

The Terramungamine Incident: a Double Burial with Grave Goods near Dubbo, New South Wales

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ABSTRACT. In 1987 a female adult skeleton with a small child was found near Dubbo, NSW, during the course of landscape gardening. Although the burials were disturbed by the landscaping work, artefacts found at the time can be associated with the burials. The presence of certain artefacts raises questions concerning the status of the female, and the cause of her death.

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At a time when archaeologists are becoming more and more specialised (*viz.* three authors to this paper), it is difficult for one person to maintain the breadth of research interests of someone like Fred McCarthy, to whom this volume is dedicated. The less tangible side of Aboriginal culture associated with death, ritual and art has been as important to McCarthy as his interest in the more mundane aspects of stone tool technology. In this paper, we discuss a burial and associated grave goods with unique evidence of both ritual and the more mundane aspects of stone technology.

Grave goods provide unique evidence. Hiscock (1988:67) argues that grave goods buried in ritual contexts must be considered as caches. He defines a cache as deliberate storage in a concealed location for some future use. In this paper we prefer the term 'grave goods'.

Although Morwood (1984) suggests that ritual caches were not uncommon in Australia, most human skeletal remains recovered are rarely associated with grave goods. To take an example in southeastern Australia, only about twenty burials have been recovered with grave goods in all of Victoria (D. Clark, Victoria Archaeological Survey, personal communication). The rarity of burials identified with grave goods may be because so few burials have been recovered using proper archaeological methods, and archaeological excavations mostly avoid places where burials are likely to be. Until very recently most human remains were recovered by non-archaeologists such as police and fossickers like the infamous Murray Black who collected the bones of about 1800 individuals (Mulvaney, 1989:66). Those people were primarily interested in the bones, not the context or culture.

Materials which have been interred with a burial have a special interest because such items had a significance which was beyond the ordinary. They are no longer, if they ever were, part of the mundane debris of daily life, but have taken on some special meaning presumably in terms of the spiritual world. Grave goods are of particular interest to archaeologists because they provide a rare opportunity to examine social and ideological aspects of Aboriginal life. The social and religious aspects are difficult to identify archaeologically, even though they were probably of great concern to people in the past. Certainly, burial artefacts are recognised by present-day Aboriginal people as being out of the ordinary and of significance equal to that of the burial itself; in some cases, of even greater significance.

The Burial

The site is on private property located about 4 km west of the Brocklehurst Highway intersection north of Dubbo, 32.18°S 148.57°E (Fig.1). It is less than 1 km east of the Terramungamine Reserve which contains a spectacular area of grinding grooves along the banks of the Macquarie River. Also reported from the locality are carved trees (no longer remaining) and other burials (details unknown).

The site is on a hill slope about 300 m north of the Macquarie River. It was exposed by the owner in the course of landscape gardening, during which the skeletal remains had been completely disturbed by a front-end loader and the burial pit was entirely displaced. Further landscaping was delayed until the burial remains were recovered. This was necessary to allow the gardening near the residence to continue and for the local Aboriginal community to provide advice on what should

be done with the burial. The archaeological work was done by the Coonabarabran District National Parks and Wildlife Service archaeologist (Witter) and other staff on 15 June, 1987.

Aboriginal consultation regarding the burial was with Rod Towney and the Dubbo TAFE Aboriginal Adult General Skills class, as well as with other interested Aboriginal people. Permission was obtained from the Aboriginal people to study the burial and artefacts before they were returned to the Aboriginal community for reburial.

Methods adopted in the salvage operation were constrained by time and the disturbance caused by landscaping. In the recovery, loose spoil, mostly sandy clay dumped by the front-end loader, was shovelled into a box sieve (1 m x 0.5 m, with 12 mm mesh) and shaken by two people. When a concentration of skeletal and other cultural material was found in intact clumps of sediment, small circular sieves were used (45 cm diameter, with 2 mm - 5 mm mesh). These concentrations were usually explored by trowel to prevent damage to delicate bones. The sieving concentrated on patches of sandy sediment, until most of the skeletal parts were found and more bones were difficult to obtain. At this stage the work needed to retrieve the remaining pieces exceeded the time available.

The orientation of the burial in the ground was impossible to determine due to disturbance by the front-end loader. The pit excavated by the machine was between 3 and 4 m deep, mainly into a red clay deposit with quartz and ironstone gravel, apparently a deeply-weathered Cainozoic sandstone. The upper soil horizon seems to have been about 1 m of loose, light brown sand with a darker, organic topsoil. The bones and some other cultural items were associated with a greyish brown sand with scattered charcoal, interpreted as the fill of the burial pit dug into the upper soil horizon. Bones of two

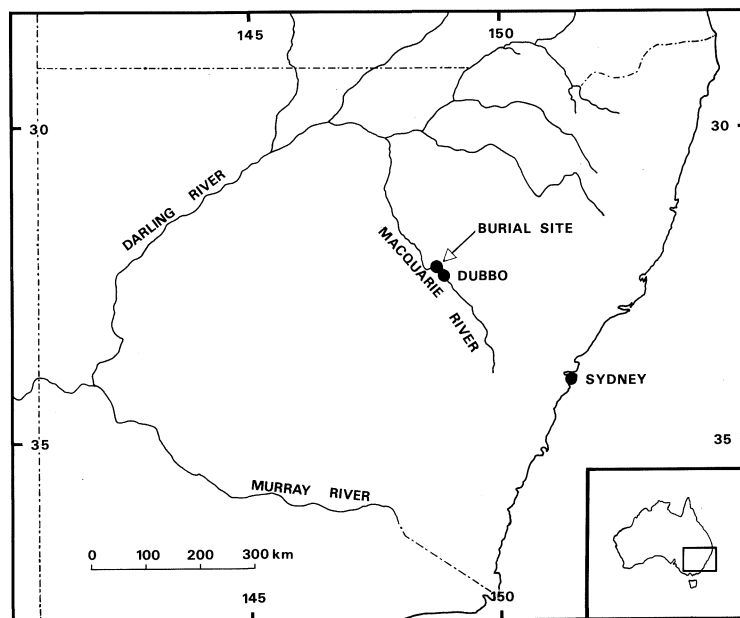


Fig.1. Site location.

individuals, an adult and a child, were found in this fill. The clear association of some cultural material with adult and child bones in intact burial fill forms the basis of our interpretation of associated grave goods.

Adult burial – skeleton A. Most bones from this individual were recovered despite the effects of the front-end loader. Only one innominate bone was found and it had been shattered and one tibia was missing. The skull was slightly damaged but it was possible to make several measurements. The individual was a young adult woman, possibly in her late twenties. The sex determination was by tooth measurements, and from observations on skull features and parts from the pelvic girdle.

