

HUNTERS AND FISHERS IN THE SYDNEY REGION

J. L. KOHEN AND RONALD LAMPERT

IN 1770 Captain James Cook found that 'the Natives of New-Holland' were far happier than 'we Europeans':

being wholly unacquainted not only with the superfluous but the necessary Conveniences so much sought after in Europe, they are happy in not knowing the use of them. They live in a Tranquillity which is not disturb'd by the Inequality of Condition: The Earth and sea of their own accord furnishes them with all things necessary for life ...



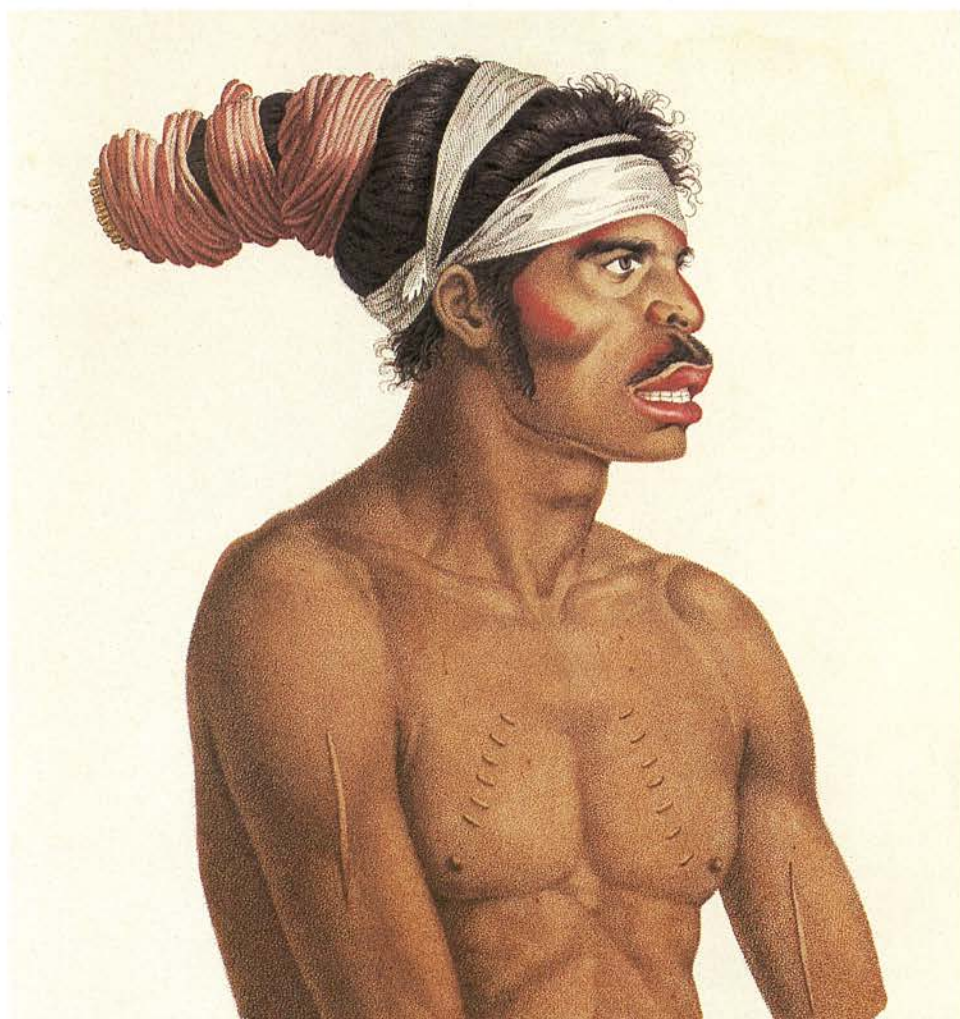
These idealistic reflections are among the first European observations on Aboriginal society in the vicinity of Sydney. Their presumed idyllic existence was not to last much longer, for less than twenty years after Cook's visit the European occupation of Australia began. Although initial relationships were amicable, there were so many differences between the two cultures that they soon clashed. A deep mutual distrust developed between the Aborigines and the convicts, resulting in theft and murder on both sides.

The impact of the outside world on the Aborigines also operated in a more insidious way. Within two years, smallpox and other diseases introduced by the Europeans had reduced the local Aboriginal population by more than half, causing drastic social and economic disruption. The Cadigal band, which occupied a territory close to the settlement, was reduced from about fifty in 1788 to three in 1790. Smallpox spread so rapidly that by the time the first European expeditions reached the Nepean River, only fifty kilometres west of Port Jackson, many Aborigines there had already died. When the explorers enquired about the people who lived between Parramatta and the Nepean River, they were told that 'this part of the country was inhabited by the Bidjigals, but that most of the tribe were dead of the small-pox'.

The death rate around Sydney was so great that traditional burial customs were discontinued. Bodies were found floating in the harbour and lying in rock shelters. The toll caused a major social reorganisation, with remnants of bands combining



Coastal people, Yerrangoulaga (above) and Couraibaigal (right). Both men are decorated with scars and ochre. The elaborate hairstyle is held in position with twine. Painted at Sydney by Francois Péron, naturalist with the Baudin expedition of 1802, and published in F. Péron and L. Freycinet, *Voyages de découverte aux terres australes*, Paris 1807–16.



to form new groups known to Europeans by such names as the 'Botany Bay tribe', the 'Kissing Point tribe' and the 'Broken Bay tribe'.

The number and distribution of Aboriginal bands at contact will never be known exactly, but several early diarists described the culture and vocabulary of the Sydney Aborigines, and from their reports it is possible to reconstruct some aspects of Aboriginal life before it was disrupted. The reconstruction is not easy, for economic and cultural practices that continued after European settlement were often quickly modified. Aborigines seized on any aspect of European technology that was more efficient than their own: for example, they used bottle glass instead of shell and stone for scraping and planing when making wooden artefacts. Changes in other areas, such as the basic pattern of subsistence, were less rapid. Most traditional plant foods remained available, and other practices such as burning the underbrush to assist hunting were still used well into the nineteenth century. On matters of social organisation, ritual and belief, the diarists had little to say; but it is certain that initiation ceremonies, marriage, burial customs, clan relationships and religious expression were all altered as the population declined.



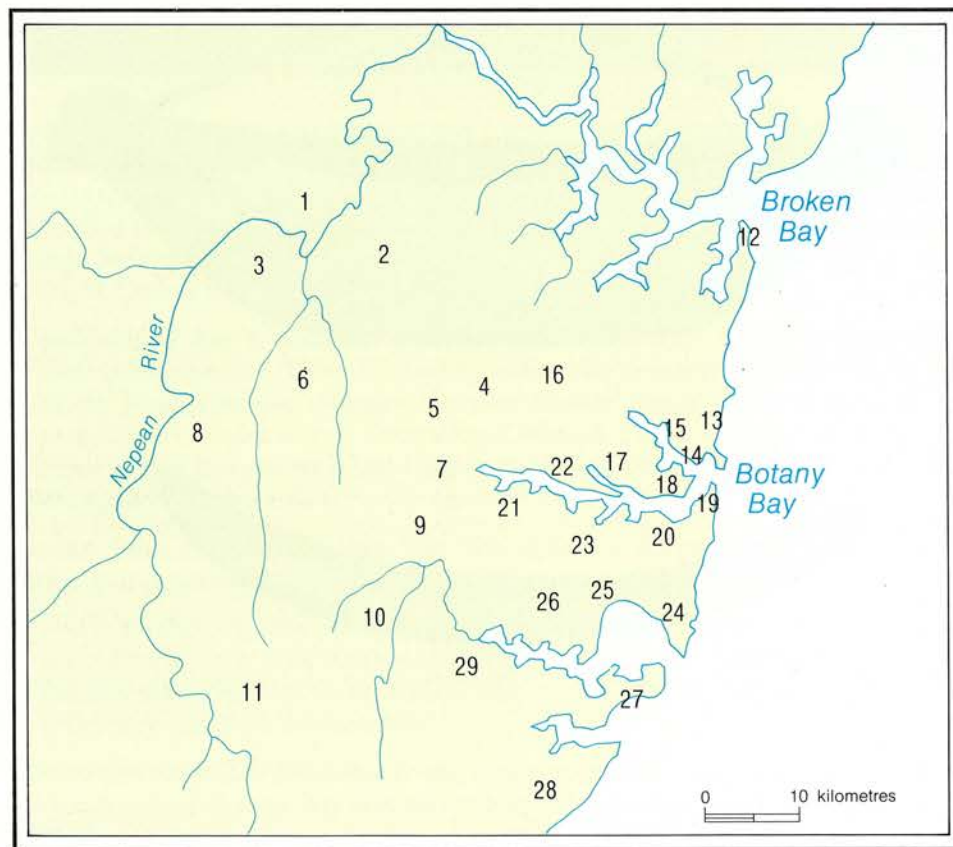
In the Sydney region three major Aboriginal languages were spoken. The south side of Botany Bay, extending down the coast as far as Nowra and Jervis Bay and west to George's River, was the province of the Dharawal language. A second closely related language, Dharug, was spoken over a large area of the Cumberland Plain from Appin to the Hawkesbury River and west into the Blue Mountains. A dialect of Dharug was spoken on the coast between Botany Bay and Port Jackson and from Parramatta to the Lane Cove River on the north side of Port Jackson. Between the Lane Cove River and the coast, from the north shore of Port Jackson across Broken Bay as far as Tuggerah Lake, the language was Kuring-gai. These three language groups, Dharawal, Dharug and Kuring-gai, were termed 'tribes' by Europeans. Much of the vocabulary was common to all three languages, so all the Aborigines of the region could understand each other with little difficulty. As each linguistic group probably consisted of fewer than one thousand people, the total number of Aborigines around Sydney was between two and three thousand. An estimate in 1788 of Aboriginal population in the Sydney region concluded that about fifteen hundred people lived along the coast between Broken Bay and Botany Bay. The Cumberland Plain had a similar population.

