of pandanus leaves. The orthography of Kilivila is based on Senft (1986).

³I also heavily rely on the descriptions of the *masawa* canoes and their construction as recorded in Malinowski (1922/1978, pp. 105–146).

⁴Gerrits (1974) also mentions, documents, and describes burial canoes of the Trobriands (on Kitava) and the Marshall Bennet Islands (on Iwa). These objects, called *nalio'ema*, were small coffins carved like miniature canoes. However, even his informants did not "remember anybody to have been buried in this way" (Gerrits 1974, p. 229). I have never heard anything about these canoes on the Trobriands.



Fig. 11.1 Children playing with a *kemolu* canoe on the reef of Tauwema, with a *masawa* canoe passing in front of the reef (all photos by author)

2. *kemolu* a small outrigger canoe that can be sailed for fishing and relatively short trips (not mentioned in Malinowski 1922/1978; see Fig. 11.1)
3. *ligataya* a canoe larger than a *kemolu* and used for relatively long trips but not as carefully constructed and decorated as a *masawa* canoe (see Fig. 11.2). The *ligataya* resembles the *kalipoulo* type of canoe described by Malinowski (1922/1978, p. 112) but has no prow boards.
4. *masawa* large *kula* canoe⁵ (see Fig. 11.3)
5. *mesolaki* very large *kula* canoe (not mentioned in Malinowski 1922/1978)
6. *nagega* largest *kula* canoe; neither used nor built by the Trobriand Islanders but rather by other Islanders who participate in the *kula* (Malinowski 1922/1978, pp. 144–145)

The generic term for all these dugout canoes (and other vehicles except airplanes) is *waga*. The expression *waga parai* refers to any kind of sailing vessel. This chapter concentrates solely on the building of a *masawa* canoe. However, before explaining this complex and time-consuming activity, I briefly outline what Malinowski (1922/1978) called “the canoe’s sociology” (p. 113) and describe essentials of a *masawa*’s construction.

⁵Gerrits (1974, p. 230) reports that the *masawa* canoe came originally from Dobu Island. *Kula* is the name of a ritualized trade in which shell valuables are exchanged. The *kula* covers a wide area of Melanesia (see Malinowski 1922/1978).



Fig. 11.2 A *ligataya* canoe with a sail made of plastic



Fig. 11.3 Nusai's *masawa* (*Seguvagava*) under full sail (1989)

The *Masawa* Canoe's Sociology

According to Malinowski (1922/1978, p. 114), only chiefs or headmen of a village sector could own *masawa* canoes. A closer look at the canoe owners in Tauwema reveals that this general rule did not hold in that village (nor, as far as I know, for the villages on the islands of Kaile'una, Kuiuava, and Simsim). None of the eight canoe

owners in Tauwema was a chief, and none of them, at least in 1996, was the headman of a village sector. Only Nusai, Tosulala, and Taidyeli were members of the highest ranking *Malasi* clan; Topiesi (chief Kilagola’s eldest son). Tosobu, Moligogu, and Tomtava were members of the third-ranking *Lukwasisiga* clan, and Bulasa was even a member of the lowest ranking *Lukulabuta* clan (but was one of the first local missionaries — *misinari* — of Tauwema). However, in Tauwema and on the other islands mentioned above, the *toliwaga* were as solely responsible for the building of their *masawa* as were the *toliwaga* on Kiriwina, Vakuta, and Kitava, the other islands of the Trobriand chain. They had to initiate the building of their canoe, acted as the spokesmen in everything related to constructing and sailing it, and, last but certainly not least, had to accumulate enough food and other items of wealth such as stone blades (*beku*), belts (*kaloma*), and small necklaces (*kuwa*) to pay experts and other workers involved in making the *masawa*. Besides this strong economic position, the *toliwaga* had to be respected persons who had gained a degree of influence and authority within their village community. The *toliwaga* was the one who —

- made all kinds of decisions during the process of building the canoe;
- selected the indispensable experts (craftsmen and magicians);
- decided whether to rent the canoe to others (for which service he would receive payment, traditionally in yams, betelnuts, fish, and so forth);
- selected the crew of his canoe; and
- saw to it that all magical rites and duties inextricably intertwined with the *masawa* were properly performed from the very outset of its construction to ensure the canoe’s performance and safety at sea.

This list of a *toliwaga*’s main duties shows that making and using a *masawa* were a communal matter. Along with the experts that were needed for building the canoe, the *toliwaga* also needed the help of a smaller group of workers, usually his relatives and friends, who helped him at certain stages of the construction. Moreover, whenever communal work was necessary during this building process, all villagers supported him and took part in the work. If the *toliwaga* put an expert canoe builder (a *tota’ila waga*) in charge of making the canoe, which used to happen quite often, the *tota’ila waga* was entitled to make all the decisions during the construction process, including the selection of other experts. However, the final responsibility for the canoe and the obligation to reimburse the experts and helpers for their efforts and to sponsor the communal meals remained with the *toliwaga*.

The crew of a *toliwaga* consisted of sailing experts (again normally kinsmen and friends) who specialized (or would eventually specialize) in performing a particular task (e.g., a steersman would always be responsible for the rudder (*kuliga*)). The *toliwaga* usually acted as captain, provided he was a skilled sailor. If he was not, he could take over some other assignment and leave the command to the best seaman of his crew.

During the building and use of the canoe, the *toliwaga* had to rely on experts specialized in specific aspects of craftsmanship. An especially important individual was the one who performed the magic to guarantee the *toliwaga*’s success at achieving his aim of owning a beautiful, admirable, swift, and elegantly sailing

canoe that was protected against all the harms it could encounter at sea or on the beach. Malinowski's (1922/1978) description of the *toliwaga*'s role (p. 120) implies that the latter person knew all the various forms of magic crucial to the realization of this ambitious goal. I know of nobody on the Trobriands these days who claims to have the paramount competence in canoe and sailing magic. Even chief Kilagola, a canoe-builder of renown, did not dare claim this ability. Thus, the *toliwaga* depended on an expert crew but also on experts in the manifold forms of canoe and sailing magic.

Essentials of the *Masawa* Construction⁶

The dugout, ranging in length from 6 to 10 m (some 20–33 ft) and featuring massive pointed ends, is watertight, immersible, and able to carry even heavy loads, but it has no lateral stability. Any load put on the hollowed-out log will cause it to capsize. To solve this problem, the Trobriand Islanders equip their canoes with outriggers (*lamina*). That is, they attach a second, slightly smaller, solid log to the dugout. However, the greater stability afforded by this float is not symmetrical. Stability is guaranteed only when downward pressure is exerted on the opposite side of the canoe's body. This force lifts the outrigger out of the water and produces "momentum . . . proportional to the displacement, and the rest of the canoe will come to equilibrium" (Malinowski 1922/1978, pp. 109–110). This asymmetrical stability has important consequences for sailing an outrigger canoe: The float must always remain windward! Another factor that increases the stability of the canoe is the volume and depth of the dugout. Both factors can be easily increased by adding longitudinal planks to them. These planks are closed in at the ends of the canoe by transversal prow boards that break the waves. Sagittal prow boards are mounted on the front of the transversal ones to reinforce them. This construction lends the canoe "a good deal of freeboard to prevent water from breaking in" (Malinowski 1922/1978, p. 110). Yet another stability-increasing factor is the distance between dugout and float. With the *masawa* this distance is ordinarily about a quarter of the length of the dugout and is covered with a platform.

