The salt-encrusted surface of Lake Eyre, South Australia, at sunset.
G.E. SCHMIDA/ANT PICTURE LIBRARY

CHAPTER 13

GOODS FROM ANOTHER COUNTRY: EXCHANGE NETWORKS AND THE PEOPLE OF THE LAKE EYRE BASIN

ISABEL MCBRYDE

THE EASTERN PART of central Australia is a low, flat land with bare, stony tablelands slightly elevated above wide gibber plains and the great dune fields of the surrounding deserts. At the centre of this land lies Lake Eyre, two vast empty salt pans fringed by deserts: the Tirari Desert to the northeast, the Gibson to the west, the Simpson to the north and the Strzelecki to the southeast. Lake Eyre lies fifteen metres below sea level, draining the surrounding country with a catchment of 1 300 000 square kilometres, one-sixth of the continent. Rivers rising in the northern and western highlands of Queensland and watered by tropical rains flow to it through braided channels.

Rarely, however, do these watercourses, including the Diamantina River and Cooper Creek, bring down enough water from their distant catchments to fill both basins of the lake. This has happened twice in the last century—during the flood years of 1950 and 1974—but geographers estimate that such huge floods would occur on average perhaps once in five hundred years. In 1974 the lake flooded to a depth of six metres, a depth exceeded only three times in the last 3000 years. But minor floods fill parts of the northern basin much more often. The major floods are remembered in Aboriginal legend and mythology, and people now living in the region have traditional stories about the creation of Lake Eyre in the Dreaming, one of which, from the Arabana people, is recounted in this chapter. Other stories refer to times before the lake was formed, an example being the Wonkangurru myth of the grinding-stone men.

To the casual visitor the desert landscape near Lake Eyre is beautiful, but also harsh, empty and daunting. Yet it was the permanent territory of several thousand Aborigines, whose group territories were usually referred to as their 'country' by the people living in them. To them the desert was neither empty nor daunting. They knew all its features, not only the areas for good hunting or where water could be found or the places where seeds and fruits could be gathered, but also the places where the events of the Dreaming took place, where the ancestral beings camped or hunted. Every hill, waterhole, spring and rocky outcrop has its name and associated mythology.

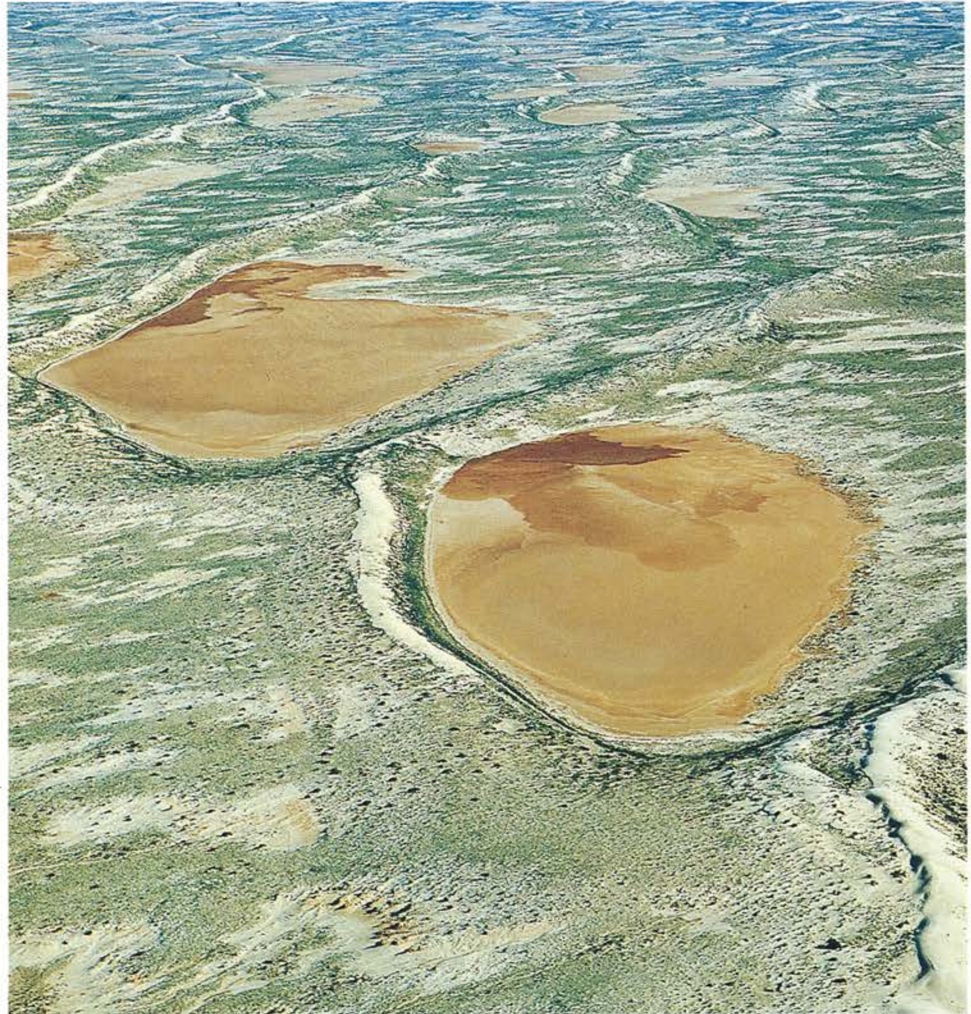
Eastern central Australia showing the major features of the Lake Eyre–Cooper basin and the locations that are of importance when considering the movements of goods and of people to acquire raw materials through this desert region.
J. GOODRUM

Over the generations, these people of the desert have developed strategies for living effectively in their harsh environment. This chapter is about one of these strategies, the complex system of exchange and barter that enabled them to distribute and share resources, skills and knowledge essential to desert living.

THE LANDSCAPE

The vegetation of the Lake Eyre basin consists of shrubs and hummock grasslands. The dune fields of the Tirari, Strzelecki and Simpson deserts support woodland and shrubs on the sandhills and low chenopod shrubs, mainly saltbush and bluebush, in the corridors between the dunes. This harsh environment has a climate of continental extremes, with maximum shade temperatures above 50° Celsius in summer, cooler temperatures in winter, and great daily temperature variation in both seasons. Rainfall is both meagre—about 125 millimetres a year—and uncertain. Surface water evaporates quickly—at between 1800 and 2400 millimetres a year—and is permanent only in the waterholes scattered along a few major creeks—havens for people, animals and birds. For short periods after rain, when claypans and drainage hollows between the dunes in the sand deserts hold water, people can camp in these areas. Water is also available in springs fed by pressure from the underground artesian basin. These are called 'mound springs' because the minerals in solution in the water, deposited around the mouth of the spring, eventually form a small hill. The heavily mineralised water has a strong taste, but most springs provide safe drinking water for animals and humans. As permanent water sources, the mound springs became important features of the

Opposite page.
The shoreline of Lake Eyre, a great pan fifteen metres below sea level with a drainage basin that comprises one-sixth of the continent.
AUSTRALIAN INFORMATION SERVICE



Claypans and sand ridges stretching away to the north from Lake Eyre into the Simpson Desert, Wonkangurru country.
AUSTRALIAN INFORMATION SERVICE

Sandridge Desert north of Lake Eyre on the southern fringes of the Simpson Desert.
AUSTRALIAN INFORMATION SERVICE

Blanche Cup Mound Springs south of Lake Eyre. These springs are fed from the subsurface artesian basin and so are sources of permanent if heavily mineralised water.
I. MCBRYDE

Aboriginal landscape. They are celebrated in mythology as significant places along the Dreaming tracks of the ancestral beings. The Two Snakes story or the Dead Woman's story, for example, involve real geographical references that criss-cross the desert in patterns of both mythological and practical significance.

