

# O LE VA'Ā TĀ PALOLO – THE PALOLO FISHING CANOE

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E au i le tauola, e au i le fāgota.  
Tend the fish basket, become the fisher.  
Samoan Proverb

# 2-4

## Abstract

Building a canoe for the palolo<sup>1</sup> rise, an event that occurs twice in a year, is rarely described and documented in moving and still images. With accompanying text capturing knowledge shared by a Master Craftsman, Lesā Motusaga of Sa'anapu village in Samoa, this paper provides insights into the Intangible Cultural Heritage associated with the building of a paopao<sup>2</sup>, dugout canoe, for a rich fishing tradition. Palolo, a delicacy that rises pre-dawn from coral beds seven days after the full moon in October and November, is known as the caviar of the Pacific, an apt description given the high price people are willing to pay for this rare seafood<sup>3</sup>. Briefly, it is a seafood with significant socio-cultural value now enjoying high, if not inflated, economic value.

The natural environment is not a typical classroom but is, insofar as Intangible Cultural Heritage is concerned, an important setting where knowledge is transmitted, particularly knowledge of the environment and tapu or sa, the sacred laws or forbidden acts designed for its protection and conservation

## 1. Introduction

Samoa culture, despite successive waves of globalization, has maintained a rich and distinguished cultural heritage that supports a way of life with many distinct features. People often use the catch-all phrase "*fa'a-Samoa*," to differentiate this distinctiveness: *in the manner of the Samoans*. But there have been sea changes in many of the Samoan world views that traditionally supported their way of life: the impacts of alien cultures, administrative and spiritual colonization, the shift to a cash economy and a foreign diet, to name a few, have all brought change to the *fa'a-Samoa*, a way of life once supported by

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1. Palolo are actually worm-like sacs of eggs and of sperm from the female and male forms of a sea annelid (*Palola siciliensis*, Grube, 1840. *Palolo viridis*, Gray, 1847. *Eunice viridis*, Kramer, 1903) which spends its life in crevices in the coral depths. Source: The Rising of the Palolo, South Pacific Bulletin, July 1962.

2. The *paopao* is one of several types of boats traditionally built by the Samoans. All other boats are no longer built in Samoa and include the *va'a-alo*, a small fishing canoe, the large single-hulled canoes identified by the number of boons (e.g., *lā'au lima* or five-barred), *'alia*, the Samoan double canoe which, when very large, is also known as the *va'a-tele*. Other boats were often built using with planked wood and could also be fitted with sails to become *va'a-fai-lā*. Source: <https://en.wikipedia.org/wiki/Va%27a>

3. *Palolo* sold for record prices in 2019. See for example: <https://samoaglobalnews.com/the-cost-of-palolo-reaches-a-record-high-this-year/>

wide-ranging traditional ecological knowledge sustaining a rich body of Intangible Cultural Heritage (ICH).

The knowledge and competence applied to traditional Samoan house building and boat-craft are two examples of ICH that have been steadily declining since first contact with foreigners. Such decline means more than just the loss of a particular set of skills or tangible expressions of culture. The discovery and making of cultural products created wellsprings for the Samoan language. The decline in one leads to loss in the other. When words no longer have a meaningful reference point, they are apt to be forgotten or misused over time. Losing the art forms and the language also erodes cultural identity shaped by an intangible cultural heritage. Moreover, cultural erosion can lead to loss in biodiversity with once-needed species of native flora no longer protected. The niu'afa or sennit coconut tree, once found near settlements is now hard to find with fewer sennit makers and a declining conservation of the trees<sup>4</sup>. A similar loss seems to have occurred with the plant once preferred to make house thatching, tolo fualau<sup>5</sup>. Samoan sandalwood, asi manogi<sup>6</sup>, used to make fragrant coconut oil, seems also to have disappeared from the environment or is certainly now extremely rare. In an age of information overload, it is easy to forget what our forbears knew so intimately – the natural world that sustained their way of life.

