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BURIAL CYLINDERS

The essence of a dilemma in public archaeology

R.P. Robins and G.L. Walsh

Abstract

The proper management of Aboriginal archaeological burials raises basic problems for public archaeological agencies in Australia. We examine the implications of some of these problems using bark cylinder burials from the central southern highlands of Queensland as an example. An outline of the nature, contents, and the history of these burials is given. This history and its implications are then compared with the results of a *rescue operation* that was the direct result of the implementation of the policy of a public archaeological agency. The policy was found to be inadequate to protect this invaluable archaeological resource.

Introduction

Accounts of Aboriginal mortuary remains in Australia are not often published. There are two major reasons for this. Firstly, they are relatively rare archaeological features. Secondly, they remain a sensitive issue within Aboriginal communities throughout Australia, and professional archaeologists and public archaeological agencies have been sympathetic and responsive towards Aboriginal feelings about departed kin. However, in areas of Australia where there are no Aboriginal descendents to look after burial areas the best intentions of the archaeological community can, at times, be at odds with a responsible policy towards the protection and preservation of these remains. A good example of this problem comes from the highlands of central southern Queensland.

The past - a potted history

Few ethnographic accounts of mortuary practices describing the use of burial cylinders exist for the Queensland central southern highland area. An early account from the Barcoo River, Tambo, Mt Enniskillen area relates that 'the dead (males) are buried for a time then disinterred and their bones carried about in bark coffins for six months and then finally re-buried' (Hyde *et al.* in Curr 1886:79). The account of R.C. Lethbridge in Howitt (1904:467) of mortuary practices on the Maronoa gives greater detail.



Not infrequently, however, the body is dried and carried about for a long time - even, as in one case for three years. Such a body is dried by being placed on a stage under which the women keep a slow fire constantly burning...

It is usually some young man who has died a violent death who is dried and carried about by his kindred. The reason assigned for the custom is that he has died before his time and would not rest in his grave. Such a body is tied up tightly at full length in a sheet of bark, which is painted and ornamented with emu feathers. When they are travelling two young men carry the body in the day and watch it at night, then two others the day following and so on.

By 1901 the Aboriginal population of the area had been reduced, detribulised or relocated. Consequently, traditional mortuary practices ceased and all published accounts subsequent to this date relate to descriptions of the cylinders themselves, or to their contents, not to directly observed ethnographic events (see Appendix I).

These published accounts form a broad but irregular spectrum of observations from which only crude generalisations about cylinder burials can be made. Cylinders have been found throughout a large area of the highlands extending from Blacks Palace in the northwest (Illidge n.d.; Stark 1933:85) to Carnarvon Gorge in the east (Goddard 1942:76; Quinnell 1976:227) and from Castlevale Station in the north (Gaukrodger 1924) to Warrong Station in the south (Meston 1901) (see Fig.I). The cylinders contained skeletal material of both adults and children. No decayed flesh or hair has been found, and in one instance the skeletal material had been rearranged, (Gaukrodger 1924) indicating that this was probably a secondary stage of mortuary treatment. The cylinders themselves were elaborately prepared. Skeletal material was wrapped in sheets of bark which were bound or fastened with human hair (Geary 1939; Goddard 1942) and fibre string, (Gaukrodger 1924). Feathers and ochre were used for decoration (Geary 1939). Some cylinders were wrapped in skin rugs (Gaukrodger 1924) or deposited with grave goods including 'fishing nets made out of fibre or bark' (MacLellan 1901).

The repositories for interred material were consistently ledges or caves in sandstone cliffs, access to which was probably gained by poles placed up against the wall (Illidge n.d.). Some of the repositories contained multiple cylinders (Gaukrodger 1924; Burchester 1967), possibly even hundreds (Illidge n.d.). Others contained only single examples (Meston 1901; Goddard 1942). At Blacks Palace and Castlevale Station a number of burials had been placed in the same cave, while at the amptly named 'Tombs' and in Carnarvon Gorge numerous caves contained single cylinders. In some instances the entrances to small caves were blocked with stones (Gaukrodger 1924) and in other instances repositories had been decorated with art. On Warrong Station Meston (1901) observed that 'On the roof and sides of all caves containing the dead were imprints of hands done in red or white ochre'.

