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A FOOTNOTE ON THE ARCHAEOLOGY OF POWER: ANIMAL BONES FROM A MYCENAEAN CHAMBER TOMB AT GALATAS, NE PELOPONNESE¹

(PLATE 35)

INTRODUCTION

ANIMAL remains in human burials do not usually receive much attention, and very rarely become the subject of zooarchaeological investigation. Even where this is carried out, analysis does not usually go beyond a brief description of the species and the anatomical parts found. Moreover, interpretations tend to extrapolate into the past our presentday perceptions of animals and/or confine themselves to the blanket suggestion of animal sacrifice—which in itself signifies nothing. This category of archaeological material, however, offers the opportunity to investigate issues such as the symbolic role of animals in human relationships, the development of human perceptions of animals over time, and burial customs and their meaning, provided that meticulous contextual zooarchaeological analysis is firmly integrated within a broader theoretical archaeological framework.

This short article presents the analysis of the animal remains from a Mycenaean chamber tomb at Apatheia, Galatas, in the north-east Peloponnese. It also takes the opportunity briefly to discuss issues related to the role of animals in the Mycenaean burial ritual, and especially the significance of dog remains in human burials.

THE EXCAVATION

At the site of Apatheia, which is situated 4 km west of Galatas and 4 km east of Troizina in Troizinia, a group of Mycenaean chamber tombs was found on the north slopes of a hill, 1 km south of the Galatas–Troizina road. Three tombs were excavated in 1985, one in 1986, another two in 1991, and one more in 1993. These excavations were conducted by Mrs Eleni Konsolaki-Yannopoulou on behalf of the 2nd Ephoreia of Prehistoric and Classical Antiquities. The remains come from tomb 2 of 1991, excavated as part of a rescue operation.

¹ Many thanks are due to Mrs Eleni Konsolaki for inviting me to study the animal bones from her excavations and for providing all the necessary information as well the photographs in PLATE 35 *a* and *b*; also for her comments on an earlier draft of this paper. Many thanks also to Paul Halstead for comments and to Graeme Barker and Annie Grant, who in their capacity as referees made many useful suggestions. Conventional rules of responsibility apply. FIG. 1 was redrawn by D. Schofield from an original by N. Kalliotzis of the 2nd

Ephoreia, and FIG. 2 was done by Vangelio Kiriati. The identification and recording of animal bones were undertaken while I was Faunal Research Fellow at the Wiener Laboratory of the American School of Classical Studies at Athens.

Special abbreviations:

Bp = proximal breadth

Bd = distal breadth

GL = greatest length

GLP = greatest length of the glenoid process

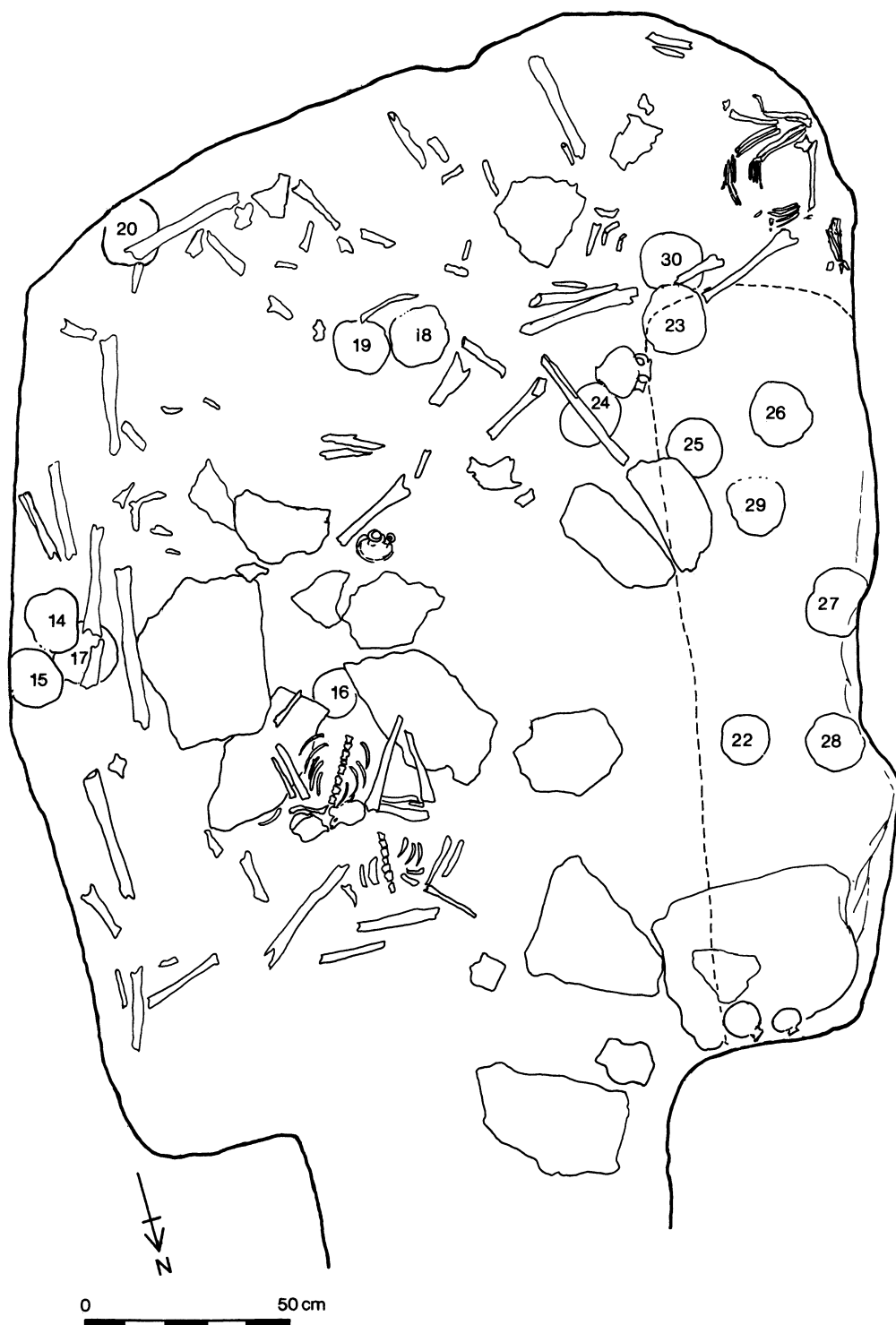


FIG. 1. Plan of the Mycenaean chamber tomb 2 (1991) from Apatheia, Galatas, at a depth of 1.15 m with the dog skeleton 1 at the SW corner. Dotted line represents the pit with the articulated skeleton; scattered skulls are noted with numbers.

