


Technologies

Canoes represent one of the earliest forms of the human use of technology.

People have become increasingly interested in the materials, designs and structures of these canoes. The following article illustrates the kind of information about the past that people have drawn on to understand historic cultural practices and to revive the practice of canoe making.

CROSS CURRICULUM PRIORITIES

 Aboriginal and Torres Strait
Islander Histories and Cultures

 Sustainability

CONTENT AREAS

T Technologies

H History

G Geography

S Science

GENERAL CAPABILITIES

 Intercultural Understanding

 Critical and Creative Thinking

 Numeracy

KEY CONCEPT

Technologies: Materials, data, systems, components, tools and equipment used to create solutions for identified needs and opportunities, and the knowledge, understanding and skills used by people involved in the selection and use of these.

The Australian Curriculum Glossary

SUPPORTING CONCEPTS

- › cultural practice
- › artefacts
- › historical records
- › research
- › reconstruction
- › cultural revival

GUIDING QUESTION

How can cultural artefacts, materials and technologies from the past be reconstructed through examining the historical record?

This printed material is **to be used with Fibres – a Living Cultures multimedia curriculum resource** that can be found at www.theorb.tas.gov.au

The Living Cultures Fibres resource and this supplementary printed material have been designed to foster culturally responsive practice when learning about Tasmanian Aboriginal Histories and Cultures.

