Hunting and gathering technology of Indigenous Australians

Technology is defined as “the application of scientific knowledge for practical purposes, especially in industry”\(^1\). Before the 19\(^{th}\) century, Aboriginal communities were traditionally self-reliant hunter-gatherers producing their science and technology for everyday life of foraging and preparing plants for food, fibres and medicines and, hunting animals for food and clothing\(^2\).

Most of the tools and weapons were manufactured from local raw materials such as different wood and stones, strings obtained from different plants and sinews of animals, and glues from plants\(^3\). Fire was extensively used to mold the timber to a desired shape or to harden for extra strength\(^3\).

Due to seasonal pattern of bush foods and for ceremonial purposes, traditional Indigenous communities tended to move from place to place so many of the tools could be left behind until their return the following year\(^2\). Tool-makers carried critical supplies of strings and resin wherever they went to make and fix wooden tools, whereas other materials were gathered opportunistically on their travels\(^4\).

Special materials such as stones, ochres, tool and ceremonial items that are not locally available were acquired through trade\(^5\). Trading routes stretched across Australia and down to Tasmania. Sea shells came from the north, grinding stones and ochre was supplied from the south, the east and north-east carried boomerangs and spears\(^5\).

The nomadic lifestyle of Indigenous Australians meant food was shared within the community. However, tools for hunting and gathering were regarded as individual possessions so these artifacts were never lent to others and were personally decorated\(^4\).

The practicality of these artifacts suggest that Indigenous Australians had an intimate understanding of Australia’s natural environment\(^5\).

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\(^1\) [http://www.oxforddictionaries.com/definition/english/technology](http://www.oxforddictionaries.com/definition/english/technology) [Accessed on 7/11/13].


Aboriginal people were the first to introduce grinding edges on cutting tools using stones such as obsidian and quartz glued onto wooden tools with resins to create excellent cutting edges that created cleaner, smoother cutting surfaces than steel\(^6\).

While stones were heavily used in the desert tribes of Western Australia, where the landscape is rich in rock resources, in the coastal tribes of northern Queensland cutting tools were mostly made from bone, teeth, wood and shell\(^4\). These cutting implements were used for many things including to: make other tools, gather and prepare food, chop wood and prepare animal skins\(^5\).

**Plant-based weapons and tools**

The great majority of Aboriginal technological items were made of perishable materials such as wood and fibres\(^4\). The favoured tools and weapons were boomerangs, clubs and spears.

Boomerangs were often made from mulga wood\(^7\) and wattles and were considered to originate from the throwing club\(^2\). They were mainly used for injuring an animal which would then be killed by a club\(^2\). Boomerangs made in the desert can reach distances of 160 metres – nearly three times that of the fighting club\(^2\). The returning boomerang did not exist in Central and Northern Australia regions and were mostly used as a plaything\(^6\) or to frighten birds\(^7\).

Clubs were manufactured into various size and shapes. Many were fire hardened and some had extra attachments of sharp quartz set into the head\(^7\). Heavier models of the club were used in single combat, tribal warfare and to kill large prey\(^2\). Clubs and boomerangs also served as clap sticks for music, ceremonial items\(^5\) and as digging sticks\(^8\).

A favourite weapon of Indigenous Australians was the spear and spear thrower. The spear was favoured over the later introduced bow and arrow weapon due to the easy make, flexibility to change from hunting tool to fighting weapon, and efficiency in hunting the large Australian animals with thick hides\(^9\). Therefore, spears made for killing were designed from strong hardwood with a sharpened stones or bone attached by resin and string or sinew as the spearhead\(^3\).

Fishing spears were lighter and had several toothed edges either by cutting bamboo or


\(^7\) D. S. Davidson, 'Australian Throwing-Sticks, Throwing-Clubs, and Boomerangs', *American Anthropologist*, 38 (1936), 76-100.


adding the extra teeth to a smooth spear\(^3\). Spears for bird-hunting were also of lighter wood to ensure birds were injured but not speared or to force birds to fly into net traps\(^4\).

Spear throwers (woomera) were used with spears to increase throwing distance by up to three times to throwing a spear without a thrower\(^3\). It is a simple lever invention that acts as an extension to the thrower’s arm\(^5\). Other functions of the woomera was to use as a container for food gathering, mixing ochre\(^4\) and starting a fire by rubbing one side against another softer piece of wood with kindling nearby\(^3\).

Questions

a) What is NOT part of the nomadic Indigenous Australian lifestyle?

a) Gather and hunt for food to be shared within the community.

b) Personal possessions of tools and weapons.

c) Trading with different tribes across the continent for special resources.

d) Carrying all artefacts to all locations.

b) Traditional Aboriginal tools and weapons were...

a) Distinctively different as each were designed for the one purpose of hunting and gathering for food, or fighting.

b) Multifunctional in survival, entertainment and ceremonial uses.

c) Shared amongst the hunters and gatherers of the tribe.

d) Difficult to produce and required extensive trading to obtain all necessary materials.

c) Why did Indigenous Australian tribes in northern Queensland use bones as spearheads?

a) The tribes lived near the coast where no quartz or obsidian was available.

b) Bones were more efficient as spearheads than other materials.

c) The tribes did not use bones as spearheads - they only used shells.

d) The tribes did not favour trading with different tribes.
d) The returning boomerang ...

a) Is found in south-eastern Australia.

b) Is very useful for hunting, digging and entertainment in play and music.

c) Can reach distances of up to 160 metres.

d) Can only be made with specific materials to the correct size and shape.