The dromos was destroyed by modern activity but the entrance was still found blocked with stones. The chamber was filled up to its roof; the deposit to a depth of 0.65 m in the east part and to 0.95 m in the west part of the tomb contained brown soil together with organic material penetrated from the present surface, along with some pieces of tiles of a later (hellenistic?) date.

The tomb contained an unusually large number of skeletons (physical anthropological study is under way, but the excavator counted 31 skulls at the time of the excavation) and nearly all of them were completely or partially disarticulated, although skulls were arranged into groups in certain parts of the chamber. An exception was a skeleton found articulated in a pit at the west side of the tomb (FIG. 1). A number of vessels were found in the tomb, representing some of the shapes usually found in Mycenaean chamber tombs: kylikes, conical cups, stirrup jars, alabastra, jugs, etc. A number of glass beads and spindle whorls were also found. Complete vessels were found close to the chamber walls but sherd material coming from the same pots was found in different depths in the deposit, indicating that, despite the chronological differences (based on stylistic grounds), the fill as found represents a single stratum.

The excavator dates the pottery found in the tomb to LH II B–LH III C Early. In view of the state of the skeletal material and the spatial distribution of pottery, the excavator has made the preliminary suggestion that, although the tomb was used for primary burials at some stage (as indicated by the presence of the articulated skeleton in the pit), the deposit with the disarticulated skeletal material possibly represents a single episode of secondary burials coming from the cleaning of the tombs nearby.

THE ZOOARCHAEOLOGICAL MATERIAL

METHODOLOGY

The material is permanently kept at the Museum of Piraeus and was examined at the Wiener Laboratory of the American School of Classical Studies (to which it was transferred with permission by the Department of Foreign Schools, General Directorate of Antiquities) during the summer of 1994.

For the recovery of the material dry sieving was carried out with a mesh of 0.5×0.5 cm. This mesh size ensured the recovery of most of the bones of large and medium-sized mammals, although some of the bones from small mammals and birds, and most of the fish bones, must have been missed.² For identification of the species, the comparative collection of the Wiener Laboratory as well as the author's personal collection and the atlas of Schmid³ were used. Quantification follows the 'Number of Identifiable Specimens' method.⁴ Ageing based on epiphyseal fusion follows Silver.⁵ Cutmarks were examined with a hand-lens and,

² R. Meadow, 'Animal bones: problems for the archaeologist together with some possible solutions', *Paléorient*, 6 (1981), 65–77.

³ E. Schmid, *Atlas of Animal Bones* (Amsterdam, 1972).

⁴ See, among many others, A. Gilbert and B. H. Singer, 'Reassessing zooarchaeological quantification', *World Archaeology*, 14 (1982), 21–40; A. Gautier, 'How do I count you, let me count the ways? Problems of zooarchaeological quantification', in C. Grigson and J. Clutton-Brock (eds), *Animals and Archaeology*, iv:

Husbandry in Europe (BAR S227; Oxford, 1984), 237–51; D. K. Grayson, 'On the quantification of vertebrate archaeofaunas', in M. B. Schiffer (ed.), *Advances in Archaeological Method and Theory*, ii (New York, 1979), 199–237; id. *Quantitative Zooarchaeology* (New York and London, 1984); T. J. Ringrose, 'Bone counts and statistics: a critique', *JAS* 20.2 (1993), 121–58.

⁵ I. A. Silver, 'The ageing of domestic animals', in D. Brothwell and E. Higgs (eds), *Science in Archaeology* (London, 1969), 283–302.

TABLE 1. Representation of faunal remains from chamber tomb 2 (1991) at Apatheia, Galatas by species and anatomical elements (side given in parentheses).

	Horn core	Mandib. teeth	Maxillary teeth	Humerus	Radius	Ulna	Metacarpal	Calcaneum	First phalanx	TOTAL
Sheep/goat (<i>Ovis aries</i> / <i>Capra hircus</i>)	1 (?)	1 (?)	3 (2 r; 1 ?)	1 (r.)						6
Dog (<i>Canis familiaris</i>)	See TABLE 2, TABLE 3									82
Hare (<i>Lepus europaeus</i>)				1 (l.)	1 (l.)	1 (l.)	1 (l.)	1 (l.)	1 (?)	6
Roe deer (<i>Capreolus capreolus</i>)	1 (?)									1
Lagomorphs					1	1				2
Birds							2 (r.+l.)			2
Unidentified										39
TOTAL										138

when in doubt, with a low-power stereomicroscope, and were recorded according to Binford,⁶ although other literature was also used. Metrical information (in mm) was recorded according to the conventions proposed by von den Driesch.⁷

RESULTS

The animal bones analysed fall within two groups: the scattered bone fragments belonging to different species and found in the fill at a depth of 0.55–1.10 m (TABLE 1); and the two cases, one of a dog skeleton (TABLE 2) and another of a possible dog skeleton (TABLE 3), both deliberately deposited and found at a depth of 1.15 m and 1.00–1.10 m respectively. Most of the material was heavily eroded owing to soil activity and root etching,⁸ while a large number of bones exhibited signs of possible gnawing by rodents.⁹ A number of bones (parts of the main dog skeleton, bones of the lagomorph animal) bear signs of burning on the soil attached to them. The sheep/goat right humerus (only its shaft was present) also bore signs of burning.

Little can be said about the first group of bones, given such a minute sample. It is likely that some of them found their way into the tomb by accident, while others offer clear indications that they are food remains, associated with some sort of funerary dining ritual. This is clearest in the case of the hare remains: the radius, ulna, and metacarpal at least almost certainly come from the same animal, and were most probably articulated when deposited fresh as a

⁶ L. R. Binford, *Bones: Ancient Men and Modern Myths* (New York, 1981).