The Making of a *Masawa*

In late July 1983, Tosulala demonstrated to my wife and me how he burned coral to make lime out of it. He then gave a detailed and quite sophisticated verbal description of what he had done. I thereupon asked him whether he would like to tell me how one builds a *masawa*. On the evening of July 30, he came to my house and agreed to do so. Most of what follows is based on Tosulala's tape-recorded account,

⁶This section relies on Malinowski (1922/1978, pp. 109–111), Haddon and Hornell (1991, Vol. II, pp. 266–271), and Helfrich (1984, pp. 47–48).

with a few additions from the descriptions by Kilagola and Mokeilobu mentioned above, my field notes, and other relevant information from Haddon and Hornell (1936–1938/1991), Helfrich (1984), and Malinowski (1922/1978).⁷

The first thing the *toliwaga* has to do is to go into the bush and find a tree that meets the criteria for making a good dugout.⁸ Helfrich (1984, p. 47) assumes that this tree may belong to the species *Calophyllum inophyllum*. The tree has to have a particular length and width, and it should be slightly bent so that it will not be too much work for the expert to give the dugout the sickle-like shape that improves its ability to cut the waves. It should not be unduly cumbersome to transport the tree from its place of origin to the village. When the *toliwaga* has found such a tree, he publicly announces his intention to build a *masawa*. For this purpose a communal meal called a *katuyuvisa* is prepared by his wife and members of his own clan. On the next day the *toliwaga* and a few other men take their axes and go to the bush where the tree is growing. After they clear the bush around the tree, the *toliwaga* or another expert magician performs the first magical rite. The magician makes a small incision in the trunk of the tree and puts a piece of food or a betelnut into it. He then recites a magical formula that addresses the *tokway*, harmful dwarf-like beings in whose existence the Trobriand Islanders believe. They have long beards and sleek long hair, play unpleasant tricks on the Islanders, steal yams, cause sicknesses,⁹ and can make themselves invisible. The incantation makes the *tokway* leave the tree. To give them time to do so, the party leaves the spot in the bush and has a second breakfast at another place. Tosulala emphasized that this meal includes eating fish. I have no idea whether this choice of food has any connection with the magical rite itself, but if the rite is not performed, the *tokway* of this tree will become angry and sabotage the construction of the canoe in one way or another. The log may turn out to be full of knots or may split just before the process of scooping it out is finished. In those cases, the canoe will not perform properly at sea or will quickly rot. After a while the men return to the tree and cut it down with their axes. A special form of magic is whispered over the axe(s) that will fell the tree. After the tree is felled, it is measured. Tosulala drew attention to the indigenous Trobriand way of measuring long objects: The length of the log should be four or five times the span of two extended arms.¹⁰ After measuring the tree, the men trim it, lop off the branches, and

⁷For similar descriptions see Pule (1983) and Whakataka-Brightwell (1994). See also Finney (2006), Nayak (2008), and Thompson and Taylor (1980).

⁸Munn (1977, p. 42) mentions a canoe origin myth on Gawa, on the northern tip of Elcho Island in the Arnhem Land of Northern Territory, Australia.

⁹The *tokway* can cause sicknesses by inserting small sharp and pointed objects into persons' bodies. There are magicians who know extraction magic and produce the inserted objects at the end of their magical healing session (see Schiefenhövel 1986). *Tokway* can also have names. The Trobriand Islanders' inventory of string figure games (*ninikula*) contains a figure that refers to a *tokway* called Tokemtuya (see Senft and Senft 1986, pp. 149–150). See also Munn (1977, p. 41).

¹⁰The *masawa* that was exhibited in Berlin in 1985, the *Meraga*, was 5.93 m (19 ft 6 in.) long, 1.08 m (3 ft 6 in.) high, and 1.45 m (4 ft 9 in.) wide. It was built in Tauwema, owned by chief Kilagola, and acquired for the Ethnographic Museum in Berlin–Dahlem by Wulf Schiefenhövel in 1983.

cut the log to both the desired length and rough shape of the canoe. The tree is left in the bush, and the men return to their village.

On the following day the *toliwaga* tells the people in his village that he and his friends are going into the bush to the felled tree to start hollowing it out. All the villagers accompany him, and they join in when he commences with the work. The account by Malinowski (1922/1978) differs from Tosulala's description at this point. In Tauwema all villagers, not just the *toliwaga's* kinsmen and friends, help cut the log to the desired length and shape. They even begin hollowing it out. In the afternoon they all go back to their village, where the *toliwaga* has organized another communal meal, for which he even provides a pig besides the typical food and betelnuts.

A few days later the *toliwaga*, a magician, and many other men return to the log to bring it into the village. The undertaking is not easy, but the magician knows special magic, which Malinowski (1922/1978, p. 129) calls the "*Kaymomwa'u* Spell." It makes the log lighter. He whips the log with a rope. Malinowski also mentions both a dry banana leaf that is lain on the log and a bunch of dry lalang grass that serves as a kind of whip with which to reduce the weight of the log. After the magician has whipped the canoe, he discards this heavy grass and takes another bunch of grass, the light bunch, and hits the log again to make it lighter. Then the men pull it to the village. In most cases on Kaile'una Island the men try to find a path from the bush down to the sea so that they can float the log at least part of the distance. Even so, they have to drag it out of the bush by using small round timber as rollers. During this heavy work, the *toliwaga* again distributes food, betelnuts, and pieces of cooked pig to the magician and other men who work very hard. These gifts, the *puvaya*, are announced like prizes awarded during a harvest competition. Finally, the men arrive with the log in their village, where it is left bottom up either on the village square, near the house of the *toliwaga*, or on a spot close to the beach.

Malinowski (1922/1978, p. 130) mentions that on the following day the *toliwaga* ceremonially cuts off the rope with which the log had been hauled to the village. Tosulala and Kilagola did not mention this detail. Tosulala pointed out that the *toliwaga* will cut and hollow out the log with his adze (*ligogu*). However, this work can also be done by another expert, the builder of the canoe (*tota'ila waga*). It takes a long time, during which the kinsmen and friends of the *toliwaga* usually construct a shed for the canoe. Tosulala mentioned that it is an excellent omen if in this phase the *tota'ila waga* wakes up at night, goes outside his house, and sees shooting stars in the south, the direction of what the Trobriand Islanders regard as the mountains—the D'Entrecasteaux Islands and Dobu Island in Papua New Guinea—where the Kula partners of the Trobriand Islanders live. Tosulala also emphasized that the *tota'ila waga* knows a specific kind of magic for his adze. Malinowski (1922/1978, pp. 130–131) refers to this formula as the "*Kapitunena Duku* Spell." It takes a long time to chant it over the *ligogu*, but this magic is performed repeatedly while the canoe-builder works on the outside of the log. When he has finished this part of his job and the outside of the dugout has received its final polish, the *tota'ila waga* turns the log over so that it is bottom-side down. He takes a different kind of adze, the *lali* or *kavilali*, which is inserted in a handle with a movable part that "allows cutting to

be done at varying angles to the plane of striking” (Malinowski 1922/1978, p. 132). He uses this adze to hollow out and cut the inside of the log. It goes without saying that another specific kind of magic, the “*Ligogu Spell*” (p. 132), goes with this tool.¹¹ Sometimes the *tota’ila waga* also uses a pickaxe (*kabolu*) to do such work. Scooping out the log is difficult; it takes great skill, especially during the final phase when the walls of the dugout have to be made sufficiently thin. This stage, too, takes a relatively long time. When it is finished, an expert carver gives the canoe its specific decoration pattern, the *pusa*, at both ends of the dugout and another decoration, the *talapwapwa*, on the upper part of the dugout. To execute these ornamentations, the master must know a particular form of carving magic.