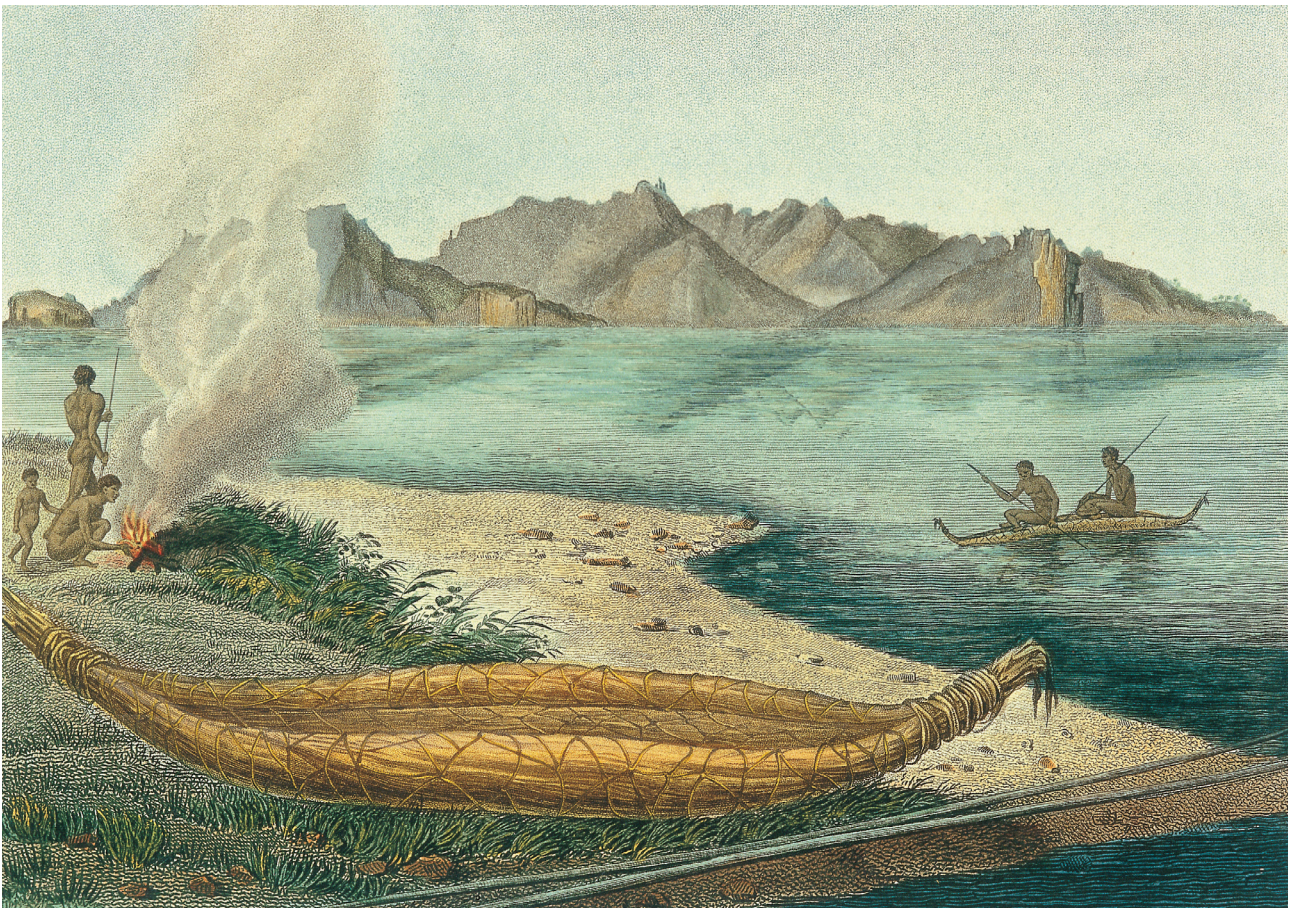
Introduction

The early European explorers recorded details of many aspects of life of the different groups of Aboriginal people they encountered. These records included journal entries, letters, sketches and paintings.

These early records assist contemporary researchers to piece together practices from the past. Technologies of the past can be revived and reconstructed using valuable primary and secondary source evidence.

Bark Canoes

Below are sketches and paintings by Charles Alexander Lesuer, Francois Peron and Nicolas-Martin Petit who were artists, naturalists and explorers on the French expedition led by Nicolas Baudin that arrived in Van Diemen's Land in January 1802.



Terre de Diemen, navigation, vu de la côte orientale de l'Île Schouten | TAHO

DISCUSSION QUESTIONS

- › What do these images tell us about bark canoes?
- › What can we learn about the materials and design features that have been used?



Study of a *ningina* (bark canoe) with spears. | Muséum d'histoire naturelle, Le Havre, France

Detailed Description

Below is a detailed description of the bark canoes recorded by Louis de Freycinet, who was also a member of the Baudin expedition.

We have seen them [canoes] and have measured several. They had the same dimensions and were constructed in exactly the same way. Three rolls of bark of the eucalypt made up its whole structure. The roll which was the principal piece was 4.55 metres long by 1 metre thick; the two others were only 3.9 m long by 0.32 m thick. These bundles which, taken separately, resemble in a way the yard of a vessel, were joined at their ends, and this caused them to stick up in a point and make up the whole of the canoe. The assemblage was made quite firm with a sort of grass or sedge. In this state, the craft had the following dimensions –

- › Length inside 2.95m
- › Breadth outside 0.89m
- › Total height 0.65m
- › Depth inside 0.22m
- › Size at the ends 0.27m

[They] can put five or six people in these canoes; but more commonly only three or four are taken at a time. Their paddles are plain pieces of wood from 2.5 m up to 4 and even 5 meters long and with a thickness which varies from two to 5cm).

Sometimes, and when the water is not very deep, they use these staves for pushing on the bottom.

Usually they sit down to manoeuvre their canoes; in that case they place bundles of grass to serve as seats. At other times they stand up.

Freycinet in Plomley 1983: 120

Louis Peron records the differences in materials and construction techniques used by the different groups of people he encountered.

Their boats are perhaps the only thing which differ in essentials. Moreover, those of the Channel are constructed from the bark of trees, and they are large enough to contain 4 or 5 persons; while those of Maria Island can scarcely carry 2, and they are all made of a species of reed which is lighter and consequently more suitable than bark.

However, this difference must be reckoned as of little importance, and it seems to have arisen because the natives of Maria Island find this reed in abundance locally while we did not discover it in any part of the Channel.

Peron in Plomley 1983: 92-93

DISCUSSION QUESTIONS

- › What important details about bark canoes are provided in these accounts?
- › How useful is this information for contemporary people who are reviving cultural practice?

Materials and Properties

George Augustus Robinson, so-called conciliator of Aborigines, while undertaking the Friendly Mission (1829-1834), made observations of Aboriginal people's lives, culture, customs and practices in his journal. This included information on bark canoes.

These catamarans are ingeniously constructed of the bark of the tea tree shrub and when properly made are perfectly safe and are able to brave a rough sea. They cannot sink from the buoyancy of the material and the way in which they are constructed prevents them from upsetting. The catamarans are made of short pieces of bark, some not above a foot in length, which when collected in mass are tied together with a long grass called LEM. MEN.NE. The southern natives call the tea tree NING.HER. Stingy bark is what is used by the Brune natives.

15 February 1830

Robinson cited in Plomley 2008: 149

On another occasion Robinson reports on a catamaran made from different materials.

In constructing these aquatic machines from this material a difference is observed from that constructed of the bark of the tea tree and stringy bark; the former has five layers

whilst the latter have only three. The rush is quite dry and is the same which they eat.

27 June 1831

Robinson cited in Plomley 2008: 399

Robinson also documented information about canoes in the form of sketches in his journals such as those that appear below.



