

RITUAL INTERFERENCE WITH HUMAN BONES IN THE MESARA THOLOI

There are now about seventy known examples of Mesara-type tholoi in Crete, if we include a small group of Middle Minoan date and another small group found outside the Mesara region, spread through the north and east of the island. Forty-five of these tombs have been excavated, yet we know little or nothing about the human remains found in them. Not only do we have almost no reports on the physical anthropology of those buried in these tombs, but we lack even the most basic reports on the condition of the bones as found, and on the posture in which the skeletons were found. The number of the burials made in any tomb is rarely reported, and where estimates exist they vary widely and are hotly disputed. Nevertheless, even from the totally inadequate reports which are published, there is widespread evidence that the Minoans interfered with the bones in the Mesara tholoi in a number of distinctive ways, and in this paper I seek to draw together for the first time the evidence which exists for the manipulation of human bones in the tholos-using communities of Minoan Crete.

The Burial of the Dead

In view of the large numbers of burials believed to have been made in these tombs, it is surprising how few descriptions there are of the posture in which articulated skeletons were found. Contracted burials were noted at both Ayia Triadha and Gypsades ¹ and Xanthoudides refers to burials as "contracted" although this is in his general discussion rather than in the description of any specific tholos ². On the other hand, Marinatos describes several extended burials in both of the tholoi at Vorou, and Alexiou describes burials in Lebena I as extended ³. At Vorou it was also noted that most burials were oriented east-west with the

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- (1) L. BANTI, *AnnScAtene* 13-14 (1930-1931), p. 151; M.S.F. HOOD, *Ill. London News* Feb. 22 1958, fig. 8.
 - (2) XANTHOUDIDES, *Vaulted Tombs*, p. 134.
 - (3) Sp. MARINATOS, *ArchDelt* 13 (1931), p. 145, 151-153; *Chronique* 1958, *BCH* 83 (1959), p. 742-743.

heads at the east, and I have suggested that there is some evidence that this was common practice in Ayia Triadha A too ⁴. From this evidence, found in a very few tombs, we might suppose that the common method of burial in a Mesara-type tholos was by inhumation, in either extended or contracted position, with the head to the east.

We should perhaps beware of assuming that these somewhat scarce and scattered examples represent the norm in tholos burial practices. No doubt the constant deposition of burials over periods of up to nine or ten centuries may explain the complete disarticulation and disintegration of many of the skeletons in the tombs, but the latest burials might be expected to remain more or less intact. It is surely significant that only one skeleton was found completely articulated in Ayia Triadha A, and that neither Xanthoudides or Alexiou illustrate or mention complete, articulated skeletons when describing contracted and extended burials in tombs they excavated. Only at Vorou and Gypsades, both late examples with relatively small numbers of burials, do we find several of the burials still more or less complete and articulated. More typical than the tombs with some evidence for articulation are those where there is no record of articulated skeletons being noted during excavation; at least forty of the forty-five excavated tombs fall into that category. Enrico Stefani long ago suggested that the corpses buried in the Mesara tholoi were allowed to decompose before interment in the tomb, which was essentially a repository for disarticulated bones ⁵. Although it is clear that in some tombs small numbers of articulated burials were made late in the history of the tombs, it remains distinctly possible if not probable that the majority of burials made in the Mesara tholoi were made as collections of disarticulated bones, or possibly as badly decomposed bodies which would soon become disarticulated by even minor disturbance of the burial deposit.

It is unfortunate that we cannot be more certain of the original mode of burial, since this must obviously influence our interpretation of what constitutes post-burial interference of the bones. If skeletons were completely disarticulated before bones were first placed in the tomb, then the removal of certain bones, the charring of bones, and the sorting and differential placing of bones might all be done at the time of "burial" rather than representing later disturbance and manipulation. In describing the evidence we have for such manipulation, therefore, we must bear in mind the possibility that this was as much a burial practice as a post burial activity. Some activities, however, are more clearly post burial, and ethnographic evidence suggests that manipulation of bones is a not uncommon post burial activity.

Interference with skeletal remains

The skeletal remains in the Mesara tholoi appear to have been interfered with, or manipulated, in at least five different ways. These may be summarised as follows: -Clearance

(4) BRANIGAN, *Tombs*, p. 88.

(5) BANTI, *op. cit.*, p. 150.

of burial remains to dumps either within the tombs or outside them (interference ?). -Fumigation of either bones or the entire tomb contents (interference or manipulation ?). -Selected grouping of certain bones (manipulation ?). -Selected removal of certain bones from the tomb (manipulation ?). -The breaking, or chopping into fragments, of some long bones (manipulation ?). The occurrence of these practices is tabulated in Table 1 (p. 46), where it can be seen that almost thirty of the tombs produce evidence for one or more of these activities, but that only fumigation and clearance are found at all frequently. These two activities are best described as interference, since their purpose *may* be no more than the practical one of making tombs which were becoming choked with remains suitable for further burials. The other practices serve no such practical function and are better described as manipulation, with bones selected, removed or specially treated for what must be purely ritual reasons, very possibly with social overtones.

