

Aboriginal Stone Arrangements in Australia

By FREDERICK D. MCCARTHY

ALTHOUGH the aborigines set up stone arrangements of various kinds, the term "megaliths" is rarely applied to them; the stones used are not shaped, rarely exceed three feet in length, and one or two men can always lift or roll them into place. Megaliths are either "made of, or marked by, large stones", according to the Oxford English Dictionary, so that, strictly speaking, many of the Australian structures come within this definition. Megaliths, however, are usually considered to be built of artificially shaped stones or of rocks so big that many men would be required to move them, they belong to a definite cultural period, and are associated with advanced traits not found in Australia; for these reasons the term "stone arrangements" is applied in Australia. They occur throughout the greater part of the continent and may be classified as follows: (1) Fish-traps. (2) Monoliths. (3) Heaps and cairns. (4) Circles and lines of stones. (5) Elaborate arrangements which combine (2) to (4).

FISH-TRAPS.

The simplest form is a low wall, two to three feet high, of stones built on a shallow shore; in some cases the wall extends out to sea as much as 300 feet. As the tide recedes the fish are speared or taken with scoop-nets. This type occurs on the coasts of northern Australia and Queensland, at Port Stephens, New South Wales, and Mount Dutton Bay in South Australia. The same device is utilized in flood channels in the interior. At Boulia in Queensland, and in Central Australia, gaps are left in the weirs, and on a stone platform beneath a net is placed into which the fish fall through the gap; conical traps made of cane are used in the same way on the Queensland coast. The most remarkable example is at Brewarrina on the Barwon River, New South Wales, where rows of enclosed pools extend from bank to bank for several hundred yards; the walls are constructed of boulders eroded out of the sandstone bar upon which the traps are built. At Lake Condah in Victoria are



The fish-traps at Brewarrina extend for a quarter of a mile along a rocky bar across the Barwon River, New South Wales.
Photo.—A. J. North.



Line of stones at a Kanytu tribal totem centre for kangaroos, Emily Creek, Cape York.
Photo.—Irisula McConnel, courtesy Australian National Research Council.

stone-lined channels, with weirs across them, designed to trap fish after floods. Baiami and his sons built these traps and laid down certain rules for their use.

MONOLITHS.

These are common in north-west Australia and have a generally similar significance to the natural rock masses associated with mythology. The Worora tribe say that a cylindrical stone was set up by a great man, *Kanawci*, to mark the spot near a tree where a black snake crawled over his thighs and awakened him. Another set of four elongate stones set up on a hill overlooking an arm of the sea are said by the same tribe to indicate the spot where a boobook owl stopped the sea from flooding the land. As the tide rose the owl seated itself on this hill, and, when it heard the owl's fearful cry and saw its big eyes, the sea drew back. Numerous instances may be quoted of monoliths, natural and artificial, forming totem-centres in north-west Australia. Thus an Ungarinjin totem-

centre for honey is a cylindrical mass of stone, which had weathered *in situ*, projecting from the ground, and a similar but much larger mass of basalt in the Macdonnell Ranges is a centre for spirit-children. Two pieces of columnar stone are set up as though intended to represent the open seed of a palm, the fruit of which is eaten, and forms a totem of the Worora tribe. The Kanytu tribe in Cape York say that a line of elongate stones, up to three feet high, set on end along a ridge, represents a file of kangaroos, buck, doe, and young, and that the kangaroo ancestors who live in the creek below, and who placed the stones in position, visit them at night. Monoliths are set up on ceremonial grounds in various parts of the continent, where circles and other patterns of stones are laid out.

HEAPS AND CAIRNS.

Heaps of stones made by the aborigines are widespread and their meaning and function vary considerably. To the Worora, one heap marks the spot where a kangaroo was cooked by an ancestral *Wandjuna* hero, and its heart was placed on another rock, a cluster at the foot of a Bottle-Tree signifies the place where *Kutorubadu*, a *Wandjuna* hero, lay down and died, and a small heap has on its top a large oval boulder which represents the pounded and baked mass of grapevine roots. A cluster of stones on Cooper's Creek, Central Australia, is a Yantruwunta totem-centre for tortoises. Three stones in a cleared space in the bush represent the male, female and young of the cod fish at a Kanytu tribal totem-centre in Cape York. Another type often seen in north-west Australia consists of one or more pebbles placed on a large rock *in situ*; thus at one totem-centre of the Worora tribe the base stone, a red one sticking out of the ground, is the head of the *Wandjuna* hero *Kutorubadu* (meaning "he-having-the-quiet-dove"), a white stone set upon it is the dove, and several little stones are the chicks. In north-east South Australia a mound of stones was placed over a grave.



Heap and cairn of stones forming part of the arrangement on Mount Foster, New South Wales.
Photo.—C. C. Towle, courtesy of Anthropological Society of New South Wales.