The Lake Eyre basin not only contained limited and precarious supplies of water, but was also deficient in many of the materials needed by Aborigines for tools, clothing and other purposes. In some years people were forced to stay close to the few permanent waterholes or to the mound springs. In worse times they sometimes needed access to food and water outside their immediate territory, and had to rely on the support of kinspeople in adjacent areas.

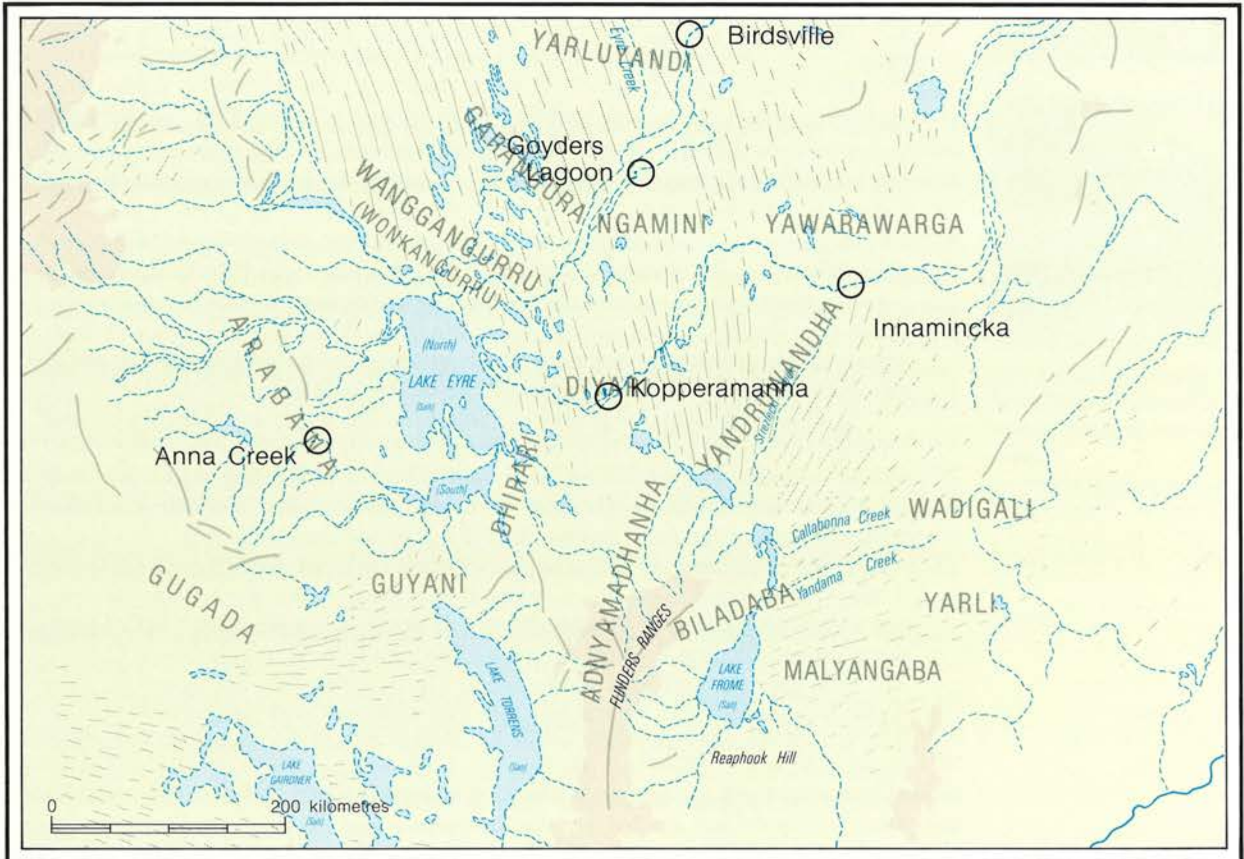
The people who lived around the lake belonged to a number of distinct social groups that shared customs, beliefs, ceremonies and a common material culture. Their languages had much in common, and all differed from those spoken by the Aranda people of the deserts to the west and by the people living to the east and southeast. They came together for ritual events such as the *wilyaru* initiation ceremony or the *mindari* ritual that celebrated the emu myth. Their cultural networks stretched from the Lake Eyre–Cooper basin in the north to Port Augusta in the south. George Aiston, a mounted constable and storekeeper who lived at Mungeranie and at Mulka for more than thirty years early this century, was

impressed by the community of relationships over such a vast area. He observed that these desert Aborigines

> were all linked up to one long family from Fowler's Bay to the Darling. I knew these tribes intimately and the Nagara were cousins of the Kokatha, the Kokatha were cousins to the Uruburra, the Uruburra were linked up to the Wonkonguru, [and the] Wonkonguru were cousins to the Yaurorka. They all assembled at Anna Creek for the big corroborees. When I tried to give them, any of them, a fixed habitat, I bumped up against the memory of Yaurorka I had known over in the west country and of Kokatha and Nagara blacks I had met over there. I met the Port Lincoln tribes everywhere from Port Lincoln to Beltana . . .

Compared with other Australian societies, these groups had few members and their territories were vast. The Arabana speakers occupied the west side of Lake Eyre from Oodnadatta in the north and Cooper Pedy in the west to Coward Springs in the south. South of their territory lived the Gugada (or Kokatha) people and to the east the Guyani (or Kuyani) occupied the country from Stuart Creek to the northern parts of the Flinders Ranges. Along the Flinders Ranges south of the Guyani lands lay the country of the Adnyamdhanka people; further east lived the Biladaba, whose territory bounded on the north the Yandruwandha country extending to Innamincka on Cooper Creek. West from Innamincka the Cooper ran through the country of the Diyari (Dieri), which stretched from lakes Howitt and Peri Gundi in the north to the Clayton River and Frome Creek in the south. Mount Freeling marked its southeastern corner. The Diyari included four distinct

The language areas of eastern–central Australia. The areas that the speakers of the major languages for the region regarded as their country are indicated. No firm outline boundaries are given as these would be subject to minor shifts from time to time, while for some languages that are no longer spoken the evidence on spatial distribution of its speakers is too fragmentary to map in exact detail.
J. GOODRUM



Aboriginal camp of low domed huts made of leaves and sand placed over a wooden frame to effect good insulation against the extremes of the desert climate.
G. AISTON

local groups. Between their country and Lake Eyre, from Kalamurra Lake to Maree, lay the territory of the Dhirari; north of Lake Eyre the southern part of the Simpson Desert was occupied by the Wonkangurru. Adjacent to the east lay the country of the Ngamini on the Diamantina River, and to the north of Innamincka lived the Gawarawarga. The Garanguru and Yarlijandi had country to the north of Goyder's Lagoon and Birdsville; sadly, we now know very little about the lives of these two groups.

For much of the year members of these distinct groups lived in small bands, using the food and other resources of their particular territories. But such resources were limited. The Lake Eyre landscape, for example, provided no hard rock for the manufacture of heavy-duty stone tools such as hatchet heads, and few softwoods for shields, and the spinifex (or *Triodia*) grasses that produce the finest resins for attaching stone tools to wooden handles did not grow in all parts of the region. Yet for some resources it was famous. Along the Mulligan River on the northern fringes of the Simpson Desert grew the most abundant and finest groves of the *pituri* bush (*Duboisia hopwoodii*) whose leaves, carefully dried and prepared, made a powerful narcotic. This was the most prized item for barter among Aboriginal groups spread over thousands of square kilometres.

AN ARABANA ACCOUNT OF THE FORMATION OF LAKE EYRE

This story was well known. For another earlier recorded version see D. Otto Siebert, *Sagen und Sitten der Dieri und Nachbarstamme in Zentral-Australien, Globus* 3, 1910, 44–9. This version is from A.P. Elkin, *The Australian Aborigines*, Sydney 1974 (1938), 244–6.