Within each language, different dialects were spoken, sharing a common grammar but having slightly different vocabularies. The Gweagal dialect of Dharawal was spoken on the south side of Botany Bay. The Dharug language had two major dialects, that of the Eora or coastal people and that spoken by people occupying the inland area from Parramatta to the Blue Mountains.

Named groups of people were distinguished in many ways apart from their different territories and languages. Weapons and implements varied between

Locations of Aboriginal groups in the Sydney area.

J. GOODRUM



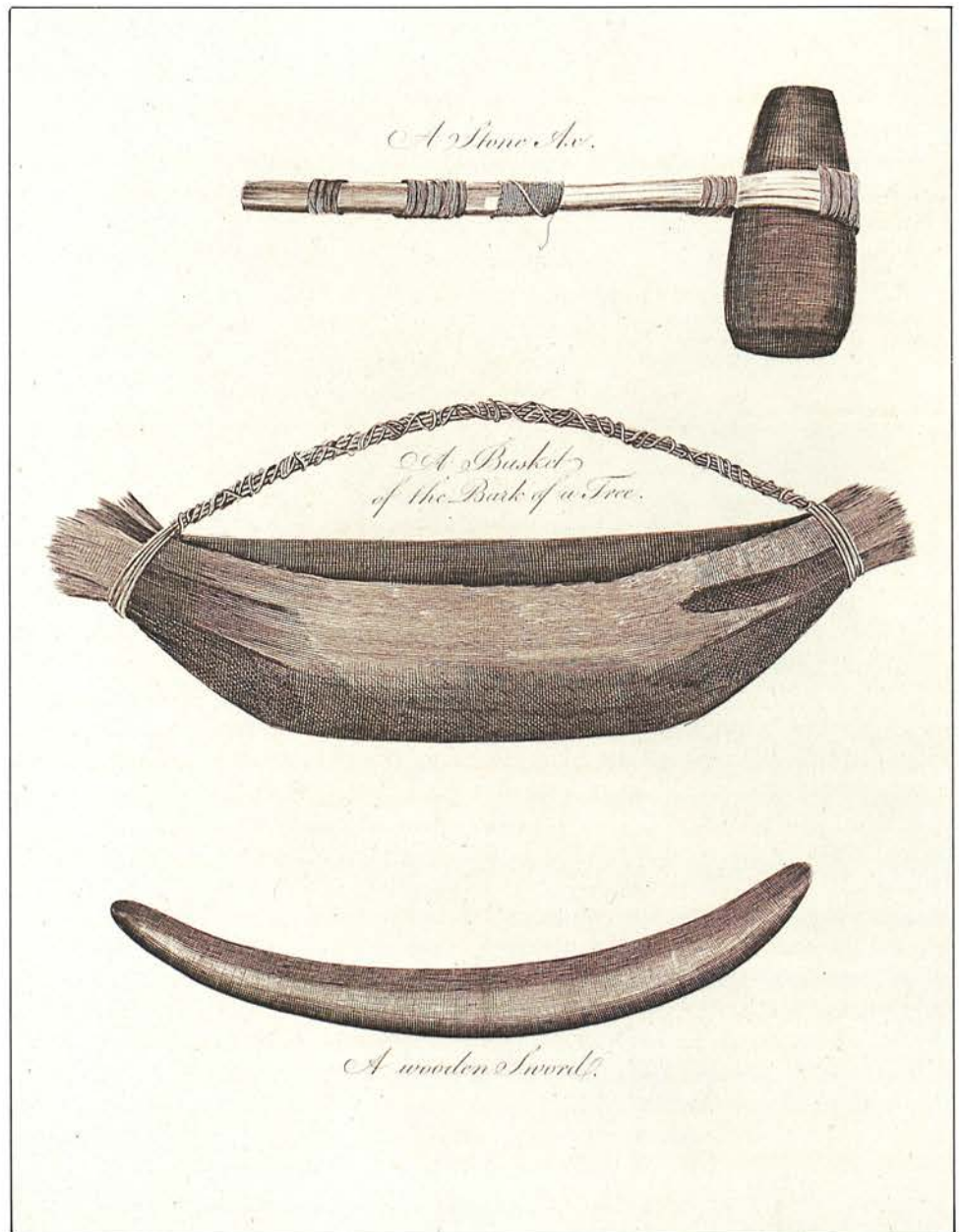
- 1 KURRAJONG
- 2 CATTAI
- 3 BOOROOBERONGAL
- 4 BIDJIGAL
- 5 TOOGAGAL
- 6 GOMERRIGAL
- 7 CANNEMEGAL
- 8 MULGOA
- 9 BOOL-BAIN-ORA
- 10 CABROGAL
- 11 MURINGONG
- 12 CARIGAL
- 13 CANNALGAL
- 14 BOROGEAL
- 15 KAYIMAI
- 16 TERRAMERRAGAL
- 17 CAMMERAIGAL
- 18 GORUALGAL
- 19 BIRRABIRRAGAL
- 20 CADIGAL
- 21 BURRAMATTAGAL
- 22 WALLUMATTAGAL
- 23 WANGAL
- 24 MURU-ORA-DIAL
- 25 KAMEYGAL
- 26 BEDIAGAL
- 27 GWEAGAL
- 28 TAGARY
- 29 NORONGERRAGAL

groups: 'they have told us', wrote the judge-advocate David Collins, 'that such a one was used by the people who live to the southward of Botany Bay [Gweagal]; that another belonged to the tribe of Cam-mer-ray ... lines worn round the waist by the men belonged to a peculiar tribe ...' Carrying-nets 'differed in the mesh' between woods and coast. These differences extended into their dances and songs.

The divisions between 'coasters', 'woods tribes' and 'mountaineers' were noted by several observers along the south coast. In the Sydney region, the 'coasters' and 'woods tribes' were subgroups of the Dharug. Further inland, the Gundungurra inhabited the Blue Mountains and the plains southwest of the Nepean River.



Items used by the Sydney Aborigines in 1788. The stone axehead was usually ground from a basalt pebble and secured in the handle with grass tree resin. The basket was made of a piece of bark bent into the required shape and tied at the ends with string. The 'wooden sword' is in fact a throwing stick, or non-returning boomerang. Drawn by George Stockdale for Governor Phillip's account of the settlement.





The basic social and economic unit was a small group consisting of a few related families. In the Sydney area each group seldom exceeded fifty or sixty people, and appears to have been at once a clan (a landowning unit possessing sacred sites within a specified territory) and a band (the basic economic division). It was to these small groups, here called 'bands', that the first European settlers gave the title 'tribe'.

David Collins noted that

each family has a particular place of residence, from which is derived its distinguishing name. This is formed by adding the monosyllable Gal to the name of the place; thus the southern shore of Botany Bay is called Gwea, and the people who inhabit it style themselves Gweagal. Those who live on the north shore of Port Jackson are called Cam-mer-ray-gal, that part of the harbour being distinguished from others by the name of Cam-mer-ray.

Captain John Hunter observed that 'the different tribes are in every respect perfectly independant of each other', and that

you may often visit the place where the tribe resides, without finding the whole society there; their time is so much occupied in search of food, that the different families take different routs; but, in case of any dispute with a neighbouring tribe, they can soon be assembled.

The two bands of the Dharawal living closest to Sydney were the Gweagal from the south side of Botany Bay around the Kurnell peninsula and the Norongerragal extending further to the west as far as George's River. The coastal Dharug referred

An Aboriginal family at Port Jackson. The woman is carrying a bark container, a string bag and a coil of fishing line, while the man is carrying a club, a shield and two spears. Although only two children are shown, Aboriginal families usually included several children, spaced several years apart. Painted by Louis-Claude Freycinet, cartographer-naturalist with the Baudin expedition, in April 1802, and published in his Voyage autour du monde, Paris 1825.