We can now examine the evidence for the practice of each of these activities in so far as it has been recorded by the excavators /discoverers of these tombs.

Fumigation

A dozen tombs have provided some evidence for the charring of bones but there are important differences in the nature of the evidence from these tombs. In only three cases was evidence noted for fires which had left marks on either the floor or the walls of the tombs -these were Platanos tombs A and Γ, and Koumasa B ⁶. Elsewhere the evidence was confined to the bones and in some tombs, such as Drakones Δ, bones in one part of the tomb were unburnt and in another were charred ⁷. It seems likely that these variations reflect the varying size of the fumigatory fires and the intended scale of the fumigation. At Platanos A, for example, where both the tomb and bones were heavily charred, it is quite clear that a full scale fumigation and clearance of the remains had taken place, probably late in EM II. In the adjacent tholos Γ, where some bones were blackened and others not, the floor of the tomb was burnt in several places, suggesting very localised fumigation. Localised fumigation appears to have been far more prevalent than general fumigation, to judge by the scarcity of tombs with extensive burn marks on walls and floors and a totally charred burial stratum. Furthermore, we have to bear in mind the five tholoi where the excavators specifically state that no evidence at all was found for the charring of either bones or tomb. Fumigation was clearly not a mandatory part of the ritual or funerary practices of the Mesara communities, yet the frequent appearance of partial fumigation affecting only a small part of the burial deposit requires explanation. If general fumigation of the entire tomb and its contents was rare, what was the purpose of small-scale localised fumigation ? Presumably it was not *fumigation* at all, but was used to cleanse, symbolically or otherwise, the bones of one or a handful of individuals.

(6) XANTHOUDIDES, *Vaulted Tombs*, p. 6, 89, 92.

(7) XANTHOUDIDES, *Vaulted Tombs*, p. 76.

Tholos Tomb	Fumigation/ Charring	Clearance (where to)	Bone Groups	Bones Removed	Chopping/ Breakage
Apesokari II		Chambers			
Arkhanes		Buildings		Yes	
Aspripetra	No				
Ayia Eirene e	Bones				
Ayia Kyriaki	Bones	Chambers			Chop/Break
Ayios Kyrillos		Chambers			
Ayia Triadha A		Chambers	Skulls		
Christos	No				
Drakones	Bones				
Drakones Z		Yes			
Kalathiana	No				
Kaloi Limenes 2	Bones				Breakage ?
Kamilari I		Internal			
Kaminospelio					Break/Grind ?
Koumasa B	Bones/Tomb		Skulls		
Koumasa E		Internal			
Lebena IIa	Bones				
Marathokephalo II	No	Internal			
Megaloi Skinoi IIIa	Bones				
Megaloi Skinoi IIIb	Bones/Tomb ?				Breakage ?
Platanos A	Bones/Tomb	Trenches		Yes ?	
Platanos B	No		Skulls		
Platanos	Bones/Tomb	Trenches			
Porti	Bones	Trenches			
Skotomenou Khar. A		Rock cleft ?			Breakage ?
Vorou A		Internal	Skulls +	Yes	
Vorou B				Yes	

Table 1

Clearance

At Platanos A, fumigation and clearance of the burial remains seem to have been combined, but that is exceptional, although some charred bones were found in the small huts outside tholos Γ at the same site and may have come from clearance of the tomb after localised charring of skeletal remains ⁸. The combination of total fumigation and total clearance of bones and grave-goods before a new burial stratum was begun in Platanos A, and the total fumigation overlain by a new floor of clean white sand in Lebena IIa, suggest that fumigation in these tombs was ritualised and symbolic. The same may be said of the clearance of Koumasa E, where much of the burial deposit was cleared out and the remainder was swept into a heap at one side and the whole deposit covered with a layer of white earth ⁹.

Elsewhere, clearance was a less dramatic event and was indeed perhaps an ongoing process. A certain amount of clearance within the tomb, by pushing material to one side, was noted in Kamilari I (Pl. X, a-b) and Marathokephalo II ¹⁰, and at Vorou space was made for more burials by dumping bones from several skeletons into a single larnax ¹¹. Most clearances, however, involved the removal of large quantities of bones from the tomb proper to external depositories. In some instances -at Apesokari II, Ayios Kyrillos and Ayia Triadha A and Ayia Kyriaki- bones were removed from the tomb chamber and dumped in the ritual chambers fronting the tomb ¹². At Platanos and Porti, however, the quantities of bones removed from the tombs was so great that lined pits were dug and "filled to the brim" with the skeletal material and small quantities of grave goods ¹³. Unfortunately, none of these bone dumps have been recorded and analysed, so that we have no idea as to whether the removal of bones was completely indiscriminate, or whether some remains were excluded from the process (e.g. certain bones or the bones of certain groups of individuals). The impression is one of indiscriminate, wholesale clearance, but when we examine the limited evidence for the removal of specific bones from the tomb we shall see there are some reasons to think that there may have been some selectivity applied to these clearances.