⁷ A. von den Driesch, *A Guide to the Measurement of Animal Bones from Archaeological Sites* (Harvard University,

Peabody Museum Bulletin, 1; Cambridge, Mass., 1976).

⁸ Cf. R. Lee Lyman, *Vertebrate Taphonomy* (Cambridge, 1994), 375–7.

⁹ Cf. *ibid.* 194–5.

TABLE 2. Summary information on dog skeleton 1 from chamber tomb 2 (1991) at Apatheia, Galatas.

Anatomic element/ body part	Side	Proximal/distal/complete	Fusion state	Measurements (mm)	Comments
Mandible	left	Only P1 present			
Loose teeth		Upper and lower canines (both sides), 2 lower premolars, and 2 lower incisors present			
Vertebrae		9 vertebrae			
Ribs		2 ribs			
Scapula	right	Most of the blade	Fused	GLP 18.17	Roden gnawing
Pelvis	right	Only acetabular area survives	Fused		
Pelvis	left	Only acetabular area survives	Fused		
Humerus	right	Proximal epiphysis missing	Fused		
Humerus	left	Proximal epiphysis missing	Fused	Bd 20.49	Mid-shaft breakage
Radius	right	Both ends present but distal broken in mid-shaft	Fused	Bp 12.29 GL 118.18 Bd 15	
Radius	left	Complete	Fused	GL 118.73; Bp 11.50; Bd 13.73	
Ulna	right	Nearly complete	Fused		Possible rodent gnawing at the distal end
Ulna	left	Complete	Fused	GL 139.27	Fine transverse cutmarks in the middle of the shaft, on the lateral side
Tibia	right	Only the shaft present			Gnawed by rodents: teeth- marks near the proximal end, plantar side
Front foot	right	1 carpal, 4 metacarpals (m/carpal III is missing), 4 first phalanges, 3 second phalanges		m/carpal v: GL 41.20; m/carpal IV: Bd 5.23; first phal.: GL 19.94; second phal.: 10.32	Transverse cutmarks on the lateral surface of a central m/carpal, close to prox. epiphysis; gnawing marks at the proximal epiphysis of one first phal.; also at the proximal end of a central and a lateral meracarpal
Front foot	left	5 metacarpals (I–V), 1 second phalanx			All m/carpals lack the distal epiphysis
Rear foot	right	4 metatarsals, 4 first phalanges, 3 third phalanges, calcaneum		m/tarsal III: GL 63.10	Transverse cutmarks in the mid-shaft of m/tarsal II
Rear foot	left	4 metatarsals (II–IV), 5 first phalanges, 1 second phalanx; 1 third phalanx		m/tarsal III: GL 62.60; m/tarsal IV: GL 65.33	M/tarsal IV gnawed by rodents
First phalanx		Distal end missing	Fused		

TABLE 3. Summary information on the possible dog skeleton 2 from chamber tomb 2 (1991) at Apatheia, Galatas.

Anatomic element/ body part	Side	Proximal/distal/complete	Fusion state	Comments
Maxilla	Left	Part of it with a third premolar and first and second molar present		
Maxilla	Right	Fragmented; no teeth present		
Vertebrae		1 vertebra		
Humerus	Indeterminate	Only shaft present	No fusion evidence	
Front foot	Right	2 metacarpals (III–IV), 1 first phalanx	No fusion evidence	In m/carpal III deep transverse cutmarks in the lateral peripheral surface, close to prox. epiphyses; both distal epiphyses possibly gnawed off by rodents
Metacarpal	Indeterminate	III or IV; only shaft present	No fusion evidence	
Metatarsal	Right	M/tarsal V, only shaft present		
First phalanx	Indeterminate	part of prox. epiphysis missing	Fused	

piece of meat. This is indicated by their presence in the same spot and by their anatomic position, as they all come from the same side and part of the body, and indeed fit together.¹⁰ It is also very likely, judging by their size, that the humerus,¹¹ calcaneum, and first phalanx (only the shaft is present) which were found at the same depth but in a different spot belong to this same animal: such a concentration of hare bones coming from the same part of the body is unlikely to be accidental. Moreover, the two cases of cutmarks observed, one in the distal end of the calcaneum (deep and wide intersecting cuts) and another on the phalanx (many parallel thin cuts), the first most probably the product of disarticulation and the second of skinning, indicate that the animal was prepared by skinning and was butchered into manageable quantities for consumption. The two bird bones coming from a specimen of the size of a partridge (only part of the shaft was present, making identification to species impossible, at least to this author) also point to meat consumption: they come from the opposite sides of the same individual, and near their distal epiphysis deep, multiple, crossing cutmarks were recorded.

More interesting information is provided by the second group of bones, the dog skeletons. As with most of the bone material, these skeletons were severely eroded and brittle, which explains the relatively large number (for an articulated skeleton) of breaks, both old and fresh. The first and more complete dog skeleton was found at a depth of 1.15 m in the south-west corner of the tomb (FIG. 1; PLATE 35 *a, b*). Bones from all parts of the skeleton were present (FIG. 2; TABLE 2) and most of them were found articulated, indicating that the skeleton was discovered in its original position. The number of missing parts is explained by the fact that some fragile parts (such as the skull) were fragmented and passed unnoticed, or else many were not recognized as part of the skeleton at all, and were either accidentally destroyed or misplaced (possibly put together with the mass of disarticulated human skeletons). The cause

¹⁰ Measurements for m/carpal III: GL 31.71; Bd 4.26.

¹¹ Only the distal epiphysis present, measuring Bd 12.06.

