

SVENSKA INSTITUTET I ATHEN

INSTITUTUM ATHENIENSE REGNI SUECIAE

Opuscula Atheniensia

Annual of the Swedish Institute at Athens

31–32
2006–2007

STOCKHOLM 2008

Distributor Paul Åströms Förlag
Mimersvägen 44, SE-433 64 Sävedalen, Sweden

BURNT ANIMAL SACRIFICE IN MYCENAEAN CULT A REVIEW OF THE EVIDENCE

BY

HELÈNE WHITTAKER

Abstract

This paper discusses the evidence from several Mycenaean sites which in recent years has been associated with the practice of burnt animal sacrifice. It argues that this evidence does not provide sufficient proof that burnt animal sacrifice was part of Mycenaean ritual practice.*

It can be regarded as universally accepted that animal sacrifice was part of Mycenaean ritual practice. The iconographical, textual, and material evidence (animal bones found in ritual contexts) concur in supporting this conclusion.¹ The question of whether burnt animal sacrifice also existed has, on the other hand, been the subject of some debate. Interest in this issue is derived in no small part from the fact that burnt animal sacrifice, which can be defined as the burning of the whole or part of the animal as an offering to a deity, was a central part of Greek ritual in the historical period. According to the descriptions in Homer, it consisted of the burning of the thighbones (*ossa femoris*) of the animal from which the flesh had been removed and which had then been covered with a double layer of fat and small pieces of meat (e.g. *Il.* 1.458–461).² Later literary and iconographical evidence indicates that the tail with the os sacrum was also burnt as part of the offering to the gods.³ The practice of burnt animal sacrifice has also been confirmed by archaeological evidence from sanctuaries.⁴ Consequently, if it could be shown that burnt animal sacrifice also occurred in the Mycenaean period, one could, if one wished, postulate continuity of ritual practice.⁵

In an important article published in 1988 Bergquist argued that burnt animal sacrifice was not part of Bronze Age ritual practice, and that consequently there were significant differences between Mycenaean and later Greek sacrificial practice. Her conclusions were based on the evidence from the sites of Kynortion on the Mainland and Kato Syme on Crete, where large quantities of animal bones testified to the importance of animal sacrifice and ritual meals. With regard to the Bronze Age, Bergquist particularly emphasised the complete lack of evidence for sacrificial structures suitable for the display and burning

of meat offerings of the type that we would expect on analogy with later Greek practice.⁶

Following on Bergquist's article, it would seem to have been generally accepted that burnt animal sacrifice did not exist in the Mycenaean period, or in the least that the question must remain open until new evidence can be brought forward. In an article which discusses the archaeological evidence for Mycenaean ritual, Hägg makes the valid and important point that without contextual evidence, which can adduced in support, the presence of burnt animal bones in a cultic context does not alone constitute sufficient evidence for burnt animal sacrifice.⁷ Like Bergquist, he emphasises the significance of the fact that no structures which can convincingly be associated with the practice of burnt animal sacrifice have been identified in Mycenaean cultic contexts.

In the last few years, however, it has been claimed that both new evidence and the re-evaluation of old evidence from several sites indicate that Bergquist's conclusions have now been overturned. The sites in question are Pylos, Mycenae, Eleusis, and Methana. There would now seem to be a tendency to accept the Bronze Age origins of burnt animal sacrifice, as indicated by, for example, Dickinson's re-

* I am grateful to the anonymous reviewer whose comments made me think again on several points.

¹ Mylonas 1973, 102; 1982, 316; Kilian 1981; Vermeule 1974, 67–69; Piteros *et al.* 1990, 103–184; Killen 1994, 67–84; Konsolaki 1996, 73; Renfrew 1985, 388, 479–483; Hägg 1998b.

² Hägg 1998a; see van Straten 1995 for a thorough discussion of the iconographical evidence for all aspects of Greek sacrifice in the Archaic and Classical periods.

³ Van Straten 1988; 1995, 118–130.

⁴ Stanzel 1991; Felsch 2001 (Kalapodi); Chenal-Velarde & Studer 2003 (Eretria); Forstenpointner 2003 (Artemision at Ephesus); Reese 1989 (altar of Aphrodite Ourania in the Agora at Athens); Reese 2000; Shaw 2000 (Kommos).

⁵ Isakidou *et al.* 2002, 89–90; Hamilakis & Konsolaki 2004, 144–145.

⁶ Bergquist 1988, 1993.

⁷ Hägg 1998b, 100–102.