The skills needed for house building and boat-craft are commonly found in one person – the *tufuga* – an expert artisan. At the highest of level of expertise is the *matua o faiva*, the elder artisan or Master craftsman who leads a project. As work proceeds, it is not uncommon to hear the phrase: “*mālō le silasila i Lau Afioga le Matua o Faiva*” – good eye to

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4 Anecdotal evidence discovered during research conducted by the author for the production “*O le fafa Samoa*,” a documentary film and companion booklet on the making and use of *afa* (coconut sennit). To lose this coconut variety will be a great loss to the biodiversity of Samoa and indeed the world, as the niu'afa is considered to be the longest variety on the planet, with husks measuring up to half a meter in length. 2013.

5 Ibid.

6. Tui Atua Tupua Tamasese Ta'isi Efi, in ‘*Tau mai na o le pua ula*’ – Fragrancing Samoan Thought  
University of Otago Public Lecture, Dunedin, New Zealand, 9 March 2009. Source: [http://www.head-of-state-samoa.ws/speeches\\_pdf/Tupua%20Fragrance%20paper%2008%2003%2009%20FINAL%20OTAGO.pdf](http://www.head-of-state-samoa.ws/speeches_pdf/Tupua%20Fragrance%20paper%2008%2003%2009%20FINAL%20OTAGO.pdf)

you sir, the elder craftsman. The matua o faiva was held in such high esteem that he was also titled “agai o tupu,” the companion of kings<sup>7</sup>.

This paper presents some of the knowledge and expertise shared with the author by Tōfā Lesā Fa’anū Motusaga, a tulafale or orator-chief and a Matua o Faiva skilled in house and boat building. He builds a paopao just before the first of two spawnings of the palolo, events that occur over a three-day period in October and November each year. The common belief is that the yield in October is stronger along the coastline of Savaii while the catch in November is stronger in Upolu. The reasons for this are unclear but anecdotal evidence suggests that this is no longer certain with the impacts of climate change on the marine environment<sup>8</sup>.

**2. Trees are an important aspect in any building project. For the paopao documented in this presentation, the following tree species were used or mentioned:**

- *Tamaligi*, *Falcataria moluccana*: an invasive species not considered useful for any other purpose.
- *Tamanu*, *ma’ali*, *gasu*, *tavai*, *moso’oi*, *’ulu*, and *pipi*: preferred native trees for boats.
- *Fau*, *Hibiscus tiliaceus*, a beach or sea hibiscus of the Tropical almond family: Used for the boon or float.
- *Ma’ailili*, *tava*, *akone*: Other species often used for the boon or float.
- *Filifiloa*, a slender and strong tree with a girth around the size of a thumb: used as pegs attaching the outrigger boon to the two booms lashed to the boat.
- *Togo vao*, *Ardisia elliptica*, an invasive species and recent addition to the littoral forest on the Sa’anapu coast, and *lala*, *Uraria lagopodioides*, possibly another invasive species: These are supple and are curved to create the *palolo* fishing nets.
- *Poumuli*, *Flueggea flexuosa*, a dense hardwood commonly used for

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7. Te Rangi Hiroa (P.H.Buck), *Samoa Material Culture*, 1930. Source: <http://nzetc.victoria.ac.nz/tm/scholarly/tei-BucSamo.html>

8 Conversation with Lesā, 6 October 2020.

house poles and preferred by some boat builders for making paddles. Other species that can be used are: *tava*, *akone*, *ma'alili*, and *tamanu*.

- *Milo*, *Thespesia populnea* (Malvaceae, of the Mallow family), aptly named Pacific Rosewood: the preferred species used to make handles for hafted adzes.

With an extensive knowledge of the natural environment, the *tufuga* is more than an expert craftsman; he is a keeper of indigenous ecological knowledge, one who knows the forest and the rituals that effectively serve to protect it for a sustainable future. *Tufuga* are wardens of Intangible Cultural Heritage comprising knowledge systems and know-how not learned in a classroom.

Subsistence farming and fisheries are still very important for sustainable livelihoods and the dietary health of rural Samoans.<sup>9</sup> The population of Samoa in 2016 was 194,88610. There are few paid jobs in rural villages.