Large heaps were gradually built up in the Olary district of South Australia by aborigines who passed by and deposited a stone on one of them. They were situated between valleys, and the practice was believed to prevent evil spirits from following a man into the next valley. One is twenty-four feet in diameter, and nearly four feet in height, and is estimated to comprise 37,000 pebbles. Similarly, Worora tribesmen, when passing a group of seven cairns near the Sale River, place a spear or stick upon one of them so that they will not be bothered by sneezing all day. Sir George Grey and Carnegie observed large heaps in Western Australia built up in this way, and they occur also in the Broken Hill district of New South Wales.

There is at Dalhousie in Central Australia a line of stone heaps said by Sir Baldwin Spencer to denote tribal boundaries. The explorer Giles saw evenly spaced heaps, two feet six inches high, each with a large stone in the middle, in the Rawlinson Ranges. Such series occur in far western New South Wales and south-west Queensland, often with single boulders between the clusters, and associated with well-worn native tracks; there are heaps along a "pad" which runs from the Wilson River to the native quarry at Coppra Mingi, and passing natives place a stone upon them.

A carefully constructed type has been recorded in the Flinders Ranges. It is made of slabs of slate. In one a base is laid with two pieces three feet six inches long and six inches wide, upon which two slightly shorter slabs are placed at right angles near each end; this method is continued to a height of over three feet, there being twenty-eight layers in the turret-shaped cairn. Little wedges of stone are inserted to offset unevenness in the slabs. Six of these cairns occur in the Weroonee Range, three on top of a hill in a line and from fifty to eighty yards apart; some eighty yards away, on the western slope, the other three form a group. A large flat stone is placed near some of these cairns. They were said by local aborigines to be used in rain-making rites. On Mount Foster in New South Wales is an arrangement composed of three heaps in an east-west line, another one to the north of the middle heap, and beside the latter is a double circle of stones; a single heap is built on Little Mount some miles away, and a line of twenty boulders in a paddock between Mounts Foster and Harris. Its significance is not known.

CIRCLES.

A widespread custom was to make a ring of stones round a platform on which a corpse had been placed to dry. An

An arrangement of stones representing yams at a totem-centre of the Ungarinia tribe, north-western Australia. Photo.—Prof. A. P. Elkin, courtesy Australian National Research Council.



inquest was held by the old men to ascertain who was responsible for the death. His identity was revealed by the body juices which dropped on the earth, either splashing one of the stones—each represented a possible culprit—or pointing in its direction. On the Clarence River stones were placed round a grave, and in western Victoria around the large oven mounds (in some of which were burials). On the south coast of New South Wales stone circles, known as *Nambi*, were visited by medicine-men when they wished to communicate with the ancestral spirits. In the Nandewar Ranges these circles figured in the initiation of a medicine-man. Eyre observed on a hill near the Murray River an oval figure of stones, thirty-three feet long and from three to six feet wide, made of stones which projected up to five inches from the ground. It was called *Mujumbuk* by the natives, who said it was a place for disenchanting a person afflicted with boils. The Aranda of Central Australia placed stones around a man who expected to be attacked with weapons or by sorcery.

On some of the *Bora* initiation grounds of south-east Australia stones were placed round the circular spaces, which were up to a hundred feet in diameter. One made by the old men of the Ucnuble tribe near the Peel River covered several acres and had smaller circles within its boundary. It is probable that many of the natural circles of large blocks of stone which occur on hilltops in the granite belt in Victoria and New South Wales served as *bora* grounds. Circles of

stones on the hills near Lake Macquarie were said to have been placed there by the eaglehawk, probably by the spiritual ancestor of this clan or moiety. They have been reported on Mount George and in the Gloucester district. One at Gleniffer had a central cluster of stones, and others in the Paterson River district had a stone and ashes in the middle. In the Mudgee district Brown described thirteen erections of loose stones, three feet in diameter and two feet high, each large enough for a man to climb into, with a bigger one on a nearby hilltop.

In western Victoria and in South Australia circles were formed as a result of placing stones round huts. One circle represents the totem-centre for the whitefish in the Worora tribe's territory, where another totem-centre is a U-shaped figure of stones representing the roots of the wild-grape, a hollow stone at one end being where the stem of the plant emerges.

ELABORATE ARRANGEMENTS.

The structures already described constitute the elements of stone arrangements in Australia, but they are often combined into more elaborate patterns, usually on clay-pans and ridges covered with loose stones. Wood Jones described an arrangement in northern South Australia which consists of "millions" of stones. It covers an area of 800 by 600 yards. In the middle there are heaps up to four feet high, with loops and connecting lines around them, and straight rows of carefully selected stones radiate

out into the sandhills. A white man "gone native" said that it is a sub-incision ground of the local tribe, who claimed that it was made by the spiritual ancestors.

An arrangement at Weelina Waterhole on the Finke River in Central Australia consists of four sets. Two are well defined curved lines, sixty feet long. The third set occupies an area of 200 by 300 yards, and consists of a U-shaped figure, sixty feet long, with heaps at each end of the two arms. Nearby are two parallel rows of stones, fifty feet long and six feet apart, and a collection of flattened slabs, up to three feet high, set in the ground. Some 500 yards away are ovals and circles, and a cairn ten feet in diameter and over three feet high. The fourth set is another series of ovals up to thirty-six feet long. The stones used are up to eighteen inches in diameter, and mostly up to twelve inches in height. This extensive arrangement was associated with a carpet snake ancestor who made the waterhole, and rites for the increase of the snakes, and probably of the ancestor's activities, were carried out on the site.