An old woman who was looking for food at Maluna near Lake Eyre saw a big kangaroo (*kungara*) which she desired to kill, but a boy Wilkuda, sprang out of her inside ... and chased the kangaroo in a westerly direction across what is now Lake Eyre. He camped near the site of Peake station homestead. Next morning he managed to kill the kangaroo and put it on the fire at Ngurupana; this is the place of the tail, for *ygurupa* means tail; it is near Keckwick's Pile. Wilkuda then went to sleep, but when he woke up, instead of finding a cooked kangaroo, he discovered that the kangaroo had got off the fire and run away. He chased it into a mob of kangaroos near Kununa, up Arckaringa Creek, but managed to cut it out of the mob, for he had to catch this particular kangaroo.

Continuing the chase, he grew very weary. At this stage, an old man who was hunting with a dog came along, and seeing the big kangaroo, and thinking it was just an ordinary kangaroo, caught it with the help of his dog, and killed and skinned it. Wilkuda at length came up to the old man and told him it was his kangaroo, adding 'you can eat the flesh, but give me the skin'.

Wilkuda then went off with the skin, making back east. Arriving at a spot near Guduna (Goodana Creek), he contemplated making a lake there with the skin, but a little bird, the *yuriilya*, told him not to do so, as people had to walk about there. So he rolled up the skin and walked down the Nulkuna (Nilkinna Creek). The bird again stopped him from making a lake, telling him not to put the skin down Anna Creek way. Passing to a spot east of Anna Creek he threw down the skin, which became Lake Eyre, while he himself turned into stone; his knife and bag in which he carried the skin can also be seen there in stone, and, strangely enough, the kangaroo is likewise there in stone.

Networks of contact between individuals and groups allowed prized goods to be distributed across the region. When groups came together for ceremonies, including the great corroborees such as the *mindari* which celebrated the emu myth, they also used the occasion for exchanges of goods. Gason, a police officer who was stationed in Diyari country in the 1870s, said of the Diyari, with considerable exaggeration, that

> Their whole life is spent in bartering; they rarely retain any article for long. The articles received by them in exchange one day are bartered away the next, whether at a profit or loss. Should any one of them, more shrewd than another, profit on one occasion by this traffic, he is sure immediately after to sacrifice his advantage, and the majority of their quarrels are caused by bartering or refusing to barter.

Gason's comments reveal both the importance of the exchanges he observed and his failure to understand them fully. For while many exchanges had ritual purposes that made little sense in terms of material profit, the exchange networks also distributed many useful artefacts and materials into areas where they were otherwise unavailable.

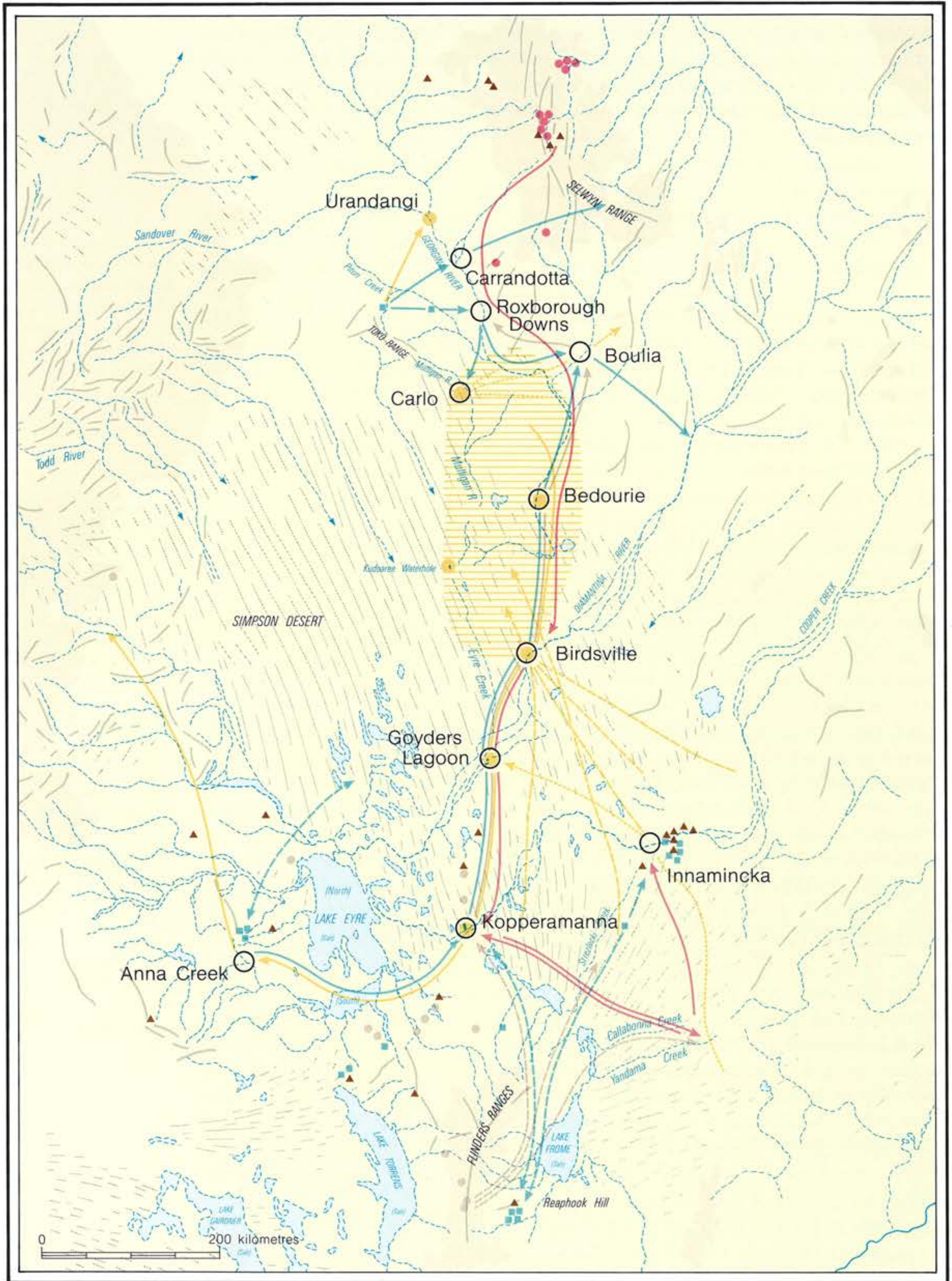
In winter, when the weather was cooler and waterholes and claypans were more likely to have been replenished by rain, the Diyari travelled on long and dangerous journeys to intergroup meetings and ceremonies and to acquire scarce goods. The journeys brought goods from distant areas into the Diyari camps near Cooper Creek. But not everyone in a Diyari group made these long journeys. Some were too young to travel, others too oid, and people unacquainted with the songs and ceremonies needed for renewing contacts and making exchanges could not leave their own territory until they had been properly instructed. Goods also came along exchange networks stretching southwards from the Gulf of Carpentaria to Port Augusta and westwards from the Darling River to the Finke.

Such people wintered on river flats close to water. Solid beehive-shaped huts built on frames of bent branches gave protection against heat and cold and rain. Called *mulyeroo poonga*, they were thatched with reeds or leafy boughs and sealed with an insulating layer of sand. They served as night shelters, sometimes even in summer, when the desert nights were cool. Close by, less substantial structures were built for day use in winter and for sleeping in during hotter summer nights. Called *wilpie*, they were ventilated by being left open at the base to a height of half a metre. A camp also contained platforms (*dunpara*) built about 1.6 metres high to keep supplies of food and water away from dogs and other scavengers. It was in such camps that the Diyari waited for the return of the travellers at the end of winter.