### 3. Implements: The principle tools of the trade are:

- Iliafi*, chainsaw: widely used and now essential piece of equipment.
- To'i*, axe: used for roughing out the hull, removing large chunks of wood.
- To'i fafau*, hafted steel adzes: A straight-edged adze and a curved steel adze used on convex surfaces such as the hull.

*To'i ma'a*, stone adzes, are no longer a part of Samoa's traditional creative industry and how these were made and used are a mystery to modern *tufuga*. Lesā was unable to offer any insights or knowledge concerning stone tools.

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9. The total number of employees in the formal sector in the June 2020 quarter was 24,358 (0.3% lower than the same quarter in 2019). Source: [https://www.sbs.gov.ws/images/sbs-documents/Finance/Employment/2020/Employment\\_Report\\_June\\_2020\\_Quarter.pdf](https://www.sbs.gov.ws/images/sbs-documents/Finance/Employment/2020/Employment_Report_June_2020_Quarter.pdf)

10. Samoa Bureau of Statistics Statistical Abstract, 2018. Source: <https://www.sbs.gov.ws/images/sbs-documents/social/Abstract/Abstract2018.pdf>

#### 4. The boat building process:

A *tamaligi* (*Falcataria moluccana*) growing some 200 meters from Lesā's home was selected for this project. It is less than 5 years old and stands 12 – 15 meters in height. When the tree falls the stump is covered; a vestige of ancient rituals associated with tree felling. Earlier research suggests that Samoan *tufuga* of old would first invoke a ritual seeking permission from the tree and thanking it for its sacrifice, regarding humans and trees as kin<sup>11</sup>. Lesā explained that the tree stump is covered in order that the canoe will not *pā* or crack at its ends.

*O le liu o le Va 'a* – Carving the hull is laborious work. After turning the log to its floating position, a series of parallel chainsaw cuts are made, perpendicular to the log. An axe wielder follows taking off large chunks of wood with each blow (Figure 1).

The chainsaw next creates a series of zigzag cuts, again followed by the axe, then cuts out the bow and stern leaving rings of wood at each end to help ensure the ends do not crack.

Hafted adzes used are called to'i fafau but the curved steel adze is known as the to'ū.

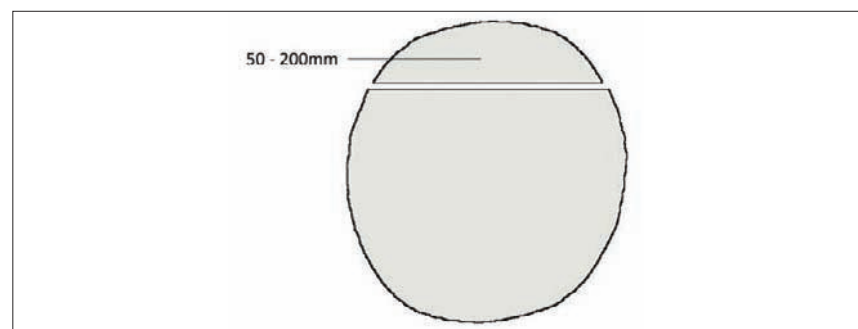


Figure 1. Cross-section of log showing first part removed

<sup>11</sup>The late Siatua Leulua'iali'i, a respected elder and cultural custodian, was interviewed by the author in 2008 and he recalled his father saying that whenever he was going to cut a tree down in the forest he would first address the tree as if asking for permission to do so.



The to'i fafau, a hafted adze with a straight steel blade. The to'ū, a hafted adze with a curved steel blade.



The first cuts. Rālio roughing out the hull [Photograph by Denisa Maňásková]

Shown right is a hafted stone adze made by the author.

*O le ama o le Va 'a* – The boon is made from fau (Hibiscus tiliaceus). It is light in colour and weight but is strong and can be reused from a previous canoe. It is attached to the boat with booms pegged and strapped to the boon (refer Figure 2 on next page).





a. Design showing dimensions and names of parts of the boat (Figure 2).