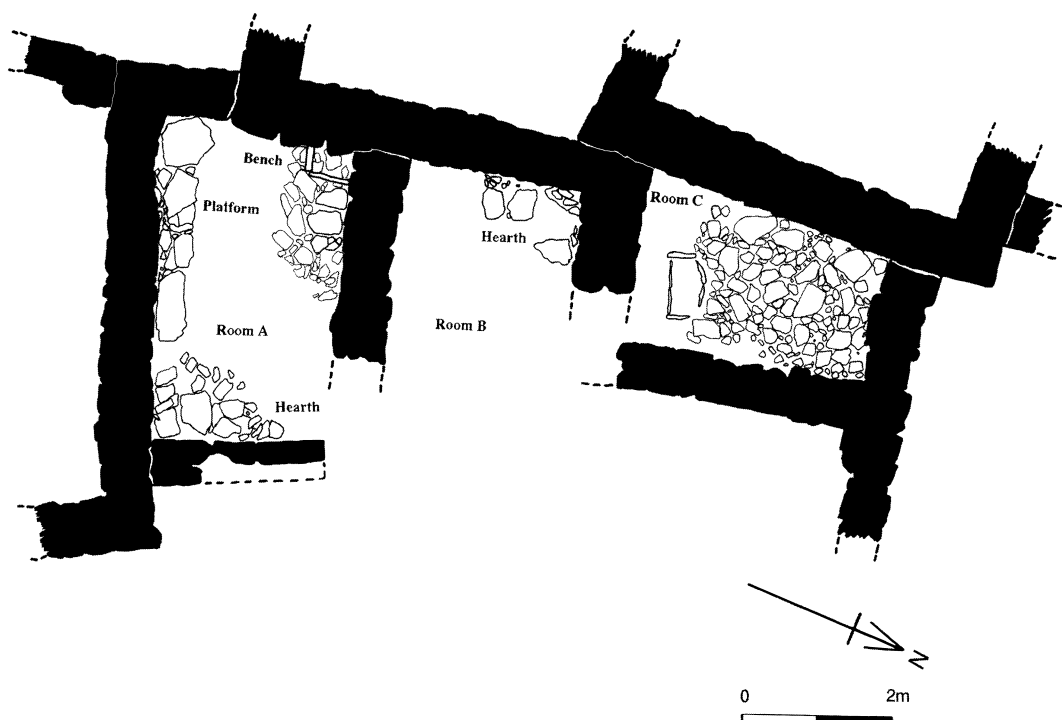


Fig. 1. Methana, cult building. After Hamilakis & Konsolaki 2004, fig. 3.

cent book.⁸ The purpose of this article is to review the evidence from the above-mentioned sites and to question whether it can really be said to prove the existence of burnt animal sacrifice in Greece in the Bronze Age.

Methana represents the only case where the burnt animal bones come from a primary deposit and is therefore potentially the most informative. The evidence comes from a recently excavated cult building dating to the Late Helladic IIIA–B period. The building consists of four adjacent rooms with separate entrances (*Fig. 1*). Room A seems to have been the primary cult room while the other rooms were perhaps used as subsidiary cult rooms or for storage.⁹ Within Room A there was a stepped platform in the northwest corner against the wall opposite the entrance. Numerous terracotta figurines were found associated with it. In the southeast corner of the room to the left of the door as one enters there was a hearth, covered with a thick layer of ashes. Mixed in with the ashes were the burnt bones of pigs, sheep, and goats. It has been argued by Hamilakis and Konsolaki that this constitutes definite evidence for burnt animal sacrifice in a Mycenaean sanctuary.¹⁰

Almost fifty years ago Jameson argued that the evident symbolic importance of the hearths in the megara of the palaces should be interpreted as evidence for the importance of burnt animal sacrifice in Mycenaean religion.¹¹ He suggested that, in contrast to later Greek practice, burnt animal sacrifice in the Mycenaean period mainly took place in an indoor setting. The evidence from Methana could therefore

be seen as a confirmation of Jameson's hypothesis. Furthermore, if the evidence from Methana can be accepted as indicating the practice of burnt animal sacrifice in the Mycenaean period, it has also a more general significance as it could be argued that hearths which are found in other cultic contexts should be interpreted as ritual installations or altars for the dedication to the gods of the whole or part of the slaughtered animals by means of fire.

However, in contrast to the monumental and centrally placed palatial hearths, the hearth in Room A at Methana is roughly constructed, small, and inconspicuously situated in a corner, at the opposite end of the room from the platform with the figurines, which was, in all probability, the central ritual feature of the room. Anybody officiating at the hearth would therefore have been standing facing into the corner with his back towards the platform and presumably also to the images of the gods who were the recipients of worship. The fact that in the later Greek period a large fire which produced much smoke was an important part of the sacrificial procedure may also be of relevance here.¹² Sacrificial fires of this type would clearly be incompatible with an indoor setting such as is the case with Room A at Methana.¹³ Fur-

⁸ Dickinson 2006, 224

⁹ Konsolaki 2002; Hamilakis & Konsolaki 2004.

