

A BRIEF REPORT ON THE RESCUE EXCAVATION OF A HUMAN SKELETON FROM NOOITGEDACHT, NORTHERN CAPE PROVINCE, SOUTH AFRICA*

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*Accepted for publication May 1995

ABSTRACT

The excavation of a single burial of an older male from the farm Nooitgedacht is described. The preservation of the skeleton is extremely poor, but the context of the grave and the associated ostrich eggshell beads are consistent with other isolated graves of the late prehistoric and early historic populations of the region.

INTRODUCTION

During April 1993, David Morris of the McGregor Museum in Kimberley located a burial eroding out of the bank of the Vaal River on the farm Nooitgedacht, near Barkly West (Fig. 1). His busy schedule at the museum did not allow him time to excavate the exposed material and it was decided in consultation with the Department of Anatomy & Cell Biology at UCT that a team, made up of students from the Science Course in the Department under the direction of A.G. Morris and G.H. Louw would perform the excavation and analysis as a class project. The following is a brief report on the excavation procedures and the outcome of the analysis.

EXCAVATION

The burial was exposed in an erosion slope of the alluvium about 50 m south of the river bank. A substantial cairn consisting of 11 large stones was visible on the surface. Erosion gulleys were encroaching on the north and east edge of the cairn (Fig. 2). The cranium of the burial was exposed immediately to the north of the cairn, and it appears as if the soil erosion was responsible for this exposure (Fig. 3). The area around the cairn was gridded into 1 metre squares with the exposed cranium and associated cairn falling into squares A1 and A2. Clearance of the surface stones in square A1 exposed two deeper stones at the same level as the cranium. These stones and the cranium were removed at the same time.

Although the unweathered portions of the cranium appeared well preserved as the soil was removed, it soon became apparent that the bone was severely damaged by the action of ants of the genus *Messor*. These insects had created a network of tunnels through most of the grave shaft and had used the cranium and the abdominal area of

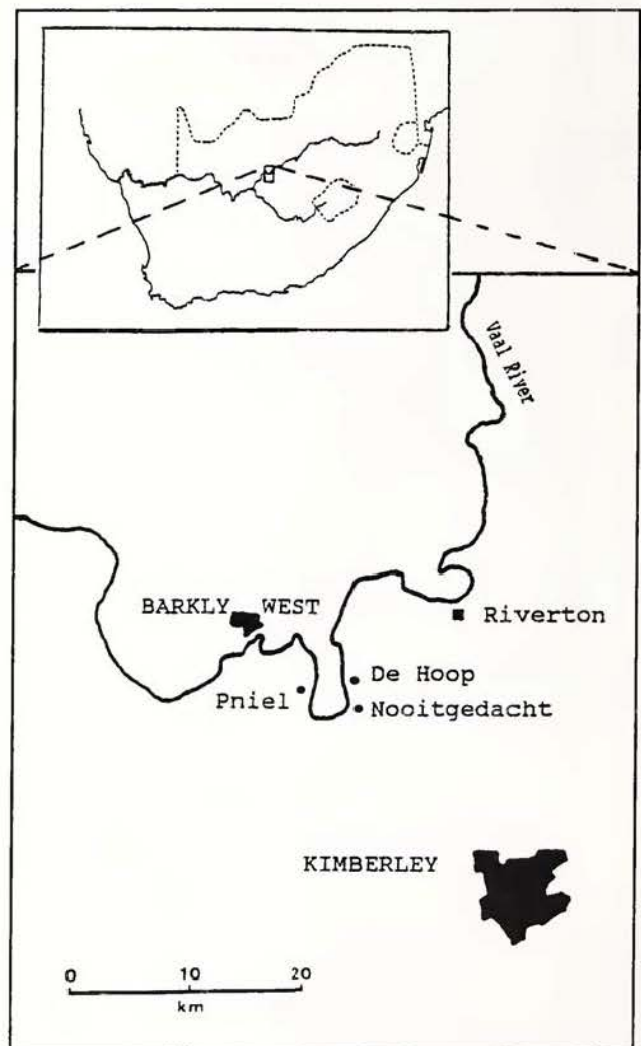


Fig. 1. Map of Barkly West district showing location of sites mentioned in text.



Fig. 2. Nooitgedacht burial cairn on edge of erosion gully before excavation.



Fig. 3. Exposure of cranium on surface.

the body as storage chambers for "duwweltjies", spiny seeds of the genus *Tribulus*. Despite the poor preservation of the bone, most of the elements of the skeleton were visible, so it was decided to continue the excavation even though it was unlikely that a full physical anthropological analysis could be completed on the remains. The cranium was undercut and removed as a block.

The post-cranial skeleton was exposed at a depth of 0,20 m below the cranium which was approximately the same level as the base of the main group of superficial cairn stones. Most of the body lay directly under the cairn stones with the pelvis in the southwest corner of square A2 (Fig. 4). The body posture was an upright kneeling position with the head to the north. Both legs were tightly flexed with the right knee overlapping the left. The pelvis was upright, but the thorax had slumped over on to its left side. The arms were folded over each other with the elbows at about mid-thigh and the hands crossed under the thorax. The head was higher than the body and faced east. The skeleton was removed in two blocks. At its greatest depth the grave shaft was 0,45 m below the level of the base of the surface cairn stones.

Grave goods consisted of a single strand of ostrich eggshell beads. The beads lay along the dorsal aspect of



Fig. 4. Post-cranial skeleton cleared in soil block ready for removal. Note presence of ostrich eggshell beads in single strand around outside of pelvis.

the pelvis as a complete row of over 70 beads. As the strand was traced over the right iliac blade it appeared to break into small clusters of beads, finally becoming untraceable as a separate strand at the level of the proximal femur. The position of the beads over the skeleton indicates that they would have lain over the buttocks at the time of burial, but it is likely that the strand originally lay around the waist, slipping down during the process of burial or decomposition of the body. The average size of the beads is a maximum of 6,6 mm and a minimum of 6,0 mm.