After the *tota’ila waga* has finished this task,¹² he sets about making the other parts that are necessary for the construction of the canoe. Tosulala began this part of his account by mentioning the *gelu*, which are L-shaped ribs that will hold the side planks and stabilize the connection between the body of the dugout and the boards at its sides. Depending on the length of the canoe, 12–20 pairs of these ribs have to be made and joined into a U-shape within the canoe. The four prow boards are carved, first the initial set of two *lagim* and then the two *tabuya*. All four boards differ in their carved designs. Many of these boards are marvelous and admirable pieces of art (see Campbell 2002; Munn 1977, pp. 47–50; Senft 1993, 2005; Scoditti 1990) by expert and renowned master carvers (*tokabitam*), whom the *toliwaga* pays handsomely for their work if he is not a carver himself (see Fig. 11.4). The carving of the prow boards, too, calls for specific forms of magical formulae and rites. Kinsmen and friends of the *toliwaga* assist him again when it comes to making four broad and long planks that will form the gunwale. At the same time other men also prepare long poles (*kesuya*) critical for the longitudinal strengthening of the ribs and for the outrigger platform (*pitapatila*). They cut short poles (*kaitota*) that must serve as transversals for this platform and as main supports of the outrigger. They also fashion the small sticks that are to connect the float with the transversals. (Tosulala did not mention these sticks in his description but did refer to them when they were needed for constructing the canoe.) After these kinsmen and friends have finished their work, the *toliwaga* organizes another communal meal for them as payment for their efforts.

Then the outrigger has to be made. Another tree, Tosulala referred to a black palm, is felled (after the *tokway* magic has been performed, of course). The float is cut in the bush, either by the *toliwaga* or his friends and kinsmen, and is brought into the village. At the same time, the *liu* sticks are cut. These cross-girths connect the canoe with the outrigger and constitute the basis of the outrigger platform, which is on the vessel’s windward side (*kelamila*). In the meantime the *tota’ila waga* inserts the *gelu* ribs into the canoe, assembling each pair of them into their characteristic U-shape. The men cut the gunwale’s lower plank (*budaka*)—or “strake” (Haddon and Hornell 1936–1938/1991, Vol. II, p. 270, Fig. 157)—and

¹¹ This logic was obvious to Tosulala, which is probably why he did not mention the spell in his description.

¹² Malinowski (1922/1978, p. 133) notes that “parallel with the process of hollowing out, the other parts of the canoe are made ready.” This observation does not seem to hold for what is done in Tauwema.

Fig. 11.4 The prow of a *masawa* canoe used by visitors from Vakuta Island on the beach of Tauwema (1983)



upper plank (*sipa*). Thereafter, the *tota'ila waga* takes a traditional drill (*kegigi*) and creates holes (*kogwa*) in the *budaka*, through which planks will be attached to the outrigger side (*kelamina*). These holes will later receive the *liu* sticks. All parts of the canoe are now ready.

Malinowski (1922/1978, p. 133) reports that on Kiriwina the magical rite named *kapitunela nanola waga* is performed at this juncture. The term means “cutting the canoe’s mind” and implies the shaping of the canoe’s determination. The *toliwaga* or another expert magician recites a short spell over drops of coconut oil, which are subsequently wrapped up in a bundle. The incantation is recited over the adze, and the bundle is put inside the canoe and struck with the adze. This magic is intended to make the canoe sail at high speed.¹³

¹³Neither Tosulala nor Kilagola mention this kind of magic. The incantation I received from Yoya in 1989 belongs to the types of formulae that are used to make canoes sail swiftly. However, magicians usually cast this magic on the canoe before it starts to sail away. The following account by Tosulala differs substantially from Malinowski’s (1922/1978, pp. 134–144) description of the next

Now the canoe parts are ready to be put together. First, an expert magician performs the *katuliliva tabuyo* rite over the *lagim* and *tabuya* prow boards. These boards are thereupon inserted into their grooves at both ends of the canoe, and the side planks are put onto the edge (*tolena*) of the dugout to constitute the gunwale.¹⁴ The side planks are preliminarily lashed to the *gelu* ribs and onto the dugout's upper rim (*kilababa*). The canoe-builders now take a 4-day rest.

To resume their work, the *toliwaga* and his helpers take ropes and *veyugwa* lashings, or lashing creepers made of lianas (*Lygodium circinnatum* [?]; Helfrich 1984, p. 48), and retie the side planks and the *gelu* ribs. Before the *veyugwa* are used to join the canoe parts, a magician recites the *Wayugo* Spell over them (Malinowski 1922/1978, pp. 137–139). The *liu* sticks are inserted through the holes in the *budaka* on the outrigger side. They rest upon both edges of the dugout and are tied to the *gelu* as well.

The construction of the outrigger platform follows. Everything that has to do with this phase of the canoe's construction is closely monitored either by the *toliwaga* himself or by an expert known as a *tolilamila*. Long poles called *kaitota* are set perpendicular over the *liu* sticks and tied to them, and the *vatota* sticks that connect the float with the outer top pole of the platform are sharpened. The next day the float is hardened and blackened over an open fire (see Fig. 11.5). Pairs of long undercrossed *vatotua* sticks are hammered into the float as well as tied to and interlocked with the platform's first vertical outer top pole (*kedudula*). In addition there are strengthening spars (*donaba*), in some cases only two, each of which is tied to the *vatotua* sticks at the float and made to slant upward to about the strake under the platform and over the *liu* sticks (Haddon and Hornell 1991, Vol. II, p. 270, Figure 157).¹⁵ Below the *budaka*, there is another longitudinal pole, the *kesukwava*, which is tied to the body of the canoe. In the space between the *kesukwava* and the *liu* sticks are the *donaba*, which are tied to the *kesukwava* pole. This work is very difficult because the canoe-builder must ensure that the float is perfectly parallel to the dugout to optimize the maneuverability of the vessel when it is sailed. That is the manner in which the float is connected with the outrigger platform. The workers make sure that all parts of the canoe are tied together properly. Tosulala mentioned four different knots used for this purpose: *nabwasiko* (from Vakuta Island), *namkilavava* (from Tauwema), *mumyobikwa* (from Simsim Island), and *yumnuk-wausa* (from Kitava Island). Simultaneously, others lending the *toliwaga* a hand build a shed (*buneyova*) for the canoe.

stages of constructing a canoe. Malinowski mentions that the next stage commences with another magical rite (the *Katuliliva tabuya*). Thereafter, the prow boards are mounted on the dugout, which is ceremonially launched for the first time. After magicians have recited a number of different formulae over the dugout, it is ceremonially washed and heaved ashore, its parts tied together, and the assembled canoe caulked.

¹⁴Tosulala forgot to mention that the four prow boards (the *lagim* and *tabuya*) are first put in place.

¹⁵Neither Tosulala nor Malinowski (1922/1978) mentioned these sticks, but see Haddon and Hornell (1991, Vol. II, p. 270).



Fig. 11.5 Topiesi hardening a new outrigger for a *masawa* canoe in the fire on the beach of Tauwema (1983)

The next day the canoe is caulked. People cut out roots of a specific tree (Helfrich 1984, p. 48, assumes it could be the *parinarium* nut tree, *Maranthes corymbosa*, Bl.). They scrape off parts of the roots and mix them with water, and the *toliwaga* or another expert magician recites a charm over this substance (*kebasi*), with which that person caulks the canoe with the utmost care. This job is concluded by another communal meal that the *toliwaga* organizes for all the people who have aided him during these phases of the canoe's construction.

The day thereafter people burn chalk to make lime with which to paint the canoe prows, the canoe boards, and the tips of the dugout (*kabununa*). They also go and collect red soil, the ochre with which to paint the *lagim* and *tabuya* boards and the side planks of the canoe. Coconut husks are burned to produce charcoal with which to paint these planks and prows black. After the various canoe parts are painted, white cowrie shells (*Ovula ovum*) are tied to the canoe prows and the tips of the dugout to serve as a decoration termed *buna*. Sticks are bound together and also tied to the canoe. Lastly, pandanus streamers are tied below the outrigger platform as extra decoration.¹⁶

¹⁶Malinowski (1922/1978, pp. 139–140) mentions three more magical rites that have to be performed before the canoe is painted. They are “exorcisms against evil influences” (p. 139). In the *Vakasulu* the magician must prepare a veritable witch’s cauldron containing “the wings of a bat, the nest of a very small bird, ... some dried bracken leaves, a bit of cotton fluff, and some lalang grass,” which he subsequently burns beneath the canoe, an act that has a cleansing and speed-giving influence. The *Vaguri* is an exorcism in which the magician strikes the body of the canoe with a wand, expelling evil witchery. In the *Kaytapena waga* rite the magician puts a spell on a coconut-leaf torch and fumigates the canoe with it. This rite, too, cleanses the canoe and increases its speed.