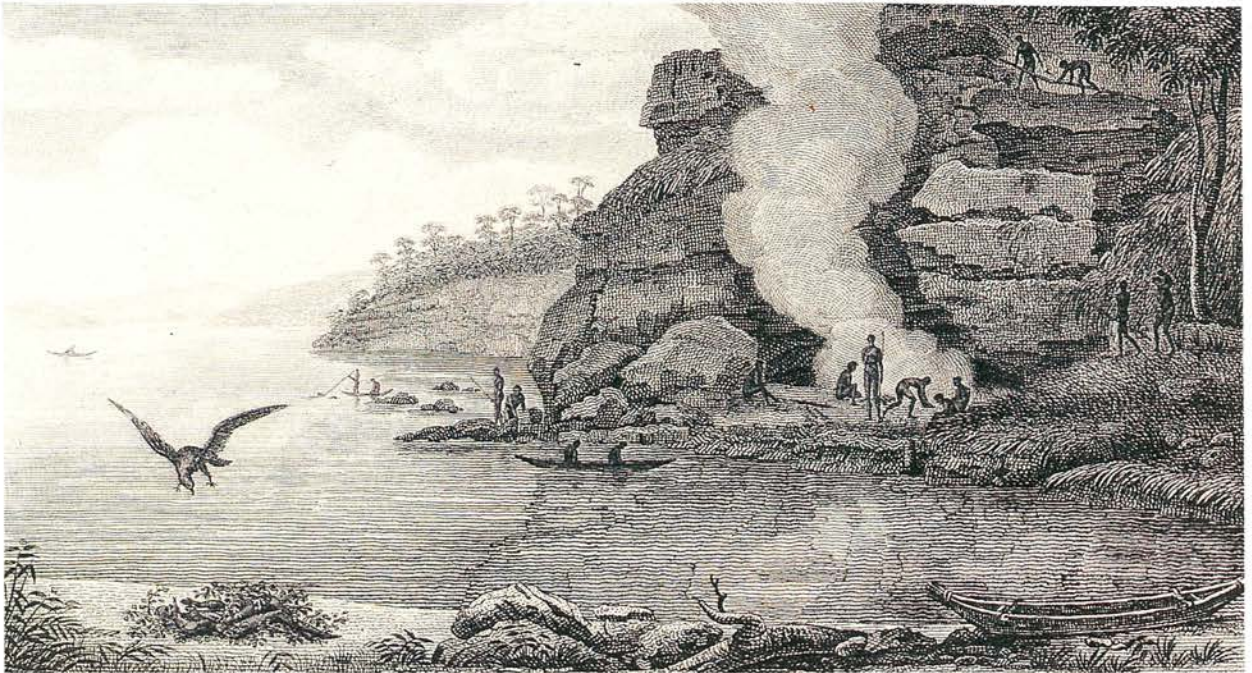
Portrait of an Aboriginal youth from the Sydney area. This boy lived for a time with Governor Macquarie, and his portrait, by an unknown artist, was probably painted about 1816. The headband he wears suggests he was initiated.

MITCHELL LIBRARY

to themselves as Eora, derived from the term *E-e*, meaning 'yes', and *ora*, meaning 'country' or 'place'. There were at least seven and possibly eight Dharug-speaking bands near the coast. One band was called the Borogegal-yuruey, and while they clearly lived on the north side of the harbour (Boroggy being Bradley's Point), the suffix *yuruey* is probably derived from the word *eora*, suggesting that they were Dharug speakers. The Kuring-gai were also coastal people, and at least six bands lived in the area bounded by Port Jackson, Broken Bay and the Lane Cove River.

To the west across the Cumberland Plain as far as the Blue Mountains lived the remainder of the Dharug speakers, the 'woods tribes' of the early diarists. The territory of each band was larger than that of the coastal Aborigines, to judge from some of the known boundaries. The names of other bands were recorded but no location was given.

Some bands probably lived at one campsite for some months of each year and regularly returned to it. In 1788 the marine officer Watkin Tench noted: 'on the north-west arm of Botany Bay stands a village, which contains more than a dozen houses, and perhaps five times that number of people'. A similar village was described eighteen years earlier when men on the *Endeavour* made the first contact with Aborigines on the southern shore of Botany Bay, at Kurnell. 'We came to an anchor abreast of a small village consisting of about 6 or 8 houses', the botanist Joseph Banks observed. Later he noted, 'We saw many Indian houses and places where they had slept upon the grass without the least shelter.'



The 'houses' were small huts made of branches covered with sheets of bark. How long they were occupied before people moved on to a new campsite is unknown. The term 'village' suggests that some sites were occupied for perhaps several weeks or even months. Certainly the resources of the coast could support a small group living at one place, at least during the warmer parts of the year. The evidence from the Sydney area is precious, for it is the only place where detailed observations were made before European diseases killed many people. All later accounts are probably reporting an Aboriginal way of life drastically different from that of the pre-contact culture.

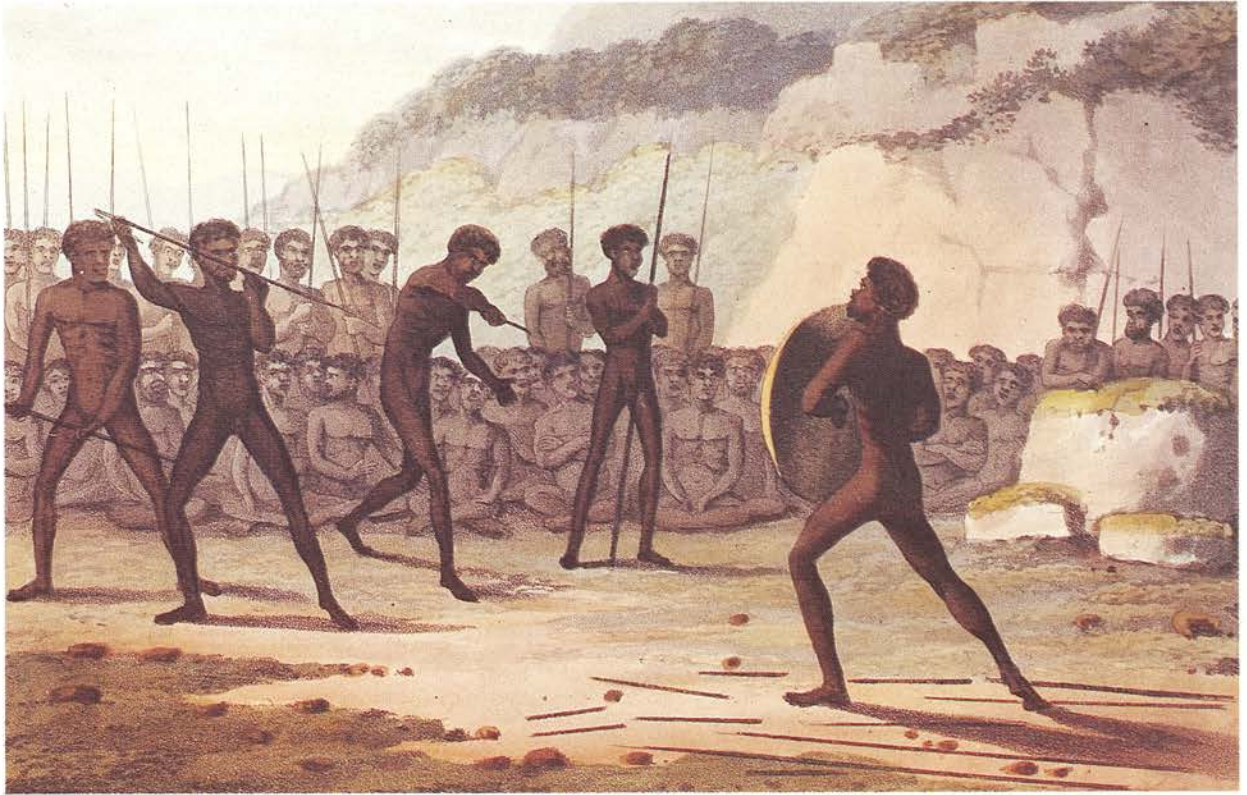
The number of bands in Port Jackson can be estimated from two pieces of information. Sixty-seven canoes were counted in the harbour on a single day, and each 'tribe' was observed to have six, eight or ten canoes; there were between seven and eleven bands living close to the harbour, a figure that corresponds well with the nine Dharug and Kuring-gai bands recorded by name.

Similar numbers were to be found at Botany Bay, where Tench observed the Aborigines were 'tolerably numerous as we advanced up the [George's] river', and at Broken Bay, where 'The Indians who live on its banks are numerous'. Near the entrance to Botany Bay 49 canoes were counted, and on the following day a party of 212 armed men was observed. 'The Natives ...', wrote Governor Phillip, 'are far more numerous than I expected to find them'.