¹⁰ Hamilakis & Konsolaki 2004.

¹¹ Jameson 1958.

¹² Van Straten 1995, 167–168.

¹³ I owe this point to the anonymous reviewer.

thermore, a large number of cooking pots were found close to the hearth. These indicate as does possibly also the presence of a stone stand for a roasting-spit that it was used for the ordinary cooking of food. It can therefore be suggested that rather than documenting the existence of burnt animal sacrifice, it would seem more likely that the burnt bones represent waste from the preparation and/or consumption of meat dishes which had been thrown into the fire in order to dispose of it such as one might find in connection with any domestic non-ritual hearth.¹⁴

In their argumentation Hamilakis and Konsolaki make much of the fact that the bone material from the hearth in Room A is dominated by bones from very young pigs, while the bones of sheep and goats predominate in the material found in Rooms B and C. This is interesting and may be the result of religious requirements. In the later Greek period, piglets were offered to a variety of gods.¹⁵ On the other hand, it could rather be associated with the fact that while cattle, sheep, or goats can be kept for a variety of reasons, pigs are generally raised solely for their meat.¹⁶ Moreover, pigs reproduce fast and are easier and cheaper to keep than other domestic animals because they are not picky eaters. Van Straten suggests that in the later Greek period piglets were popular as sacrificial animals precisely because they were cheap.¹⁷ The preponderance of bones from very young pigs in Room A at Methana need not then be interpreted in strictly ritual terms. The assemblage of identifiable bones from Room A at Methana is not large, only a little more than a quarter of the total assemblage, and the extent to which it is possible to draw secure conclusions can also be questioned. In any case the selection of animals is not relevant one way or the other to the question of whether the bones in the hearth were burnt intentionally as the god's portion or had been discarded as waste.

Evidence from other Mycenaean cult buildings does not provide much support for Hamilakis' and Konsolaki's conclusions. In the Room with the Fresco (Room 31) in the Cult Centre at Mycenae, there was a large oval hearth in the centre of the room. Square projections with post sockets at either end suggest that it may have been covered by a canopy. In contrast to Methana, the monumentality and central position of this hearth would seem to indicate that it had an important ritual function. The bone material from the Cult Centre at Mycenae has not yet been fully published. It has, however, been referred to by Hamilakis and Konsolaki as evidence which supports their conclusions concerning the existence of burnt animal sacrifice in the Mycenaean period.¹⁸ According to French, however, it does not come from primary contexts, and it is not clear from the available publications to what extent the bones were burnt.¹⁹ On the evidence which has presently been made available through publication, it would seem doubtful then that the hearth in the Room with the Fresco at Mycenae is to be related to the

practice of burnt animal sacrifice. Furthermore, as was the case at Methana, the cooking of food is indicated by the fact that pottery, including cooking ware and storage vessels, was found both in the hearth and in its vicinity.²⁰ Analysis of the cooking pots found near the hearth indicate that two had contained a meat stew with lentils, while one had contained fish cooked in olive oil and wine.²¹ This is significant information, as the evidence for what can be considered relatively sophisticated cooking weakens quite considerably the suggested link between the occurrence of a hearth in a ritual context and the practice of burnt animal sacrifice, and suggests rather that the evidence for food preparation and consumption in Mycenaean sanctuaries should be interpreted in terms of a different type of ritual food transaction. The evidence from Methana and Mycenae which has been discussed indicates the likelihood that eating and drinking formed an important part of the ritual activity associated with the Mycenaean sanctuaries. It might furthermore be possible to suggest that the evidence for food preparation in Mycenaean sanctuaries also demonstrates that the feeding of the gods was part of Mycenaean ritual practice.²² This is a practice which is widely attested in ethnographic and archaeological literature. In the ancient Near East it is particularly well-documented in Mesopotamia where ample textual evidence exists from the second and first half of the first millennia.²³ Providing the gods with the necessary requirements of food and drink was also part of Hittite ritual practice.²⁴ It could therefore be suggested that the evidence for food preparation and consumption from within Room A at Methana and the Room with the Fresco at Mycenae indicates that there may have been a commonality of ritual practice over a large geographical area and that contemporary cultures in the Near East can provide a framework for understanding one aspect of Mycenaean ritual practice.

Animal bones were also recovered from the cult buildings and the court in the Unterburg at Tiryns. These have been interpreted as the remains of cult meals, and there would seem to be little evidence which could provide grounds for suggesting the existence of burnt animal sacri-

¹⁴ In Room B 85 at Malthi a hearth was found covered with ashes, charred wood and the fragments of burnt bones from small animals (Valmin 1938, 174).