One femur was complete and indicated a height of above average for a woman. The limb bones were relatively light and slender, typical of a woman's skeleton, with no ridges or roughened areas for heavy muscle attachments. The skull showed no pathology and the teeth were sound. One clavicle had been broken and was slightly short and twisted. A more serious injury had been received in the sacrum, showing a fracture which had later become infected. It is possible that a difficult childbirth at an early age could have caused this damage, or weakened the area to be more susceptible to injury. There appeared to be no other scars attributable to childbirth on this bone.

Child burial – skeleton B. Due to the fragility and small size of children's bones, it was more difficult to recover all this individual. Most of the skull was found, even though parts were broken and scattered. One unusual feature on the skull was the presence of numerous wormian bones along the lambda suture. Although this is not overly common, it was a surprise that a bregma bone was also present. This is a small bone which on rare occasions forms in the fontanelle before the rest of the bones (parietals and frontals) grow together. The epiphyses were not yet attached to the

longbones and this made measurements for size estimation uncertain. All of the deciduous teeth had appeared but none of the permanent incisors had quite erupted. On the basis of the dentition, the age would seem to be about seven or eight years old.

Grave goods. In the course of spading sediment into the sieve, a large portion of the child's articulated ribcage was found in association with a block (20 cm) of grey-brown friable sand which appeared to be intact burial fill. This was broken down by trowel. Held within this block were the upper thorax portion of the child's skeleton, a few parts of the adult skeleton and some artefacts clearly associated with the burial contents. The artefacts included six rhyolite flakes showing use-wear and a knife-like bone tool made from a human tibia (Figs 2,3), with a mussel shell valve lying in position over its proximal end. The block also contained a kangaroo incisor and all the small mammal bones recovered from the 2 mm mesh sieve.

The artefacts are interpreted as grave goods, the total of which included a series of thirteen rhyolite flakes, all of which fitted together (Fig.4); a pair of kangaroo incisors (Fig.4); two freshwater mussel shells (Fig.4); the bone tool made from a human tibia (Figs 2,3) and small mammal bones (Fig.5). Other artefacts not associated with the burial fill (Fig.6) are thought to be general camp debris, from the ground surface into which the burial pit was dug.

Series of rhyolite flakes. The original core, from which the series of thirteen flakes was produced by free-hand percussion, was a stream cobble of fine-grained volcanic rock. Upstream in the ranges east of Dubbo are dykes of greenish and grey acid volcanics, usually shown on the geological maps as rhyolite. The flakes appear to be of this material.

When the rhyolite flakes were refitted it was possible to see gaps where smaller debitage had been produced (Fig.7). When stone tools are made, it is common for

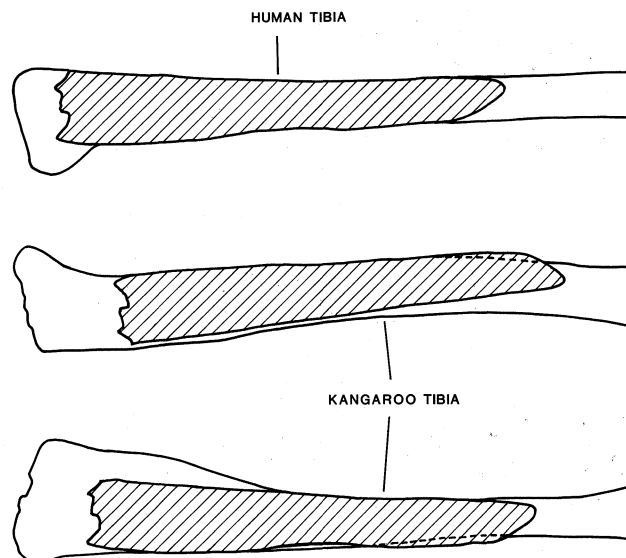


Fig.2. Bone implement compared with human and kangaroo tibiae.

shatter fragments and small flakes to be produced along with big flakes. During the fine sieving, no small flakes or micro-debitage belonging to the refitted series were found. Had the refitted flakes belonged to a workshop which was accidentally in association with the burial, the small debitage would have been recovered from the

fine sieve. Thus there can be no doubt that the thirteen rhyolite flakes were selected from a stone knapping workshop elsewhere, transported together and deposited as part of the burial.

From the shape of the refitted series of flakes, we estimate about 60% to 80% of the original cobble to be

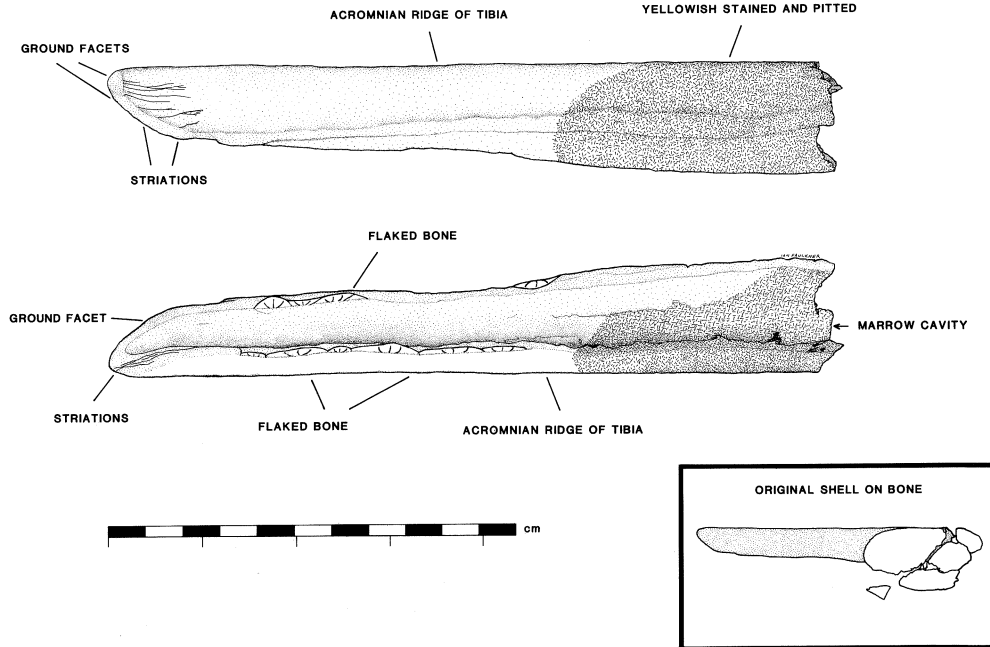


Fig.3. Human bone implement.