Along the coast, the rich resources allowed people to own much smaller territories than those inland. Evidence for seasonal migration is slight, and since the whole area was densely settled, such movements were unlikely. Later accounts suggesting that coastal populations moved some distance each season may reflect new social alliances rather than traditional economic movements. If large-scale depopulation occurred all along the coast, greater mobility may have been essential for any form of traditional ceremonial life to continue.

Early diarists, lacking the aims and skills of modern anthropologists, nevertheless provide some clues to the ways in which society was organised. David Collins did notice that authority within bands was exerted by elders: 'These people are

A typical campsite on the shores of Port Jackson. Note the construction of the canoes, made of a single sheet of bark and tied at each end. The men are fishing with spears from a canoe and from the rocks, and a fire has been lit in front of the rock shelter to cook their catch. Painted by Francois Péron in 1802, and published in Voyages de découverte.



Ritual spearing. Disputes were often settled by this method. The guilty individual would stand alone protected only by a parrying shield, and friends and relatives of the offended party would throw their spears at him. Honour was usually satisfied once blood had been drawn, and serious injury or death was rare. Field sports, 1813.

MITCHELL LIBRARY

distributed into families, the head or senior of which exacts compliance from the rest.' There were laws that, if broken, brought such punishment as 'the party offending being compelled to expose his person to the spears of all who choose to throw at him'. Certain bands within a tribe enjoyed a higher status than others in ritual and legal matters, including the initiation practice of tooth evulsion or extraction. Collins also noted:

To the tribe of Cam-mer-ray also belonged the exclusive and extraordinary privilege of exacting a tooth from the natives of other tribes inhabiting the sea-coast ... there is no doubt of their decided superiority ... Many contests or decisions of honour (for such there are among them) have been delayed until the arrival of these people ...

David Collins, the newcomer who set down most about the Aboriginal way of life, declared that 'no country has yet been discovered where some trace of religion was not to be found ... I can safely pronounce them an exception to this opinion'. Over much of Aboriginal Australia, this erroneous view was echoed by churchmen and others for more than a century. A modern authority, W.E.H. Stanner, has concluded that Collins

noted many of the things that persuade modern scholars of Aboriginal religious capacity and attainment: a notion of a mystical source and end of life; a belief in the survival of the human spirit; elementary moral ideas and a variety of ritual symbolisms; and spectacular initiatory and mortuary rites. But evidently he could not conceive of them as belonging to a truly religious order of facts.

Just as Cook's perception of life in the state of nature drew upon European philosophical notions of the noble savage, European prejudices as to what constituted religion prevented an understanding of Aboriginal spiritual life.

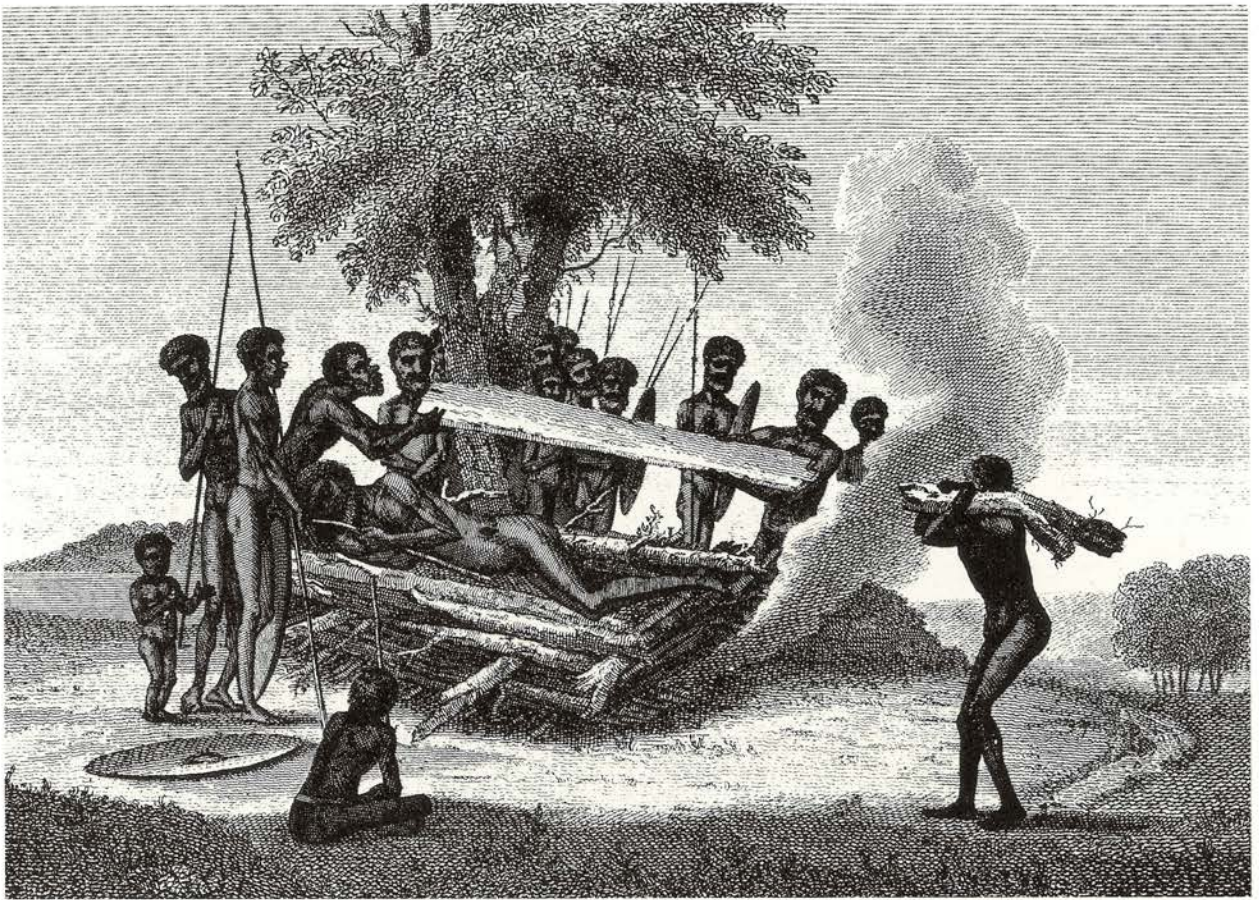
There were two distinct mortuary practices, a division apparently based on age: 'their young people they consign to the grave', wrote Collins; 'those who have passed the middle age are burnt'. Items of personal property were buried with the deceased, consistent with a belief in immortality. Witnessing an elaborate funeral, Collins noted a canoe was brought, and 'cutting it to a proper length, the body was placed in it, with a spear, a fiz-gig [fish-gig], a throwing-stick, and a line which Ba-loo-der-ry [the deceased] had worn round his waist'. Bennelong cremated his wife's body on a pyre of dry wood, and a 'basket with the fishing apparatus and other small furniture of the deceased was placed by her side ...'. He then 'raked the calcined bones and ashes together in a heap ... he formed with a piece of bark a tumulus ... carefully laying the earth round'.

The modern Aboriginal practice of avoiding any mention of the names of dead people extends back at least to 1788: 'They enjoined us on no account to mention the name of the deceased, a custom they rigidly attended to themselves whenever any one died.'



ABORIGINAL BAND/CLAN NAMES IN THE SYDNEY AREA

BAND	LANGUAGE GROUP	LOCATION
Cadigal	Dharug (Eora)	Sydney
Wangal	" "	Concord
Burramattagal	" "	Parramatta
Wallumattagal	" "	Ryde
Muru-ora-dial	" "	Maroubra
Kameygal	" "	Botany Bay
Birrabirragal	" "	Sydney Harbour
Borogegal-yuruey	" "	Bradleys Head
Bediagal	Dharug	North of George's River
Bidjigal	"	Castle Hill
Toogagal	"	Toongabbie
Cabrogal	"	Cabramatta
Boorooberongal	"	Richmond
Cannemegal	"	Prospect
Gomerigal-tongara	"	South Creek?
Muringong	"	Camden
Cattai	"	Windsor
Kurrajong	"	Kurrajong
Bool-bain-ora	"	Wentworthville
Mulgoa	"	Penrith
Terramerragal	Kuringgai	Turramurra
Cammeragal	"	Cammeray
Carigal	"	West Head
Cannalgal	"	Manly (coast)
Gorualgal	"	Fig Tree Point
Kayimai	"	Manly (harbour)
Gweagal	Dharawal	Kurnell
Norongerragal	"	South of George's River
Illawarra	"	Wollongong
Threawal	"	Bong Bong
Tagary	"	Royal National Park?
Wandeandegal	"	?
Ory-ang-ora	"	?
Goorungurragal	"	?



Cremation at Sydney, published in David Collins' account of the Sydney settlement; the artist might have been the convict Thomas Watling. Cremation was usually reserved for mature adults, and was performed with a great deal of ceremony. Personal items such as clubs and spears were frequently burned with the body. Burial was another method of disposing of the dead, and Governor Phillip dug up a grave in May 1788.