The next day one of the brothers of the *toliwaga* goes to the bush early in the morning to cut *yakwara* and other trees. He will bring them to the canoe shed and use them to build a slipway from the shed to the sea, work that takes all day. On the following night the *toliwaga*—Tosulala also referred to him as the *totatai* (the cutter of the canoe) sleeps in the canoe shed, but not on the canoe, for that act is tabooed. During the night he will hear whether the canoe was tied together properly. If the *liu* sticks or *vatotua* sticks shake, he will know that parts of the canoe must be retied in the morning. The following day the *toliwaga* or other expert recites magic over the canoe, the logs, the pandanus streamers, and the conch shell trumpet (*tauya*) that is put into the canoe just behind the *lagim* prow. These magical rites take all day.

The next morning an expert magician crawls under the outrigger platform of the canoe, sits there, and recites another magical formula. He strikes the canoe at several places with fibers on which he has cast a specific spell. He also shakes the vessel with his hands while reciting another charm over the canoe. These forms of magic will make the canoe light so that it will be easy to move from the shore into the sea or from the sea onto the shore. Before the *toliwaga* launches his new canoe for the first time, he names it (Munn 1977, p. 41). He takes the conch shell and holds it in front of the canoe as strong men pull it down from its shed, over the slipway, and into the sea. The magic put onto the conch shell will make the canoe lighter for the men who lug it into the sea. This kind of magic is done only before and after the canoe's first four trips.

When the canoe is afloat, the magician blows the conch shell. When the villagers hear the sound, they come to the beach and inspect and give exhaustive critique of the new canoe. The *toliwaga* or an expert magician first washes the canoe and puts a spell on it to make it swift. The *toliwaga* and his crew then board the canoe to paddle and test it on the reef at high tide. Eventually, they paddle it ashore again and pull it to its shed. Before it may be pushed into its shed, however, the villagers attack the canoe as it were. They throw stones, sticks, papayas, young coconuts, and rotten coconuts at the *lagim* prow until it breaks (the reason why the initial set of *lagim* boards is usually thinner and less artistically carved than the final set). A broken *lagim* after such an attack is taken by the *toliwaga* and the whole village community as a positive sign of the quality of the canoe, especially its swiftness and safety. The person who manages to break the *lagim* receives a pig from the *toliwaga* as a prize. The *toliwaga* treats all the villagers to a major feast during which he not only feeds them well but also distributes valuables like stone-axe blades, belts, small necklaces, pigs, and betelnuts. His guests sing the traditional *Kapoka* songs that celebrate new canoes and praise their owners (Malinowski 1922/1978, pp. 146–149). After this feast the broken *lagim* is replaced by the stronger and more elaborate real one.

At this stage the sail (*naya*) is made. The *toliwaga* and many other villagers go into the bush and cut pandanus leaves. The leaves are brought into the village, the thorns on the sides of the leaves are cut off, and the leaves are dried in the sun. They are thereafter rubbed with specific stones and dried in the sun again. The drier the leaves, the stronger and smoother the sail will be. When the leaves have become soft, they are rolled up. After this task the *toliwaga* makes a rope, a so-called *tasiu*. When the rope is finished, he or an expert sail-maker marks the shape of the canoe on the ground. He drives stakes into the ground to outline the triangular frame of the sail and connects the stakes with the *tasiu*. As Malinowski (1922/1978, p. 140) indicates,

an old sail may sometimes serve as a pattern. Sails match the size of the canoe, and the better this match, the better the canoe will sail. Then the pandanus leaves are unrolled and laid out on the ground within the frame, with people immediately lying down on them for a while to keep them flat. This practice is probably the funniest part of the work, both for participants and observers. When the pandanus leaves finally remain flat on their own, the sail-makers sit on them and sew them together, starting at the apex of the triangle. This technique gives the sail an intricate pattern. The sail-makers formerly used bones of a flying fox as needles. Their threads are strips of specially toughened pandanus leaves. Two layers of leaves are sewn one on top of the other to produce a solid fabric, the typical triangular Oceanic lateen sail (*Velum latinum*; Höver 1957). When the sail is finished, the *toliwaga* organizes another communal meal for the people who have worked with him.

If the *toliwaga* also needs a new mast for the canoe and poles for the gaff, they have to be made, too. He needs the main mast (*vania*), the long pole on top of the sail (*kunaya*), the pole at the bottom of the sail (*kenaya*), the mast support (*kena'ila*), and a good deal of rope (both *soya* and *tapwai*) for setting the sail and handling it when the vessel is in use (see Fig. 11.6). When all these parts are ready, the *toliwaga* and his crew do a short-distance trial run with the new canoe, sailing it for a few hours. Tosulala referred to this trial run as *i-valakola-si tolilamila*.

Fig. 11.6 Nusai's *masawa*, *Seguvagava*, under full sail, with Mokeilobu leaning against its mast



When the members of the crew sail the canoe into the wind, they immediately know whether the frame that holds the dugout and the float together is as strong and flexible as it has to be for a seaworthy *masawa* canoe. All the villagers gather at the beach again when the new canoe is pushed into the sea—the moment at which the crew puts up the mast at the third or fourth *liu* stick and sets sail. And they are there when the canoe returns in the afternoon. Thus ended Tosulala’s description of how to make a *masawa*.¹⁷

His account shows that the construction of such a canoe is accomplished in many stages that require organized and coordinated individual and communal labor and the assistance of many experts (see Table 11.1). These experts are paid by the *toliwaga*, and after phases of the building process that must involve communal labor, those who have contributed are honored and their work is acknowledged with communal meals organized and sponsored by him. The building of a canoe is always guided by magic. Only the traditionally appropriate coordination of craftsmanship and effective magic guarantees the successful outcome of this

Table 11.1 The traditional process of building a *Masawa* canoe on the trobriand Islands

Phases and duration	Protagonist(s)	Activities	Magical rites	Communal meals and prizes sponsored by <i>toliwaga</i>
1. Several days	<i>Toliwaga</i>	Searching for a tree for the dugout		
2. One day	<i>Toliwaga</i>	Publicly announcing intention to build a <i>masawa</i>		Meal (<i>katuyuwisa</i>) for all villagers
3. One day	<i>Toliwaga</i> and helpers (kinsmen, friends) Expert magician (if needed) <i>Toliwaga</i> <i>Toliwaga</i> and helpers	Clearing the bush around the tree Felling the tree and cutting the log to the desired length	<i>Tokway</i> magic Magic for axe(s)	Picnic for helpers and magician
4. One day	<i>Toliwaga</i> and fellow-villagers <i>Toliwaga</i>	Cutting the log to the rough shape of the dugout		Meal for all villagers

(continued)

¹⁷ It is interesting to compare Tosulala’s account with Malinowski’s (1922/1978, pp. 105–150) description of how canoes are built on the Trobriands. Tosulala’s description and my morpheme-interlinearized transcription of it, along with Mokeilobu’s description of how to make a sail and my morpheme-interlinearized transcription of that explanation, can be read and heard at <http://www.mpi.nl/people/senft-gunter/research>

Table 11.1 (continued)