¹⁵ See Clinton 2005 on the significance of pigs as sacrificial animals in the historical Greek period.

¹⁶ Cf. Jameson 1988, 99.

¹⁷ Van Straten 1995, 170–181.

¹⁸ Hamilakis & Konsolaki 2004, 144; see also Isakidou *et al.* 2002, 87; Cosmopoulos 2003, 16.

¹⁹ French 2002, 134.

²⁰ Taylour 1970, 275.

²¹ French 2002, 91, 132.

²² See Whittaker 2004; forthcoming.

²³ Lambert 1993.

²⁴ Collins 1995.

fice in connection with the cult buildings at Tiryns.²⁵ Large quantities of burnt animal bones have been reported from the open-air sanctuary at Kynortion.²⁶ These were found in the ashes of the altar and it would seem very possible that they represent refuse from sacrificial meals as suggested by Bergquist rather than the remains of burnt animal sacrifice. However, since no details have as yet been published, further evaluation is not possible.

At Pylos six deposits of burnt animal bones dating to the final period of the palace which derive from Blegen's excavations have now been restudied and interpreted as the remains of burnt animal sacrifice.²⁷ The bones were completely burnt, and consist almost entirely of parts of the head and legs of cattle. According to the recently published interpretation, each deposit represents the remains of a sacrifice which took place on a single occasion. The deposit of bones found in a corner of Room 7 of the Archives Complex has received particular attention. It consists of bones from at least ten cattle which seem to have been dumped in a heap on the floor within the room. Room 7 has been identified as the office of the archivist where clay tablets were kept temporarily before being archived in Room 8.²⁸ It has been seen as notable that several of the texts recorded on the Linear B tablets found in the room appear to deal with provisions for feasts. Among the other finds from Room 7 were around twenty miniature kylikes, and it was suggested that these were also connected with sacrifice and banqueting. Although too small to have been used as drinking vessels, they could have been dedications made by those who had taken part in a sacrificial feast. A sword was also found in the room and it was suggested that it could have been used for the slaughter of animal victims. Stocker and Davis therefore argue that in addition to its function as archival office, Room 7 may have been used for the storage of sacrificial equipment. They suggest that the find context of the bones could indicate that they had been brought to the archivist as concrete proof that the sacrifice, for which provisions had been given, really had taken place.²⁹ This does not seem a very convincing explanation for the presence of the animal bones in Room 7, but alternative interpretations are hard to come by. It may be significant that the deposit had been made just before the final destruction of palace, as it would seem possible that the fact that animal bones had been dumped within the room may in some way be attributed to the disorder which must have reigned at Pylos in the last weeks or days before the palace was torched.

Of considerable interest is the fact that the deposits found at Pylos consist solely of bones from specific parts of the animals. They might therefore be seen to present a remarkable concurrence with later Greek evidence, where selected parts of the animal were burnt as the gods' portion. The bones found in the Pylian deposits are mandible, femur and humerus bones. As the thigh bones of sheep, goats, or cattle

were normally the bones which were burnt in later Greek sacrifice, the nature of the selection represented by the Pylian deposit is all the more striking.

Hamilakis and Konsolaki state that they do not believe that there is necessarily a direct connection between Mycenaean and later Greek practice with regard to burnt animal sacrifice.³⁰ In the initial publication by Isakidou et al. the deposits found at Pylos were compared with the description of animal sacrifice in the *Odyssey*, and it would seem that the similarities in the selection of animal parts with later Greek sacrificial practice contributed significantly to their being interpreted as the remains of burnt animal sacrifice.³¹ However, Isakidou et al. carefully point out that the material from Pylos does not in itself prove continuity of sacrificial practice between the Bronze Age and later periods, and it is furthermore evident that the presence of mandibles in the Bronze Age material represents a notable and possibly significant difference from the Homeric accounts as well as from later osteological evidence for burnt animal sacrifice. Another difference from later Greek practice can be seen in the fact that no *ossa sacralia* or caudal vertebrae were represented in the deposits from Pylos.³² It is difficult to know how much should be made of this. The burning of tails as part of the god's portion is not mentioned in Homer. At Kalapodi in Phocis there is evidence for cult activity, including animal sacrifice, from the Late Helladic IIIC period onwards. According to Stanzel, who published the animal remains from the sanctuary, burnt animal sacrifice is not certainly attested before the Geometric period, when a substantial number of the bones are burnt.³³ It is, however, interesting that a common characteristic of the bone assemblages of all periods represented in the sanctuary is the almost complete absence of caudal vertebrae and *ossa sacralia*. Stanzel suggests that this should be attributed to the fact that these bones are small, do not preserve well, and are easily lost.³⁴ He admits, however, that even so one would expect them to be represented to a greater extent than is the case, and suggests alternatively that they have not been preserved because they were removed and completely burnt as part of the sacrificial ritual. In a recent discussion of sacrificial activity at Kalapodi, Felsch argues that the lack of caudal vertebrae or *ossa sacralia* in the bone material should be

²⁵ Kilian 1981; Albers 1994, 106, 131.