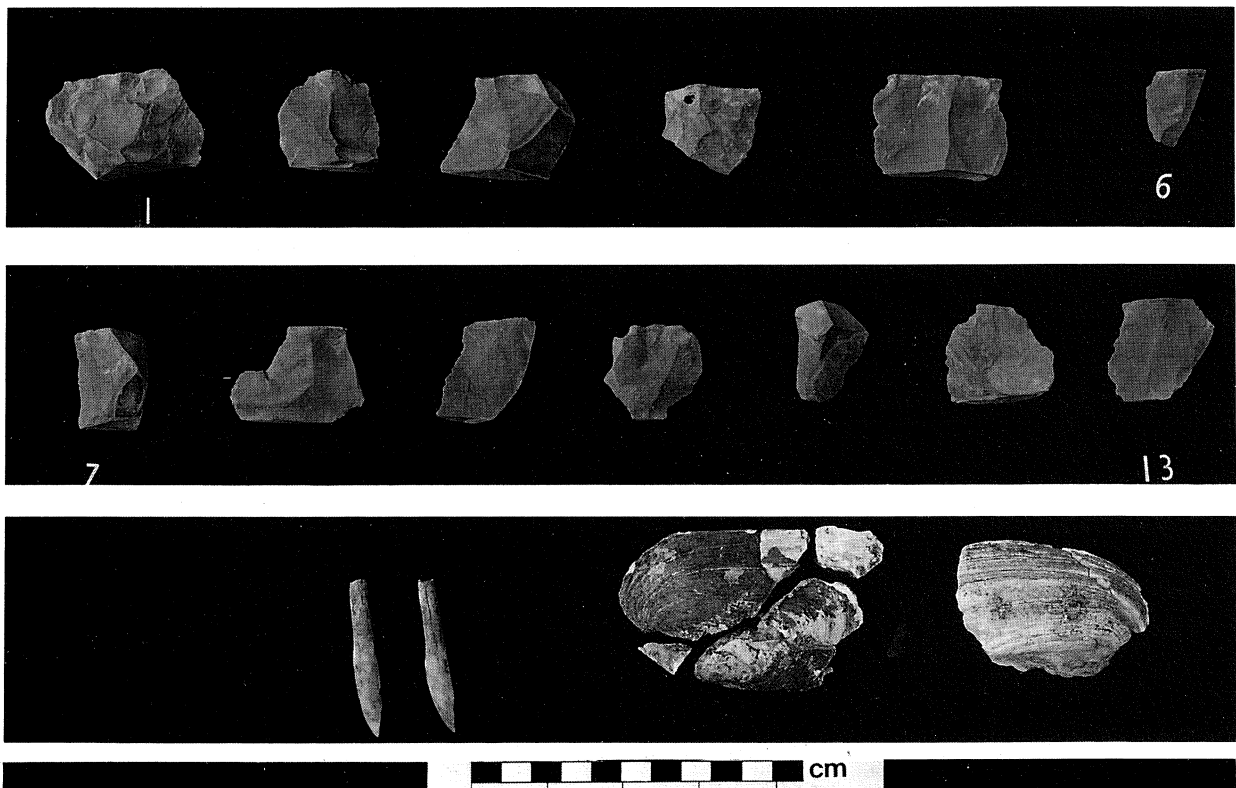


Fig.4. Rhyolite flakes, kangaroo incisors and freshwater mussel shells.

present in the cache. The remaining 40% to 20% of the cobble would constitute the core, and was discarded separately from the flakes. As a refitted unit the conjoined flakes measure 74 mm \times 59 mm \times 30 mm (Fig.7). All of the flake platforms have cortex. Eleven flakes have broad platforms and two have thin focal platforms. There is no indication of any form of platform preparation or other special manufacturing technique.

The flakes were analysed in order to identify any processes related to production and/or function. Each of the flakes had six measurements (all in mm) taken as well as a record of cortex (Table 1 [Appendix]). Two axial measurements were made. Axial length (AL) was the maximum distance along the centre of the axis of the flake as determined by the point of impact on the platform. Axial width (AW) is the greatest distance across the flake at 90° to the axial length. The block measurements are based on the length and width which, when multiplied together, approximate the area of the flake surface. If the flake were to be oriented as closely as possible in a rectangle, block length (BL) is the

maximum distance across the flake, along the longest side of the rectangle. Block width (BW) is the maximum distance at 90° to block length. Maximum thickness (MT) is the greatest thickness measurement at 90° to the plane formed by AL \times AW or BL \times BW.

The platform thickness (PT) was also measured for each flake, from the ventral point of impact on the axis of the flake and across the top of the platform to the dorsal edge. This measures how far back from the platform edge the core was struck to produce a flake. Therefore, the measurement is not made through the flake nor is it necessarily the maximum platform thickness measurement. The measurements were plotted on a set of scattergrams to determine (1) elongation, (2) type of platform and (3) cross-section characteristics. This approach is useful for understanding the techniques of flaking and stages in reduction of the core.

Elongation was tested by plotting the axial length/axial width ratio on the horizontal axis against a volume indication (block length \times block width \times maximum thickness) on the vertical axis (Fig.8). The purpose was



Fig.5. Small mammal bone.