A series of connected ovals form a yam totem-centre of the Ungarinyin tribe in north-west Australia. A number of similar groupings have been recorded in far western New South Wales, and one of them is 176 feet long. A very fine arrangement on Endrick Mountain, New South Wales, consists of a divided oval figure fifty-five feet long and nineteen feet wide, with a heap at each end, the stones being laid out on an extensive exposure of sandstone. Nearby is an oval seventeen feet long, with a large stone at its eastern end and a cluster at its western end, and forty yards up the slope is a group of clusters some of which form a square. The stones used are up to nineteen inches thick.

A notable feature of some of the elaborate arrangements is that they are associated with a cave, to which the stones lead, examples being at Durham Downs and Moana, South Australia, and at Tattiarra in western Victoria.



These stones mark the site where the boobook owl came the sea to recede in the territory of the Worora tribe, north-western Australia.

Photo.—J. R. E. Love, courtesy S.A. Museum

Finally, there is the curious custom of natives placing stones in tree forks. Thus, in South Australia, at McPherson's Pillar rock hole, Giles saw dozens of pebbles in the trees, and at Alexander Springs he saw them wedged into the fork of every tree round a ceremonial ground. According to Dahl, in Arnhem Land the purpose of this custom was to mark the height of the sun at the time of passing spot as a message to others following. Stones were so disposed in Central Australia and far western New South Wales.

DISCUSSION.

The above descriptions will serve to demonstrate that, although the stone arrangements may be classified into different types, and such a division is convenient for descriptive purposes, it is purely arbitrary, because it is not consistent with their function. Each type is used for more than one purpose in the ritual associated with magic, religion and mythology, and, further, even to denote notable events in daily life. This brings us to the important distinction to be drawn between structures believed to have been made by the mythological beings who lived in the ancient dream-time world, and those made by the living aborigines. The former group comprises natural sites, totem-centres, initiation

grounds, fish-traps, and places associated with culture heroes and magic. The sites which commemorate an event in the journeyings of the mythological beings are more commonly artificial structures in northern Australia and Cape York than in other parts of the continent; at them the episodes they commemorate are re-enacted in the historical rites.

The totem-centres are important because ceremonies are carried out at them for the purpose of increasing the associated totemic species. During the rites stones may be struck with clubs or other rocks, pebbles thrown into a waterhole, earth or water distributed about the surroundings, the place tidied up, and so on; the sacred appeal to make the species abundant is recited during the rites.

In considering stone arrangements in Australia one is impressed by the fact that they form an essential part of the daily and secret life of the aborigines as we know them, and are not, therefore, relics of an extinct people or culture.

Further, clumps of bushes, trees, rocks *in situ*, waterholes, and other features of the landscape are just as important as the megaliths. It might be mentioned that a great variety of megaliths of both simple and highly developed types occur in Malaya, Micronesia and Polynesia; in New Guinea and Melanesia are circles and other patterns of upright stones often taller than a man, and enormous carvings in stone of the human figure. The fact that circles and heaps of stones occur in Tasmania indicates that the custom was brought to Australia at a very early period. It has been employed more extensively in those parts of the continent where cult totemism with increase rites is present. Whether there is an historical relationship between the oceanic occurrences of arranging stones is a problem that may be solved only by archaeological work yet to be carried out.

Stone arrangements in any part of Australia should be reported to the State museums and every effort made by local people to preserve them.

Snakes that Fish

By G. P. WHITLEY

IN the *Sun* newspaper, Sydney, April 4, 1938, there appeared a curious paragraph entitled "Snake Goes Fishing". It read as follows:

Bathurst, Monday.

The extraordinary sight of a black snake [*Pseudechis porphyriacus*] emerging from a shallow pool with a small carp fish [*Carassius*] in its mouth was witnessed by George Gunther and his wife, of Bathurst, at "The Forge", a well-known fishing resort near here.

Gunther fired at the snake, but missed. The reptile dropped the fish and returned to the pool, apparently reluctant to lose its meal.

With his next shot Gunther killed the snake, which measured five feet.

Whilst sea-snakes are well known as fish-eaters, and certain northern Australian freshwater snakes (*Myron*,

Acrochordus and *Cerberus*) are very partial to fish, the above account is the only one known to me of a land snake actually caught fishing in Australia.

Mr. J. R. Kinghorn, in his *Snakes of Australia*, 1929, p. 162, says of the Black Snake that "Those living near rivers almost invariably have frogs, fish, and small eels in their stomachs". There are many American records of snakes as "fishermen", most of the observations dating from the 1880's, and quoted in Bashford Dean's *Bibliography of Fishes*. Many of us have probably seen snakes in our country rivers or marshes, but it seems we must award the prize for serpentine angling to the common Black Snake.