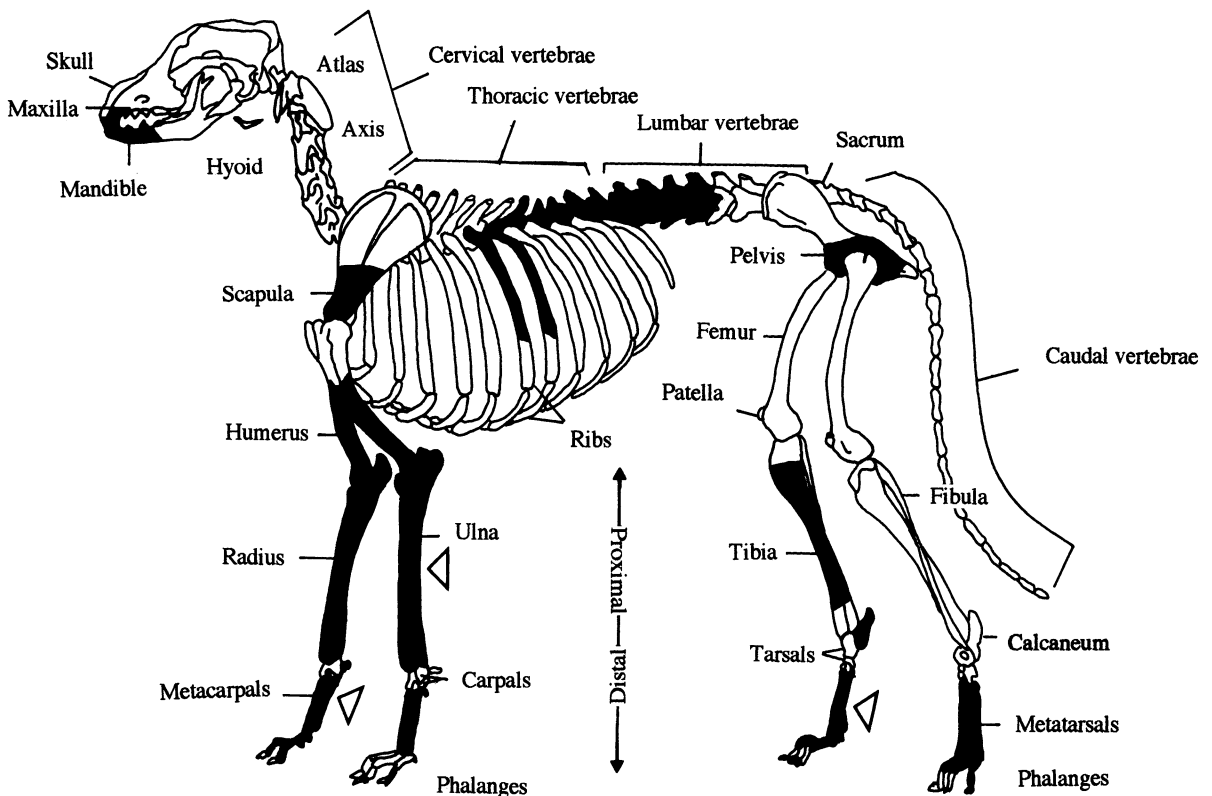


FIG. 2. Graphic representation of a dog skeleton, showing in black the anatomic elements preserved and found from skeleton 1 at chamber tomb 2 (1991) at Apatheia, Galatas. The arrows show the approximate position of cutmarks.

of death cannot be determined but ritual killing seems plausible. Had the atlas being found, it might have provided evidence (in the form of cutmarks) for killing by cutting the animal's throat¹². On the basis of the epiphyseal fusion, the specimen was older than 11–12 months at death, but more precise ageing cannot be determined; nor can the sex of the animal be specified. No baculum (or penis bone) was found, but this does not necessarily mean that the animal was female since the bone, being small and relatively fragile, could have disappeared, as happens with many other bones from the skeleton.

The size of the animal and the possible breed are of interest. Following the formula proposed by Kudelka in 1885,¹³ our specimen (at shoulder height) stood at 36.2 cm based on ulna and 39.1 cm based on radius. This can be compared to an estimated shoulder height of 73–78 cm for dogs from LH III Tiryns,¹⁴ whereas we can imagine that Mycenaean dogs from Kalapodi and Pylos were equally tall, judging by the greatest length of a metacarpal and two

¹² Cf. Binford (n. 6), 111.

¹³ R. A. Harcourt, 'The dog in prehistoric and early historic Britain', *JAS* 1 (1974), 151–75.

¹⁴ A. von den Driesch and J. Boessneck, 'Die Tierreste von der mykenischen Burg Tiryns bei Nauplion/Peloponnes', in *Tiryns: Forschungen und Berichte* (Mainz am Rhein, 1990), 87–164 at 145.

first phalanges, respectively. The metacarpal measures 59.8 mm (Kalapodi)¹⁵ and the first phalanges 24.8 and 29.0 mm (Pylos),¹⁶ differing markedly from our specimen, whose metacarpal measures only 41.20 mm (m/carpal V in TABLE 2) and first phalanx 19.94 mm (front right foot: TABLE 2). Such a short stature for a mature animal indicates that in the Galatas tomb we are possibly dealing with a brachymel dog (a short-legged variety which in the Eastern Mediterranean is documented as early as 1900 BC in Egypt),¹⁷ although our specimen is relatively larger than the average brachymel dog, the shoulder heights of which range between 22 and 37 cm.¹⁸ While it is usually thought that short-legged dogs were bred in some cases as pets or luxury animals (e.g. in the Roman period),¹⁹ this need not always be the case. Small dogs have been used in the past as they are today for hunting since their size makes them more suited to certain hunting tasks than larger dogs.²⁰

The other interesting feature of the skeleton is the presence of a number of cutmarks. Three certain cases of this phenomenon were recorded (shaft of an ulna, of a central metacarpal, and of a central metatarsal: TABLE 2; FIG. 2; PLATE 35 c), although a number of less certain cases, especially in the extremities, were also noted. The heavily eroded surface and the fine nature of incisions made the identification of certain cutmarks difficult, but the combined use of a stereomicroscope and comparative literature guaranteed a valid identification. They are classified as cutmarks since they are narrow, elongated, parallel, transverse striations, in most cases with a V-shaped cross-section.²¹ In the case of the right central metacarpal, the repeated action of the tool has produced what is termed a 'sawmark', 'a set of multiple, closely spaced, parallel cutmarks that cumulatively create a deep incision'.²² These incisions cannot be the result of gnawing by rodents (present in some anatomic elements of the skeleton: TABLE 2), since the later are usually shallower, rounder, and softer in appearance and tend to be more wavy,²³ characteristics which are absent from our case.