In one expedition, Diyari men and groups of Tirari, Wonkangurru and Arabana men travelled on long journeys to ochre mines at Pukardu Hill (Bookatoo/ Bookartoo). The expedition, occupying two months, took them almost five hundred kilometres to the south into the territory of the Guyani people near Parachilna in the Flinders Ranges. There were local outcrops of ochre at Ooroowillanie, Mungeranie Gap and Wangianna, but the people of the Lake Eyre region valued the red ochres of Bookatoo/Bookartoo far above them, and shared creation myths about Pukardu Hill, some of which are described in this chapter. Red ochre—*yarnparnu*—was used especially to decorate bodies and equipment for the great ceremonies of the desert peoples, and the return of the travellers was an exciting time in the Diyari camps along Cooper Creek. Men who had remained in camp prepared net bags for use in a ceremony welcoming the return of the 'Bookartoo' men, while the women, who had spent several weeks grinding seeds into flour on flat stone grinding-dishes outside their huts, baked special cakes for the ceremonial welcome.

View from the entrance to the Bookartoo ochre mines in the Flinders Ranges. These mines were visited regularly by expeditions from the Diyari and other Lake Eyre groups to acquire the precious pigment.
ABORIGINAL HERITAGE UNIT, SOUTH AUSTRALIAN DEPARTMENT OF ENVIRONMENT AND PLANNING

This net used in hunting, is from Cooper Creek and is made of fibre cord from the rushes.
SOUTH AUSTRALIAN MUSEUM


Urandangi
Sandover River
SELWYN RANGE
GEORGINA RIVER
Carrandotta
Roxborough
Downs
TOKO RANGE
Boulia
Carlo
Todd River
Mulligan R.
Bedourie
Kudsaree Waterhole
DIAMANTINA RIVER
COOPER CREEK
SIMPSON DESERT
Birdsville
Eyre Creek
Goyders
Lagoon
Innamincka
(North)
LAKE EYRE
Kopperamanna
Anna Creek
(South)
Callabonna Creek
Yandama Creek
FLINDERS RANGES
LAKE TORRENS
LAKE FROME
Reaphook Hill
LAKE GAIRDNER
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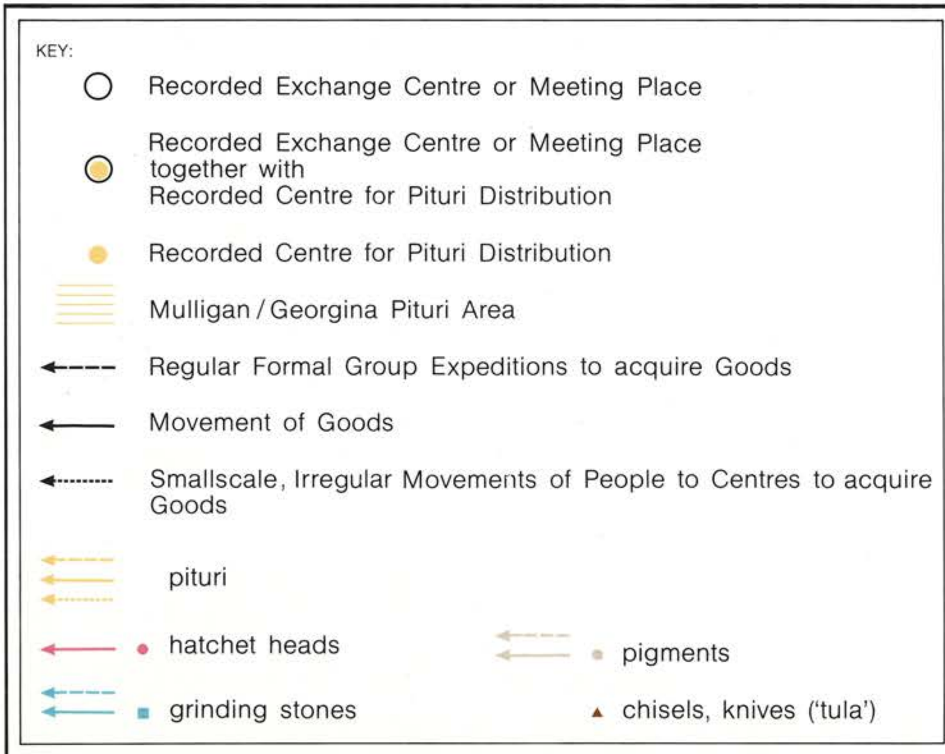
200 kilometres



Map opposite.
Location of sources for raw materials. These are primarily stone for grinding slabs, flaked stone tools and hatchet heads, but also significant are deposits of red ochre in the Mulligan–Georgina area, which is the main source for pituri, *the narcotic produced from the leaves of* Duboisia hopwoodii. *The directions along which the goods are exchanged in transfer from person to person are shown, as well as centres for intertribal meetings where much of this exchange took place. Also mapped are routes along which the organised groups travelled to acquire important raw materials at their source.*
J. GOODRUM

Left.
Key to map on opposite page.

The expedition itself involved careful preparation. Message sticks were sent ahead to advise the owners of the mines that ochre was required. Goods were carried to exchange for the red ochre: black pigment (manganese), boomerangs, spears, firestick wood, down feathers, nets and sometimes grass seed in bags. And the journey had its own rituals. 'They came on foot, from far away, from beyond, they came from the sandhill country ... carrying big fighting boomerangs', remembers Mick McLean, a senior Wonkangurru man. These 'Bookartoo men' always followed the same route, and carried special seed cakes called *malhiri* for ceremonial meetings with other Aborigines encountered along the way. Their bodies appropriately painted, they performed specific songs and dances as they travelled. 'They sing the Pukardu song ... for setting out and returning. They sing the song of Pukardu Hill, they sing it for a long time.' After arriving at Pukardu, McLean explains, they made the ochre into a cake, cut it up, and 'baked 'm like a damper, cut 'm in the middle and then cut 'm again in the middle.' These carefully prepared round cakes, which could be cut still smaller if required, were then carried on the long journey home, each man bearing a heavy load of up to thirty kilograms. Nor were the ochre cakes their only burden, for while in the Flinders Ranges, McLean recalls, his people also acquired stone for seed-grinding dishes from quarries such as those on Reaping Hook Hill and carried them home, balancing them on their heads.

Stone quarry at Tooth's Nob (Reaping Hook Hill) in the Flinders Ranges, where flat tabular stone was quarried for the grinding slabs on which seeds were ground or other plant foods prepared.
ABORIGINAL HERITAGE UNIT, SOUTH AUSTRALIAN DEPARTMENT OF ENVIRONMENT AND PLANNING

Expeditions to Bookatoo/Bookartoo by the Diyari and other groups were important episodes in a recurring pattern of contacts and exchanges linking people and materials across great distances. The red ochre of the Parachilna area of the Flinders Ranges attracted others besides the Lake Eyre Aborigines. A long journey brought the Wonkumara people from the Tibooburra area along the Yandama and Callabonna Creeks to barter for ochre at Pukardu Hill, exchanging boomerangs and spears. The Wonkumara also travelled northwest to barter directly with

Kallakoopah Creek north of Lake Eyre, along which the ancestral grinding-slab men travelled on their journeys to and from Pirlakaya.
AUSTRALIAN INFORMATION SERVICE

Grinding-slab quarry at Charlie's Swamp south of Finniss Springs. Blocks of orthoquartzite extracted from this quarry are carried many kilometres to be used for grinding seeds and ochres.
I. MCBRYDE

Carrying pad from Cooper Creek. This ring was placed on the head to cushion it while carrying heavy loads, such as the grinding slab stone or ochre.
SOUTH AUSTRALIAN MUSEUM

owners of the Innamincka stone quarries near Cooper Creek for stone for grinding-dishes, and to seek *pituri*, the highly prized narcotic produced by Aborigines in the Mulligan and Georgina River country. All groups made such journeys, and an inventory of materials in their camps would have provided evidence of a complex society in which local groups were caught up in intricate networks involving exchanges of goods between many people and regions over thousands of square kilometres.