15 February 1830 | State Library of New South Wales IR229788



27 June 1831 | State Library of New South Wales IR227639

DISCUSSION QUESTIONS

- › What further detailed information has Robinson provided here?
- › How might Robinson's drawings and notes be useful for contemporary researchers?
- › What do these entries reveal about regional differences in technologies?

New Technologies

In the 1840s, when people were no longer living on country and unable to maintain traditional practices, a number of model canoes were made. Eight of them are held in museum collections. Six are made from bark and the other two are made of reeds. These models have been used by Tasmanian Aboriginal people to help revive the practice of making full size bark canoes.

Below are photos of the bark and reed canoes held at the Pitt Rivers Museum in England.

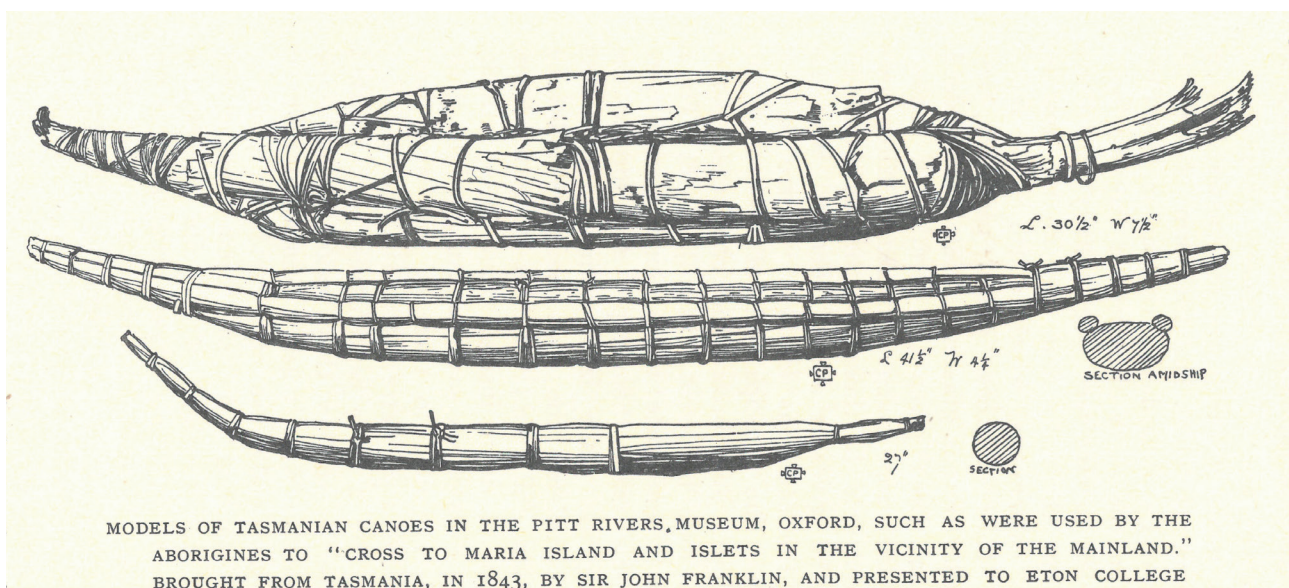


Model boat PRM 1893.50.13 | © Pitt Rivers Museum



Model canoe PRM 1893.50.14 | © Pitt Rivers Museum

Below is an illustration of the model canoes held in the Pitt Rivers Museum in England. The models were brought from Tasmania in 1843 by Sir John Franklin.



Illustrations of Models of Tasmanian canoes in the Pitt Rivers Museum, 1843 | Roth 1899: 156

DISCUSSION QUESTIONS

- › What do the images and sketches of the model canoes reveal about traditional construction techniques?
 - › What other inquiry methods could people have used to find out more about how these models were made?
-

Learning through Doing

A canoe-making workshop held at St Helens District High School introduced a group of students to the traditional techniques and technologies of bark canoe construction.



Nindarra Wheatley and Students at St Helens, 2017 | Image: Dcnstrct Pty Ltd

The girls have done quite a good job and there's quite a bit extra rope as well that they put together too. You know just a couple of days of that knowledge being passed on to them and how much they take in and then

they actually see the end product you can't tell the difference between my rope and their rope. They've done a really, really good job of it. So yeah really proud of them.

Craig Everett, 2017



Craig Everett and son at St Helens, 2017 | Image: Dcnstrct Pty Ltd

DISCUSSION QUESTIONS

- › What skills, techniques and technologies have been learned from past records and accounts?
- › Why is it important for cultural knowledge to be exchanged and passed on?
- › In what ways do people benefit from such experiences?

www.theorb.tas.gov.au/living-cultures/fibres/teacher-drawer

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