DESCRIPTION OF THE SKELETON

Essentially, only the right side of the cranium has been preserved in a reasonable condition. The occipital is present from lambda to the nuchal line, while the squamous temporal and mastoid are complete, as is much of the petrous temporal including the temporo-mandibular joint and auditory meatus. The preservation is poorer anteriorly and although a segment of the frontal remains, it does not include the nasion. The right zygomatic is attached but is badly eroded.

Also present is the right corpus of the mandible from M1 posteriorly, the right coronoid and part of the ramus. The canine and premolars from the same side are present as loose teeth. The left side of the mandible is represented by the ramus including gonion and the coronoid process.

The preservation of the post-cranials is very poor. Nearly all the bones were damaged by ant tunnels and virtually none of the material could be freed from the soil matrix without the crumbling of the bone. Much of the post-cranial skeleton has therefore been left in its matrix and no observations can be made about long bone length or pelvic morphology.

The cranium is robust with very strong muscularity along the root of the zygoma and on to the nuchal line. The superior orbital margin is well rounded and there is strong supra-orbital development and projection at glabella. This is consistent with a male morphology. The

right maxillary dental set is complete and the mandibular teeth are present on the same side from the canine to M3. All of the teeth are extremely heavily worn. The M1, in particular, has no enamel left on its occlusal surface and secondary dentine is exposed. There is no caries nor ante-mortem tooth loss. Although no specific age can be assessed, it is reasonable to assume from this state of dental wear that the individual was an older adult.

Very few measurements can be recorded. The height of the mastoid is 23 mm. The minimum width of the left ramus is 40 mm and the projective height of the left condyle can be estimated at approximately 53 mm. The value for the rameal index is therefore 75.5%.

BURIALS ALONG THE RIVER SYSTEMS OF THE NORTHERN CAPE

The skeleton at Nooitgedacht is not the first to be discovered in the vicinity of Barkly West. Miller *et al.* (1993) have reported on an isolated grave from De Hoop, less than five kilometres north of Nooitgedacht. Earlier, Humphreys (1970) had briefly described a grave from Pniel, approximately eight kilometres west of the present site. All three of these burials are similar in that they are isolated graves under cairns in the alluvium of the Vaal River. The individual from Pniel was also an upright burial, although both De Hoop and Pniel provided a richer array of grave goods than did Nooitgedacht.

Other skeletons have been collected under uncontrolled conditions from the shores of the Vaal River. J.H. Power, later Director of the McGregor Museum, collected some 15 skeletons during the 1920's from north of Riverton and nearly the same number from lower down the Vaal near the Barkly West loop (Morris 1992a). Unfortunately there are few burial data associated with these skeletons. Further afield is a similar cluster of over 20 graves from Douglas above the Orange-Vaal confluence (Morris 1992a). Humphreys (1982) examined 7 of these from the farm St Clair and noted that where information about burial position was available in the records, the skeletons were in a vertically flexed position. They were associated with a range of grave goods that included ostrich eggshell beads as well as grindstones, a grooved stone, a cowrie shell and shell pendants and a range of small copper items.

Perhaps the largest and most important collection from near rivers in the Northern Cape and Western Orange Free State is that from the Riet River in the region of Koffiefontein (Humphreys 1970, Morris 1992b). Records exist for 79 of these graves. Fifteen percent of these burials were vertically flexed, but this is probably an underestimate because of the lack of data for many of the graves. Thirty-three of the burials had some sort of cultural material interred with the skeleton, and in 19 of these cases the grave goods included ostrich eggshell beads. Most striking is that virtually all of the burials were recovered from within one kilometre of the river.

The common phenomenon linking these clusters of graves is their proximity to the river systems. None of the Vaal river burials have yet been dated, but the style

of graves and their similar location near the river suggest that they may be similar to the Riet River pattern. From our knowledge of the Riet River sequence (Morris 1992b), it seems likely that many of the river burials are of late pre-historic or even early historic origin. Maggs (1971), Humphreys (1972) and Morris (1992b) have emphasised the relationship between the Riet River burials and the Type-R stone settlements along the river.

These authors have argued that the burials represent the remains of Khoisan populations who were within the contact zone of the neighbouring agro-pastoralist Sotho-Tswana groups. The model proposed is that these were hunter-gatherer groups who learned to practice pastoralism through cultural diffusion and that the Type-R settlements were modelled on the agro-pastoralist stone walling pattern (Humphreys 1988). Since livestock require a relatively reliable water source, this resulted in the clustering of the human populations near the river systems. The isolated graves from along the Vaal may also have been part of this process, but without the use of stone for the stock kraals. Although the excavation of the burial at Nooitgedacht has not provided a great deal of information in itself, it does add to our knowledge of these river burials and confirms that the general pattern seen on the Riet and lower on the Vaal probably extends up into the Barkly West area of the river as well.

ACKNOWLEDGEMENTS

We must give special thanks to David Morris of the McGregor Museum for his help not only in introducing us to the skeleton at Nooitgedacht, but also for providing much of the logistical support needed for the trip from Cape Town to Kimberley and for his comments on the manuscript. Developing and printing of the film was kindly performed by Elise Fuller of the Department of Anatomy & Cell Biology at UCT, and Dr H. Robertson of the South African Museum and Dr J. Hoffman of UCT provided information on the taxonomy of ants and plant seeds. We also appreciate the useful comments from the two anonymous reviewers. Financial support came from the Field Work Committee of UCT.

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