In the Diyari camps along the Cooper the grinding-stones and the ochre cakes which the 'Bookartoo men' had carried from the celebrated quarries in the Flinders Ranges were not just for everyday use. They were retained for barter during other expeditions. The sheer utility of the items being acquired was not an overriding consideration. Among the Lake Eyre Aborigines, only the Diyari seem to have had no sources in their own territory from which to quarry the flat, tabular sandstone or quartzite used for grinding dishes. Yet there were obvious sources fairly close by, in the quarries at Innamincka, Charlie Swamp, Anna Creek and in the Strzelecki dune field. All were closer to Diyari country than the sources that the 'Bookartoo men' used in the Flinders Ranges, and all were owned by friendly groups. So it is clear that the major expeditions were not carried out simply for practical economic reasons. The contacts involved were important for their own sake, and materials bartered increased in social value as they passed through successive exchanges.

An examination of the kinds of goods and materials accumulated by the Diyari illustrates the range and diversity of these great exchange networks. Among the materials stored carefully in net bags, for example, were oval pieces of shell transported from distant coastal areas through a long chain of exchange. Some were made from baler shells (*Melo amphora* or *Melo diadema*), gathered on the shores of

Arafura Sea

Coral Sea

SIMPSON DESERT

LAKE EYRE

FLINDERS RA

Tasman Sea

Southern Ocean

0 500 kilometres

KEY:

Documented movement of Baler Shell

Documented movement of Pearl Shell

Natural distribution of Baler Shell (*Melo sp.*)

Natural distribution of Pearl Shell (*Pinctada sp.*)

The distribution of shell items across east central Australia is extensive. The shells used include baler and pearl species and the pendants and other items manufactured from them acquire great significance as sacred and status objects in central Australia.

J. GOODRUM

*A woman grinding seeds on a flat stone slab using a small flat stone. Note the groove on the grinding-slab. The dark seeds have been carried in the large wooden dish (*pirrha*) and the flour is collected in the smaller one.*

G. AISTON, MUSEUM OF VICTORIA

Preparing nets for use in hunting, or to exchange for goods at the large intertribal meetings. Shell of the freshwater mussel is used to strip the rushes by the two men on the right, to prepare a fibre cord that is made into nets by the men to the left.
G. AISTON, MUSEUM OF VICTORIA

Decorated shield from Cooper Creek made in softwood not readily available in the Lake Eyre country.
SOUTH AUSTRALIAN MUSEUM

Hafted hatchet head from Cooper Creek. The hard volcanic rock used must have been acquired through exchange from the owners of quarries in the Mt Isa–Cloncurry area hundreds of kilometres to the north.
SOUTH AUSTRALIAN MUSEUM

the Gulf of Carpentaria; others were fashioned from pearl shell (*Pinctada maxima*), collected on the northwest coast half a continent from Lake Eyre. In the coastal regions where they originated, such shells served mundane purposes as water carriers, scrapers, chisel bits and everyday ornamentation. But by the time they had been passed from hand to hand along the routes shown on page 263, repeated exchanges had greatly increased their value. They were there associated with ritual and ceremony. Diyari men wore them as pendants to signify full adult male status. 'My eldest son is nearly ready to go through his first test to make him a young man', says Andreas Dibana, a Diyari man, in the material on Diyari life compiled by Ronald Berndt, a pioneer anthropologist. To mark the occasion, Dibana explained,

> His cousin's wife gives to her husband a human hair belt which she made when he, the novice, was a small child. In a few days her husband will give it to my son—he will also receive, as I did when young and my son's age, a pearl-shell necklet which will give him new life.

Such objects had inestimable value for the Diyari. They had acquired ritual significance through contact ceremonies on epic journeys, and became important symbols of the generational transitions that gave continuity to Aboriginal societies.

Other objects acquired from distant sources through chains of exchanges were prized for their practical value, among them wood, fibre and resin materials. The fine, malleable black resin from the spinifex (*Triodia*) grasses—ideal for binding the stone working pieces of chisels (*tula*) to the wooden handles—apparently came to the Diyari from distant areas west or north of Cooper Creek. Spears, boomerangs and other wooden items were also acquired through exchange networks. Wooden shields made from the soft wood of the bean tree (*Erythrina vespertilis*) appear to have originated in southwestern Queensland, for such softwoods were rare in the Lake Eyre–Cooper basin. Other coveted items were made from woods abundant in the Lake Eyre basin. They were valued for the quality of their craftsmanship and either used among the Diyari themselves or exchanged by them at meetings or ceremonies. The Diyari also used woven bags, animal skins, feathers, fibre cords and human hair string as exchange goods, and some of these items eventually passed into distant areas.

Heavy-duty stone hatchet heads were among the commodities available to the desert people only by exchanging such local skills and materials. In Diyari men's dilly-bags glinted tools of dark green dolerite, a stone alien to the pale geological world of the desert chalcedonies, cherts, silcretes, quartzites and sandstones. This hard volcanic rock, needed for cutting tools such as hatchets, came from distant quarries in the southeast, the west, and far to the north in the dolerite belts of the volcanic landscape around Mount Isa and Cloncurry, where they were manufactured by the quarry owners. Tradition records that they were brought west from Mount Isa to exchange for *pituri* along the Mulligan River and near Bedourie. From there, passing from person to person along well-established chains of contact, the heavy dolerite tools reached the Diyari and their neighbours near Lake Eyre.

Unlike dolerite, the siliceous stone required for small cutting tools and for the working parts of chisels and adzes was available in abundance in the Lake Eyre basin, and there were many quarries in the major siliceous outcrops, some large, some small. Yet even for this readily available resource, certain locations were regarded as having special qualities or were the property of specific groups. Quarrying, manufacture and distribution—in themselves routine economic activities—were made to serve the social and ritual needs of small groups whose survival in a harsh environment often depended on good relations with their neighbours. As we saw in chapter 10, social interdependence was in the long run more important than economic independence.

Another substance brought back by Diyari travellers into the camps along Cooper Creek, carried in special neatly woven, lozenge-shaped bags, was *pituri*, the powerful narcotic prepared from the leaves of the *pituri* bush. *Pituri*, which contains more nicotine than does commercial tobacco, was chewed, producing a general sense of well-being, including hallucinatory effects. George Dutton considered it 'very strong stuff'—'like opium'. Used in ceremonies as well as on less formal occasions, the drug was probably the most precious of all items traded along the

The characteristic lozenge-shaped bags woven to carry the precious pituri *once it had been prepared for barter to the people who travelled hundreds of kilometres to acquire it.*
SOUTH AUSTRALIAN MUSEUM

The pituri *bush (*Duboisia hopwoodii*) whose leaves provided a powerful narcotic when carefully prepared. These trees were well tended by the owners of their country as a valuable resource. The leaves were harvested each autumn by the people of the Mulligan.*
R. PURDIE

Flinders Ranges, a region of deep ritual significance to Aboriginal people and famous for the quality of its ochre and its grindstones.
WELDON TRANNIES

exchange routes of central Australia. For the Diyari, obtaining it sometimes involved a 400-kilometre autumn journey north to the Mulligan–Georgina River district to meet the local Aborigines at well-known exchange places. They would then bargain for the drug with red ochre cakes and grinding slabs obtained earlier from the Flinders Ranges. Alternatively, *pituri* could be bartered, at a higher price, from neighbouring groups who had made the longer journey.