The most consistent observation relating to cylinders concerns their destruction. Every documented source describes either the removal or destruction of cylinder material, or makes some comment about the destruction. Despite, or perhaps because of, its excellent condition this material has undergone accelerated deterioration, primarily through pseudo-scientific collection, private collection and ghoulish curiosity, sometimes accompanied by blatant vandalism. Fundamental information from this valuable archaeological resource has been lost. There is no accurate information on the distribution and regional variation of cylinders and the relationship between these burials and other types of burials (if any) in the area. Details regarding the age, sex and pathology of the interred population have been neglected. The scant information relating the art of the area to cylinder burials is summarised by Quinnel (1976) 'These coffins have been found in direct association with rock art of all techniques although stencils and paintings are most common. In addition, a number of skeletons without coffins are known in association with art and there are also cases of cylinders not directly associated with art...'. There is no knowledge of the antiquity of the material, or the reasons for its apparently good state of preservation.

The present - an alternative

The most comprehensive description of a cylinder burial yet undertaken resulted from a rescue 'excavation'.

In 1976, one of the authors (R.R.) inspected, at a property owner's request, a burial cylinder located on a ledge in a gorge in the eastern end of the Carnarvon Range. The ledge supporting the burial was in danger of collapsing. The burial lay close to the boundary of two properties and was subject to an 'ownership' dispute. Furthermore, the burial had become a local curiosity with large parties of visitors being shown the site by owners from nearby properties. Access to the site was impossible to supervise and damage to, or complete removal of, the burial was likely. It is probable that items have been removed from the burial in the recent past. For these reasons, and in accordance with official policy regarding burials (see Appendix I), it was decided to remove the burial to a nearby location, rather than leave it or transport it to a local museum.

Site description : The gorge was formed by a creek bisecting the Clematis sandstone of the Carnarvon Range escarpment. The walls of the gorge have near vertical upper faces and benched, boulder strewn, outcrop surfaces, which support sandstone forest (predominantly Eucalyptus watsoniana). The lower surfaces form scree slopes consisting of rock outcrops, boulder rubble and pockets of soil, supporting high forests dominated by Eucalyptus tereticornis and Angophora floribunda.

The cylinder was located on a thin friable sandstone shelf on the northern wall of the gorge, 30m above the creek bed. The burial shelf, and the major sandstone benches of the immediate area inclined at 45° . Weathering and erosion had undermined the shelf and the shelf itself exhibited stress fractures, rendering its collapse imminent.

The cylinder had been placed on a bed of leaves (*Croton* insularis, Flindersia maculosa, Melaleuca sp. and at least three species of Eucalyptus), towards the rear of the shelf, the lower end being wedged between the shelf and a sandstone overhang immediately above the shelf. The upper 20cm of the shelf was in an advanced state of weathering. A fine, dry weathered sandstone rubble partially covered the burial and large sandstone blocks (average diameter 60cm) had been wedged into the shelf in front of, and above, the burial.

Removal and conservation measures : A detailed photographic record was made of the burial using

120mm black and white and 35mm colour film. All the large sandstone blocks around the burial were removed and the site was re-photographed. The ledge was then cleared of all loose powdery rubble to within 20cm of the cylinder with trowels and brushes. All debris removed was sieved through a 2mm mesh sieve, and all samples of skin, feathers, fur, fibure and leaves were sorted and kept for identification. Samples of the weathered sandstone rubble were also taken. The cylinder was carefully cleaned with brushes, dental probes and an air brush and then re-photographed. The debris beneath the cylinder was gradually undercut to isolate the burial, which was then removed from the ledge onto a plastic sheet. The cylinder was then lowered down the cliff face in a galvanised iron sling.

In the more convenient environment of a base camp the cylinder was further cleaned, photographed in detail, and detailed notes and scale drawings of it made. The cylinder was sprayed with a solution of 20% by weight Pentachlorphenol fungicide in mineral turpentine using a household type flyspray. Fragile portions of the cylinder were consolidated with vinyl Butyral resin mixed with 10% by weight solvent solution of N. Butanol and 20% by volume acetone. The consolidant was both sprayed on and applied with a brush.

The fungicide was also sprayed in and around the area of the cave in which the cylinder was to be re-deposited. The burial was then located in this cave, which was situated in a cliff in the nearby dissected residuals. The samples that were taken were halved; one half is stored in the Archaeology Section, Queensland Museum, the other half was used for identification and analysis. The material not destroyed in the analysis is also housed in the Queensland Museum.





Cylinder description : The contents of the burial were encased in a bark cylinder, tightly bound for almost its entire length with string. The cylinder was 161cm long and varied in diameter from 13.50cm to 17.50cm (see Fig.2).

