

With the Compliments of the Authors

Reprinted from 'MAN' Vol. LXII, Article 174
July, 1962

ABORIGINAL ROCK ENGRAVINGS OF EXTINCT CREATURES IN SOUTH AUSTRALIA

By Charles P. Mountford and Robert Edwards
South Australian Museum, Adelaide

Published by
The Royal Anthropological Institute
21 Bedford Square, London, W.C.1



(a) Marine crocodile, Panaramitee North



(b) Marine Turtle, Yunta Springs



(c) Cave paintings of dingo tracks and simple rock engraving, Ngama, north-west central Australia



(d) Engraving of marine fish, Panaramitee North

AUSTRALIAN ROCK PICTURES OF ANIMALS

ABORIGINAL ROCK ENGRAVINGS OF EXTINCT CREATURES IN SOUTH AUSTRALIA*

by

CHARLES P. MOUNTFORD and ROBERT EDWARDS

South Australian Museum, Adelaide

I74 Pecked rock engravings are distributed widely in Australia, more particularly in western New South Wales and north-eastern South Australia.

About 50 years ago, Dr. Herbert Basedow (1914, pp. 195-210) sought to prove that the rock engravings of South Australia were of great age because (a) 'the rocks had suffered considerably by denuding processes since they were chipped by hand; ... many tumbled blocks of stone were found in the valley below bearing part of the design, the other part remaining *in situ* on the cliff above ...,' (b) 'the evidence in support of great antiquity lies in the presence of a dark rust-coloured patina, or glazed surface film which covers both rocks and engravings alike,' and (c) there is a strong resemblance between some of the rock engravings at Yunta (see map, fig. 4) and the footprint of the extinct *Diprotodon*, a large marsupial about five feet high, somewhat resembling the living wombat. Basedow made use of this last evidence to support a hypothesis that man and the *Diprotodon* were contemporary in these districts.

Everyone who has examined the rock engravings in South Australia is fully in agreement with Basedow that the eroded appearance of most of the rock engravings suggests considerable age, although at present there is no means of proving how old they are.

The question of how far patina can indicate antiquity is not so definite. Henri Lhote (1961, p. 106), who has, for many years, carried out extensive research on the rock engravings of the Sahara, states that:

In the Sahara, all rock is covered with a layer that is always darker than the rock itself. . . This forms a protective layer and is called desert patina [desert varnish in Australia] . . . its development being due to the amassing of oxides . . . which dissolve in the rain water that soaks into the rock and are brought to the surface by capillary action. If one chips a rock in the Sahara, the cut will have the original lighter colour of the rock while the adjacent parts will be darker. From this it follows that the more recent the engraving, the lighter the patina. Thus, on a rock covered with engravings, it is possible to distinguish, with certainty, between the earlier works and those of a later date . . . this method is not applicable in every instance . . . For patina does not form evenly. First, the position of the rock in relation to the sun must be taken into account, since those parts exposed to its rays are more liable to oxidization. Secondly, patina is formed with varying rapidity and produces different shades of colour according to the geological structure of the rock and its oxide content . . . The method must be applied with caution when we are not dealing with engravings on the same rock or stone slab.

We have quoted Henri Lhote at length, first because he is the greatest living authority on rock engravings, and secondly because his investigations were conducted in arid