Along the coast and estuaries people based their economy on the sea. Fishing was carried out by both men and women, though they employed different methods. Men fished with multipronged fishing spears, while the women used hooks and lines. There are many descriptions of the 'fish-gig', or fishing spear, the shaft of which was made from the flower stalk of the grass tree *Xanthorrhoea*. 'Their spears', wrote the surgeon John White,

are made of a kind of cane which grows out of the tree that produces the yellow gum; they are ten or twelve feet long, pointed, and sometimes barbed, with a piece of the same cane or the teeth of fish. These they throw, with the assistance of the short stick . . . which has a shell made fast to the end of it with yellow gum.

Up to three lengths of stem made up the shaft of the spear and these segments were joined together by the resin obtained from the base of the grass tree. The resin was heated slowly over a fire to soften it, and smeared over the join between the sections. The same resin was used to secure hardwood prongs, often barbed and tipped with slivers of bone ground to a point.

The fishing equipment used by the women was quite different. 'Their hooks', wrote Phillip, 'are made of the inside of a shell resembling mother of pearl'. This was the turban, *Turbo torquata*, which was broken into a ring two or three centimetres in diameter, then ground with a coarse stone file into a crescent shape, sharpened at one end and often notched at the other to attach the line. The shiny inside of the shell acted as a lure, and a ground bait of chewed shellfish was spat into the water to attract the fish. According to some accounts, hooks were also

Material culture of the coastal Aborigines, painted by surgeon John White for his Journal. He described the material as follows:

A. is a War Spear, formed of a light reed-like substance produced by the yellow gum tree, which if the ends marked with the letters were joined together would shew its full length: the long pointed head is of hard wood, of a reddish colour, and is fastened into the

shaft in the firmest manner by a cement of the yellow gum only.

B. is a Stick, at one end of which is a small peg fastened with the same cement, and forming a hook: the other end is ornamented with the shell of the limpet or patella, stuck on with the gum; and, thus constructed, it is used to throw the spear—in this manner: The shell end of the stick being held in the right hand, and the

spear poised in the left, the end of the hook at B. is inserted into a hollow at the foot of the spear at D. and thus thrown with a force similar to that of a stone from a sling: this is shewn more particularly in a reduced figure at the upper part of the plate, a.b.

C. is a Spear or Gigg, of a substance similar to the former, for striking fish in the water: the true length of which will be known by supposing the

parts joined together at the lettered ends: the shaft consists of two pieces, a large and a small one, joined by the gum: and the head is composed of four sticks inserted into the shaft with gum, and tied together above with slips of bark, which are afterwards tightened by little wedges, driven within the bandage: each of these sticks is terminated by the tooth of a fish, very sharp, and stuck on by a lump of the gum cement: the shaft of this instrument is punctured in many places with very small holes, to the pith in the centre, but for what purpose is not known.

H. is a Hatchet, of which the head is a very hard black pebble stone, rubbed down at one end to an edge; the handle is a stick of elastic wood, split, which being bent round the middle of the stone, and the extremities brought together, is strongly bound with slips of bark, and holds the head very firmly, as smiths' chissels are held by hazel sticks in Europe.

S. is a kind of blunt Sword, of hard wood, like the head of the spear A.

F. seems to be an instrument of offence; it is a stick of the natural growth, with the bark on; the root of which is cut round into a large knob; the end F. is made rough with notches, that it may be held more firmly in the hand.

R. is a Basket, formed by a single piece of a brown fibrous bark. This separated whole from the tree is gathered up at each end in folds, and bound in that form by withes, which also make the handle. The Basket is patched in several places with yellow gum, from which it appears to have been sometimes used for carrying water.

These implements are drawn from exact measurements, and fitted to a scale of three feet, inserted at the foot of the Plate.





Spear fishing. Multipronged spears were used by the men both from the shore and in canoes. Fish speared probably included mullet, whiting and stingrays. Watercolour by Joseph Lycett about 1820.

NATIONAL LIBRARY

made from wood, bone or bird claws, probably baited. The lines to which the hooks were attached were made by twisting together long strands of the inner bark of trees, including the kurrajong (*Brachychiton populneum*) and some acacias.

When fishing, both men and women used canoes, formed from tree bark, particularly of the she-oak *Casuarina*. Men sometimes travelled to Parramatta to obtain the best bark, which was removed in one piece from a tree by using wooden and stone wedges. It was then slowly heated and bent into shape, the ends were bunched and tied with vines, and any leaks were sealed with *Xanthorrhoea* resin. A small fire was lit on a clay base in the bottom of the canoe, so that fish could be cooked and eaten immediately.

The diet of fish was supplemented by a range of shellfish, usually gathered by women. Rock platforms and sandy beaches of the open coast produced different species, and so did the mudflats of estuaries. People ate a wide variety of shellfish, the most important being mud oysters and rock oysters, mussels, cockles and turban. Crabs, octopus and turtles were all part of the diet. 'They have also small hoop nets, in which they catch lobsters', wrote Governor Phillip.

Shell middens, memorials of innumerable meals, still line the bays of Sydney Harbour and Broken Bay. They are found both in the open and in rock shelters, and contain archaeological evidence showing the importance of fishing and its associated technology for more than two thousand years. Shell fish hooks identical to those described in 1788 are common only in deposits dating from the last few centuries, perhaps reflecting the need to exploit coastal resources more efficiently in order to feed an increasing population.



Fishing from a bark canoe with a hook and line, probably for snapper or flathead. This method was usually employed by the women, while the men fished with multipronged fishing spears. Watercolour by G. C. Jenner, 1822.

MITCHELL LIBRARY

A fish hook file, used to shape the shell fish hooks.

R. LAMPERT



Campsites were usually located close to the shore, particularly during the summer months when fish were a staple food. According to the surgeon G.B. Worgan:

When they have caught enough [fish] for a Meal, and feel hungry, The Men call the Women on shore, and haul up the Canoes for them, They then gather up a few dry Sticks, light a Fire under a shelving Rock, (if there is one near,) or a Wigwam ...

A whale came ashore at Manly in 1790 and people quickly gathered. Bands would travel great distances to share a feast of whale meat, and to enjoy the social contact. The meat was usually cut from the dead animal with sharpened shell tools, commonly a valve of the Sydney cockle *Anadara trapezia*.

During the colder months when fish became scarce, men continued fishing into the night with the aid of bark torches. However, Collins' comment that 'those who live on the sea-coast depend entirely on fish for their subsistence' overstates the case. Most protein was derived from fish and shellfish, and this most visible aspect of food-getting was the one most recorded. As spring approached, animal and plant foods always supplemented the diet. Small animals were collected with the help of fire. Hunter observed that '... the natives were employed in burning the grass on the north shore opposite to Sydney, in order to catch rats and other animals, ... this is their constant practice in dry weather'.

Fern root (probably bracken fern, *Pteridium esculentum*, and *Blechnum* sp) provided a supply of carbohydrate during the winter. It was the custom to chew



Shell fish hooks recovered from archaeological sites in the Sydney area. They are commonly found in the upper levels, suggesting a heavy reliance on fishing over the last few hundred years. Similar hooks are found along central and southern New South Wales coasts.

R. LAMPERT



Bobby Nurragingy, a Dharug Aborigine from Windsor on the Hawkesbury River. He was one of two sons of the man recognised as 'chief' of the South Creek group in the 1820s. This pencil sketch by ex-convict Charles Rodius probably dates from the early 1830s.

MITCHELL LIBRARY



Two identical throwing sticks from South Creek near Sydney. They were thrown end-over-end in hunting ground-dwelling animals. This pair was acquired in the 1820s by the King and Lethbridge families and held on the Werrington House estate until recently. They are probably the only artefacts of this kind still in existence from the Sydney area.

R. OLDFIELD

it to remove the starch and then to spit out the fibrous residue. Other plant foods were seasonally important, including the burrawang (*Macrozamia communis*), native figs, the fruit of lillypilly trees (*Acmena* and *Syzigium* sp) and a range of lilies and orchids with tubers. The coastal people were not as reliant on 'yams' (as all bulbs and tubers were called by early diarists) as were those who lived inland across the Cumberland Plain and along the Nepean and Hawkesbury rivers, nor were they as mobile. The botanist George Caley wrote that they were 'more confined to one place of abode [than the inland natives] and know nothing of climbing trees, no further than in getting up for to strip of the bark for to make canoes'.

Plant foods were located in three major environmental zones. In the steep sandstone gullies that lined the harbour grew a wide range of wet sclerophyll and rainforest vegetation, rich in fruits such as figs, lillypilly, native grape, apple berries and *bolwarra* (*Eupomatia laurina*). In the swamps between and behind the sand dunes grew a range of aquatic and semiaquatic plants with edible tubers and rhizomes, including the *bungwahl* fern (*Blechnum* sp) and a number of orchids. The third zone was the sandstone country which, provided sweet nectar from the flowers of *Banksia*, *Grevillia* and the waratah (*Telopea*). The brush cherry (*Exocarpus cupressiformis*) and the native currant (*Leptomeria acida*) were also found in this area.