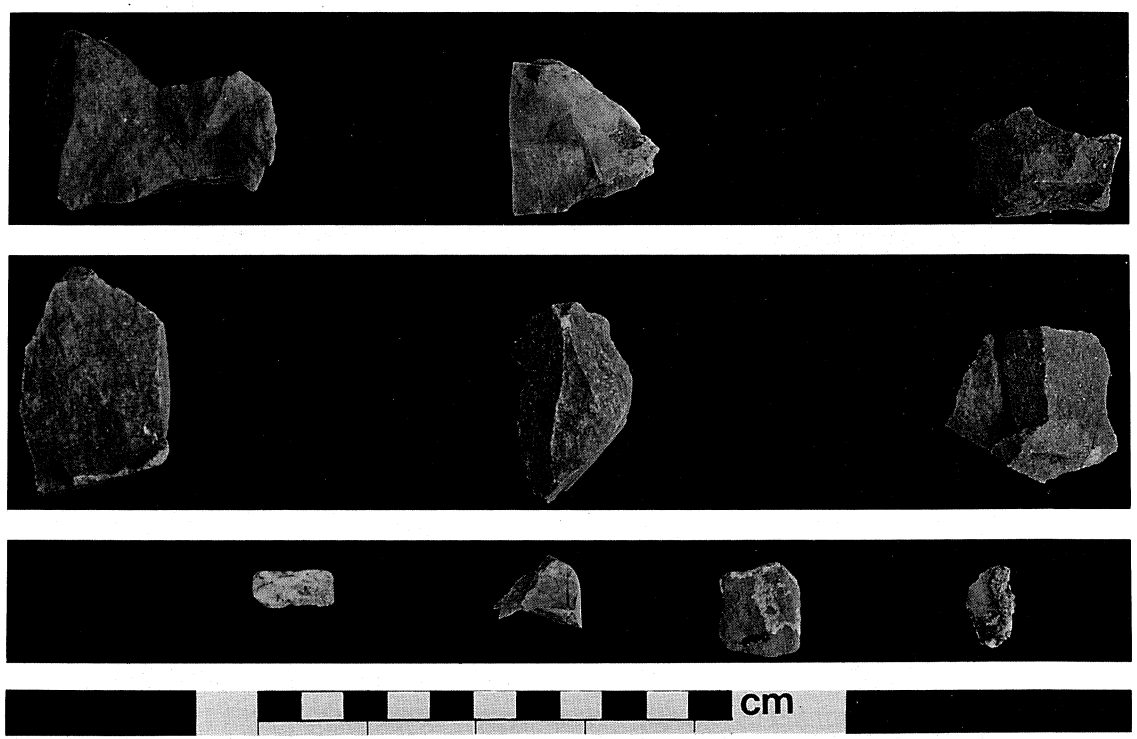


Fig.6. Stone artefacts associated with camp debris the burial.

to determine if there were distinct classes of flake such as short, preliminary waste flakes and main flakes which were then detached for use. The line $AL/AW = 1$ means that length is equal to width, and along the line $AL/AW = 2$, the length is equal to twice the width (i.e., elongated). The length and width plotted for each flake tend to be the same. Most flakes are also of a similar volume except for one which is wider and larger. In spite of this, all flakes seem to be main primary flakes.

In another analysis (Fig.9), the platform thickness

(horizontal axis) was plotted against the axial length (vertical axis). This was intended to measure how close to the edge of the platform the core was struck and the precision in flaking. The points plotted form a main group except for two flakes. The main determinant of flake length was core thickness. Most of the flakes were simply struck well back from the platform edge with sufficient force for the fracture path to emerge at the distal end of the core, resulting in cortex on both the platform and distal end of each flake. The two short

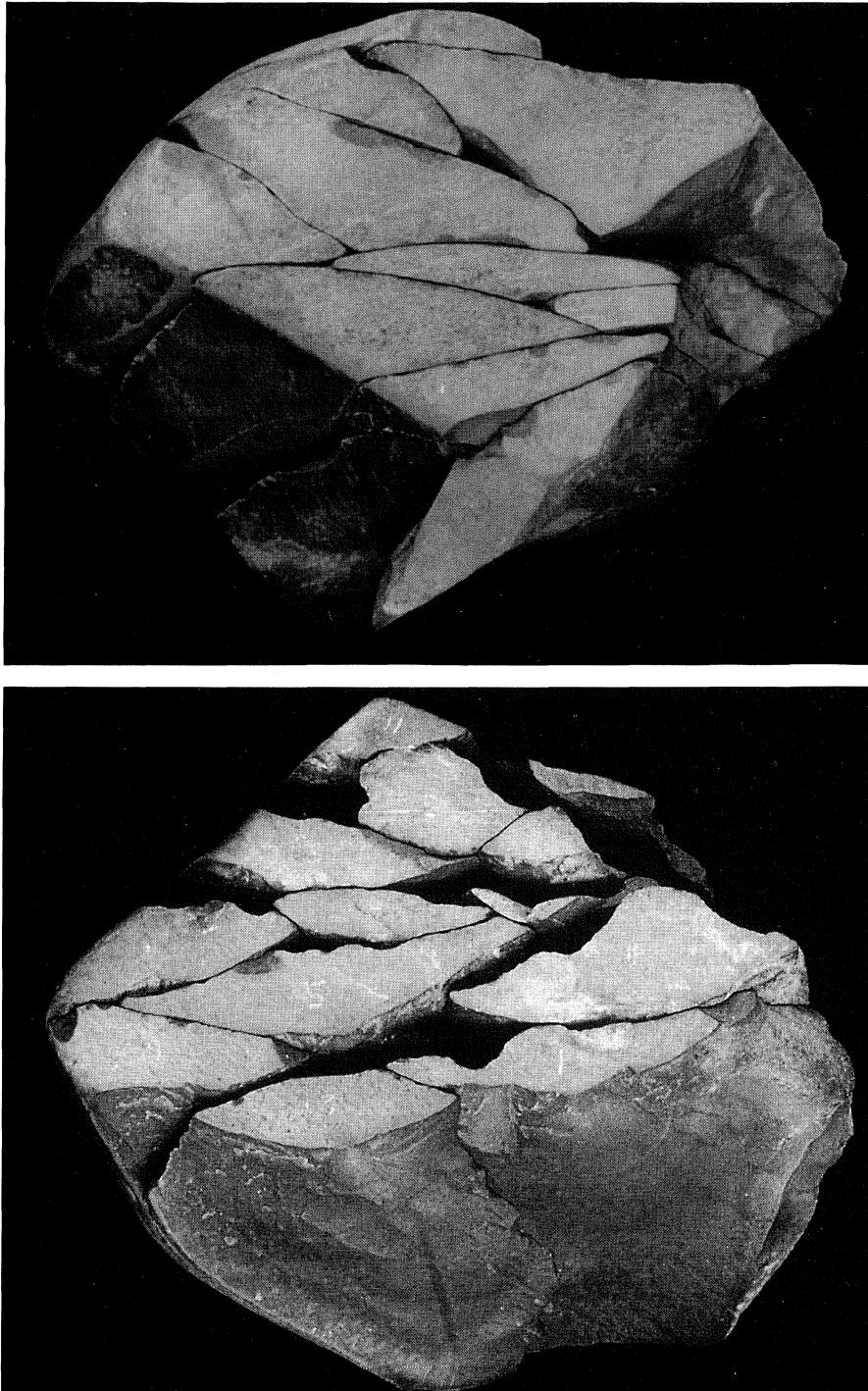


Fig.7. Refitted core.

flakes are both hinge terminated and have relatively thick platforms, indicating that they were struck with insufficient force.

Witter (1993:102-107) has devised an approach to further examine functional preference for particular shapes in the context of manufacturing stages. A scattergram, termed the Reduction Chart, plots maximum thickness on the vertical axis and an index of flake area (the square root of block length \times block width) on the horizontal axis. In this case (Fig.10) the assemblage forms a distinct but loose group. The main exception is the longitudinally split fragment of a hinge terminated flake. The cross-section was probably not of special significance. All that seemed to be necessary was to obtain any flake with a sharp edge and which was as large as the core could produce.