These cutmarks are more likely to be the result of skinning, for the following reasons. (1) The presence of cutmarks on an articulated skeleton cannot be the product of any other carcass-processing activity such as dismembering, chopping, etc., practices which are associated with meat preparation and consumption. (2) The anatomic placement of the incisions, mainly in the extremities, coincides with what is ethnographically, archaeologically, and experimentally recorded for the skinning process.²⁴ Skinning cutmarks on the dog radius, on the other hand, are not unusual.²⁵ (3) The fine nature of the cutmarks is characteristic of skinning, since the activity aims to remove the skin and not to cut through to the bone, so that the pressure exerted is not great, resulting in fine incisions or even no traces at all. In addition, the soft tissues (meat, periosteum) absorb much of the pressure exercised on the cutting tool.²⁶

¹⁵ M. Stanzel, *Die Tierreste aus dem Artemis-/Apollon-heiligtum bei Kalapodi in Böotien/Griechenland* (Munich, 1991), 84.

¹⁶ G. Nobis, 'Archäozoologische Untersuchungen von Tierresten aus dem "Palast des Nestor" bei Pylos in Messenien/SW-Peloponnes', *Zeitschrift für Archäologie*, 27 (1993), 151–73 at 171.

¹⁷ M. Teichert, 'Brachymel dogs', *Archaeozoologia*, 1.1 (1987), 69–75 at 72.

¹⁸ Ibid.

¹⁹ Ibid. 71.

²⁰ T. O'Connor, 'Pets and pests in Roman and Medieval Britain', *Mammal Review*, 22.2 (1992), 107–13 at 110; P. Sadler, 'Useful small dogs', *Circaea*, 11.1 (1994 for 1993), 6.

²¹ J. W. Fisher, 'Bone surface modifications in zooarchaeology', *Journal of Archaeological Method and Theory*, 2.1 (1995), 7–68 at 12.

²² Ibid. 17.

²³ P. Shipman and J. Rose, 'Early hominid hunting, butchering, and carcass-processing behaviors: approaches to the fossil record', *Journal of Anthropological Archaeology*, 2 (1983), 57–98 at 81–5.

²⁴ Binford (n. 6), 107; Lee Lyman (n. 8), 309.

²⁵ e.g. J. Studer, 'Entre chien et homme au Bronze Final', *Archaeozoologia*, 2.1–2 (1988), 269–80 at 273.

²⁶ Shipman and Rose (n. 23), 86.

The under-representation of second and third phalanges may be considered an additional indication supportive of skinning since those bones usually remain attached to the removed hide,²⁷ although their small size may equally mean that they have passed unnoticed during excavation.

Bones from a possible second dog skeleton were found at a depth of 1.00–1.10 m in the north-west part of the chamber (TABLE 3). Some of them (e.g. the front foot) were most probably articulated, whereas on grounds of size it seems that the rest belong to the same skeleton, although this cannot be proved and the possibility that several individuals are represented by this group cannot be ruled out. It is certain, though, that we are dealing with at least one other dog skeleton, which was deposited whole or in part in the tomb. Postcranial elements are too fragmented to provide information on the age at death, but the presence of maxillary first and second molars suggests that the animal was mature.²⁸ Sexing information is not available. The stature cannot be calculated, but the animal was apparently even smaller than the first one. Cutmarks were found in the lateral side of a right metacarpal III, close to the proximal epiphyses (PLATE 35 *d*). They consist of V-shaped, multiple, parallel, transverse striations which can be described as ‘sawmarks’ (see above). For the same reasons described above, these cutmarks are attributed to skinning.

DISCUSSION: DEPOSITIONS OF DOG BODIES IN MYCENAEAN TOMBS

The practice of dog burials in Mycenaean tombs is well known. The recorded examples up to 1984 have been very conveniently summarized and thoroughly discussed by Day.²⁹ These cases, supplemented with more examples found since, are presented in summary form in TABLE 4. The main hypotheses offered so far by way of explanation for the practice are: (1) dog burials together with the burial of other animals were sacrificial offerings to the dead, either to please the deceased or to be used in the underworld; (2) dogs were simply the pets which, being sentimentally connected to their masters, were buried with them. These explanations, and especially the first one, were heavily influenced by the later textual evidence and in particular the Homeric description of Patroklos’ funeral.

Close contextual observations, however, do not support the above interpretations, the weakness of which is pointed out by Day.³⁰ *Sensu stricto* all the described examples, including the present ones, are not dog burials but depositions of a dog corpse or part of it in a tomb, together with all the other grave goods. In other words, the focus of the burial rite is not the animal but the human burial. As can be seen from PLATE 35 (*a*) and (*b*), the animal’s corpse has been literally thrown into the tomb. None of the other known examples indicates any particular care expended upon the animal corpses. This sharply contrasts with the practice from other contexts, where we encounter dog burials proper. For example, in classical Greece

²⁷ e.g. T. Trolle-Lassen, ‘Human exploitation of fur animals in mesolithic Denmark: a case study’, *Archaeozoologia*, 1.2 (1987), 85–102 at 88; S. Payne, ‘Bones: identification and related aspects’, in C. H. Greenewalt, jun., *Ritual Dinners in Early Historic Sardis* (Berkeley, 1976), 19–26 at 24; this criterion, however, mainly applies to large game animals, since experimental or ethnoarchaeological studies on dog-skinning are lacking. Skinning of animals in association with a funerary ceremony is testified in Patroklos’ funeral (*Il.* xxiii. 165 ff.):

πολλὰ δὲ ἴφια μῆλα καὶ εἰλίποδας ἑλικας βοῦς
πρόσθε πυρῆς ἔδερόν τε καὶ ἀμφεπον· ἐκ δ’ ἄρα
πάντων
δημὸν ἐλὼν ἐκάλυψε νέκυν μεγαθύμος Ἀχιλλεύς
ἐς πόδας ἐκ κεφαλῆς, περὶ δὲ δρατὰ σώματα νήει.

²⁸ Silver (n. 5).