Unlike many Aboriginal groups, the coastal people were seen to use little stone in the manufacture of their wooden artefacts. Shells usually served as scrapers, being hafted on to the end of the spearthrower in the same way that stone adzes were hafted away from the coast. 'The shell at one end of the throwing stick is intended for sharpening the point of the lance, and for various other uses', wrote Governor Phillip. Shell tools were sometimes sharpened with the teeth and could be used while held in the hand. The only type of stone tool in common use was the edge-ground hatchet. The stone for the hatchet head was usually a basalt pebble obtained from the gravel bed of the Nepean River. The coastal people probably acquired such pebbles often by ceremonial gift exchange, but there is one account of a coastal Aborigine travelling to the foot of the Blue Mountains to obtain suitable hatchet blanks.

Stone tools are rare in the recent levels of archaeological sites in the Sydney district. This may result partly from the virtual absence of hard stone towards the coast, the nearest useful outcrops being some distance westward on the Cumberland Plain. Yet in earlier levels of archaeological sites, dating back more than one thousand years, stone tools are more plentiful. The recent decline in the use of stone was perhaps the result of people having become specialised coastal dwellers, using local raw materials such as shell.



The 'woods tribes' who lived between Parramatta and the Blue Mountains were more dependent on small animals and plant foods, although freshwater mullet and eels were seasonally available. Tench observed that

they [the inland Aborigines] depend but little on fish, as the river yields only mullets ... their principal support is derived from small animals which they kill, and some roots (a species of wild yam chiefly) which they dig out of the earth.

Coastal Aborigines described them as 'climbers of trees, and men who lived by hunting': they would 'ascend the tallest trees after the opossum and the flying squirrel'. From the treetops they collected the honey of native bees.

These people differed in several ways from those around Port Jackson. They spoke a different dialect of Dharug, they barbed their spears with stone rather than



shell, and they made skin cloaks out of possum and kangaroo fur. They also moved more often according to the season. The Nepean and Hawkesbury rivers attracted larger numbers during the summer months, and in winter smaller groups spread out over the plain and into the mountains.

At least three bands—the Bidjigal, the Cabrogal and the Cattai—also had access to the estuarine resources of the George's River and the Hawkesbury River; but the Toogagal, Boorooberongal, Gomerigal, Cannemegal, the Bool-bain-ora, the Muringong and the Mulgoa people relied entirely on terrestrial and freshwater foods. The diet of the inland groups was varied. Collins observed it to include: 'a few berries, the yam and fern-root, the flowers of the different banksia, and at times some honey'. In addition, he wrote, they 'make a paste formed of the fern-root and the large and small ant bruised together; in the season they also add the eggs of this insect'.

To the west of the Nepean River grew the *burrawang* (*Macrozamia communis*) and to the east a smaller species of macrozamia. Both species are poisonous, and they required extensive preparation by soaking and pounding before the toxins were removed. The flour-like substance eventually produced was baked into small flat cakes. Other plant foods could be eaten without such painstaking preparation. Watkin Tench noted that the Aborigines 'broil innocent food, though in their raw state many of them are poisonous'.

Orchids and lilies with edible tubers were plentiful in the open woodlands to the east of the Nepean; 'The natives here', wrote Hunter, 'appear to live chiefly on the roots which they dig from the ground', including 'the wild yam [found] in considerable quantities, but in general very small'. The banks of the Nepean were often submerged by floodwaters, producing a rich soil dominated by tuberous

A whale feast. The stranding of a whale on the coast provided an abundant supply of food at least for a short time. For this reason, it provided an opportunity to hold ceremonial gatherings. Watercolour by Joseph Lycett, an ex-convict, about 1820.

NATIONAL LIBRARY

plants. The 'yams' were 'in the greatest plenty on the banks of the river; a little way back they are scarce'.

While the women and children gathered yams, roots, fruits and small game that provided the staple diet, the men hunted. They set traps and snares for quail and possums and dug pitfall traps for other small mammals. Along the rivers and creeks they built fish traps, in which mullet and bass could be speared easily with a multipronged fishing spear similar to the one used on the coast. Eels were an important part of the diet, particularly in April, when the Aborigines, noted Collins, 'resort ... to the lagoons, where they subsist on eels which they procure by laying hollow pieces of timber into the water, into which the eels creep, and are easily taken'.

The platypus, most bizarre of marvels to European eyes, was speared in rivers and lagoons. 'The natives', as Collins observed them,

sit upon the banks, with small wooden spears, and watch them every time they rise to the surface, till they get a proper opportunity of striking them. This they do with much dexterity and frequently succeed in catching them this way.

Yabbies, freshwater mussels, tortoises and water birds were also collected. The importance of aquatic resources to the Aborigines of the plain is reflected in the fact that most large campsites so far recorded are close to rivers or creeks.

Along the upper estuarine reaches of the Hawkesbury and George's rivers and their tributaries, the *cobra* grub (a mollusc, *Teredo* sp), was found among decomposing logs under the water. They were such an important food source that one place near the George's River was known as Cabramatta, meaning 'creek where *cobra* grubs are found'. 'There is a tribe of natives dwelling inland', wrote Collins, 'who, from the circumstance of their eating these loathsome worms, are named Cah-bro-gal'.

The possum was probably the most important source of protein. Although kangaroos and wallabies were hunted, possums were more abundant and easier to obtain. Kangaroo was not a significant component of the diet, although the Aborigines 'ate it', reported Ensign Francis Barrallier in 1802, 'whenever they were fortunate enough to kill one of these animals'.



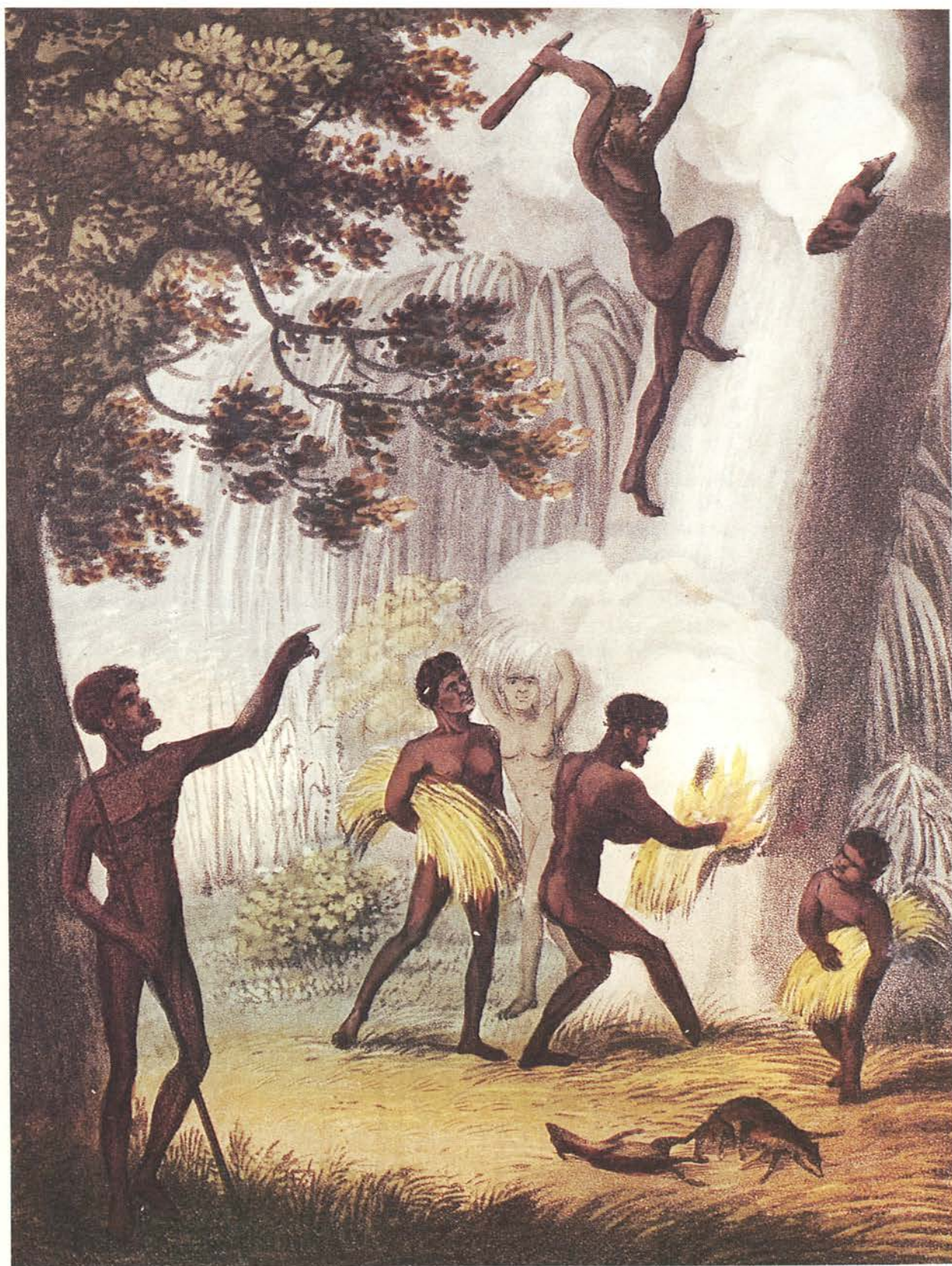
The stone tool technology of the area expressed the relative importance of possums and other tree-dwelling animals in the diet. The dominant stone tool was the edge-ground hatchet, used to cut toeholds in trees for climbing hunters, and to enlarge the base of a hollow tree so that a fire could be lit to drive the possum from its nest. Tree-climbing may also have been necessary to capture the large bats which, Hunter observed, being 'very fat' were 'reckoned by the natives excellent food'. Trees also provided other food, Barrallier observed:

Besides lizards and other animals, grubs are eaten by the natives, and it is more particularly those which are found in the trunks of trees they look for. For this purpose they always carry with them a switch about 12 inches long and of the thickness of a fowl's feather, which they stick into their hair above the ear.