Phases and duration	Protagonist(s)	Activities	Magical rites	Communal meals and prizes sponsored by <i>toliwaga</i>
5. One day	Expert magician <i>Toliwaga</i> and helpers <i>Toliwaga</i>	Bringing log into the village	<i>Kaymomwa'u</i> Spell to lighten log	Food and prizes for helpers
6. Several months	<i>Toliwaga</i> Helpers Expert carver	Cutting off the rope with which the log was pulled; hollowing out the log Building a canoe shed Carving <i>pusa</i> and <i>talapwapwa</i> decoration	<i>Ligogu</i> Spell on adzes Carving magic	
7. Several months	<i>Toliwaga</i> and helpers Expert carver	Making other parts of the canoe Carving <i>lagim</i> and <i>tabuya</i>	Carving magic	
8. One day	<i>Toliwaga</i>			Communal meal for helpers
9. A week or two	<i>Toliwaga</i> and helpers	Making the float and the outrigger construction; ensuring that all parts of the canoe are ready to be bound together		
10. One day	Expert magician <i>Toliwaga</i> and helpers	Making the gunwale and lashing the planks together	<i>Kapitunela nanola waga</i> magic; <i>Katuliliva tabuyo</i> rite over <i>lagim</i> and <i>tabuya</i>	
11. Four days	All	Resting from work		
12. A few days	Expert magician <i>Toliwaga</i> and helpers	Tying the planks together with lashing creeper; constructing the connection between canoe and float; hardening the float; making the outrigger platform; connecting float to platform and windward side of canoe; tying all parts together; building a shed for the canoe	<i>Wayugo</i> Spell on lashing creeper	
13. A day or two	<i>Toliwaga</i> and helpers Expert magician <i>Toliwaga</i> or other expert	Making the <i>kebasi</i> substance for caulking the canoe Caulking the canoe	<i>Kebasi</i> Spell on the caulking substance	

(continued)

Table 11.1 (continued)

Phases and duration	Protagonist(s)	Activities	Magical rites	Communal meals and prizes sponsored by <i>toliwaga</i>
14. One day	<i>Toliwaga</i>			Communal meal for helpers
15. A day or two	Expert magician <i>Toliwaga</i> and helpers	Making colors and painting the canoe, its planks, prows, and boards; decorating the canoe	Magical exorcisms against evil influences	
16. One day and night	Brother of <i>toliwaga</i> <i>Toliwaga</i>	Cutting trees for slipway and constructing it from canoe shed to the shore Sleeping in shed and checking whether the canoe is properly tied together		
17. One day	<i>Toliwaga</i> and expert magician		Magical formulae over canoe, slipway, and conch shell to lighten canoe before first four or five voyages	
18. One day	Expert magician <i>Toliwaga</i> and crew Expert magician Villagers <i>Toliwaga</i> and expert magician <i>Toliwaga</i> and crew Villagers <i>Toliwaga</i> Villagers	Naming and launching the canoe Blowing the conch shell Inspecting new canoe and critiquing it Trying out the canoe, paddling on the reef at high tide Attacking the canoe when it approaches the beach and breaking its <i>lagim</i> with objects which are thrown at it Singing <i>kapoka</i> songs	Magic under outrigger platform to lighten canoe Magical washing of canoe to make it swift	Donation of a pig to the person who breaks the <i>lagim</i> ; communal meal for all villagers Distribution of valuables to helpers
19. A few days	<i>Toliwaga</i> and helpers <i>Toliwaga</i>	Making the sail, the mast, its support and poles for the gaff		Communal meal for helpers
20. A day	<i>Toliwaga</i> and crew	Trial run, clause-hauled sailing of the canoe		
21. Half a day	Expert magician		Special magic after first four or five runs of the new canoe to make it swift and light	

enterprise. As Malinowski (1922/1978) puts it, the organisation of labour in canoe-building rests on the one hand on the division of functions, those of the owner, the expert and the helpers, and on the other on the co-operation between labour and magic (p. 116).

The Social Distribution of Knowledge Necessary for Making a *Masawa* and the Social Implications of the Joint Communal Activities during This Process

Table 11.1 reiterates that making a canoe directly engages not only a select number of people and the *toliwaga* but, on three occasions, the whole village community as well. The *toliwaga* relies on the aid of his kinsmen and his friends. Constructing the canoe properly demands expertise in more than ten forms of magical rites and the knowledge of the respective formulae. It is simply inconceivable to a Trobriand Islander that a *masawa* could be constructed without the appropriate magical rites being performed.¹⁸ Indeed, at least two additional rites and formulae have to be performed by the master carver who decorates the *pusa* and *talapwapwa* ornaments and the *lagim* and *tabuya* prow boards. The only former *toliwaga* I knew to be versed in the *tokway*, *ligogu*, and *kapitunela nanola waga* forms of magic, magical exorcisms against evil influences, and the magic to make his canoe safe and fast was Kilagola, the chief of Tauwema, who died in 1991. He was also a master carver who knew all the formulae and rites for carving the *lagim* and *tabuya* prows. Nevertheless, even he did not claim to know all the different forms of magic essential for building a *masawa*. This knowledge is distributed among expert magicians within a village or, in some cases, within an island community.

Ordinarily, there are also expert craftsmen who have specialized either in making specific parts of the canoe and its equipment, for which they use 15 different kinds of wood,¹⁹ or in assembling parts of the construction. Moreover, the *toliwaga* may ask other experts to seek out the appropriate tree for the dugout and caulk the canoe for him, or at least to do it together with him. Making the sails, too, normally entails a number of specialists. Mokeilobu, Moagava, Mogege, and Nusai are all expert sail-makers in Tauwema. Thus, all the knowledge that must go into making a *masawa* canoe and its sail is distributed within a village (or an island) community.

This distributed knowledge ought to be integrated, of course. Meeting that need is one of the central functions of the communal meals arranged by the *toliwaga*

¹⁸On the importance of magic to the Trobriand Islanders, see Malinowski (1922/1978, 1935/1965, Vol. II; 1974) and Senft (1985, 1997a, 2001).

¹⁹See the Appendix for the named parts of a *masawa*, the implements and materials needed to make such a canoe, and some of the equipment needed to sail it. Lists like it have a rather old tradition (e.g., Schnepfer 1908). See also Breidbach (1988) and the literature cited there.

during or after specific phases of the building process. As noted in the previous section, the *toliwaga* treats his kinsmen and his other helpers to three full meals, even four if the sail has to be made. He organizes a picnic for them while they wait for the *tokway* to leave the tree selected for the dugout. And he distributes valuables among them when they bring the log into the village. But that is not all. The *toliwaga* puts on three full meals for all the inhabitants of his village, and at the final communal meal he again distributes valuables and awards a pig to the person who manages to break the *lagim* of the canoe when it is returned to the beach after its first trial run. All these communal meals serve at least the following two quite antagonistic functions (Eibl-Eibesfeldt 1989):

First, as strategies of rank striving and self-presentation in the highly competitive Trobriand society, the communal meals and the distributions of valuables and gifts serve to increase the status of the already quite exposed *toliwaga*; they confirm publicly that he is an economically and politically influential person who can afford to build a *masawa*.

Second, with their bonding function as rituals of reciprocal care and unification, these communal meals and the distributions of valuables and gifts maintain at the same time group harmony amongst the villagers; they integrate not only the experts and the other helpers of the *toliwaga*, but also all his other fellow-villagers into his canoe building enterprise. Moreover, as strategies of support, they also contribute to the resolution of possible conflict which could arise just because of the exposed position of the *toliwaga* as a person of high status. (pp. 520–521)

Thus, despite the fact that these communal activities sponsored by the *toliwaga* increase his personal status, they are, above all, a means of bringing together the expert canoe-builders, the magicians, and the village community as a whole. Group harmony is achieved. The village community and the group of expert craftsmen and magicians involved in making the canoe accept that one of them demonstrates his rank as an economically powerful person because he is willing and can afford to redistribute a relatively high amount of his accumulated wealth to them.

“*Masawa—bogeokwa si tuta!*” (Masawa Canoes—Their Time Is Over!)

This chapter has now indicated what a complex enterprise the making of a *masawa* canoe is, how the knowledge and expertise for doing so is socially distributed, and what kind of social implications the joint communal activities during this process has for the *toliwaga*, his experts, and the village community as a whole. In what follows I first try to answer the question of why most of the village communities on the Trobriand Islands have been gradually losing the knowledge of how to make a *masawa*. In the final section of this chapter I outline and discuss the implications of this loss for the culture of the Trobriand Islanders, their social construction of reality, and their cognitive capacities.