²⁹ L. P. Day, ‘Dog burials in the Greek world’, *AJA* 88 (1984), 21–32.

³⁰ *Ibid.*

TABLE 4. Mycenaean human burials with dog bodies or body parts.

Site	Date	Type of tomb	Description
Gournes, Crete ^a	LM IIIB	Chamber tomb 1	In the fill of the dromos by the entrance and 1 m above a pit containing a sarcophagus with a human skeleton and two sealstones, a skeleton of a dog and sheep bones with traces of burning were found
Mycenae: Kalkani Cemetery ^b	LH III A–B	Chamber tombe 533	In the chamber S of the W jamb, a skeleton of a dog was found scattered
Dendra ^c	LH III A1	Royal Tholos Tomb, pit no. 2	A skull of a dog was found along with human bones. Persson's interpretation as sacrificial remains was questioned by Mylonas, who sees them as fill from previous burials. Dog teeth were also found on the floor of the tomb
Asine ^d	LH III A2	Chamber tomb 1:1	On a bench in the middle of the chamber and close to a human skeleton, the head of a dog was found
Mycenae: Kalkani Cemetery ^e	LH III A2	Chamber tomb 505	In the W part of the dromos, against the N wall, two human skeletons were found accompanied by a skull of a dog, "a pig, and a horse (?)"
Kokla, Argolis ^f	LH III A2–IIIB1	Chamber tomb II	A skeleton of a dog and four horses were found inside the tomb
Kallithea, Patras ^g	LH I–IIIC	Tholos tomb	At the lower strata, remains of skeletons of dogs, cows, and sheep/goats along with a horse skull were found
Oxylinthos, Euboea ^h	LH III A2	Tholos tomb	Dog bones (along with cow, sheep/goat, and pig bones) were found over three inhumations; interpreted as animal sacrifice
Thebes: Kolonaki Cemetery ⁱ	LH	Chamber tomb 6	In the dromos, outside the wall which blocked the tomb entrance, in a definitely Mycenaean layer, the skeleton of a dog was found
Archanes: Phourni, (Crete) ^j	LM III A	Tholos B	Between the barriers which block the dromos skeletons of dogs, some complete, some without their head, were found; isolated dog bones along with bones of pig and rabbit were found beneath the inner barrier
Perati, Attica ^k	LH III C1	Chamber tomb 1, lakkos 2	Burnt bones of a dog were found with three cremated humans. It was interpreted as animal sacrifice

^a J. Hatzidakis, *A. Delt.* 4 (1918), 64; Kanta (n. 51), 47; Day (n. 29), 23–4.

^b A. J. B. Wace, *Chamber Tombs at Mycenae* (Archaeologia, 82; Oxford, 1932), 116; Day (n. 29), 24.

^c A. Persson, *The Royal Tombs at Dendra near Midea* (Lund, 1931), 18; Mylonas (n. 34), 129; Day (n. 29), 24.

^d Frödin and Persson (n. 49), 358; Day (n. 29), 24.

^e Wace (n. b), 14; Day (n. 29), 24.

^f Demakopoulou (n. 52), 83; J. Boessneck, and A. von den Driesch, 'Die Zoologische Dokumentation der Reste von vier Pferden und einem Hund aus einem mykenischen Schachtgrab in Kokla bei Argos (Peloponnes)', *Spixiana*, 7.3 (1984), 327–33.

^g Th. Papadopoulos, 'Ανασκαφή Καλλιθέας Πατρών', *PAE* (1987), 69–72 at 72.

^h G. Papavasileiou, *Περί των εν Ευβοία αρχαίων τάφων* (Athens, 1910), 26; Day (n. 29), 24.

ⁱ A. Keramopoulos, 'Θηβαϊκά', *A. Delt.* 3 (1917), 1–503 at 137; Day (n. 29), 24.

^j J. and E. Sakellarakis, *Archanes* (Athens, 1991), 91.

^k Iakovidis (n. 53), i. 159, ii. 32, 42, 59; Day (n. 29), 24.

it is well known that dog burials were accompanied by gravestones, grave goods, and epigrammatic epitaphs.³¹ Likewise, in the recently discovered dog burials at Ashkelon (Israel) dated to the Persian period, special care was taken over the placement of the body.³² The deposition of a dog body in a Mycenaean burial, therefore, must be seen as a practice similar to the deposition of other grave goods.

It is proposed that this practice should be associated with the social and ideological role of hunting in Mycenaean society. It has been repeatedly emphasised in the past that hunting signified high status in Mycenaean society. The iconography of hunting, commonly found in formal areas such as the Megaron,³³ is also encountered in burial contexts,³⁴ even more frequently than the war scenes, which are also considered to denote aristocratic status. Dogs occupy a prominent position in the iconography of hunting, as can be seen in examples such as the boar-hunt fresco from Tiryns, and in a number of seals, sealings, etc. It has also been demonstrated that one of the most common insignia of Mycenaean power, the boar-tusk helmet, fits within the same ideological apparatus.³⁵

While this connection has been adequately illustrated, its underlying meaning and the reasons for its existence have been largely overlooked. Morris³⁶ provides an exception by pointing to the role of hunting as providing food for feasts, as a means of territorial control, and as a training for war. Helms in her recent book³⁷ offers some very interesting clues for such a connection based on ethnographic data. She sees hunting (much like acquisition of goods of distant manufacture and skilled crafting) as a strategy which signifies the ability to overcome spatial and temporal distance, and to participate in realms outside the domestic sphere, the household, the local, the familiar. As such, hunting is a strategy which contributes to the generation and reproduction of structures of power by producing the kind of 'authoritative resource' which Giddens has termed 'organisation of social time-space'.³⁸ In many societies the élites have to exhibit hunting skills in addition to their other abilities. Although, as a strategy for the generation and reproduction of power, hunting is less costly than other strategies such as those noted above (acquisition of goods of distant manufacture, skilled crafting), its power-generating value is measured by the skilfulness of the individual hunter (and does not reside simply in the practice of hunting) and by his/her ability to hunt fierce and rare animals perceived to be remote from the human realm. The iconography of

³¹ Ibid. 29.