The bands west of Parramatta used various stone tools. From the bed of the Nepean, basalt pebbles were ground into hatchet heads. On the eastern bank, at Castlereagh, a sandstone outcrop dips down into the water, and along this outcrop hundreds of grooves have been cut by basalt pebbles being ground to a sharp edge before being attached to a handle with grass-tree resin or native beeswax.

*Opposite page.
One method used by the inland Aborigines to hunt possums. A fire was lit in the base of a hollow tree, and as possums were forced out of their holes by the smoke, a hunter would knock them to the ground. Field sports, 1813.*

MITCHELL LIBRARY



Other kinds of rock also yielded tools for the manufacture of wooden implements. Chert from the Nepean River gravels was used to make flakes that were hafted on to the end of spearthrowers to be used as chisels. To the east along South Creek and Eastern Creek, red and yellow silcretes were used for the same purpose and for barbing hunting spears. A row of small flakes was mounted into the head of the spear with resin, so that when a kangaroo was hit, the spear would either drag along the ground or fall out, leaving the barbs behind. Barbed spears increased bleeding when an animal was hit, and so killed it more quickly.

People moved along the river by well-established paths on the banks, and by bark canoes identical to those used on the coast. Although the canoes were 'nothing more than a large piece of bark tied up at both ends with vines', they seem to have been well suited to the slow-moving waters of the Nepean River and South Creek. Nearby trees were stripped to make bark huts, the only protection available to people who lived away from the rock shelters of the sandstone country. Hunter wrote that they consisted of

a piece of the bark of a tree, bent in the middle, and set upon the ends, with a piece set up against that end on which the wind blows. This hut serves them for a habitation, and will contain a whole family ...

The bark of the kurrajong tree and the stringybark were twisted to make lines, but other fibres were also used, including 'a small coil of line, made of the hair of some animal', probably possum.

Fire was so vital a tool to the people of the shale country between Parramatta and the Blue Mountains that the band living between Parramatta and Prospect were known as the Cannemegal ('belonging to fire'). They used fire to maintain grassland and open woodland environments, thus ensuring an abundant supply of tuberous plants such as lilies and orchids. They also used it during kangaroo hunts, forming a wide circle around a mob of kangaroos, each man standing about thirty metres from his neighbour. The grass was then set on fire, and the kangaroos were speared as they tried to escape. Fire was also used to capture possums. As described by Governor Hunter, two or more people were involved:

Stencils of a boomerang and edge-ground hatchet in a rock shelter at Maroota, northwest of Sydney.

J. KOHEN



One man climbs even the tallest tree with much ease, by means of notches at convenient distances, that are made with a stone hatchet; when he is arrived at the top, or where there may be an outlet for the animal, he sits there with a club or stick in his hand, while another person below applies a fire to the lower opening, and fills the hollow of the tree with smoak; this obliges the animal to attempt to make its escape, either upwards or downwards, but whichever way it goes, it is almost certain of death, for they very seldom escape. In this manner they employ themselves, and get a livelihood in the woods.



Artistic expression in the Sydney region took many forms. Wooden implements were incised with designs, shields were decorated with pipeclay and ochre, and bodies were decorated with scars, white and red ochre, animal teeth and feathers. Hunter observed,

The bodies of the men are much scarified, particularly their breasts and shoulders; these scarifications are considerably raised above the skin, and although they are not in any regular form, yet they are certainly considered as ornamental.

The most lasting examples of Sydney Aboriginal art are to be found on the Hawkesbury sandstone rock which surrounds the Cumberland Plain. In the rock shelters and overhangs which are so abundant, the Aborigines drew representations of familiar objects. Animals, particularly wallabies, fish and eels, were drawn in outline with charcoal or painted with white clay or red ochre. Negative images or stencils of hands, boomerangs, hatchets and spears were produced by blowing pigment from the mouth. Stencilled hands of women and children suggest that this activity was not confined to initiated men.

One unique painting surviving in a rock shelter near George's River depicts a large cloven-hoofed animal, distinctly male. The sight of a creature the size of a

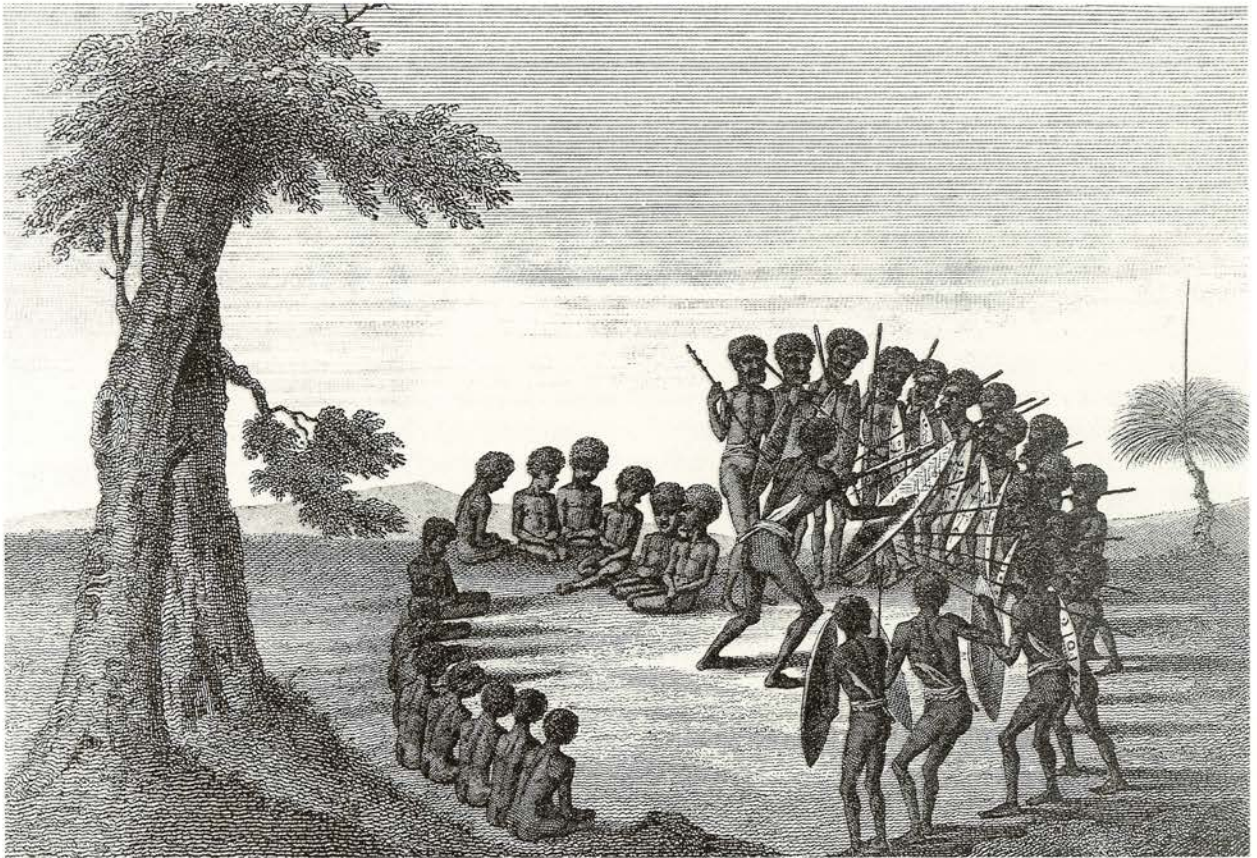
Engravings of wallabies from West Head.

J. KOHEN



Painting of a speared wallaby, George's River. This was first described by R.H. Mathews, a surveyor, in 1892.