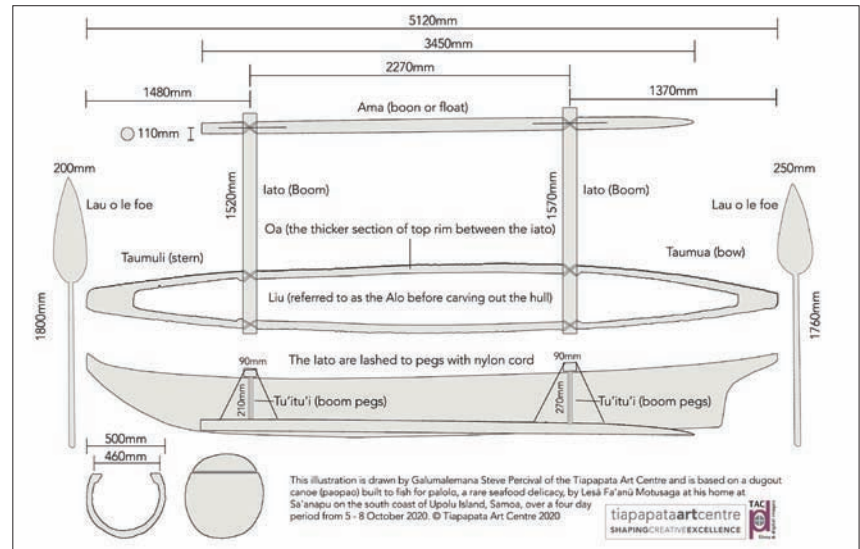


Figure 2. The dugout canoe carved in four days by Master Craftsman Lesa Fa'au Motusaga

In his landmark study<sup>12</sup>, Maori anthropologist Te Rangi Hiroa documented a dugout canoe and his drawing (lower) is almost identical to the canoe made by Lesā (Figure 3).

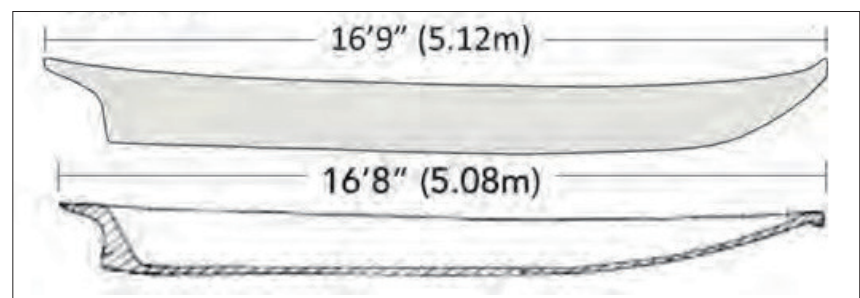


Figure 3. The canoe made by Lesā(above) and the canoe made by Te Rangi Hiroa(lower)

12 Te Rangi Hiroa (P.H. Buck), 1930, Samoan Material Culture, Bernice P. Bishop Museum Bulletin 75. Honolulu, Hawaii: B.P. Bishop Museum

13 Tofa I'iga Pisa, The Rising of the Palolo, South Pacific Bulletin, July 1962



## 5. Legends<sup>13</sup>, the name *palolo*, and proverbs:

- a. Legend refers to a war between corals and earth creatures. Corals won the war and took worms as prisoners, to serve their masters on the seabed. These “worms,” the *palolo*, were permitted to rise to the surface of the sea twice a year. Relating to this legend is a fable that the *palolo* were born from the union of corals and the captive worms. In another legend, the war is between birds and fishes. When assembling the fish battalion, the *palolo* were not enlisted as they were considered weak. The birds won that battle and many fish suffered but the *palolo* survived unscathed only to later be attacked by war waged on them by humans.
  
- b. Two origins for the name *palolo*<sup>14</sup>. The first connects the word *pā*, fishhook or lure, to the word *lolo*, a reference to the oily liquid that is formed in the *samilolo*, young coconut flesh fermented in seawater and relished by elders in the period leading up to the *palolo* rise. The other origin, recorded by Turner in 1884 and Kramer in 1903, links *pā* to *lolo*, referring to the oily appearance of the *palolo* when it reaches the surface of the sea.
  