The *pituri* bush grew over a wide area of arid Australia, but was most prolific in the Mulligan–Georgina district on the eastern borders of the Simpson Desert, and it was the people of this area who had perfected the skills of extracting the drug from the *pituri* leaves. They distributed it via complicated exchange networks over at least half a million square kilometres of northern Queensland, the Lake Eyre basin and northwestern New South Wales, to a clientele that fiercely competed for it. They guarded jealously both the sources of supply and the secrets of production. The exact location of the *pituri* bushes was not revealed to outsiders.

They were cared for and by appropriate firing their owners encouraged the growth of suitable young shoots for processing. The methods of production were known only to the old men of each generation. George Aiston observed that

> the younger men were only allowed to accompany the party to the water nearest to the small clump of trees that were deemed to be the only true *pitcheri* [*pituri*]. Here the younger men and women stayed and prepared the bags to hold the prepared *pitcheri* and gathered food for the old men who did the harvesting. The old men went on to the tree, make a camp fire and built big fires. While these were burning down sufficiently, they picked branch tips of the *pitcheri* bush, each about twelve inches [30 centimetres] or more in length. These were placed in a hole formed by racking out the fires down to the hard sand, and, completely covered with hot sand, were left to cook for at least two hours. When the steamed *pitcheri* was considered to be sufficiently cooked, the sand was rubbed off and it was placed on a *pirra* (wooden dish) to cool and dry. When thoroughly dry, it was beaten with the edge of a boomerang to break it up; all the big twigs were picked out and the clean tips bagged.
>
> The great secret lay in the length of time that was needed for the steaming, and this was not taught to the men until their beards were grey. When they were a 'little bit Pinnaru', that is when the grey first showed in their hair and beard, they might be allowed to accompany the old men to the picking ground, and would be allowed to fill the bags with the prepared *pitcheri*, but the actual cooking was done out of their sight.

Diyari cosmology: Lake Eyre people shaped objects as descriptive signs and as symbols, known as toas. *Toas are unique to Diyari territory, some of which were collected in the early 1900s. This* toa *is a symbol of the universe. The lower bulb represents the earth and the upper part the heavens.*
SOUTH AUSTRALIAN MUSEUM

The effectiveness of these secret processes justified the reputation of the Mulligan–Georgina *pituri* as superior to other sources. The secret depended on the addition of the ash of the *wirra* bush (*Acacia salicina*) to the processed *pituri*. Chemical analysis has confirmed that the effect of this alkali ash was greatly to increase the power of the drug by freeing the pure nicotine and allowing it to pass readily through the mucous membrane.

This high-quality *pituri* was so sought-after that the centres at which it changed hands may fairly be called 'markets'. Aiston wrote of one such centre:

> Crowds would be waiting at Annandale on the Herbert for the collectors to come in, and getting as much as they could, would make off for Birdsville, Bedourie, Urandangie and down the Herbert; for other people would be waiting to take it down the Diamantina to Goyder's Lagoon, where others in turn would be waiting, gathered in from east and west, some from as far as the Darling, and in good seasons, from the Lower Finke. I have seen over 500 aborigines waiting at Goyder's Lagoon.

These markets, lying at the intersections of communication routes, were crucial in the ebb and flow of exchange transactions that transmitted knowledge, materials, and artefacts between local and regional communities otherwise isolated by vast distances. Of Kopparamarra, another of the great *pituri* markets, Aiston observed:

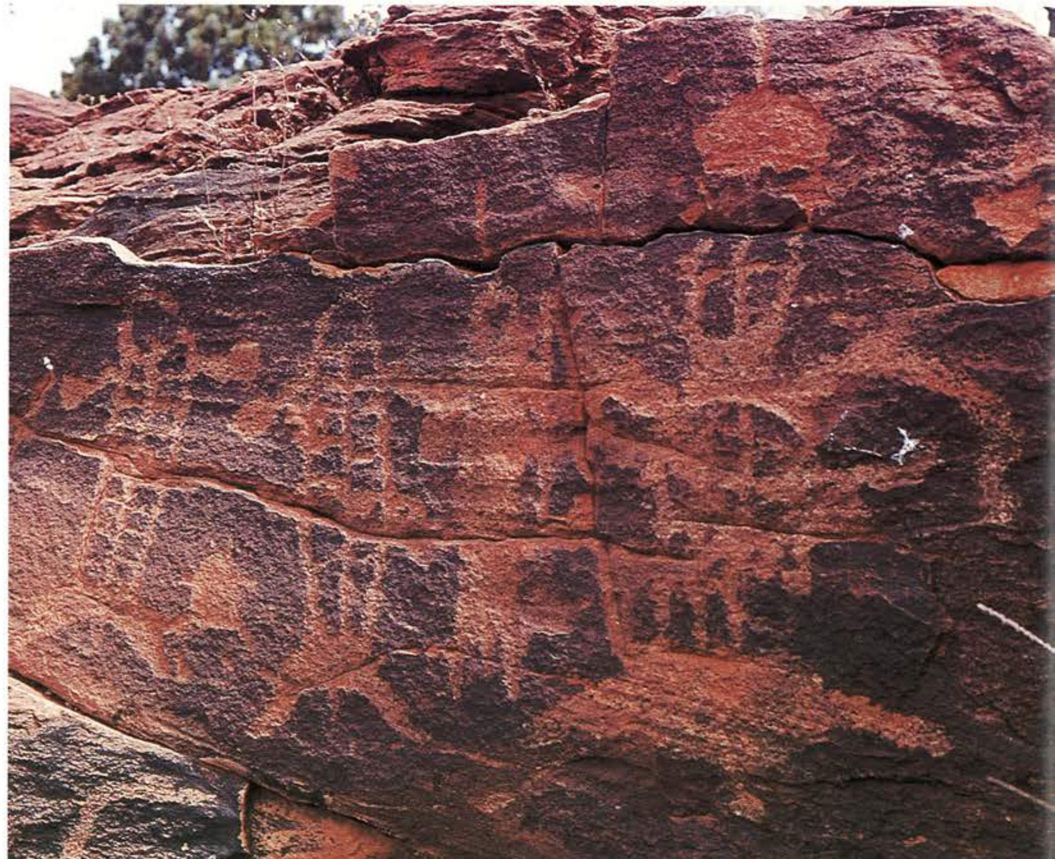
> Down to Kopparamarra came the traders loaded up to capacity with *pitcheri* and weapons which they had picked up on the way down, and a time of great activity ensued; trading was kept up until everyone was satisfied and left for home, but as parties were arriving all through the months of the cool weather, the market was open all the time.

The great ceremonial and exchange centres, such as Kopparamarra, Goyder's Lagoon, Birdsville, Bedourie and Boulia, had their smaller local equivalents where resins, handcrafts, wooden artefacts and stone tools were exchanged for everyday

use, and the great networks intermeshed with the local in a complex web of connection. All the routes necessarily followed the lines of waterholes and converged on springs or waterholes. Meetings often had to be confined to times of the year when water and food resources were most reliable. The desert itself thus shaped the patterns of relationships between the people who lived in its uncertain environment.

Routes and destinations within the web of connection, hallowed by tradition and environmental necessity, figured prominently in mythologies describing the travels of ancestral beings in the Dreaming. Predictable patterns of human movement and economic activity were vital for survival in so precarious an environment, so the rituals, ceremonies and myths that reinforced them were of great social importance. As the anthropologist A.P. Elkin has put it: 'social and inter-tribal links created through mythology make possible the most efficient exploitation of available natural resources'.