All of the flakes were examined under a hand lens, a stereomicroscope at magnifications of x8 to x40, and a metallographic microscope at a magnification of x300 for use-wear and residues (Table 1 [Appendix]). Unfortunately this was after they had been handled and refitted with water-based glue. Although tissue and fibre, probably plant, was found on several flakes, contamination cannot be ruled out. Examination of use-wear, particularly scarring and polish, indicated that twelve of the flakes had been used. Eight flakes had evidence of scraping and in at least two of these cases the material worked is very likely to have been wood (Fullagar, 1987). Woodworking is the most likely function for most tool edges, but there may have been a variety of light duty tasks.

The flakes are plotted with symbols showing the number of edges with use-wear. There is no clear

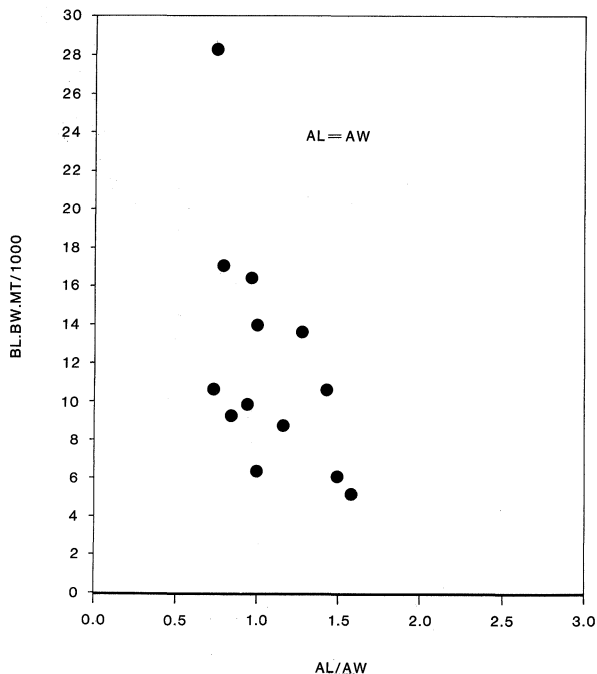


Fig.8. Flake analysis: elongation. BL - block length; BW - block width; MT - maximum thickness; AL - axial length; AW - axial width. All measurements in mm.

indication of a preference for particular cross-sections with one as opposed to two utilised edges. Thus, the use of flakes does not indicate tight control in manufacturing a specific form and no special part of that range of variation was favoured for use.

Pair of kangaroo incisors. There are two lower left incisors of a kangaroo the size of *Macropus giganteus* (Fig.4, Table 2 [Appendix]). No microscopic indication of human use-wear could be found, although given the nature of weathering their use as a tool cannot be ruled out. One of the teeth had marks in the dentine at the base of the enamel suggesting it had been hacked out of the bone. Alternatively, the marks may be associated with hafting of the tooth as a tool (e.g., a drill or gouge) or for attachment as an ornament (e.g., pendant, necklace, hair decoration).

Freshwater mussel shells. Parts of two freshwater mussel valves were present (Fig.4). One appears to be the lake mussel (*Anathyria* sp.) and the other, which is more fragmented, is possibly a larger example of the same species. No other mussel shells were found in the area and their presence does not seem to be in the context of food refuse.

Although no microscopic use-wear was found on one shell, the other had a ground facet along the edge opposite the hinge. No use-wear could be seen associated with this ground edge, and it is likely that it was ground as part of the handle of the bone tool.

Bone tool. The bone tool is a large splinter from the left tibia of a human (Figs 2,3, Table 3 [Appendix]). It was made by splitting longitudinally the proximal

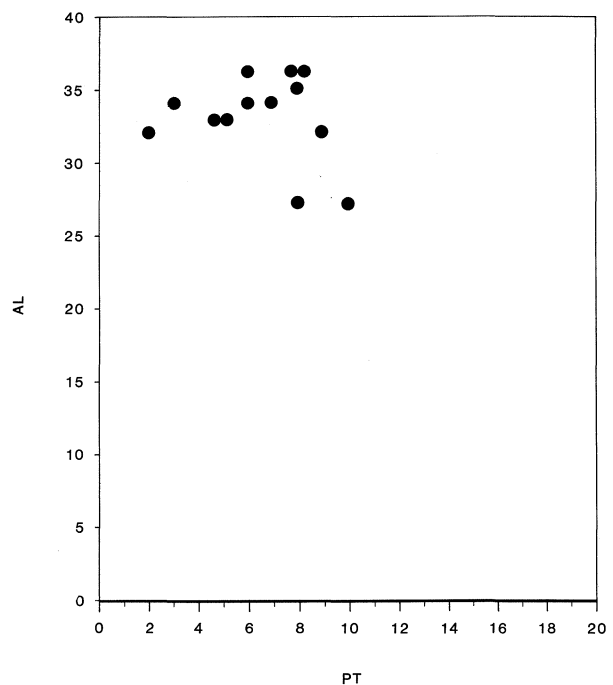


Fig.9. Flake analysis: precision in flaking. AL - axial length; PT - platform length. All measurements in mm

half of the tibia and shaping the edge by controlled flaking and fragmentation using a hammerstone. Stone burins, which leave characteristic grooves, had not been used (*cf.* Hotchin, 1982; Fullagar, 1982).

It has an obliquely pointed end, shaped by grinding to produce a bevelled edge. The edge was ground on the densest and thickest part of the mid-tibia shaft and acromion ridge, but does not seem to be polished or worn by use. However, on the surface of the bone near the pointed end there are numerous linear but irregular fine grooves or striations running roughly parallel to the long axis of the tool. These striations do not appear to be related to manufacture and few extend beyond 4 mm from the edge, where they were probably removed by grinding (sharpening?) the edge.

Opposite the pointed end of the tool, the bone is wider and thinner because of the natural shape of the tibia close to its proximal articulation. At this end the bone is stained a yellowish colour and the surface is pitted as though etched and corroded by acidic conditions. This would have been the handle and may have been formed into a grip with gum or resin attached to the implement. On recovery one of the mussel shells was in position here, where it could have been used for the outside surface of a handle built up of resin or other adhesive.

The function of the bone tool is difficult to determine. The edge would seem inappropriate for woodworking or heavy use. Some of the striations are like those received by a bone pressure flaker used to retouch stone artefacts, though the point is unsuitable for pressure flaking and most of the striations seem to be too fine.