J. KOHEN



Initiation ceremony held at Farm Cove in 1795, probably painted by Thomas Watling, and published in Collins. At this particular ceremony fifteen youths were initiated. The ceremony itself was known as the yoolong erabadiang. Initiation ceremonies of this kind continued in the Sydney area until at least the 1860s.

J. KOHEN

bull undoubtedly created a lasting impression on the Dharug, who captured its image on the wall of the Bull shelter, presumably early in the 1790s.

Although some band territories did not extend into areas of sandstone, each main linguistic group had access to sandstone outcrops suitable for painting. The soft Hawkesbury sandstone provided an ideal medium for another form of expression, rock engraving. There are thousands of engraving sites within one hundred kilometres of Port Jackson, depicting animals of all kinds, weapons, people, tracks and Dreaming characters. Most are life-sized, but they range from small animal tracks to gigantic figures more than ten metres in length, possibly of the mythical culture hero, Daramulan. There are also comparably large outlines of kangaroos and whales.

The method of engraving the sandstone was to pound a series of small pits which were then joined by rubbing to form a continuous groove up to two centimetres deep. Some engravings show evidence of regrooving. The largest galleries must have taken many hundreds of hours to produce. The purpose of these sites is not known, but at least some of the larger groups with sacred figures were used during male initiation ceremonies, and these sites were under the control of the *koradji*, men of authority and power. In other parts of New South Wales spirit figures similar to those represented by engravings at Sydney were cut out of bark or made from mounds of wood and earth. They were used on cleared flat areas of land which were often in the form of circles joined by paths. Many of the large sites contain engravings of human footprints or *mundoes* (from the Dharug word for 'foot'), which probably served to direct the youths who were being initiated around the engravings.

The only detailed description of an initiation ceremony around Sydney was not associated with an engraving site. Officiated over by ritual leaders from Cammer-ray, it took place in a specially cleared area at Farm Cove in 1795. Fifteen youths were initiated at a ceremony that culminated in the evulsion of a front tooth from each initiate. Because Dharug, Kuring-gai and Dharawal people were in attendance, it seems that several groups came together for such important occasions. However, since this ceremony was observed after the smallpox epidemic, the association of the groups may have resulted from drastic population decline.

Engraving sites in the Blue Mountains and near the Hawkesbury River were used for initiation ceremonies by the Dharug, Darkinjung and Gundungurra. Such sites are usually located on ridgetops well removed from popular camping places, because the engravings were secret. Both engraving sites and clearings were used within a single tribal area, but around Sydney most of the initiation sites without sandstone engravings have been destroyed or are no longer identifiable because of farming or development.

Most engravings are unlikely to have been initiation sites. They represent other aspects of Aboriginal culture. Life-sized human figures and family groups seem to reflect the different kinds of activities carried out by the group. The engravings continued to be produced after contact with Europeans: some depict women wearing European dresses, others sailing ships. We do not know when the first engravings were carved. Governor Phillip observed:

Fish were often represented, and in one place the form of a large lizard was sketched out with tolerable accuracy. On the top of one of the hills, the figure of a man in the attitude usually assumed by them when they begin to dance was executed in a still superior style.

Some of the animals represented may have been personal or clan totems; others, associated with spears, clubs and boomerangs, may have denoted sites where increase ceremonies were held to ensure the continuing abundance of a particular animal important as a source of food.

Although engravings exhibit some consistent traits (for example, women's breasts are always shown as projections from the side of the chest), the subjects are not always depicted in the same way, nor are the relative proportions of the subject the same throughout the Sydney area. Whales, sharks and fish are almost always found near the coast or estuaries, while kangaroos and emus are more numerous away from the coast. There is a much higher proportion of animal tracks in the Blue Mountains than along the coast. Human figures occur in both naturalistic and stylised forms, while kangaroos are shown with different numbers of legs, eyes and ears. Such variability may well reflect 'tribal', cultural or economic divisions.

There also appears to be a link between the Dharug/Dharawal boundary at Botany Bay and the way kangaroos were usually drawn. To the north of Botany Bay (where the Dharug and Kuring-gai people lived), kangaroos are almost always depicted in profile with two legs, one eye and one ear. To the south of Botany Bay (Dharawal), kangaroos have four legs, two eyes and two ears. Drawings of eels in rock shelters to the north of Botany Bay usually show the head pointed up, while south of it the head points down.

Some engravings show animals in action. One has a line of wallabies leaping one after the other across a sandstone pavement, while another depicts a gigantic life-sized whale emerging from the waters of a quiet creek onto a vertical sandstone wall. Such portrayals reflect the intimate association between the Aborigines and their environment.



Few religious beliefs of the Dharug and Dharawal people have been recorded, but strong oral traditions are characteristic of Aboriginal culture, and to this day descendants of the Dharug 'tribe' retain some of their ancestors' spiritual knowledge. One belief relates to the *duwan*, a bird that brings bad news and is an evil omen. The vivid description of this bird given by several Dharug people sounds too terrible to be real: a black bird of medium size with big feet and blood-red eyes, which screams with a piercing cry. The *duwan* was almost certainly the white-winged chough, *Corcorax melanorhamphus*, once common along the New South Wales south coast.

The Dharawal and Gundungurra also feared a creature who lived in the water. As recounted by R.H. Mathews, an ethnographer who recorded a great deal of cultural and linguistic evidence in the late nineteenth century,

Gu-ru-ngaty is the name of an aquatic monster among the Thurrawal and Gundungurra tribes. He resides in deep waterholes, and would drown and eat strange blacks, but would not harm his own people. He usually climbed a tree near the water, from which he kept a look out. If he saw a stranger approaching, he slid down and dived into the water, without making a splash, or leaving any ripples on the surface. As soon as the individual began to drink, he was caught by Gurungaty.

One of these Gurungaty is reported to have lived in a lagoon near Sackville on the Hawkesbury River, so the Dharug must have shared this story with the surrounding tribes. Mathews noted also 'another fabled monster of the Thurrawal', named Mumuga,

possessing great strength and residing in caves in mountainous country. He has very short arms and legs, with hair all over his body but none on his head. He cannot run very fast, but when he is pursuing a blackfellow he evacuates all the time as he runs, and the abominable smell of the ordure overcomes the individual, so that he is easily captured. If the person who is attacked has a fire stick in his hand, the stink of Mumuga has no effect on him.

Many Aborigines around Sydney still speak of this frightful hairy fellow who terrorised their forebears two hundred years ago.



The three thousand or so Aboriginal people who lived around Port Jackson had an intimate knowledge of their environment and a range of skills that ensured their survival. On the coast they possessed a highly specialised technology for fishing and gathering. Inland they relied on hunting, trapping and knowing how to remove toxic components from plant foods. Although they devoted much time to food gathering and associated technical processes, their social system allowed frequent contact between neighbouring bands and larger groupings on ceremonial occasions, providing opportunities to exchange gifts and settle disputes. There was time to draw and paint on rock shelter walls and to engrave thousands of figures on flat sandstone outcrops. There was time to decorate themselves with clay and ochre for corroborees, and to tell the children stories of the Dreaming.

But 1788 was the beginning of the end of the traditional way of life for the Dharug, Dharawal and Kuring-gai. Within fifty years, fewer than three hundred people would remain. Some bands had ceased to exist as social entities even before

the Europeans, preceded by smallpox and other diseases, had made direct contact with them. Inland, the yam beds along the banks of the Hawkesbury River were soon destroyed by conversion to farms.

For the Sydney Aborigines, the events of 1788 marked the end of a time during which a rich material and spiritual culture had developed. The European society established on the shores of Port Jackson not only had a direct impact on Aboriginal life but also depleted many of the natural resources on which it depended. The first Europeans failed to recognise the relationship between the Aborigines and the land, and to accept that Aboriginal people had prior claim to it. From the first days of the settlement, they established a pattern of aggression, displacement and neglect.



Bull Cave, as it is known today, is southwest of Sydney. The 'bull' was probably one of the animals which escaped from the early settlement at Sydney Cove and which later gave the name 'Cow Pasture' to this area. The drawing was almost certainly made in the 1790s and is the only one from the Sydney region. The upper part has been rubbed away by more recent animals. The kangaroos and human figures were probably drawn by Aboriginal people, but the site has also been written and drawn on by more recent visitors. Archaeological excavations in the cave floor suggest that the site has been intermittently used for at least 2000 years.

J. CLEGG



This painting by Turkey Tolson Tjupurrula of the Pintupi. people illustrates the story of a poisonous brown snake which settled in a rockpool among sand dunes at Tilpakan, near Sandy Blight Junction in Western Australia.

ABORIGINAL ARTISTS AGENCY LIMITED

III
THE INVASION



Governor Arthur Phillip, 1786, by Francis Wheatley.
Governor Phillip on the eve of his departure. He is shown holding
a plan of Fort Phillip, which he was to build as
a defence of the infant colony.

MITCHELL LIBRARY