As outlined above, making a *masawa* canoe required the *toliwaga* to be someone who disposed over all the food resources and other items of wealth and value that he needed in order to sponsor all the communal meals and other activities inextricably intertwined with the canoe-making enterprise. In 1983 the National and Provincial Governments of Papua New Guinea strongly promoted the policy of transforming their national economic systems, most of which were still based on barter, into a modern capitalist money economy. In those days the national currency, the Kina, was strong, so it was amazing how much money flooded the market everywhere in the country. The Trobriand Islanders, at least those living near the ocean and having fishing rights, earned well by selling fish to a trawler that was hired and subsidized by the Milne Bay Provincial Government. Many of the Trobriand Islanders also had relatives who worked either in the capital of Milne Bay Province (Alotau) or in other, larger cities in the country (e.g., Madang and Port Moresby). These Trobrianders had always felt obliged to send fairly significant sums of money to their relatives back home on the Islands. When I returned to the Trobriands in 1989, I immediately realized that the new national and provincial politics had been highly successful within a few years. There was a great deal of money on the Islands. Petrol and oil were relatively cheap at that time, so it had simply proven to be less expensive to buy and use a dinghy powered by an outboard engine than to organize the making of a *masawa* canoe. In 1989 three men in Tauwema owned their own dinghy. In 1992 there were already seven dinghies lying on the beach of the village. Within 10 years the dinghies had replaced almost all the *masawa* canoes in Tauwema. Only one of these traditional vessels had survived.

This development had implications for the experts who were needed to make a *masawa* canoe. The skills of the magicians were no longer in demand during the process of constructing a *masawa*. The dinghies could make do with nothing more than magical exorcisms to protect them and their crews against evil influences. This change also affected other expert craftsmen who had cooperated with the *toliwaga* to make a canoe. Their skills, too, had become obsolete. Neither these expert craftsmen nor the vast majority of the expert magicians could continue finding apprentices to whom they could bequeath their knowledge. It had lost its value, and members of the younger generation no longer saw sense in learning these craft skills and magical formulae in lengthy instruction under their elder relatives. Most of these expert craftsmen and magicians have since died, taking their knowledge with them.

The *misinari* observed these changes with great interest and strongly favored them. Ever since 1894, when the first missionaries commenced work in the Trobriand Islands, they had been attempting to displace the magicians with respect to their official status, rank, and power. In 1983 Christians on the Trobriand Islands lived in an interesting form of syncretism in which traditional belief in magic and Trobriand eschatology (Malinowski 1974) were combined with Christian ideas (Senft 1994, 1997b, p. 53). By 1992 these syncretic features of Trobriand Islands Christianity had decreased dramatically. Belief in magic was not denounced directly by the

misinari as something heathen. The strategy they pursued to fight these pagan customs was much more subtle: The *misinari* argued that there were two ways to live one's life. One was the old, traditional way, which includes magic and the eschatological belief in the immortal spirits of the dead living in the underground paradise on Tuma Island (see Malinowski 1974; Senft 2011). The other way was the new Christian way of life, with its specific Christian beliefs and its own eschatological ideas. Both ways are mutually exclusive, or, as the local priests put it, “one can either walk the path of the ancestors or take the Christian way together with Jesu Keriso, the Lord Jesus Christ.” The modern developments that led to the transformation of their indigenous economic barter system into a capitalist economy in which buying a dinghy with an outboard engine was cheaper than making a *masawa* catalyzed the missionaries' strategies in their fight against magic and magicians. The fact that the influential magicians who contributed decisively to making a *masawa* were no longer either needed or powerful signaled an important victory for the *misinari* in their long fight against these experts. It proved the *misinari* right in their calls to abandon the ways of the ancestors. I return below to the question of how the local *misinari* derived further advantage from this development.

Processes of globalization have reached the Trobriand Islands as well in recent years. In the meantime the soaring price of oil has made it quite expensive to use dinghies. The only Trobriand Islanders who can still afford to use them are those who had invested in small businesses like fisheries or public interisland transport from which they earned well. The vast majority of the former dinghy owners, however, can no longer afford the high price of zoom, the mix of gasoline and oil they use as fuel for outboard engines. Instead, they now use the *ligataya* to paddle and sail from one island to the other or the rather simple and relatively small *kemolu* for fishing and coastal traffic. These types of canoe types can be made with a minimum of ritual knowledge and do not entail knowledge of magical formulae at all. They have superseded both the splendid *masawa* canoe and, it seems, the common use of dinghies powered by outboard engines. Because the *ligataya* canoe is not really suitable for covering great distances—it is nowhere near as safe as the *masawa* canoe—most Trobriand Islanders use the airplane for such travel, or they use a ship that regularly connects Losuia, the district center on Kiriwina Island, with Alotau. Since 1982, cultural and social change initiated by a gradually growing capitalist economy and catalyzed first by missionaries and more recently by globalization have, in most village communities on the Trobriand Islands, led to the erosion or even complete loss of the complex distributed knowledge of how to make a *masawa* canoe and its sails.

Implications of This Loss

In this chapter I have pointed out that the construction of the impressive and beautiful *masawa* canoes involved from the outset a number of different experts and their knowledge of magic. It also called for strict adherence to the rules of various rituals

in which magic played an important part. Although the construction of such a canoe was always initiated by an individual, namely, its future owner, the whole enterprise had important social implications. The process of building a canoe continuously tested and monitored the security and stability of a village community's social network. Initiating the construction of a canoe meant a communal effort that relied on the aid of expert magicians, carvers, and sail-makers. They all had to cooperate in good faith to ensure the success of the canoe under construction, and they all had to be paid in the form of adequate food-distribution ceremonies after certain stages in the construction process. Such ceremonies were among the highlights of the Trobriand Islanders' year and automatically involved experts as well as the entire village community (or the entire sector community in relatively large villages). The experts were more publicly honored than paid during these ceremonies.

In 1992 only five men in Tauwema still knew the correct rituals and ceremonies that accompany the making of a *masawa* canoe. However, they themselves were no longer able to initiate the construction of such a canoe, and they had no one to whom they could pass on their knowledge. The knowledge of how to make such a canoe has since been lost in Tauwema and many other villages on the Trobriand Islands.

However, technologies are not all that have been lost; social events that used to be intertwined with those technologies have disappeared, too. These social events had the important function of rituals as forms of social bonding. All such rituals and ceremonies were accompanied by speeches that were clearly defined by their appropriateness to the stage of the construction process. From what my informants told me, I infer that these speeches had their own pragmatics. The knowledge of these pragmatics is lost as well now. Social events that are intended today to take over the key social functions of the rituals and ceremonies accompanying the construction of the *masawa* canoes are activities organized by the missionaries. They include outdoor communal prayers and hymn-singing in the village center and meetings that involve the whole village community and that are conducted by the *misinari* for missionaries from neighboring villages or for Christian women's associations. These get-togethers are also accompanied by communal meals, and sometimes even a kind of food distribution ceremony precedes these meals (Senft 1997b, pp. 53–54). These activities are rooted in Christian beliefs. They are completely different in structure from the traditional events, especially with respect to speeches and other forms of verbal communication that once took place during the long process of making a *masawa* canoe.

The loss of knowledge about how to make a *masawa* canoe also implies the loss of the corresponding specialized vocabulary in the Kilivila lexicon (Senft 1992, p. 78) and the loss of the text category known as *canoe magic*. As emphasized above, all the experts who were needed to make a *masawa* were convinced that they could perform their work properly only by invoking the power of their magic. The making of a *masawa* required the use of a broad and rather complex variety of incantations. When the *masawa* were no longer needed, neither were these formulae, and they are now lost.