- c. *Alagāupu*, proverbs<sup>15</sup>.
  - *Fefulisa ‘i fa ‘alā ‘au mamafa*: To turn like a heavy log – when looking for the best innate orientation of the boat. A favorable shift in mindset that supports a proposal such as the selection of an orator-chief to speak.
  
  - *Toft, tofā le la ‘au*: Cut the wood hither and thither. The arduous and haphazard work on the hull of the boat. Deliberations in a meeting can turn this way and that before arriving at a consensus.
  
  - *Sa ‘ili i le tai le aga a le va ‘a*: Test the characteristics of a boat at sea. The true test of a boat is how it performs in the water before it is used.

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14 Ibid.

15 These proverbs were shared with the author by Rālio Togipau Laufale, Lesā’s grandson.

6. Lefale, Penehuro, NIWA, Water & Atmosphere 11(2) 2003 <https://niwa.co.nz/sites/niwa.co.nz/files/import/attachments/samoa.pdf>

## 6. The palolo season in the year<sup>16</sup>

July	<i>Palolo mua</i>	The first promise of <i>palolo</i> .
August	<i>Toe palolo, Palolo muli</i>	The last season before the palolo
September	<i>Mulifā</i>	End of the terrestrial growing season.
October	<i>Lefanoga, Lotuaga</i>	Named after the special prayers offered to the gods for rain. The <i>palolo</i> rises on the 7th morning (pre-dawn) after the full moon (malupeaūa). A “first visit” takes place ( <i>asi le palolo</i> ) with subsequent visits on the next two mornings.
November	<i>Taumafamua, Tagaloata’u</i>	The first of plenty. Fish and other food become plentiful at this time. The second <i>palolo</i> spawning takes place 7 days after the last night of the full moon in November.

*Palolo* signifies more than a rare delicacy. It is the advent of spring as expressed in the proverb “a mōmona le vao, e tapisa le *gataifale*<sup>17</sup>,” when the forest is heavy (with fruit as seen by feasting pigeons), the coastline is noisy (with people harvesting seafood). The rainy season also begins with heavy downpours known as *Vaipalolo*.

Those fishing for palolo commonly wear garlands of fragrant flowers and leaves – *moso’oi* (*Canangium odoratum*), *lagaali* (*Aglaia*), or *laumaile* (*Alyxia*) – suggesting an affinity between people and riches provided by nature. Anecdotal evidence suggests increasingly fewer people are engaging in this cultural practice often attributing a poor catch to this. Another reason cited by several people to the author, is that palolo should not be sold but given away freely.

<sup>17</sup>This proverb was shared with the author in 2011 by Tōfā Agafili Tuitolova’a who claims to have derived the expression from the original proverb: a mafua le vao matua, e mafua fo’i le gataifale – when the forest is full of fruit so too is the sea full of fish. Tuitolova’a’s version is cryptic but has the same meaning.

## 7. Conclusion

The *tufuga* provides an important link between the natural environment and the Samoan way of life.

Documentation of the building of a *paopao* for palolo fishing has been through high resolution digital video and images. With this record, the Tiapapata Art Centre Inc.<sup>18</sup>, with Ms. Denisa Maňásková, plans to produce two films – a shorter movie with emphasis on audio-visual creativity, and a longer, educational film with interviews. A photo-essay on this subject will also be published by the Tiapapata Art Centre Inc. Through this record, it is hoped that the Intangible Cultural Heritage associated with the building of the *paopao* and fishing for *palolo* may be preserved for future generations.



Figure 4. Lesā Laufale Fa'anū fishing for palolo at dawn in October 2014. Wearing a fragrant flower necklace, he uses a tennis racket frame fitted with a net to catch the rare delicacy.

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<sup>18</sup>The Tiapapata Art Centre Inc. is a charitable trust established in Samoa in 2006 to promote traditional and contemporary arts and crafts. The author of this paper is its Managing Trustee.



Figure 5. Palolo, a rare seafood delicacy known as the cavier of the Pacific, rises only two times in a year.

**\*All images by the author unless otherwise stated.**