The social conventions of meeting and bartering were vital for similar reasons. People met for personal gift-giving and person-to-person barter, and they met in groups for the major bartering that concluded important meetings and ceremonies, bartering goods acquired in long and dangerous expeditions. All their meetings and economic activities were ordered by familiar ceremonies and rituals. Gifts were offered during the ceremonial settling of disputes, in fulfilment of obligations, in conventions of greeting and farewell, in respect of social status or ritual power. The social, economic and ceremonial aspects of life among the desert people were thus carefully ordered in ways that guaranteed them perhaps the best possible access to scarce resources and support in times of stress.



Mootwingee lies within a low ridge of sandstone northwest of Broken Hill. Best known for its remarkable engravings made by pecking the rock surface, it also includes other forms of engravings and some paintings. Recognisable motifs include human figures. The double-ended stencilled object has not yet been identified.
J.P. WHITE

ORIGIN OF THE RED OCHRE AT PARACHILNA

The red ochre at Parachilna was famous throughout eastern Central Australia, especially that from the mines near Pukardu Hill (Bookatoo/Bookartoo). A number of myths account for the formation of these deposits, and several versions are included here.

1 *Adno-artina, Marindi and another origin of the red ochre.*

The following versions were recorded by George Aiston early this century. One was told him by a Mr Waterhouse, the other by a senior Wonkangurru man known as Crooked-Foot Peter, then living at Cowarie. Aiston gives his Aboriginal name as Takaweejee.

George Aiston lived in the Lake Eyre region for thirty years, first as a mounted constable at Mungeranie and then as the storekeeper at Mulka. He knew the Diyari and other people of the region well and acquired a deep knowledge of their life and culture.

The following is taken from G. Horne and G. Aiston, *Savage life in Central Australia*, London 1924, 128–30.

> In the old days, before men were, there lived in this valley a jecko lizard. Adno-artina was his name. Every day this lizard would climb a big rock and would sing aloud so that all could hear: 'Come out and fight, come out and fight.' Now the big dog Marindi came past that way, and hearing the challenge, he bounded up the dry creek bed yelling all the way: 'I am come, I am come'. Adno-artina had a look at the dog. He saw beneath his sharp pricked ears the enormous fangs. He saw the huge bulk over which the white tip of his tail waved, and the more he looked the less he liked the prospect of the combat. 'I will fight you later', he said. 'Later you will make a feast for my pups', returned the dog, as he curled himself up at the foot of the rock. Now, like all jecko lizards, Adno-artina sees best when it is dark. So as the sun went down he tied a hair string round the root of his tail to make him fight better, for then his courage could not run into his tail. It was now dark, for when the sun goes down the darkness springs out. He crept to the ground and once more rang forth his challenge, 'Come out and fight'. Marindi the dog leapt up and tried to catch Adno-artina by the back of the neck and shake the life out of him. But the lizard ran in low beneath the terrible fighting teeth. He seized the dog by the throat and hung on. In vain Marindi shook him and scratched at him with his claws. The sharp teeth sank in and in, until at last the red blood spurted out. And so from that time on all jeckoes—now a puny race compared with their ancestor—have a constriction around the root of their tails.
>
> The blood of Marindi the dog dyed the rocks on the banks of the creek, and from this the red ochre is obtained to this day.
>
> The little creek became the Mecca, not only of the Kooiannie, but also of the Dieri, the Wonkonguru, the Ngameni and the Yaurorka tribes. There only could the real dog's-blood ochre be obtained, and none other should be used. Crooked-Foot Peter, the headman of Cowarie ... tells the following story:
>
> 'Trees two moora emu jump up. Dog him live in hole. Chase 'em emu. Emu run. Dog run. Pass 'im Killalpaninna. Pass 'im Dulkaninna. Pass 'im Apawandinna. All time emu run. Dog run. Pass 'im Farina. Pass 'im Beltana. Emu him run up big hills. Dog him catch 'em emu. Kill 'em. Blood him jump out. Ochre grow. Lot good ochre.'
>
> This, as near as I can remember, is the story in Crooked-Foot Peter's own words. And ever since, he tells us, the good ochre came from this district. From Queensland, the Cloncurry tribes sent their bean-wood shields in exchange.

> From New South Wales were traded the light shafts for spears. From Alice Springs worked *kirras* were sent. Then, loaded each with 50 pounds [22.6 kilograms] of red ochre, they must begin their toilsome way homewards. Over 300 miles [480 kilometres] they travel, keeping clear of hostile people, through whose territory they must pass . . .

2 *The emu story and red ochre*

The story given below was recorded by the anthropologist A.P. Elkin while on fieldwork near Lake Eyre in the 1930s. He noted the connection between the red ochre stories and the *mindari* ceremony that celebrated the emu myth. The *mindari* corroboree and its stories were known to Aborigines from southwest Queensland to Port Augusta.

A.P. Elkin, 'Cult totemism and mythology in north-eastern South Australia', *Oceania* 5/2, 1934–35, 187–9.

> I learnt bits of it [the emu myth] here and there. Thus, some Yauarawaka men near Birdsville said that the emus started from the Mulligan in south-west Queensland and travelled south, dancing. Near Apamana they were joined by two other emus, *itikaru* and *tjapara*, who accompanied them to Cuttapirie, where they were killed.
>
> Some Yantruwanta informants said that two emus, a male and female (in some versions there were four of the birds), called Turkurendja, were feeding around Cutrabelbo water-hole and Kunapururu, about twenty-five miles [40 kilometres] down the Cooper from Innamincka Station. A man and woman were travelling along not far off, the woman looking for grass seed to grind, and the man hunting and making for his next camp at Kudriemitchie water-hole. His dogs started the emus and chased them south-west and around the western side of the Flinders Range to Parachilna, where the emus went into the hill and were changed into a deposit of red ochre. A steep hill standing by itself near Parachilna is the female dog.
>
> I obtained another version from an old Dieri man whose patrilineal cult-totem is *pandjini*, an emu *mura-mura* who 'made' red ochre; this old man spoke of himself and his father and others of his country at Lake Peragundi as all 'red ochre mob'. His myth was that five dogs chased an emu from two *mindari* water-holes near Innamincka past Murnpeowie, across to Stuart's Creek and down to Port Augusta, where it went into the ground for a time, but after a while it came up again and travelled north to Parachilna, where it went into the ground altogether, and gave rise to the deposit of red ochre in that vicinity.
>
> The Arabana version is slightly different, for though emus are chased by dogs, yet the ochre is said to be associated with one of the latter, rather than with the former. But I may only have received a fragmentary account. It runs as follows:
>
> Two wild dogs chased some emus from Kaḷburugwa, a small salt lake near William Creek in Arabana country, to a cave at Beltana, where one of the dogs, a female, gave birth to pups. The blood associated with this event caused the local deposit of red ochre. The two dogs then sang. The male dog had a white mark down its forehead and around its neck. The dogs, changed to stone, can now be seen at this cave. It is said to be very dangerous to touch the female dog: in fact to do so would cause the world to come down. No women, not even if this be their cult-totem, can enter the cave, though one informant said that women with this cult-totem know the songs; such a woman plays a string game during the singing.

This brings us to the important point that the emu myth and ceremony are associated with red ochre, more especially the red ochre deposit at Parachilna. The ochre owes its colour to the blood of the emu (*woruwidji*), and as red ochre plays such an important part in native ceremonial life, we can understand why both the emu and red ochre should form the theme of so many myths. Further, the expedition to the red ochre deposit gives point to that part of the ceremony in which the red ochre men come on to the ground carrying the emu's 'heart', a stone, completely wrapped up in string. These men either are, or represent, those who have been on the expedition and are returning with the treasured red ochre, and are received in a *mindari* ceremony. For this is just what happened. The Yantruwanta men, for example, made the long four hundred mile [664-kilometre] journey to Parachilna, where they painted themselves with the ochre and moulded lumps for bringing home. On their return, a red ochre corroboree, the *mindari*, was held to commemorate the event. This may explain the sexual intercourse, which expresses the state of social excitement and pleasure experienced at the return of the expedition.