Bark : The bark was a single sheet, probably 'budgeroo' (*Lysicarpus augustifolius*). The bark between the string gaps was ochred although no ochreing occurred at the head or foot of the cylinder.

Cylinder foot : Fine grass which had been cut and trimmed unevenly with a blunt instrument, had been packed into the hollow end of the cylinder. A skin cap with the fur inside was bound over the foot of the cylinder and extended 10cm up the side. The upper portions of the skin had been decorated with red ochre. Remains of a resin band, 4.5cm in width, were visible 7cm from the foot.

Cylinder head : Skin capping with the fur inside also encompassed the head of the burial, and extended 13cm up the sides. It was bound to the cylinder with fibre string. As with the foot, there was a packing of fine grass in the hollow of the cylinder, underneath the capping. The remnants of white feathers (*Cacatua galerita* - white cockatoo) were tucked under the fibre string and sinew for approximately 26cm of the cylinder circumference.

Binding : (a) The predominant binding was a red ochred, 2-ply fibre string of variable diameter. This fibre string was tightly and continuously bound around almost the entire length of the cylinder. General deterioration caused small irregular gaps in the binding throughout the length of the cylinder. A 5cm gap occurred 26cm from the foot.

(b) Two-ply human hair string was bound around the cylinder llOcm to 86cm from the foot. One end of the human hair string was spliced with fine fibre string.

(c) A strip of sinew was loosely bound around the cylinder head.

(d) A strand of thinly stripped hide with the fur intact was also bound around the head of the cylinder.

Knots : In the 24th band of fibre string from the head, four large knots occurred in a circumferential row, below the feather quills at the rear of the cylinder. Four knots also occurred in the lower 40cm of the fibre binding. These may possibly have been compression ties to hold the cylinder in place while the main binding was completed.

Bone artefact : A bone artefact was tied to the first strand of fibre binding immediately below the base of the feather quills. It was 13cm in length and averaged 4cm in diameter. Two-ply human hair string was tightly wound around the greater part of its length, leaving 1cm of unevenly fractured bone exposed at the end attached to the cylinder. The opposite end of the bone was encased in a knob of resin, and the medullary cavity was also sealed with resin. A 2-ply fibre strand was sealed into, and extended from, the medullary cavity to form the uppermost loop of the cylinder binding. Resin : A major section on the cylinder was coated with resin. The resin commenced 29cm from the head and continued to within 26cm of the foot, although large areas had flaked off at one time. Occasional traces of yellow ochre appeared on the resin.

Skin : A rug made from possum (*Trichosurus vulpecula*) and wallaby skins lay beside the burial. It was in poor condition and the identification of its original position could not be accurately ascertained. It was made up of rough rectangles measuring 2.3cm x 17cm sewn together in a simple bag stitch using 2-ply fibre string with two stitches to the centimetre. The stitch holes were pierced.

Conclusion

Ethnographic and historical evidence indicates that bark cylinder burials were adopted as a method of Aboriginal interrment throughout the central southern highlands of Queensland. Recent archaeological evidence demonstrates that these cylinders are still to be found in a good state of preservation. The combined evidence, however, gives only a general indication of the extent, number and contents, of the material, while at the same time illustrates the abuse to which bark cylinder burials have been subject. Consequently, their archaeological potential has not been realised.

These resources should be considered in any future assessment of the archaeology of the area, for the potential of a cylinder lies not only in its inherent value, but also in the depth and complexity of its interrelationships with associated archaeological evidence. Cylinder burials contain bark, leaves, wood, resin, vegetable fibre string, human hair string, animal skin, fur and sinew, reptile and mammal bone, feathers, ochre, and human skeletal material. Information gained from these resources could form the basis for a detailed archaeological analysis of demography, pathology, resource exploitation, environment reconstruction and trade. The material culture items often associated with cylinder burials present the archaeologist with an opportunity to obtain a detailed inventory of the material culture of a prehistoric population, a unique situation in Australia. Historic documentation indicates that there were, in particular localities in southern central Queensland large numbers of human skeletons in in situ datable contexts. In view of the rarity of this type of evidence (Thorne 1976) and the importance it holds in the current Australian archaeological scene, such sites are of great value. Much of the stencil art of the central highlands of Queensland is of material culture items (Beaton and Walsh 1977). The investigation of cylinders and their associated material culture items could offer new insights into the interpretation of the rock art of that area.