Their loss, however, is embedded in more general processes of cultural change on the Trobriands. Until recently, all Trobriand Islanders used magical formulae to

achieve certain aims, firmly convinced that they could thereby influence and control nature, the course of their lives, and events therein (Senft 1997a). The Trobrianders differentiated between various forms of magic. They knew weather magic, black magic, healing magic, garden magic, fishing magic, dance magic, beauty magic, love magic, sailing and canoe magic, and magic against witches and sharks. There were specialists for certain kinds of magic, and all magic was regarded as personal property. When I first arrived on the Trobriand Islands in 1982, magic still played a dominant role and the power of magicians and their magical formulae clearly pervaded everyday life there. In 1983 chief Kilagola gave me parts of his canoe magic as a present when he adopted me as one of his sons. His brother Weyei bestowed me with a similar present: five formulae of his weather magic as a sign of his friendship (Senft 1985). And Vaka’ila, one of the oldest men of the village, presented me with several formulae of his garden magic because I reminded him of his late brother Keyalabwala. These three men were the only persons who offered me such personal and secret information, and I was rather proud of being honored by them in this way. In 1989, at about the same time that I initially realized there were only a few *masawa* canoes left in Tauwema, more than 12 women and men approached my wife and me and offered to sell magical formulae for money and tobacco. We felt as though we were in the middle of a fire sale on magic. The gesture was clear evidence of the fact that magical formulae had lost their importance for the majority of Trobriand Islanders. It was the obvious outcome of the old fight between traditional magicians and Christian missionaries. Because the belief of the Trobrianders in the magical power of words included the conviction that magic was a means of controlling nature and the incidents affecting their personal lives, the loss of that conviction resulted in a political and ritual power vacuum, which the *misinari* used for their own ends (Senft 1992, pp. 79–80). In 1992 the magician’s ritual and political power in Trobriand society was finally superseded by the priest’s.

Metalinguistically, the magical formulae constituted a nondiatopical variety of Kilivila, the *biga megwa*—the language of magic. This variety of Kilivila is now moribund (Senft 2010). The demise of *biga megwa* has had implications for the Trobriand Islanders’ incredible capacity to memorize forms of indigenous knowledge, be it magical formulae or mythical stories and tales—their oral history. In this nonliterate society all these forms of knowledge had been transmitted verbally only. The members of the younger generation had had to learn and laboriously memorize this knowledge from the older generation with great motivation and dedication and had had to train themselves to retrieve it when it was needed. Given that more and more Trobriand Islanders are persuaded these days that the former belief in the power of magic was heretical and completely ungrounded, this transmission of the knowledge of magic has ceased. And people who no longer practice retrieving extensive chunks of memorized texts soon lose this capacity—a rather trivial insight of the psychology of memory and learning.²⁰ Thus, the loss of this capacity implies

²⁰On memory in nonliterate societies, see, for example, Baddeley (1990, pp. 150–160; 1999, pp. 287–291), De Groot (1965), and Miller (1956). Miller (1962) points out that “many psychologists prefer to speak of memory as something a person does, rather than something he has” (p. 192).

the end of all forms of indigenous knowledge and oral history that have not been documented in some form of print. Obviously, this loss must have important consequences for the Trobriand Islanders: their individual, social, and cultural identity; their self-evaluation; and the complex construction of their social reality. Therefore, the fact that the Trobriand Islanders have lost, or are gradually losing, their knowledge of how to make a *masawa* canoe is only one minor facet of the massive processes driving the cultural change presently affecting the Trobriand Islanders.²¹

Appendix

Table A1 Bilingual glossary of parts of a *Masawa* Canoe

Kilivila	English	Construction material
Dugout canoe		
<i>Waga</i>	Dugout canoe	<i>Reyawa</i> (wood) (? <i>Calophyllum inophyllum</i> ?)
<i>Lopola waga</i>	Bilge ("belly of the canoe")	
<i>Sibula</i>	Line ahead (of keel)	
<i>Kilababa</i>	Top rim of dugout	
<i>Tolena</i>	Edge of the gunwale (on the <i>kilababa</i>)	
<i>Katala</i>	Leeward side of dugout	
<i>Kelamina</i>	Outrigger side of dugout	
<i>Kabununa</i>	Tips of dugout	
Gunwale		
<i>Budaka</i>	Lower plank	<i>Kaga</i> (wood)
<i>Sipa</i>	Upper plank	
<i>Gelu</i>	L-shaped ribs	
Compartments		
<i>Liku</i>	Compartments (from rib to rib)	
Poles and sticks		
<i>Kesuya</i>	Long poles that go through the holes in the <i>gelu</i>	<i>Kesesa</i> (wood)
<i>Kaitota</i>	Transversal poles on gunwales inside (optional)	Wood
<i>Liu</i>	Cross-girths going from inside the canoe through a hole in the gunwale's upper plank— windward side—basis for outrigger platform	<i>Yawoura</i> (wood)

(continued)

²¹In my long project of documenting the indigenous knowledge of the Trobriand Islanders, this chapter is the first work in which I deal with Trobriand canoes and the art of making a *masawa* canoe.

Kilivila	English	Construction material
<i>Pitapatila</i>	1. Long outrigger platform sticks 2. Outrigger platform	<i>Wagewa</i> (wood)
<i>Kedudula</i>	First horizontal pole on top of platform	<i>Kwetaola</i> (wood)
<i>Kesukwava/kemsukwa</i>	Lower longitudinal pole below the <i>budaka</i> plank at the <i>kelamina</i> side	<i>Yadadiga</i> (wood)
<i>Vatotua</i>	Vertical prop from outrigger (float) to platform	<i>Bokeyala</i> (wood)
<i>Donaba</i>	Slanting prop from outrigger (float) to upper plank and <i>liu</i> cross-girths	<i>Usari</i> (wood)
Float		
<i>Lamina/lamila</i>	Outrigger	<i>Riga</i> (wood)
Prow boards		
<i>Lagim</i>	Transverse board	Malea (wood)
<i>Tabuya</i>	Sagittal prow in front of <i>lagim</i> on tip of dugout	<i>Yuyuwi</i> (wood)
Holes		
<i>Kogwa</i>	Holes in upper rim of the gunwale's lower plank	
<i>Sesuya</i>	Hole in <i>gelu</i> rib	
<i>Pwanina</i>	General term used to refer to other holes	
Lashing		
<i>Veyugwa</i>	Lashing creeper	Liana (? <i>Lygodium circinnatum?</i>)
<i>Kelugwesi</i>	Lashing of the <i>kesuya</i> poles to the lower plank	
<i>Ketawaga</i>	Lashing of the <i>kesuya</i> poles to the dugout	
Caulking		
<i>Kebasi</i>	Caulking substance	Made of the scraped parts of specific roots mixed with water (? roots of the parinarium nut tree <i>Maranthes corymbosa?</i>)
<i>Beluma</i>	Caulking substance	Seaweed
Mast		
<i>Vania</i>	Mast	<i>Yowai</i> (wood)
<i>Kununa</i>	Forked top of mast	
<i>Odinakwau</i>	Forked lower part of mast which will be put onto the <i>liu</i>	
<i>Kena'ila</i>	Mast support sitting on the outrigger platform	<i>Rewaya</i> (wood)

(continued)

Kilivila	English	Construction material
Sail		
<i>Naya</i>	Sail	<i>Yagawana/kebwibwi</i> (pandanus leaves)
<i>Matala naya</i>	Front of sail (the sail's eye)	
<i>Dabala naya</i>	Back of sail (the sail's head)	
Gaff ^a		
<i>Kunaya</i>	Long pole at the top of the sail	<i>Riga</i> (wood)
<i>Kenaya</i>	Bottom pole at the bottom of the sail	
<i>Unakeli</i>	Carved part at the end of bottom pole	
Ropes		
<i>Soya</i>	Rope to set the sail at top of the gaff	Kind of bast fiber
<i>Tapwai</i>	Rope to set the sail in the middle of the gaff	
Other equipment		
<i>Kuliga</i>	Rudder, helm	<i>Kakaya</i> (wood)
<i>Kaikaila/kaikela</i>	Paddle	<i>Kesesa</i> (wood)
<i>Sususta</i>	Tip of paddle	
<i>Kavala</i>	Punting pole	Wood
<i>Yasika</i>	Piece of wood to sit on in the canoe	
<i>Kweyapapa</i>	Rescue wood	Light floating wood
<i>Yatula</i>	Scoop for bailing water out of the canoe	<i>reyawa</i> (wood)
<i>Tauya</i>	Conch-shell trumpet	
<i>Buna</i>	White cowrie shell decoration	
<i>Vatila</i>	Construction for transporting pots and other items	