³² P. Wapnish and B. Hesse, 'Pampered pooches or plain pariahs? The Ashkelon dog burials', *Biblical Archaeologist*, 56.2 (1993), 55–80 at 58.

³³ Chr. Boulotis, 'Mycenaean wall painting', in K. Demakopoulou (ed.), *The Mycenaean World: Five Centuries of Early Greek Culture 1600–1100 BC* (Athens, 1988), 35–7 at 36; C. Morris, 'In pursuit of the white tusked boar: aspects of hunting in Mycenaean society', in R. Hägg and G. Nordquist (eds), *Celebrations of Death and Divinity in the Bronze Age Argolid* (Stockholm, 1990), 149–56 at 150.

³⁴ Especially on sealstones, rings, and vessels: G. E. Mylonas, *Mycenae and the Mycenaean Age* (Princeton, 1966), 127; R. Laffineur, 'Iconography as evidence of social and political status in Mycenaean Greece', in R. Laffineur (ed.) *EIKΩN: Aegean Bronze Age Iconography. Shaping a Methodology* (Aegaeum, 8; Liège, 1992) 105–12 at 108–9.

³⁵ Morris (n. 33).

³⁶ Ibid.

³⁷ M. Helms, *Craft and the Kingly Ideal: Art, Trade and Power* (Austin, 1993), 153–7; in addition, the association between hunting in farming societies and symbolic distance has been repeatedly demonstrated in the anthropological literature. For example, it has been shown that in classical Greece the realm of hunting represents a gendered space (dominated by the male identity) beyond the conventional social limits: see M. Detienne, *Dionysos Slain* (Baltimore and London, 1979), 24–6; A. Schnapp, 'Eros the hunter', in C. Bérard, B. Cristiane, J. L. Durand, F. Frontisi-Ducroux, F. Lissanague, A. Schnapp, and J.-P. Vernant, *A City of Images: Iconography and Society in Ancient Greece* (Princeton, 1989), 72, among many others.

³⁸ A. Giddens, *The Constitution of Society* (Cambridge, 1984), 258.

lion-hunting (and the associated practice) in Mycenaean Greece³⁹ would have served this ideological need.

Zooarchaeological evidence from prehistoric sites in Greece offers additional support for the association between hunting and the élite. It is well known that the number of remains of wild fauna as a percentage of all animal remains increases considerably from the Neolithic to the Bronze Age, and the connection of this phenomenon with the institutionalization of the élites which occurred at the same period has been already noted.⁴⁰ Strangely, while the change from the Neolithic to the Bronze Age is well marked, within the Bronze Age it seems that there is no significant increase in the proportion of wild fauna from the earlier phases to the later, when established élites consolidated their power. For example, at Nichoria the incidence of wild fauna remains 6.4 per cent in the Middle Helladic, dropping significantly in LH I (less than 1 per cent) to increase to 2 per cent during LH II, to 3.5 per cent during LH III A 2 and to 4.6 per cent during LH III B.⁴¹ At Tiryns the proportion of wild fauna ranges between 1.2 per cent (EH II) and 2.2 per cent (LH III B 2), to increase to 4.5 per cent only during LH III C Late.⁴² At Lerna the proportion ranges from 7.1 to 8.5 per cent between the Early and the Late Bronze Age.⁴³ While it would be dangerous to come to any definite conclusions without looking at more bone collections and discounting any possible taphonomic, sampling (especially crucial for this kind of hypothesis), and analytical biases, this picture may possibly indicate that we should not so much think of an actual increase in the activity of hunting as of a greater emphasis on its symbolic representation. While there is no doubt that hunting continued, it seems that for the élites what counted more than the actual activity was the manipulation of the idea and its disproportionate representation in the media (iconography etc.) and in associated practices.

It is therefore suggested that the ritual deposition of dog skeletons or parts of them in Mycenaean tombs illustrates the strategy adopted by the élites to claim an association with hunting and its ideological connotations as an activity which signified their ability to control distant, unfamiliar, and often dangerous realms. The status of tombs in which dog skeletons have been found offers additional support to the above suggestion. This is a highly complicated matter, as the attribution of social status to certain tombs on the basis of their formal properties and grave goods is not as straightforward as it might seem, and the subject has generated enormous debate in the archaeology of death. The problem is no less severe in the Mycenaean context.⁴⁴ Nevertheless, if we accept that funerary practices are one of the

³⁹ N. Marinatos, 'Celebrations of death and the symbolism of the lion hunt', in Hägg and Nordquist (eds) (n. 33), 143–8; for lion bones in Mycenaean contexts see J. Boessneck and A. von den Driesch, 'Ein Löwenfund aus Tiryns', *AA* (1979), 447–9; eid., 'Ein Beleg für das Vorkommen des Löwen auf dem Peloponnes in "herakleischer" Zeit', *AA* (1981), 257–8; von den Driesch and Boessneck (n. 14); Nobis (n. 16), table 3.

⁴⁰ P. Halstead, 'Man and other animals in later Greek prehistory', *BSA* 82 (1987), 71–83 at 74.

⁴¹ E. A. Mancz, *An Examination of Changing Patterns of Animal Husbandry of the Late Bronze Age and Dark Ages of Nichoria in the Southern Peloponnese* (diss. Minnesota, 1989), 77.

⁴² Von den Driesch and Boessneck (n. 14).

⁴³ N. G. Gejvall, *Lerna: A Preclassic Site in the Argolid*, i: *The Fauna* (Princeton, 1969).