²⁶ Lambrinoudakis 1981, 59.

²⁷ Isakidou et al. 2002; Stocker & Davis 2004; Halstead & Isakidou 2004.

²⁸ Pluta 1996–1997, 245.

²⁹ Stocker & Davis 2004, 73.

³⁰ Hamilakis & Konsolaki 2004, 144.

³¹ Isakidou et al. 2002, 89–90.

³² I owe this point to the anonymous reviewer.

³³ Stanzel 1991, 13, 163.

³⁴ Stanzel 1991, 22, 44.

interpreted as demonstrating that burnt animal sacrifice of the usual Greek type was practised at Kalapodi from the earliest phase of the sanctuary in the Late Helladic IIIC period.³⁵ The bone material which has been recovered can then be regarded as representing the parts of the sacrificial animal which were consumed by worshippers during the ritual meals which took place within the sanctuary. While Felsch's reasoning is on the whole convincing, it can be remarked that femur and humerus bones which one would also have expected to have been removed and burnt as part of the god's portion are well-represented in the bone material. Clear evidence for the burning of the tail as part of the god's portion is first found in the Geometric period at Eretria, where the remains of burnt femora, *ossa sacralia*, and caudal vertebrae were found in connection with an altar.³⁶

While the nature of the deposits from the palace at Pylos is compatible with the idea that they represent the remains of burnt animal sacrifice, it could also be proposed that the bones reflect the nature of the slaughtering process. Cut marks on the bones indicate that the meat had been removed before burning. It could therefore be postulated that immediately after slaughtering the meat was removed from the head, humerus, and femur bones which were then discarded, while the remainder of the animal was cut up and distributed in some way, to the palace kitchens, or perhaps to the palace dependents who took them away for consumption elsewhere. It cannot be excluded therefore that the deposits represent waste material from the butcher shop of the palace at Pylos which had been disposed of by burning. A comparison with deposit from Tsoungiza which contained animal bones as well as much pottery would seem instructive.³⁷ The deposit consisted of the bones of cattle, pigs, sheep, goats, and other animals. About a quarter of the bones showed signs of burning. While the remains of pigs, sheep, and goats include most parts of the animal, the remains of cattle consist mainly of the bones from head and feet. According to the excavators, the number of cattle bones, representing at least six and probably more animals, could indicate that the animals had been slaughtered for a special occasion, such as a feast, which perhaps was organised on a regional level involving the inhabitants of several villages. An association with feasting is also suggested by the analysis of the ceramic material from the deposit. It would therefore seem possible that the bones were derived from animals which had been ritually killed before being eaten. However, there was nothing that indicated that the disposal of these bones had any symbolic significance. In view of the evidence from Tsoungiza, it could therefore be concluded that burning was at times used as a practical means of disposing of bone waste from butchering, food preparation, or consumption. In sum, it can be argued that the evidence from Pylos is ambiguous and open to various interpretations.

The deposits found at Pylos indicate that on several occasions large numbers of cattle had been slaughtered. The large number of animals could be seen to correspond to the evidence for feasts provided by the Linear B tablets.³⁸ The Mycenaean feasts attested by the Linear B tablets are believed to have had a ritual function. It is therefore perhaps not unimportant that iconographical evidence from Pylos clearly shows that there was a connection between sacrifice and cattle. If this is the case, it could be speculated that, in view of the evidence for the preparation and consumption of food in the cult buildings at Methana and Mycenae, the meat from the bones found in the deposits had been removed immediately after the killing of the animal and taken away so that it could be used in the meals prepared for the gods in their sanctuaries. Waste from the rest of the animal, which was consumed at the sacrificial feast, would then have been disposed of elsewhere. A similar explanation could also apply to the bone material found in the deposit at Tsoungiza. A fragment of a clay female figure which was found in the deposit may indicate the existence of an important sanctuary at Tsoungiza.³⁹

The femur and humerus of cattle provide good meat. Heads, on the other hand, provide little meat, and Maltby has pointed out that consequently head bones are common as waste from butchering in northwest Europe in the Roman and early Medieval periods.⁴⁰ As also discussed by Maltby, waste bones from several activities may end up in the same deposit.⁴¹ It could therefore be postulated that immediately after slaughtering the heads were discarded and thrown away with the humerus and femur bones from which the meat had been removed. However, an interpretation along these lines seems unlikely. Cut marks on the head bones from both Pylos and Tsoungiza indicate that the meat had been removed before they were discarded, and this suggests that they represent waste from food preparation or consumption rather than from butchering.⁴² It may also be relevant that in the later Greek period, there is literary evidence that mentions both the head and the tongue as parts of the sacrificial animal which were reserved for the priests.⁴³ It would seem very likely that this was because the meat from the head was particularly appreciated.⁴⁴ Accordingly, if this

³⁵ Felsch 2001, 196–197.