The grouping of bones

In the EM II ossuary at Arkhanes there was clear evidence for the grouping of skulls, where a "nest" of nine or ten were found together, and similar groups of skulls were found at

(8) XANTHOUDIDES, *Vaulted Tombs*, p. 93.

(9) XANTHOUDIDES, *Vaulted Tombs*, p. 34.

(10) D. LEVI, *AnnScAtene* 39-40 (1961-1962), p. 28-31, fig. 24-27; St XANTHOUDIDES, *ArchDelt* 4 (1918), p. 17.

(11) MARINATOS, *op. cit.*, p. 145-146.

(12) C. DAVARAS, *ArchDelt* 19 (1964), B3, p. 441; I. SAKELLARAKIS, *ArchAnAth* 1 (1968), p. 50-53; BANTI, *op. cit.*

(13) XANTHOUDIDES, *Vaulted Tombs*, p. 56, 93.

Mochlos. Although we have no published photographs from the Mesara tholoi to illustrate the same practice there, Xanthoudides and Stefani appear to have noted similar concentrations at Koumasa, Platanos and Ayia Triadha A. At Koumasa, Xanthoudides recorded "a number of skulls heaped together at one spot" ¹⁴. In Platanos B "Many skulls were noted in the southern part, suggesting that they had been heaped together there intentionally" ¹⁵. In Ayia Triadha A, the grouping of skulls can be seen in Stefani's fig. 5 ¹⁶. The manipulation of skulls is not uncommonly evidenced in prehistoric funerary structures and tombs in Europe, but the skull is of course a particularly distinctive part of the skeleton, the manipulation and selection of which is easily noticed and noted by excavators. Evidence for the selection and grouping of other bones is much more difficult to encounter, but Marinatos apparently found one example of it in Vorou A ¹⁷. A small cooking pot, too small according to Marinatos to have taken the complete body of a child, was found to contain a selection of bones including a child's jaw. The bones must clearly have been removed from a decomposed burial and placed in this receptacle; unfortunately only the jaw bone is specifically identified so that it is impossible even to hazard a guess as to criteria used in selecting the bones to be placed in the vessel. In the south-east corner of the same tomb, Marinatos discovered what appears to have been another deliberately selected group of bones, protected by an upright slab; there, an incomplete skeleton was accompanied by bones removed from other burials ¹⁸. Bone groups of the type found at Vorou do not attract the attention of the excavators or the students of burial customs in the same way as groups of skulls, femurs or other single specific bones, but we should not assume that such groupings were either rare or of less significance.

The removal of bones

The removal of selected bones from a communal tomb is difficult to document, particularly when the excavated record is far from complete and there is no analysis of the skeletal remains. Yet it seems certain that bones were selectively removed from many of the Mesara tholoi. Although human bones have been poorly preserved in the tholoi, there is a clear deficiency of skulls for example. From the fifteen tombs he published in *The Vaulted Tombs of Mesara*, which must have contained at the very least a thousand burials and probably many more, Xanthoudides was able to record a total of 8 skulls ¹⁹. The best preserved are illustrated by him ²⁰ and it is apparent that even these are very incomplete. It seems certain that many skulls must have been removed from the tombs. At Planatos A for example,

(14) XANTHOUDIDES, *Vaulted Tombs*, p. 7.

(15) XANTHOUDIDES, *Vaulted Tombs*, p. 92.

(16) E. STEFANI, *AnnScAtene* 13-14 (1930-1931).

(17) MARINATOS, *op. cit.*, p. 151.

(18) *Ibidem*.

(19) XANTHOUDIDES, *Vaulted Tombs*, p. 126.

(20) XANTHOUDIDES, *Vaulted Tombs*, pl. LIX.