However, in Queensland, the quantity and quality of information obtained from even the most comprehensive investigation of bark burials is restricted by the terms of the official policy. In short, this policy states 'that these burials should be left where they are, but that the scientific process of poisoning the surrounding area in an endeavour to combat white ant activity should be attempted... in order that aboriginal burials might be regarded with equal sanctity as those belonging to other groups within the Australian Society'. The dilemma created by this policy is that it advocates two impractical, incompatible courses of action. If the aim of the policy is to ensure the sanctity of bark burials, why prevent white ant activity at all, particularly when the evidence suggests that the destruction of cylinders is brought about primarily by animals or people. It is difficult to envisage the implementation of such a policy particularly when it precludes removal of material for identification, investigation or analysis. Consequently it is impossible to prove that material has been either taken or destroyed. This aspect of the policy is further hampered by the impracticality of its effective implementation. It is, short of a massive injection of funds and manpower, impossible to police and administer such a policy over this vast and rugged area. If the aim of the policy is to preserve burials then 'leaving them where they are, but poisoning the surrounding area' is almost a total negation of its stated intention. It is dubious whether 'poisoning the surrounding area' constitutes a 'scientific process', particularly when the material being poisoned is virtually an unknown quantity and when the results cannot be monitored. Furthermore, despite the assumed erradication of white ants, the cylinders are still subject to destruction by moisture, animals and humans. The variety of content of the cylinders precludes the use of standard treatment. Each should be treated on its own merits, only after thorough investigation.

While archaeologists throughout Australia are cognisant of their responsibilities towards Aboriginal feelings about departed kin, in areas where there are no Aborigines left to speak for or protect bark burials an effective management policy is needed. No matter what scientific processes are applied in the field, adequate protection for this valuable material will only eventuate if it is housed in a State or local museum.

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12 Dudley Street	PO Box 132
Highgate Hill	Injune, QLD
<i>ΩΓ.D</i>	

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The Policy on bark cylinder burials adopted by the Archaeological Division, Department of Aboriginal and Islanders Advancement.

The following was a Resolution passed by the Advisory Council at the Cairns Conference in February 1973, in answer to a submission put forward on behalf of the Department's Archaeological Division concerning the destruction of bark burials by white ants.

That these burials should be left where they are, but that the scientific process of poisoning surrounding areas in an endeavour to combat white ant activity should be attempted.

This Resolution is in accordance with the current opinions of the Aboriginal people in that they feel, and quite rightly so, that Aboriginal burials should be regarded with equal sanctity as those belonging to other groups within the Australian society.

An exerpt from the Honorary Wardens Manual, Archaeology Branch, Department of Aboriginal and Islanders Advancement, p.38.

KNOWN OBSERVATIONS AND COMMENTS ON THE DESECRATION OF BURIAL CYLINDERS IN THE CENTRAL SOUTHERN HIGHLANDS.

Observations

'.... On the roof or sides of all caves containing the dead were imprints of hands done in red or white ochre'.

'In one lonely cave in a vast sandstone rock, 300 feet in height and $\frac{1}{2}$ mile in length, we found a bark coffin containing the perfect skeleton of a child, 12 or 18 months old'.

Comments

'From some of the caves the skulls had been removed, at least one skeleton and old fishing nets taken away by white men since the remains were first reported'.

Meston 1901

Warrong Station

'....this was a great burial place of the aboriginals: many a skeleton I saw in caves there, and hand and foot imprints and other impressions in the walls and roofs of the caves; and fishing nets made out of fibre or bark'. 'Years ago while mustering at "The Tombs" one of my stockmen got a blackfellow's skull from one of the caves and threw and hit with it (as a joke) a blackboy I had with me at the time. I got little good out of that blackboy during the rest of the day, and at night he sneaked away from camp, as only a blackfellow can do, and next I heard of him he was fifty miles away'.

MacLellan 1901

Mt. Moffatt Station

'In this cave there were probably hundreds of skeletons wrapped in bark. Access was gained by placing a log up against the cliff and climbing up it. The skeletal material was removed from the bark in order to take a photograph.

Illidge No date

("Black's Palace")

'The next tomb, five feet from the ground contained merely a few bones and pieces of bark coffins'.

'....intact skeletons wrapped in bark coffins could be seen, placed one above the other'.

'Some were pushed in as far as fifteen feet, the cavity being too narrow to accomodate the number any other way'. 'At the foot of the monument human bones were strewn on all sides exposed to the rain, wind and bushfires.'