³⁶ Chenal-Velarde & Studer 2003.

³⁷ Dabney *et al.* 2004, 79–81. The material from Tsoungiza has been dated to LH IIIA2 and is much earlier in date than the Pylos deposits.

³⁸ Palaima 2004.

³⁹ Dabney *et al.* 2004, 91.

⁴⁰ Maltby 1985, 52; cf. Halstead & Isakidou 2004, 140–141.

⁴¹ Maltby 1985, 50.

⁴² As has been pointed out by Dabney *et al.* 2004, 79–80.

⁴³ Kadletz 1981; van Straten 1995, 154–155.

⁴⁴ Kadletz 1981, 29; according to the anonymous reviewer the cheek muscle is extraordinarily good to eat (as a vegetarian this is beyond my ken).

was also the case in the Mycenaean period, the meat from the head along with the meat from the thighs may have been regarded as the most desirable parts of the animal and considered as the most suitable for offering to the gods. Consequently, it can be suggested that the bone material from the deposits at Pylos and Tsoungiza represents the culinary preferences of the gods (or of the priests and/or the members of the elite who in all likelihood were the ones who in actual fact consumed the food prepared in the sanctuaries). Judging from the finds of cooking pots at Methana and Mycenae, it would further seem that in the Mycenaean period the gods preferred their meat boiled in stews rather than fried or grilled. Cooking vessels were also well-represented among the ceramic material from the deposit at Tsoungiza.⁴⁵

At Eleusis eighteen burnt bones of sheep, goats, and pigs, which were found in a drain to the south of Megaron B, have been interpreted as the remains of burnt animal sacrifice.⁴⁶ The bones were found with fragments of pottery, including alabastra, goblets, and coarse jars. It would seem likely that this material may have been washed down from the platform of Megaron B. Cosmopoulos suggests therefore that Megaron B had a religious function and that the platform was used for the performance of cult activities involving burnt animal sacrifice and libations. Those participating in the ritual would have assembled in the courtyard, below the platform. Cosmopoulos argues that the burnt bones cannot represent ordinary domestic refuse, as in that case the pottery would also have been burnt, which it is not.⁴⁷ However, according to the excavation notebook quoted by Cosmopoulos, the bones were found mixed in with ashes as well as with pottery. In an upper layer of the drain, carbonised remains of some kind were found mixed in with pottery fragments. Accordingly, it would seem that material from the drain does not represent a single deposit. It could therefore be argued that the ashes, the carbonised matter, and the burnt animal bones may be waste from various cleanings of a hearth while the pottery represents vessels which had been broken and after having been discarded had become mixed in with the waste material from the hearth.

In conclusion, it can be argued that the evidence, which has accrued or been restudied since Bergquist wrote her articles, is not of such a nature as to alter her conclusions. In fact, it can be stated that the important points raised by Bergquist and also by Hägg have not been sufficiently taken into account. It is also noteworthy that the evidence from the various sites does not cohere to form any kind of pattern of Mycenaean sacrificial practice. This may not be significant as it could be due to the specific cultic requirements of individual festivals or sanctuaries. It does, however, contrast strongly with the practice of burnt animal sacrifice in the later Greek period. While the aim of this paper was not primarily to argue against the existence of burnt animal sacrifice in the Mycenaean period, but rather to point out that definite evidence

continues to be lacking, the fact that there is some evidence that shows that the feeding of the gods may have played a major role in the cult practice associated with Mycenaean sanctuaries, makes it more likely that Bergquist may have been right also in rejecting the practice altogether.