^aThe stout, rounded, usually wooden or metal piece on which the head of a sail is extended

References

- Baddeley, A. D. (1990). *Human memory: Theory and practice*. London: Lawrence Erlbaum.
- Baddeley, A. D. (1999). *Essentials of human memory*. Hove: Psychology Press.
- Breidbach, W. (1988). *Die Schiffsbezeichnungen des Alt- und Mittelhochdeutschen: Ein onomasiologisches und etymologisches Glossar* [Ship terms in Old and Middle High German: An onomasiological and etymological glossary]. Arbeitspapier Nr. 6 (Neue Folge). Cologne: Universität zu Köln, Institut für Sprachwissenschaft.
- Campbell, S. F. (2002). *The art of kula*. Oxford: Berg.
- De Groot, A. D. (1965). *Thought and choice in chess*. The Hague: Mouton.
- Eibl-Eibesfeldt, I. (1989). *Human ethology*. New York: Aldine de Gruyter.
- Finney, B. (2006). Ocean Sailing Canoes. In K. R. Howe (Ed.), *Vaka moana: Voyages of the ancestor: The discovery and settlement of the Pacific* (pp. 100–153). Honolulu: The University of Hawai'i press.

- Gerrits, G. J. M. (1974). Burial canoes and canoe-burials in the Trobriand and Marshal Bennett Islands (Melanesia). *Anthropos*, 69, 224–231.
- Helfrich, K. (1984). Boote aus Melanesien und Australien [Canoes of Melanesia and Australia]. In G. Koch (Ed.), *Boote aus aller Welt* (pp. 33–54). Berlin: Staatliche Museen Preußischer Kulturbesitz.
- Hornell, J. (1991). *Canoes of Oceania: Three volumes combined into one*. Honolulu: Bishop Museum Press. (Original work published 1936–1938).
- Höver, O. (1957). Das Lateinsegel — Velum latinum — Velum laterale [The Latin sail]. *Anthropos*, 52, 637–640.
- Malinowski, B. (1965). *Coral gardens and their magic: The description of gardening* (2 Vols.). London: Allen & Unwin. (Original work published 1935).
- Malinowski, B. (1974). *Magic, science and religion and other essays*. London: Souvenir Press. (Original work published 1948).
- Malinowski, B. (1978). *Argonauts of the Western Pacific*. London: Routledge & Kegan Paul. (Original work published 1922).
- Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81–97.
- Miller, G. A. (1962). *Psychology: The science of mental life*. Harmondsworth: Penguin Books.
- Munn, N. D. (1977). The spatiotemporal transformations of Gawa canoes. *Journal de la Société des Océanistes*, 33, 39–53.
- Nayak, G. (2008). The wisdom of ‘tied logs’: Traditional boats of India’s Orissa coast during the colonial era. *International Institute for Asian Studies, Newsletter*, 47, 22.
- Pule, R. T. (1983). *Binabina: The making of a Gela war canoe*. Suva: Solomon Islands Centre and The University of the South Pacific.
- Schiefenhövel, W. (1986). Extraktionszauber: Domäne der Heilkundigen [Magic of extraction: Domains of healers]. In W. Schiefenhövel, J. Schuler, & R. Pöschl (Eds.), *Traditionelle Heilkundige—Ärztliche Persönlichkeiten im Vergleich der Kulturen und medizinischen Systeme* (pp. 353–372) [Sonderband]. Braunschweig: Friedrich Vieweg & Son.
- Schnepper, H. (1908). *Die Namen der Schiffe und Schiffsteile im Altenglischen. Eine kulturgeschichtlich-etymologische Untersuchung* [An etymology of the names of ships and their parts in Old English]. Kiel: H. Fiencke.
- Scoditti, G. M. G. (1990). *Kitawa: A linguistic and aesthetic analysis of visual art in Melanesia*. Berlin: Mouton de Gruyter.
- Senft, G. (1985). Weyeis Wettermagie: Eine ethnolinguistische Untersuchung von fünf wettermagischen Formeln auf den Trobriand Inseln [Weyei’s weather magic: An ethnolinguistic study of five formulae of weather magic on the Trobriand Islands]. *Zeitschrift für Ethnologie*, 110(1), 67–90 & 110(2), Erratum (2–4).
- Senft, G. (1986). *Kilivila: The language of the Trobriand Islanders*. Berlin: Mouton de Gruyter.
- Senft, G. (1992). As time goes by ...: Changes observed in Trobriand Islanders’ culture and language, Milne Bay Province, Papua New Guinea. In T. Dutton (Ed.), *Culture change, language change: Case studies from Melanesia* (pp. 67–89). Canberra: Pacific Linguistics.
- Senft, G. (1993). Review of the book *Kitava a linguistic and aesthetic analysis of visual art in Melanesia* by Giancarlo M. G. Scoditti. *Journal of Pragmatics*, 19, 281–290. doi:10.1016/0378-2166(93)90033-L.
- Senft, G. (1994). Darum gehet hin und lehret alle Völker: Mission, Kultur- und Sprachwandel am Beispiel der Trobriand-Insulaner von Papua-Neuguinea [Thus go and teach all peoples: Mission, culture, and change of language as exemplified by the Trobriand Islanders of Papua New Guinea]. In P. Stüben (Ed.), *Seelenfischer: Mission, Stammesvölker und Ökologie* (pp. 71–91). Gießen: Focus.
- Senft, G. (1997a). Magical conversation on the Trobriand Islands. *Anthropos*, 92, 369–391.
- Senft, G. (1997b). Magic, missionaries, and religion: Some observations from the Trobriand Islands. In T. Otto & A. Borsboom (Eds.), *Cultural dynamics of religious change in Oceania* (pp. 45–58). Leiden: KITLV Press.

- Senft, G. (2001). 'Kevalikuliku': Earthquake magic from the Trobriand Islands (for unshakeables). In A. Pawley, M. Ross, & D. Tryon (Eds.), *The boy from Bundaberg: Studies in Melanesian linguistics in honour of Tom Dutton* (pp. 323–331). Canberra: Pacific Linguistics.
- Senft, G. (2005). Review of the book *The Art of Kula* by Shirley F. Campbell. *Anthropos*, 100, 247–249.
- Senft, G. (2010). Culture change—Language change: Missionaries and moribund varieties of Kilivila. In G. Senft (Ed.), *Endangered Austronesian and Australian Aboriginal languages: Essays on language documentation, archiving and revitalization* (pp. 69–95). Canberra: Pacific Linguistics.
- Senft, G. (2011). *The Tuma underworld of love: Erotic and other narrative songs of the Trobriand Islanders and their spirits of the dead*. Amsterdam: John Benjamins.
- Senft, B., & Senft, G. (1986). Ninikula—Fadenspiele auf den Trobriand Inseln, Papua Neuguinea: Untersuchungen zum Spiele-Repertoire unter besonderer Berücksichtigung der Spielbegleitenden Texte [*Ninikula*—String figures on the Trobriand Islands, Papua New Guinea: Studies on the game repertoire with special consideration of texts accompanying games]. *Baessler Archiv, Beiträge zur Völkerkunde NF*, 34, 93–235.
- Thompson, J., & Taylor, A. (1980). *Polynesian canoes and navigation*. Laie: Brigham Young University, Hawaii Campus, Institute for Polynesian Studies.
- Whakataka-Brightwell, M. (1994). *Waka*. Wellington: Ministry of Education.