If then, we keep in mind the myths and ceremonies concerning the emu in this north-eastern corner of South Australia, we see that the one set of myths explains the red ochre deposit at Parachilna and the possibility of increasing emu, more especially at such *mura* sites as Cutrabelbo and Kudadjiri, and provides the sanction both for the *mindari* festival on the return of the red ochre expedition, and also for the emu increase ceremony.

3 *Emu Stories Still Recounted*

The stories of the emu and the creation of the Pukardu Hill ochre were passed from generation to generation. Mick McLean Irinjili and Murtee Johnnie could talk of it to the linguist Luise Hercus in camp near Lake Eyre in 1968. Both men remembered the old Wonkangurru man 'Crooked-Foot Peter' (Thalka-nguyu) who told the legend of the Parachilna ochre to George Aiston.

Luise Hercus, transcripts of recorded conversation, Lake Eyre fieldwork, 1968.

The ancestral emu walk about there and go down south then, the dogs been chase 'm then. He goes right down to Parachilna, further than that, to Point Pearce. Turn 'm back then and comes back this way and chas 'm all the way to Parachilna then, that *Pukardu pithi* [quarry], kill 'm there. Those same two dogs from Cowarie are in all the history, all the *Mindari* history.

They go down as far as the Nukunu crowd and the Point Pearce mob. People from the Peterborough side (Ngadjuri) come in it too.

THE TRAVELS OF THE ANCESTRAL GRINDING-SLAB MEN

This story, told to Luise Hercus in 1970 by Mick McLean Irinjili in Wonkangurru, is translated here by her. It is one of the many myths the Lake Eyre peoples have concerning the flat grinding dishes used to prepare grass-seed flour and to process other plant foods. Most involve Mount Termination (*gagalbune*), known as the 'home of the grinding dish (*wadla*)'. The Arabana/Wonkangurru terms used in the story for these artefacts are:

1 *paltiri*—flat grinding dishes, such as those quarried from the outcrops near Anna Creek
2 *wadla*—flat grinding dishes brought from Guyani country
3 *namba*—thick grinding stones used to prepare non-grass-seed plant foods

4 *mugugu* and *aganda*—circular pads made of creeper placed on the head to cushion the stone-grinding slab while carrying it

Translation by Luise Hercus of recording made in 1970 of Mick McLean Irinjili recounting Wonkangurru stories.

> It was here at Pirlakaya. There was a large crowd of men there, Wanganuru men, my relations. They set out from Pirlakaya. The salt lake is that side. Those ancestral grinding stones travelled from Pirlakaya, this mob, this large number of men carried them on their heads ... they travelled carrying the stones. They turned and they got going and then went along the creek, the Kallakoopah, 'the little creek'. They came this way ... but they came out over there at the Milyeewilpa water hole ... they went down to the water ... The men put down the grinding stones so they could have a bit of a rest there, they put them down flat on the ground ... those stones when they were put down flat they turned into the salt lake, Lake Milyeewilpa, previously there hadn't been a lake there at all. Milyeewilpa Lake—that really is the *wadla* grinding stones.
>
> They went off to the Sandhill, to a sandhill far away to the north, and they broke off pieces of the *wari-wari* creeper that grew there, at Lake Wari-Wari, so that they could make little carrying pads out of it ... they put the grinding stones on top of these.
>
> They went to *Bira-bira-bulana* ('the two little round ones') to tie together these carrying pads; there is a salt lake by the side of a sandhill ... They made these pieces of creeper into a round shape ... with a hole in the middle; that's *aganda*, 'carrying pad'.
>
> Now that great crowd of men set out ... from the bottom end of the lake, [near where] the Macumba comes in ... to another creek and in creek junction ...
>
> That grinding stone mob from *Pirlakaya* went along the creek, along the creek which had become one, they talked and walked along to the *Gadi-Garnira* ('three creatures') waterhole. Then they went down the other creek (the Diamantina channel) to Lake Eyre ... they camped right inside the lake ... they went travelling down south. They went and went walking on the dry land [because the lake was not yet there]. That's how they travelled inside the proper bed of the lake, ... drinking spring water, staying there, sleeping there. In the morning they got up and went along the creek [the Frome]. They travelled leaving the Maru-mudluru [Muloorina waterhole, 'Little Claw'] on one side.
>
> They went and stayed at *Mari* [Marree], they stayed there for a while and then they camped at Boorloo Creek, where there are now a lot of grinding stone quarries.
>
> They went to *Gadni-dilana* (Mount Norwest), another turned to *Gagalbuna* (Termination Hill), that crowd of men from *Pirlakaya*. They stopped there and they all slept there.
>
> Then they started off on their way back, and these two came along again and rose from the dead, while all these others were on their way back to *Mari*.
>
> They'd left them behind at *Pirlakaya*—they'd left them there dead, they were not going to walk [to Termination Hill]. They were dead ... it might have been a week that they lay there, dead, and then they gradually started to come back to life ...
>
> They ultimately became completely alive again, these two, and they walked off following the others, but they were already on their way back ...
>
> So they all came together and they went travelling back, the two travelled back too, having joined the others ...

They kept an eye on those two, they watched them constantly in case they died in the middle of the trip. But the two of them got there finally, they all got back to their own camp. And then those two died for the second time ... they were bad men, and it was over women ... the old men saw it and got angry, and then they struck these two, and killed them. They had returned to *Pirlakaya* and that's where they died. Then the old men said one to the other: 'Go and bury these two dead fellows.' They dug a deep hole, so deep that the ground was way above their heads ... they first put in one and then the other into this enormous ditch.

Then the old man (the ritual leader) collected everybody together: 'When you have all come up close, have a look at the two dead men. Look at these two pitiful ones for the very last time.' The old men came close to see the two pitiful ones ... they all stood at the edge and stared down into the hole ... the Black Hawk (the ritual leader) spread out his wing-like arm to smother them all; he buried them in the hole so that there was not one left. There was just one old fellow that got away, it was *Marawa* ['Claw'], the [ancestral] Pig Footed Bandicoot ...

That mob of old men, my mob who came from there, those who came from the creek, the Diamantina, as well as my mob from *Pirlakaya* once, long ago, they were all familiar with this story. They all knew it. Those men used to go on journeys to get grinding stones.

PITURI, THE ABORIGINAL NARCOTIC

The text here presents comments on *pituri*, especially its preparation, made by George Dutton talking to Luise Hercus at Wilcannia in 1968. George Dutton came from the 'Corner', in northwestern New South Wales, and was born on Yancannia station near White Cliffs about 1880. His people knew the country and peoples from southwestern Queensland to Lake Eyre. His life story has been compiled by Jeremy Beckett who knew him well. See *Aboriginal history* 2/1, 1978.

Luise Hercus's transcript of conversations with George Dutton, Wilcannia 1968.

The Queensland *pitjiri* comes from the Mulligan. It is only a small bush. When they gather it they break off the leaves and make big bundles and light a fire. They rake all the coals out and just leave the dirt, the ash, just ashes and they rake it all out and they drop all these leaves in, and a fellow goes there to cover them. He doesn't breathe, you know, he'd have to stop breathing, when he is cooling it, and after he has covered it all over he goes out ... he can breathe then. If he starts breathing there where it lies, then he goes mad. They used to make a little bag, like *warnu* they call it, and they used to fill it, but they only put a little bit in their mouth. And when they chew it, they put just a little bit on their tongue, it's like opium, very strong stuff.

... They'd be out in the bush, they do all this out in the bush ... They go out and break the *pitcheri* ... they cool it out in the place in the ashes ... They throw the coal out ... They'd keep it [that is, the *pituri*] for a while, two or three days, it doesn't take long to dry ... They dry out. Put it in a bag then. They trade it down.