Xanthoudides comments on the "fair state of preservation of the bones" and notes the amount of goldwork and other grave goods found with the uppermost layer of burials, indicating no subsequent robbing. Yet from the whole cemetery at Platanos he recovered only three large portions of skulls ²¹. Some supporting evidence for the removal of skulls from their bodies is found in the more detailed notes made by Marinatos of the tombs at Vorou ²². In one place in tomb complex A he found a skeleton with the skull removed, and in room ΔΔ 2 one pithos was found to contain one skeleton and two skulls. The complete removal of skeletal remains from the tombs at Vorou is indicated by both larnakes and pithoi found inside the tomb A with no skeletal remains inside them; the majority of larnakes and pithoi contained incomplete skeletons (again suggesting selective removal of bones). Here again it should be noted that the recovery of skulls was low; only six semi-complete examples were recovered (of which only four could be sufficiently reconstructed for measurement) from a total of about 70 burials ²³. In tholos Γ at Arkhanes photos reveal several empty larnakes and clearly incomplete skeletons in others; in this instance, large numbers of skulls and other bones found in adjacent buildings (buildings 9, 18 and 19) may reveal where some of the bones selected for removal from the tholos were taken and stored ²⁴.

The breakage of bones

The possibility that some of the bones buried in the Mesara tholoi were deliberately rather than accidentally broken has only been recognised in the last fifteen years. During the survey of the Ayiofarango and the adjacent stretch of coast in 1971-72, fifteen (possibly sixteen) tholos tombs were identified and recorded ²⁵. At nine of these the remarkably small size of the human bone fragments was noted at the time, and mentioned in the subsequent reports. With the excavation of the Ayia Kyriaki tholos in 1972 the opportunity to examine the bones more closely arose. Less than a hundred fragments of bone were recovered, and the largest of these was less than 6 cm. in length. The impression here and elsewhere was that bones had been deliberately broken down into small pieces, and five bones were noted which appeared to have been cleanly and deliberately chopped or cut at each end ²⁶. It is possible that some of these small bone fragments represent the residue from robber's sieving operations, but some were certainly broken into small pieces and placed in a ritual context in the Early Bronze Age. In room I a small area of undisturbed deposit was found and this contained twenty small fragments of bone, together with fragments of conical cups ²⁷. This small deposit placed against the end wall of the otherwise empty room was far

(21) XANTHOUDIDES, *Vaulted Tombs*, p. 126.

(22) MARINATOS, *op. cit.*, p. 151.

(23) ID., *op. cit.*, p. 165.

(24) *Chronique 1976*, BCH 101 (1977), p. 652.

(25) D. BLACKMAN, K. BRANIGAN, BSA 70 (1975), p. 17-36; ID., BSA 72 (1977), p.13-84 .

(26) ID., BSA 77 (1982), p. 53.

(27) ID., *op. cit.*, p. 8, 25.

too small to represent any clearing deposit from the tomb chamber - that is, room I was not being used as a dump for bones. The bones appear to have been selected and brought here for some specific piece of ritual.

Finally, we should note that at another tomb where the small size of bone fragments was noted, namely Kaminospelio, a quern stone was found in the tomb with fragments of bone adhering to it in the saddle of the quern, giving the impression that bones had been pounded or ground on the quern ²⁸.

Summary

The practices outlined in this brief paper are not exclusive to the burials in the Mesara tholoi; indeed they are much more clearly evidenced elsewhere. In particular recent studies of British megalithic tombs and their burials have produced good evidence for selection, grouping and removal of bones, and the charring of bones has been recorded for many years in the burial deposits of the long barrows of eastern England. Similarly many of the practices discussed in this paper are reported in ethnographic studies of funerary practices. In general such practices are found where "secondary burial" is practised - that is, where a body is initially disposed of and subsequently involved in a secondary rite, often accompanied by greater communal involvement than the original funeral.

It seems likely that the Mesara tholos burials are in some sense secondary. The disturbance and manipulation of bones that is evidenced there clearly points to a secondary rite, or even a series of secondary rites. It remains unclear whether the manipulation of bones took place at the time when remains were first placed in the tombs, or later. That is because we still cannot be certain whether the majority of the earlier burials in the tholos tombs of Mesara were made as articulated corpses or as collections of disarticulated bones. We must look forward to the final publication of the Lebena and Arkhanes tholos tombs, where undisturbed burial deposits excavated and studied under modern conditions should provide an answer to that question and perhaps throw additional light on some of the manipulatory practices to which I have tried to draw attention here. Until we have such reports to hand, it would be both foolish and impossible to attempt to understand these practices further or interpret them in terms of social behaviour. It should already be clear, however, that burial in a Mesara tholos tomb was not a single-phase or simple event but almost certainly a complex process which took place over a long period of time.

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(28) D. BLACKMAN, K. BRANIGAN, *KretChron* 27 (1973), p. 202, 206.

LIST OF ILLUSTRATIONS

- Pl. X, a : Pottery and human bones pushed or swept into a heap at the side of the tomb : Kamilari I. Courtesy : Prof. Doro Levi.
- Pl. X, b : Another view of bones and pottery pushed to one side in Kamilari I. The long bones appear preserved, but there are few signs of ribs. Courtesy : Prof. Doro Levi.

X



a



b