In two instances, the entrances were not blocked with stones, so the animals were allowed free access into the cavities, there to take shelter from the weather. So, as time went on the frail bark coffins were trampled to pieces and their contents strewn about as we found them. 'The bark coverings were made of the stringy bark of budgeroo, or giant tee-tree and were so well preserved that it could be fancied that the bark had but recently been stripped. The binding string to hold the bark around the body was also in a fair state of preservation; it was made from the fibre of currajong or bottle tree twisted into a three-ply string and varying in size from that of ordinary grocer's string to that of small clothes-line. The knots employed were mostly half hitches and also a peculiar kind of double figure 8. The ends of the smaller size strings had eyes whipped into them with what appeared to be kangaroo sinews. By employing these "eyes" it was an easy matter to pull the strings very tight around the coffin; thus when completed a very neat bundle was created'.

'.... a careful examination of the bones revealed that many of them were misplaced. For instance, shin-bones were found lying against the thigh and invariably the feet had been turned back towards the knees. Moreover, the circumference of the parcel was altogether too small to hold a human body, but just the size that would encase a bark skeleton'.

'Two of the coffins we examined appeared to have had special care bestowed on the dead occupants by their undertakers. They were covered with what appeared to be kangaroo skin shaped like a waistcoat and neatly seen with sinews of such an animal. The fur side had been put next to the remains and could still be seen adhering to the bones. Also, in one of these two coffins we noticed the bony remains of an oppossum and in another those of a "corney" (frilled neck lizard)....'

'We found no vestige of any stone implements in these tombs'.

Gaukrodger 1924 pp. 19-20

Castlevale Station

Incorrectly stated as Mt. Enniskillin, Tambo area.

The inference of these passages is that the cylinders were opened, in part, to allow inspection.

'Odd bones scattered about on floors of caves perhaps indicate that this was an old burial place.....' 'Collectors or vandals have removed all the bark enclosed burials'.

Stark 1933

"Black's Palace"

'The sandstone outcrop known as "The Tombs" had perhaps a hundred burial holes, but now these are all empty'.

'A number of holes still contained the sticks on which the bodies had been laid, and by the look of them they might have been there for centuries. Apparently, the same kind of wood was always used. It is from a tree which grows in the neighbourhood, and is called by the Aborigines, boogooroo; its timber is very hard and durable. The bodies were always wrapped in the bark of this tree, bound tightly in the usual crouching posture by cords made from human hair; I found portions of this cord in the burial holes. The pieces of wood had been cut into lengths by the use of fire....' 'I was sorry to say I was unable to find any Aboriginal remains, for these had been removed or destroyed'.

Geary 1939

"The Tombs"

'The next stencilled group surrounds a small cavity which has been used as a burial niche. A fairly well preserved human skeleton wrapped up in bark and tied with human hair string was previously discovered in this cavity by a member of the expedition. This group of stencils directly surrounds the burial niche

'There are two lil-lils in red and two rows of stencilled hands (three left and three right), whilst directly above the niche are three right hands. This burial niche is 12 feet above the floor level and could only be reached with the help of a couple of sapplings as an improvised ladder'.

'This one was a small natural cave, without markings of any kind 20 feet or so above the creek bed. It contained two skulls, one identified as a young female and the other as the cranium of an infant.... The bark wrapping originally used to enclose the bodies was still there as were also the fragment of string made from hair and used for tying the bundle'. Goddard 1942

"Cathedral Cave" Carnarvon Gorge

To the authors knowledge this burial was removed by the late 1950's.

'Strewn around the floor of the cave were many other human remains, including a number of leg, arm and rib bones indicating that more than two bodies had been placed there and that some of the skulls had since been removed'.

'There are, in the Carnarvon Ranges, innumerable caves, many which are reputed to contain large numbers of aboriginal skeletons. The writer has not seen any of these burial caves personally but has seen on stations, skulls and skeletal remains obtained from some of them'.

Burchester 1967

Tanderra Station

'Elsewhere in the central highlands these coffins have been found in direct association with rock art of all techniques although stencils and paintings are most common. In addition, a number of skeletons without coffins are known in association with art and there are also cases of cylinder coffins and skeletons not directly associated with art although art sites exist in the immediate vicinity'.

'One factor has to be taken into account when dealing with the function of sites in this region. That is the wholesale removal of bark cylinder coffins from the region in general and the National Park (Carnarvon National Park) in particular.

Quinnell 1972

Central Highlands in general.