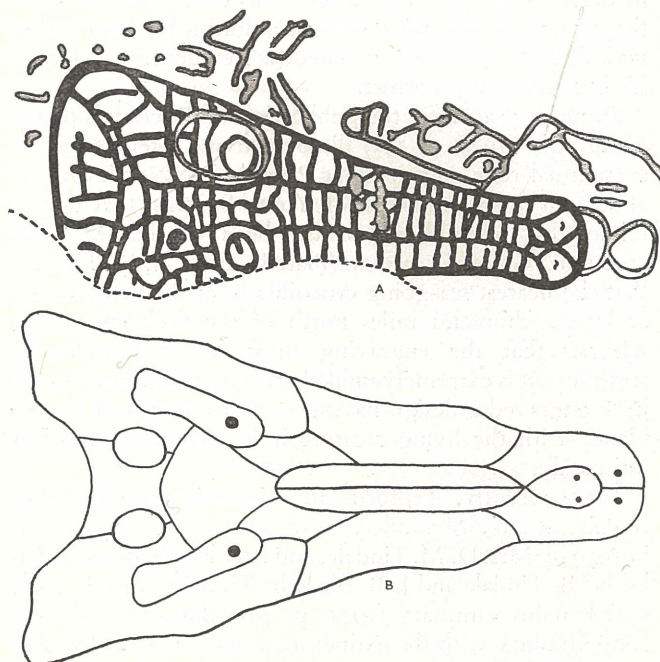


FIG. 1. ROCK ENGRAVING, PANARAMITEE NORTH
(a) The engraving; (b) outline sketch of head of *Crocodilus porosus*



FIG. 2. ROCK ENGRAVING, YUNTA, S. AUSTRALIA

* With Plate I and four text figures

surroundings which are similar, in many respects, to the country in South Australia where the majority of the pecked rock engravings have been found.

Basedow's hypothesis that because certain engravings at Yunta and Wilkindinni bore a resemblance to the footprints of the extinct *Diprotodon*, man and that creature were living in the country at the same time was not, and still is not, accepted, the reason being that the evidence is either incorrect or too weak to support his claim. Nevertheless, there has been mounting evidence, during the intervening period, that, even though Basedow's evidence was faulty, his hypothesis was correct.

Some 15 years after the publication of Basedow's paper, Mountford (1929, p. 243) discovered and later described, an unusual rock engraving at Panaramitee North (fig. 4), about ten miles south-east of Yunta Springs, that bore a remarkable resemblance to the head of the sea-going crocodile, *Crocodilus porosus* (Plate Ia, fig. 1, a, b). The fact that the nearest sea-going crocodile is, at the present day, at least a thousand miles north of the rock engraving, suggests that the engraving must be of considerable antiquity. It is extremely unlikely that any aboriginal could have engraved a design having so many points of resemblance with the living creature if he had not known it intimately.

More recently, Tedford, after investigating the fossil remains at Lake Menindee, New South Wales (discovered in 1939 by Mrs. D. M. Tindale, and later briefly investigated by N. B. Tindale and J. B. Birdsell; Tindale, 1955, p. 269), stated in his summary (1955, p. 305) that (a) 'man was contemporary with the extinct mammals of Australia' and (b) 'man hunted these creatures as a source of food.' The extinct *Diprotodon* was one of the fossil creatures specifically mentioned by Tedford.

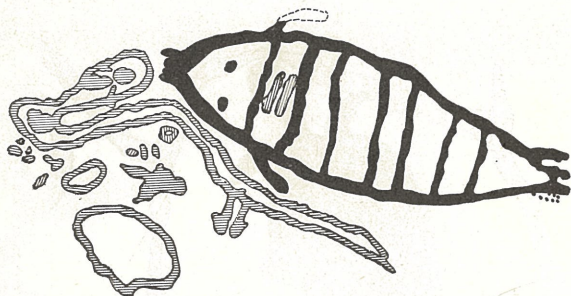


FIG. 3. ROCK ENGRAVING, PANARAMITEE NORTH

Last year, in company with Mr. Igor Zorich, the authors revisited Panaramitee North, where, less than 100 yards from the crocodile engraving recorded by Mountford (1929, p. 243) Zorich recognized a rock engraving of a fish (Plate Id, fig. 3). This find led the party to re-examine the rock engraving of a turtle, previously recorded by Mountford (1928, p. 358, fig. 87), which on closer examination, proved to be a representation of a marine turtle, (Plate Ib, fig. 2).

Further proof of the age of these engravings is the evidence of the aborigines themselves. Mountford (1960, p. 145) records that the aborigines in the northern Flinders

Ranges of South Australia did not recognize the engravings in their own tribal country as human handiwork until they were pointed out by the author. In central Australia, however, although the aborigines knew of the existence of the engravings, they were definite that they had not been cut by human hands, but by some mythical hero of creation times.