Betty Meehan (personal communication) has suggested that since the edge is not sharp, it might have been used for working hides. One of the authors (DW) has seen striations on bone bison and caribou flensing tools in North America. The striations in this case are predominantly from sand grains caught on the surface or fascia and other tissue which are scraped off dry hides staked on the ground.

The shape of the tool is rather like a dagger and it

is possible that the function was a weapon for fighting like the cassowary bone daggers of Papua New Guinea. The striations, however, are not easily explicable in terms of use of the tool as a flesh-piercing dagger. Another possibility (Badger Bates, personal communication) is that the object was never functional and belonged to a class of items which includes 'pointing bones', used by a 'clever man' or Aboriginal shaman or witch doctor (Elkin, 1944:100-101). Roth (1903:32) reported the use of pointing bones on the Pennefather River in North Queensland:

the death charm or om-bo consists of a long thin bone needle fixed into a wooden shaft - a spear in miniature. The bone from the emu's or human leg is considered more efficacious than any other.

There is reference to a similar type of human bone artefact in Papua New Guinea, where the human shin bone of a murdered person was attached to the posterior end of a spear, where it remained until the spear had avenged the murder (Parkinson, 1907:128ff.).

Although its function remains problematic, the tool is very distinctive and appears to be unique in Australia; we can find no previous documentation of a human bone artefact with similar modification.

Small mammal bone. At least three species of small mammal are present (Fig.5). One is a native rat, represented by a femur and a tibia. Another species (*Trichosurus vulpecula*) is represented by at least two individuals, one represented by five bones: humerus (1), radii (2), ulna (1), and innominate (1). The other, larger, individual is represented by an ulna. The colour of an unidentified femur shaft suggests that it may belong with this individual. Finally, there is a calcaneum from a small dasyurid, possibly an *Antechinus* species.

Camp debris. A scatter of flaked stone, burnt stone and charcoal was present. None of these materials was associated with the burial pit itself or the contents. The retouched artefacts include a quartzite pebble core with two platforms and a large quartzite flake with a well-

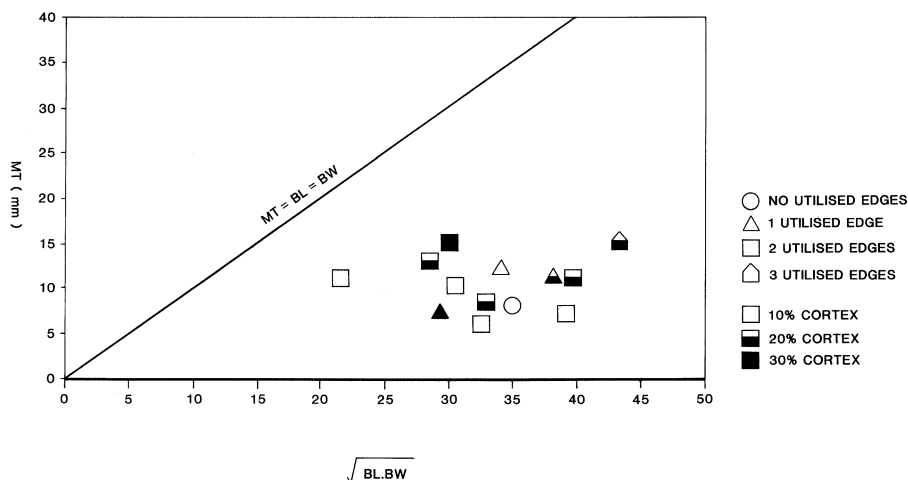


Fig.10. Flake analysis: reduction chart. MT - maximum thickness; BL - block length; BW - block width. All measurements in mm.

bevelled resharpened edge. The debitage includes 24 pieces as follows: quartzite (4), quartz (15), chert (2), rhyolite (2), basalt (1). It is likely that all stone in this scatter was collected from the gravels in the nearby Macquarie River. The burnt stone fragments all seem to be of quartzite except for one of igneous material. Some large chunks of charcoal were recovered in the sieve; nearly 50 g was recovered but this has not been dated on account of the uncertainty of its association.

Discussion

Before proceeding it is necessary to establish an appropriate term for the Aboriginal equivalent of a witchdoctor, medicine man or shaman. In western New South Wales this type of person seems usually to be referred to as a 'clever man'. This term seems appropriate to us, but should be expanded to include both men and women who have special secret knowledge (*cf.* Roth, 1903:31). Therefore, we use the term 'clever person' for the purposes of this article. Local Aboriginal people in Dubbo suggested that the burial belonged to a 'clever person', and claimed that personal possessions were always buried with a 'clever man'. It is perhaps not surprising that someone with special powers would have all personal items placed in the burial pit because of their potential danger to the living. The unique human bone implement also implies an extraordinary person.

It is possible that the grave goods were the personal possessions of the woman (skeleton A) and were buried along with her and the child. Although burials are common in southeastern Australia, burial goods are rarely reported. From historic accounts it is apparent that people carried their personal items in a basket or bag made of string or possum skin, but the contents of these are almost unknown (*cf.* G.A. Robinson's observations in Presland, 1977:39; Grey, 1841:266; Schurmann, 1879:215; Dawson, 1881:14; Roth, 1904:20; Horne & Aiston, 1924:109; Spencer & Gillen, 1927; Mathews, 1980:45; Morwood, 1984). Parcels containing sacred items and stone flakes were also bound with fur string and carried by men in their hair (Tindale, 1972:247). The contents of a 'clever man's' dilly bag also was described as having '... bones and something that looked like glass... things that looked very greasy and a bundle of hair' (Jimmy Barker, as told to J. Mathews, 1980:45).

Most of the items found on archaeological sites was discarded as waste, and provide little direct evidence of what was saved and carried about from day-to-day. The burial goods reported here provide a rare archaeological opportunity to see the possible contents of a carrying bag: a handful of flakes used as tools and all from the same core, a large bone knife-like implement, two mussel shell artefacts which were probably handles for the bone implement rather than tools, and two kangaroo incisors which were probably ornaments. There may have been other items made of organic materials which

have not been preserved. Although the flakes would have eventually been replaced and thrown away, it is likely that unresharpened flakes of fine-grained stone for tools were regularly carried about. The small mammal bones probably represent food items, but may have been part of a 'clever man's' kit (see Barker's description above, cited in Mathews, 1980:45).