⁴⁴ Cf. C. B. Mee, and W. C. Cavanagh, 'Mycenaean tombs as evidence for social and political organisation', *OJA* 3.3 (1984), 45–64; W. Cavanagh and C. Mee, 'The location of Mycenaean chamber tombs in the Argolid', in Hägg and Nordquist (eds) (n. 33), 55–64; O. Pelon, 'Les tombes à tholos d'Argolide: architecture et rituel funéraire', *ibid.* 107–12; S. Voutsaki, 'Social and political processes in the Mycenaean Argolid: the evidence from the mortuary practices', in R. Laffineur and W. D. Niemeier (eds), *Politeia: Society and State in the Aegean Bronze Age* (Aegaeum, 12; Liège and Austin, 1995), 55–66; K. Lewartowski, 'Mycenaean social structure: a view from simple graves', *ibid.* 103–14.

media signifying competitive expression of and aspirations to status,⁴⁵ and that Mycenaean funerary remains constitute statements of power,⁴⁶ a differentiation in status can be inferred, at least in some cases, from the Mycenaean tombs. In our case (see TABLE 4) four out of eleven examples of dog remains come from tholos tombs, which are undoubtedly associated with the élites.⁴⁷ Of the rest, chamber tombs 505 and 533 from Mycenae have been assigned a score of 1 and 2 respectively (1 signifying the 'wealthiest', 4 the least 'wealthy') in terms of their 'wealth status' by Mee and Cavanagh.⁴⁸ The tomb from Asine contained 75 vessels, gold and silver objects, sealstones, and artefacts of faience, ivory, amber, etc.⁴⁹ Tomb 6 from Thebes–Kolonaki is looted and poorly dated, but with regard to the cemetery as whole it is thought that 'the largest and richest Theban families of the first half of the Mycenaean period buried their dead' there.⁵⁰ At the tomb of Gournes sealstones were found⁵¹ and the tomb at Kokla contained c.230 pots, weapons, jewellery, figurines, etc.⁵² The tomb at Perati was one of the largest and contained a large number of 'valuable' objects.⁵³ It seems, therefore, that the majority of tombs associated with dog depositions were of high status, although some of them seem of lower status than others, as is the case with the Galatas tomb. The phenomenon can thus be better described as a strategy to confirm status and reproduce power, but also to express aspirations and claims to power by declaring associations with hunting and its connotations. The ritual deposition of a dog skeleton was a far less costly statement than other means—the exhibition of hunting iconography, for example—and could thus suit groups with a limited capacity for conspicuous consumption. Funerary ceremonies offer a very convenient arena for such negotiations since they are occasions on which different social groups, possibly with conflicting interests, come together.⁵⁴

CONCLUSIONS

Despite its small size, the sample of animal bones from the tomb at Galatas offered some very interesting hints concerning Mycenaean burial practices. It is hoped that the presentation has helped to demonstrate that zooarchaeological analysis can and should be actively employed in the investigation of issues such as the strategies for generating and maintaining power in past societies.

The animal bones offered evidence for a funerary dining ritual at which hare and birds were consumed. They also provided evidence for the ritual deposition of at least two dog carcasses or parts of them which had been skinned. The skeletons come from small but

⁴⁵ Cf. A. Cannon, 'The historical dimension in mortuary expressions of status and sentiment', *Current Anthropology*, 30.4 (1989), 437–58 at 437.

⁴⁶ e.g. J. Wright, 'Death and power at Mycenae: changing symbols in mortuary practice', in R. Laffineur (ed.), *Thanatos: les coutumes funéraires en Égée à l'Âge du Bronze* (Aegaeum, 1; Liège, 1987).

⁴⁷ e.g. Mee and Cavanagh 1984 (n. 44), 50.

⁴⁸ Mee and Cavanagh 1990 (n. 44); on the basis of attributes related to grave offerings.

⁴⁹ O. Frödin and A. W. Persson, *Asine: Results of the*

Swedish Excavations 1922–1930 (Stockholm, 1938), 359–377.

⁵⁰ S. Symeonoglou, *The Topography of Thebes from the Bronze Age to the Present* (Princeton, 1985), 54.

⁵¹ A. Kanta, *The Late Minoan III Period in Crete: A Survey of Sites, Pottery and their Distribution* (SIMA 58; Göteborg, 1980), 47.

⁵² K. Demakopoulou, 'Κόκλα, μυκηναϊκή νεκρόπολη', *A. Delt.* 37 (1982 [1989]), Chr. 83–5.

⁵³ S. Iakovidis, *Περατή* (Athens, 1970), i. 159–60.

⁵⁴ e.g. D. J. Parkin, *Palms, Wine and Witnesses* (San Francisco, 1972), 77.

mature animals. Contrary to common interpretations, it is suggested here that the deposition of dog carcasses in Mycenaean tombs is probably connected to the social and ideological role of hunting in Mycenaean society. It formed part of the same ideological apparatus as the plentiful iconography of hunting in Mycenaean *megara* and burial contexts, by which élites were affirming or laying claim to power. Hunting signified their ability to participate in socially—spatially and temporally—remote realms, an ability which is highly praised in a number of societies.

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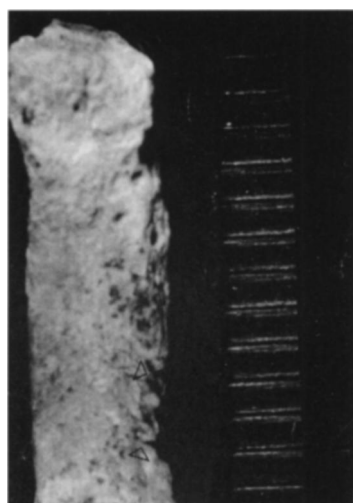
YANNIS HAMILAKIS



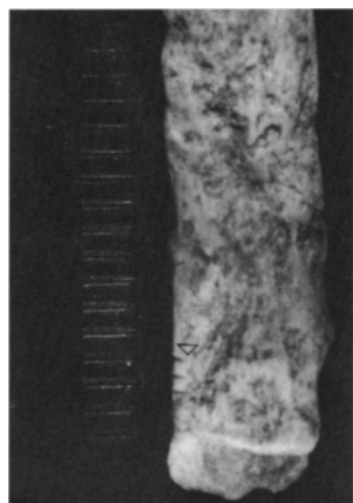
(a)



(b)



(c)



(d)

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A FOOTNOTE ON THE ARCHAEOLOGY OF POWER

Chamber tomb 2 (1991) at Apatheia, Galatas: (a) sw corner with dog skeleton 1; (b) sw corner with dog skeleton 1 in closer view; (c) left ulna from dog skeleton 1 with cutmarks, shown with the arrow (scale in mm); (d) metacarpal III from the dog burial 2 with cutmarks ('sawmarks'), shown with the arrows (scale in mm).