Helène Whittaker

Department of Culture and Literature (Greek and Latin)
Faculty of Humanities
University of Tromsø
NO-9037 TROMSØ
Norway
helene.hofsten@hum.uit.no

BIBLIOGRAPHY

- | | |
|------------------------------|--|
| Albers 1994 | G. Albers, <i>Spätmykenische Stadtheiligtümer. Systematische Analyse und vergleichende Auswertung der archäologischen Befunde</i> , Oxford 1994. |
| Bergquist 1988 | B. Bergquist, 'The archaeology of sacrifice: Minoan–Mycenaean versus Greek. A brief query into two sites with contrary evidence', in <i>Early Greek cult practice. Proceedings of the Fifth International Symposium at the Swedish Institute at Athens 26–29 June 1986</i> (ActaAth-4°, 38), eds. R. Hägg, N. Marinatos & G.C. Nordquist, Stockholm 1988, 21–34. |
| Bergquist 1993 | B. Bergquist, 'Bronze Age <i>koine</i> in the eastern Mediterranean? A study of animal sacrifice in the ancient Near East', in <i>Ritual and sacrifice in the ancient Near East. Proceedings of the International Conference organised by the Katholieke Universiteit Leuven from the 17th to the 20th of April 1991</i> (Orientalia Lovaniensia analecta, 55), ed. J. Quaegebeur, Leuven 1993, 11–43. |
| Chenal-Velarde & Studer 2003 | I. Chenal-Velarde & J. Studer, 'Archaeozoology in a ritual context: the case of a sacrificial altar in Geometric Greece', in <i>Zooarchaeology in Greece. Recent advances</i> , eds. E. Kotjabopoulou, Y. Hamilakis, P. Halstead, C. Gamble & P. Elefanti, Athens 2003, 215–220. |
| Clinton 2005 | K. Clinton, 'Pigs in Greek rituals', in <i>Greek sacrificial ritual, Olympian and chthonian. Proceedings of the Sixth International Seminar on Ancient Greek Cult, organized by the Department of Classical Archaeology and Ancient History, Göteborg University, 25–27 April 1997</i> (ActaAth-8°, 18), eds. R. Hägg & B. Alroth, Stockholm 2005, 167–179. |
| Collins 1995 | B.J. Collins, 'Ritual meals in Hittite cult', in <i>Ancient magic and ritual power</i> (Religions in the Graeco-Roman world, 129), eds. M. Meyer & P. Mirecki, Leiden, New York & Köln 1995, 77–92. |

⁴⁵ Dabney *et al.* 2004, 90.

⁴⁶ Cosmopoulos 2003.

⁴⁷ Cosmopoulos 2003, 21, n. 10.