The use of human skeletal material or any of the grave goods for dating was out of the question because of strong Aboriginal feelings that the burial and contents be returned in their entirety. Some of the charcoal seems to be mixed with the intact block of burial fill that contained the grave goods. Due to the disturbance, however, it is impossible to show that the charcoal belonged to the same period as the burial: the burial could have been dug into an old cooking pit on a much earlier campsite, and the possibility of a burnt-out stump cannot be eliminated, though the charcoal seems to be from branches rather than roots. Dating the charcoal, therefore, would not necessarily give a reliable indication of the age of the burial, even as a maximum or minimum date.

The nearest well-documented burial is at Tibuc, near the eastern edge of the Warrumbungle National Park about 20 km west of Coonabarabran and about 160 km north-east of Dubbo (National Parks and Wildlife Service files). This burial, recorded in 1985, was found in a small natural hole in a rockshelter. The burial was of a girl, judged to be about 14 years old. The dry conditions permitted mummification of part of the skin on the skull. The skull also showed extra wormian bones at the back of the skull. A piece of string made of carefully-twisted fibres of kurrajong bark was found with this burial. The quality of the workmanship was excellent and the string could have been part of a dilly bag. The only surviving contents from this bag was a tapered, pointed tool made from a kangaroo fibula. No stone tools were present, but a lump of burnt wood was found.

Another burial cache has been discovered west of Condobolin at Halls sandpit (National Parks and Wildlife Service files). Most of the burial was bulldozed away and only part of the forearm was left. The burial cache consisted of a small hammerstone, a flake tool with use-wear, a resharpened flake tool, and at least seven possum ulna. There has been no opportunity to study this material further.

Reconstruction

How do we explain this double burial, the ages of those in it, the presence of the grave goods, of stone tools buried with the woman, of a large tool made of human bone and the presence of small mammal bones? We will never know the true story of this burial but we can speculate.

For most of these questions it is possible to think of ordinary explanations. For example, it is mentioned historically that parts of a dead relative's body (such as

a hand or foot) were carried around for a considerable time. Sometimes an entire body was carried around in a bundle. The child burial, therefore, could be a body which had been carried around until the woman, perhaps her mother, also died.

The damage to the hip bone suggests that the woman could have died in childbirth. The child buried with her, however, is too old to have been that baby, and no newborn infant bones were found.

If either the woman or the child had died violently, this is not indicated by the bones; certainly, neither skull had been clubbed. The age of death for the child, however, is too late for usual infant mortality and the age of the adult seems too young for death by old age.

Although it may have been standard practice to bury personal effects with a 'clever person', there may have been other occasions when other people had the same treatment. Given the other caches found in this area, this may have been common in the western slope areas of the Lachlan, Macquarie and Castlereagh Rivers at certain times in the past. Thus the presence of grave goods does not necessarily imply a 'clever person'.

The stone implements are interesting because women have rarely been identified as stone knappers. The context of the burial provides the possibility of linking gender with stone tool production and use. If we assume that the burial goods including the unusual bone implement are an individual's personal gear, they are more likely to belong to the woman than the child. It is also likely that the stone artefacts were manufactured, assembled and transported by an individual, because they fit together in a unit. It is therefore possible to argue that the woman made, selected, carried and used these stone tools. On the other hand, the technological analysis shows that the manufacturing technique was not complex, consisting of hard blows well to the back of the core to detach the flakes. There is no simpler method of producing flakes and it is possible that the young child could have made them.

The most difficult thing to explain is the bone implement. The fact that its shape is unknown for Australian implements is not, perhaps, overly strange. Our record of bone tools in museums is scanty, and the taphonomic conditions in many archaeological sites do not favour the preservation of bone. The surprise is that the tool is of human bone. Apart from pointing bones, drinking cups made from human skulls are the only other known example (e.g., McCarthy, 1976:90).

Aboriginal people from the western slopes region (mostly of Wiradjuri, Ngyiampaa and Kamilaroi affinities) regard products from the human body with grave concern. These include human hair string belts acquired from the central, northern and western parts of Australia and tastelessly displayed in local museums. During the Aboriginal consultation regarding this site, it was clear that there is enough local tradition in the area to indicate that throughout remembered history an article from a human body is no casual matter, clearly not something an ordinary person would possess.

The presence of the animal bones is also perplexing. Almost certainly the two possums and the rat were present as skeletons even though the skulls were not found. The marsupial mouse was represented only by a calcaneum and may have been as part of a skin rather than a whole animal body. If only a single species were represented then perhaps some totemic connection could be suggested. The rat and marsupial mouse found in the burial might be what a child would find under logs or beneath rocks. The possums are a type of game animal which might be taken by a woman, especially if she was acquiring skins to flense for a cloak. The idea of food for dead spirits is a possibility, and the contents of a 'clever person's' kit is another.

One explanation for some of the above features is that the burial was just before European contact when diseases such as smallpox were raging through the region. The response to such deaths may have been to bury all things touched by those who died. Although this explanation is attractive, it assumes that the contagious nature of European diseases was understood by Aborigines. Such burials might also be expected to be in the same place if they were numerous. The landscaping depression opened up by the landholder was large enough to indicate that there were no more burials. Moreover, after thousands of years of burials in the area, the chances of getting one which belonged to a period of only the few years when European diseases were rampant must be extremely remote. Another explanation is that the woman and her child were killed by the powers of a 'clever person', and the bone knife was planted on her to indicate how she was killed; or perhaps she was even stabbed with the bone knife. However, if this were so, then it seems odd that such an item was placed with her kit of stone tools and it is difficult to see why her child should be killed.

If we concentrate further on the unusual features, there is an explanation which may account for all the details. Considering the burial cache and the human bone implement, it is possible that the woman was especially involved in spiritual matters and was a 'clever person'. Perhaps she used a human bone tool for everyday use to symbolise this or, more likely, it was part of her secret kit.

One of the liabilities of being a 'clever person' in Aboriginal culture was that of murder accusations. It was believed that people did not die from natural causes alone, but were killed by special powers, for example 'pointing the bone'. Thus, after someone died it was necessary to determine who was responsible and to extract revenge. From the historic accounts of southeastern Australia, it would seem that many of the raids and warfare consisted of these payback actions (e.g., Blainey, 1975:105ff.). Death resulting from these raids may not have been common, but it would have been a regular and consistent cause of mortality.

If the woman in the burial had a reputation as a 'clever person', she may have had the death of someone in another group attributed to her. This may have resulted

in a raid on her camp in which she and her child were killed. Since everything connected with the woman would have been contaminated by her power, these items would have posed a threat to her killers. Consequently all of her possessions would have been buried with her. This might even have included the day's catch of possums and other small animals. It is conceivable that some of the charcoal contained in the burial fill is from the burning of the rest of her effects or even the huts of the camp.