Another point of some interest is the fact that, among the many thousands of rock engravings which one of us (C.P.M.) has examined over the past 30 years or more, in which the footprints of the creatures form a considerable proportion of the designs present, he has never seen an engraving of the footprint of the dingo. An examination of the cave painting of a dingo track from Ngama (Plate Ic),

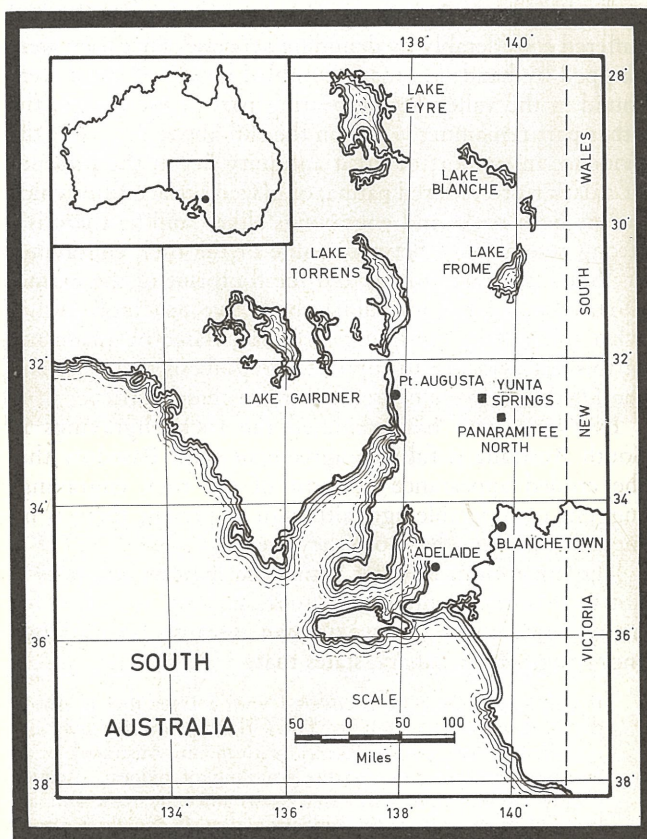


FIG. 4. LOCALITY MAP OF SOUTH AUSTRALIA

north-western central Australia, indicates how easy it would be to distinguish this track from those of wallabies, wombats and so on.

Tedford (1955, p. 305) also states that, although he found the skeletal remains of a number of living and extinct Australian mammalian forms during his archaeological research at Lake Menindee, there was no palaeontological evidence indicating the presence of the dingo. Thus, the absence of representation of dingo tracks among the pecked rock engravings, which all the evidence suggests are of considerable age, the fact that its skeletal remains are not present among the extinct creatures found by Tedford at Lake Menindee, and the fact that the dingo was not present on the island of Tasmania indicate that this non-marsupial

creature reached Australia after (a) the aborigines engraved the rocks with the pecked designs, (b) the aborigines had hunted the extinct creatures at Lake Menindee, in New South Wales, and (c) the Tasmanians had crossed the water barrier of the Bass Straits.

Description of Illustrations

Plate Ia is the crocodile engraving at Panaramitee North, in which the later engravings, which are readily distinguished in the photograph, are shaded to distinguish them from the main design. When these engravings are subtracted, the strong resemblance between the main design and that of the outline drawing of the head of the sea-going crocodile (*Crocodylus porosus*) (fig. 1b) is unmistakable.

The engraved design on Plate Ib from Yunta Springs (fig. 4) has been identified by Mr. John Mitchell, the Curator of Reptiles of the South Australian Museum, as a representation of a marine turtle. As there are obviously two designs in the engraving, we have distinguished, by shading, the simple barred circle from the turtle engraving (fig. 2).

Plate Id is the photograph and fig. 3 the tracing of a fish at Panaramitee North in which the eyes, one fin (the other having been eroded away) and the tail are clearly shown. Dr. Trevor Scott, Curator of Fishes at the South Australian Museum, identifies this engraving as a representation of one of the species of marine fish that live on the sea bottom. An examination of the photograph will show that the meandering design to the left and the paired kangaroo footprints on the body of the fish are made up of indentations that are much sharper and deeper than those that make up the fish design. As the sharp-edged indentations are an indication that this meandering design has been engraved at a much later date, we have indicated by shading.

Plate Ic is a photograph of cave paintings of the dingo tracks (already mentioned) at Ngama, north-western central Australia. Between these cave paintings is a simple rock engraving. The aborigines knew, of course, who had produced the cave painting, but were quite definite that no living man had engraved the design in the rock. This, the aborigines considered, was the work of one or another of the mythical, semi-human people of creation times.

Discussion

The research work of Tedford on the Lake Menindee site can be taken as definite proof that extinct creatures and

man were contemporary in Australia. Professor R. A. Stirton, of the Museum of Palaeontology of the University of California, who, over a number of years, has carried out palaeontological research in the Lake Eyre basin, north of where the engravings of the crocodile, turtle and fish have been found, is of the opinion that the Lake Eyre basin was never, during recent geological times, anything else but a brackish-water area. Therefore, as the rock engravings on Plate I are, in the opinion of the specialists, marine creatures, it would appear that the aborigines could only have become acquainted with their appearance had they camped adjacent to, or on, a sea coast. It is extremely unlikely that the aborigines would have seen these marine creatures in their present-day habitat (this would have entailed extremely long journeys), particularly as the aborigines seldom travelled beyond the boundaries of their tribal country. These facts suggest that, at some time (not yet established), the sea must have been closer to the localities at which the engravings were found, than at present.

We are not in a position to suggest the answer to this problem, the solution of which lies in the realms of the palaeontologist and the geologist. For that reason we are merely recording the fact that, at Yunta Springs and Panaramitee North, in South Australia, there are rock engravings of three marine creatures, now extinct in the area, a crocodile, a turtle and a fish.

Acknowledgments

The authors wish to acknowledge the help of Mr. Igor Zorich in this research, and the unstinted hospitality of the Wade family at Panaramitee.

References

- Basedow, Herbert, 'Aboriginal Rock Engravings of Great Antiquity in South Australia,' *J. R. Anthropol. Inst.*, Vol. XLIV (1914).
 Mountford, C. P., 'Aboriginal Rock Engravings in South Australia,' *Aust. Assoc. Adv. Sci.*, Hobart (1928).
 —, 'A Unique Example of Aboriginal Rock Engraving at Panaramitee North,' *Trans. Roy. Soc. S. Austral.*, Vol. LIII (1929).
 —, 'Simple Rock Engravings in Central Australia,' *MAN*, 1960, 192.
 —, *The Art of Oceania*, Baden-Baden, Germany (1962).
 Tedford, Richard H., 'Report on Extinct Mammalian Remains at Lake Menindee, New South Wales,' *Rec. S. Austral. Mus.*, Vol. XI, No. 3 (1955).
 Tindale, N. B., 'Archaeological Site at Lake Menindee, New South Wales,' *Rec. S. Austral. Mus.*, Vol. XI, No. 3 (1955).

BANYANG SETTLEMENTS

PART I: PRE-EUROPEAN SETTLEMENT*

by

M. J. RUEL, M.A., D.PHIL.

Department of Social Anthropology, University of Edinburgh

175 Any socially discrete residential group, whether a small cluster of two or three houses or a named village or village group whose furthest settlements may be twelve miles or more apart, is classed by Banyang as *etok*

* With two text figures. Part II will be published in the next issue of *MAN*.

or a 'town'.¹ Important differences exist between residential groups of differing inclusiveness or span but certain characteristics are shared by them all and, as traditions of the past illustrate, the 'town' of a small cluster of houses may eventually expand to become in later generations a very much larger unit, a village or village group. Following