The Pilliga Scrub, north of this area, is said to be the territory of a great clever woman. She is known to be more powerful than any male clever person and can transmute into animals. She is believed to be there at the present time, and any encounter with her by a man is likely to be fatal. With this tradition of malevolent female clever persons in the region, the possibility of such a revenge killing seems very plausible.

The above explanation is a somewhat fanciful means of trying to bring together otherwise anomalous features of the burial. From ethnography, however, we have reason to believe that such dramas took place with some frequency. How do we recognise them archaeologically? What are their chances of appearing in an archaeological context? Such events nevertheless need to be considered along with the everyday processes usually thought to comprise the archaeological record. We suggest that this burial in the Terramungamine area be considered as a dramatic event such as an execution. We add that in discussions with Aboriginal people in the Dubbo area, such an explanation was considered to be plausible, if not likely.

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References

- Blainey, G., 1975. *Triumph of the Nomads*. MacMillan, South Melbourne.
- Dawson, J., 1881. *Australian Aborigines*. George Robertson, Melbourne. Facsimile edition, Australian Institute of Aboriginal Studies, Canberra.
- Elkin, A.P., 1944. *Aboriginal Men of High Degree*. Australian Publishing Company, Sydney.
- Fullagar, R., 1982. What's the use? Unpublished MA(Prelim) thesis. La Trobe University, Melbourne.
- Fullagar, R., 1987. Artefacts from the Jinchilla burial, Dubbo, western N.S.W. Unpublished report prepared for D. Witter.
- Grey, G., 1841. *Journals of Two Expeditions of Discovery...2 vols*, London.
- Hiscock, P., 1988. A cache of tulas from the Boullia district, western Queensland. *Archaeology in Oceania* 23(2): 60-70.
- Horne, G. & G. Aiston, 1924. *Savage Life in Central Australia*. Macmillan, London.
- Hotchin, K., 1982. The archaeology and changing environment of Jack Smith Lake, southeastern Gippsland, Victoria. Unpublished BA(Hons) thesis, Australian National University, Canberra.
- Mathews, J., 1980. *The Two Worlds of Jimmie Barker*. Australian Institute of Aboriginal Studies, Canberra.
- McCarthy, F.D., 1976. *Australian Aboriginal Stone Implements*. The Australian Museum Trust, Sydney.
- Morwood, M., 1984. The Mt. Inglis cache: a new perspective on Aboriginal material culture in the central highlands of Queensland. *Memoirs of the Queensland Museum* 21: 561-565.
- Mulvaney, D.J., 1989. Reflections on the Murray Black collection. *Australian Natural History* 23(1): 66-72.
- Parkinson, R.R.H., 1907. *Dreissig Jahre in der Sudsee*. Strecker und Schroeder, Stuttgart.
- Presland, G. (ed.), 1977. *Journals of George Augustus Robinson, March-May 1841*. Records of the Victorian Archaeological Survey 6.
- Roth, W.E., 1903. Superstition, magic and medicine. *North Queensland Ethnography Bulletin* No. 5.
- Roth, W.E., 1904. Domestic implements, arts and manufactures. *North Queensland Ethnography Bulletin* No. 7.
- Schurmann, C.W., 1879. *The Aboriginal Tribes of Port Lincoln*. E.S. Wigg & Son, Adelaide.
- Spencer, W.B. & F.J. Gillen, 1927. *The Native Tribes of Central Australia*. London.
- Tindale, N.B., 1972. The Pitjandjara. Pp. 217-268. In M.G. Bichierrri (ed.). *Hunters and Gatherers Today*. Holt, Rinehart & Winston, New York.
- Witter, D.W., 1993. *Regions and Resources*. Unpublished PhD thesis, Australian National University, Canberra.

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APPENDIX

Table 1. Measurements (in mm), cortex and use-wear rhyolite flakes. BL - block length; AL - axial length; BW - block width; AW - axial width; MT - maximum thickness; PT - platform thickness; Pl - platform of flake; La - lateral edges of flake; Di - distal end of flake; Ll - left lateral margin; Rl - right lateral margin; x - present; - - absent; ? - edge damage not from use.

| BL | Measurements | | | | | Cortex | | | | Use-wear | | | |
|----|--------------|----|----|----|----|--------|----|----|----|----------|----|----|----|
| | AL | BW | AW | MT | PT | Pl | La | Di | % | Pl | Ll | Rl | Di |
| 44 | 35 | 35 | 44 | 11 | 8 | x | x | x | 20 | - | - | - | x |
| 52 | 34 | 36 | 45 | 15 | 7 | x | x | x | 20 | - | x | x | x |
| 36 | 36 | 41 | 37 | 11 | 8 | x | x | x | 20 | - | ? | x | x |
| 34 | 34 | 34 | 34 | 12 | 6 | x | x | x | 10 | - | x | - | x |
| 36 | 34 | 34 | 36 | 8 | 3 | x | - | x | 10 | - | - | - | - |
| 35 | 36 | 31 | 31 | 8 | 8 | x | x | x | 20 | - | - | x | x |
| 34 | 36 | 25 | 24 | 7 | 6 | x | x | x | 30 | x | - | - | x |
| 36 | 32 | 25 | 25 | 15 | 9 | x | x | x | 30 | - | - | x | - |
| 46 | 33 | 33 | 45 | 7 | 5 | x | - | x | 10 | - | - | x | - |
| 33 | 32 | 32 | 32 | 6 | 2 | x | - | x | 10 | - | - | x | - |
| 32 | 27 | 29 | 32 | 10 | 8 | x | - | - | 10 | - | x | - | - |
| 34 | 33 | 24 | 23 | 13 | 5 | x | x | - | 20 | - | - | x | - |
| 27 | 27 | 17 | 17 | 11 | 10 | x | - | - | 10 | - | - | x | - |

Table 2. Measurements (in mm) on kangaroo incisors.

| | Incisor 1 | Incisor 2 |
|---------------|-----------|-----------|
| Enamel length | 29 | 33 |
| Total length | 53 | 54 |

Table 3. Measurements (in mm) on the human bone implement.

| | |
|--|-----|
| Total length | 203 |
| Maximum width | 30 |
| Thickest part of bone on acromion ridge | 8 |
| Thinnest part of bone | 2 |
| Length of bevelled ground edge | 29 |
| Width of bone at end with bevelled ground edge | 20 |
| Length of bone with striations | 40 |
| Width of bone at handle end | 31 |
| Length of etched portion at handle | 65 |

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<http://dx.doi.org/10.3853/j.0812-7387.17.1993.59>

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<http://dx.doi.org/10.3853/j.0812-7387.17.1993.60>

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