- Cosmopoulos 2003 M. Cosmopoulos, 'Mycenaean religion at Eleusis. The architecture and stratigraphy of Megaron B', in *Greek mysteries. The archaeology and ritual of ancient Greek secret cults*, ed. M. Cosmopoulos, London & New York 2003, 1–24.
- Dabney *et al.* 2004 M.K. Dabney, P. Halstead & P. Thomas, 'Mycenaean feasting on Tsoungiza at ancient Nemea', in *The Mycenaean feast* (= *Hesperia* 73:2), ed. J.C. Wright, Princeton 2004, 77–95.
- Dickinson 2006 O. Dickinson, *The Aegean from Bronze Age to Iron Age: continuity and change between the twelfth and eighth centuries BC*, London 2006.
- Felsch 2001 R.C.S. Felsch, 'Opferhandlungen im Heiligtum der Artemis bei Kalapodi', in *Potnia. Deities and religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference/8^e rencontre égéenne internationale*, Göteborg, Göteborg University, 12–15 April 2000 (*Aegaeum*, 22), eds. R. Laffineur & R. Hägg, Liège 2001, 193–199.
- Forstenpointner 2003 G. Forstenpointner, 'Promethean legacy: investigations into the ritual procedure of "Olympian" sacrifice', in *Zooarchaeology in Greece. Recent advances*, eds. E. Kotjabopoulou, Y. Hamilakis, P. Halstead, C. Gamble & P. Elefanti, Athens 2003, 203–213.
- French 2002 E. French, *Mycenae. Agamemnon's capital: the site and its setting*, Stroud 2002.
- Hägg 1998a R. Hägg, 'Osteology and Greek sacrificial practice', in *Ancient Greek cult practice from the archaeological evidence. Proceedings of the Fourth International Seminar on Ancient Greek Cult, organized by the Swedish Institute at Athens, 22–24 October 1993* (*ActaAth-8^o*, 15), ed. R. Hägg, Stockholm 1998, 49–56.
- Hägg 1998b R. Hägg, 'Ritual in Mycenaean Greece', in *Ansichten griechischer Rituale. Geburtstags-Symposium für Walter Burkert, Castelen bei Basel 15. bis 18. März 1996*, ed. F. Graf, Stuttgart 1998, 101–113.
- Halstead & Isakidou 2004 P. Halstead & V. Isakidou, 'Faunal evidence for feasting: burnt offerings from the Palace of Nestor at Pylos', in *Food, cuisine and society in Prehistoric Greece* (Sheffield studies in archaeology, 5), eds. P. Halstead & J.C. Barrett, Sheffield 2004, 136–154.
- Hamilakis & Konsolaki 2004 Y. Hamilakis & E. Konsolaki, 'Pigs for the gods: burnt animal sacrifices as embodied rituals at a Mycenaean sanctuary', *OJA* 23, 2004, 135–151.
- Isakidou *et al.* 2002 V. Isakidou, P. Halstead, J. Davis & S. Stocker, 'Burnt animal sacrifice at the Mycenaean "Palace of Nestor", Pylos', *Antiquity* 76, 2002, 86–92.
- Jameson 1958 M. Jameson, 'The prehistory of Greek sacrifice', *AJA* 62, 1958, 223.
- Jameson 1988 M. Jameson, 'Sacrifice and animal husbandry in Classical Greece', in *Pastoral economies in Classical Antiquity* (Cambridge Philological Society, Suppl., 14), ed. C.R. Whittaker, Cambridge 1988, 87–119.
- Kadletz 1981 E. Kadletz, 'The tongues of Greek sacrificial victims', *HTR* 74, 1981, 21–29.
- Kilian 1981 K. Kilian, 'Zeugnisse mykenischer Kultausübung in Tiryns', in *Sanctuaries and cults in the Aegean Bronze Age. Proceedings of the First International Symposium at the Swedish Institute in Athens, 12–13 May, 1980* (*ActaAth-4^o*, 28), eds. R. Hägg & N. Marinatos, Stockholm 1981, 49–58.
- Killen 1994 J. Killen, 'Thebes sealings, Knossos tablets and Mycenaean state banquets', *BICS* 39, 1994, 67–84.
- Konsolaki 1996 E. Konsolaki, 'Μέθανα Ἀγίος Κωνσταντίνος', *ArchDelt* 46, 1991 (pr. 1996), 71–74.
- Konsolaki 2002 E. Konsolaki, 'A Mycenaean sanctuary on Methana', in *Peloponnesian sanctuaries and cults. Proceedings of the Ninth International Symposium at the Swedish Institute at Athens, 11–13 June, 1994* (*ActaAth-4^o*, 48), ed. R. Hägg, Stockholm 1981, 25–36.
- Lambert 1993 W.G. Lambert, 'Donations of food and drink to the gods in ancient Mesopotamia', in *Ritual and sacrifice in the ancient Near East. Proceedings of the International Conference organised by the Katholieke Universiteit Leuven from the 17th to the 20th of April 1991* (*Orientalia Lovaniensia analecta*, 55), ed. J. Quaegebeur, Leuven 1993, 191–201.
- Lambrinudakis 1981 V. Lambrinudakis, 'Remains of the Mycenaean period in the sanctuary of Apollon Maleatas', in *Sanctuaries and cults in the Aegean Bronze Age. Proceedings of the First International Symposium at the Swedish Institute in Athens, 12–13 May, 1980* (*ActaAth-4^o*, 28), eds. R. Hägg & N. Marinatos, Stockholm 1981, 59–65.
- Maltby 1985 J. Maltby, 'Patterns in faunal assemblage variability', in *Beyond domestication in Prehistoric Europe. Investigations in subsistence archaeology and social complexity*, eds. G. Barker & C. Gamble, London 1985, 33–74.
- Mylonas 1973 G.E. Mylonas, 'Ἀνασκαφή Μυκηνών', *Prakt* 1973, 99–107.
- Mylonas 1982 G.E. Mylonas, 'The Cult Centre of Mycenae', *Proceedings of the British Academy* 67, 1981 (pr. 1982), 307–320.
- Palaima 2004 T.G. Palaima, 'Sacrificial feasting in the Linear B documents', in *The Mycenaean feast* (= *Hesperia* 73:2), ed. J.C. Wright, Princeton 2004, 97–126.
- Piteros *et al.* 1990 Ch. Piteros, J.-P. Olivier & J.L. Melena, 'Les inscriptions en Linéaire B des nœuds de Thèbes (1982): la fouille, les documents, les possibilités d'interprétation', *BCH* 114, 1990, 103–184.
- Pluta 1996–1997 K.M. Pluta, 'A reconstruction of the Archives Complex at Pylos: a preliminary report', *Minos* 31–32, 1996–1997, 231–250.
- Reese 1989 D. Reese, 'Faunal remains from the Altar of Aphrodite Ourania, Athen', *Hesperia* 58, 1989, 63–70.
- Reese 2000 D. Reese with contributions by M.J. Rose & D. Ruscillo, 'The Iron Age fauna', in *Kommos: an excavation on the south coast of Crete, Vol. IV: The Greek sanctuary*, eds. J.W. Shaw & M.C. Shaw, Princeton 2000, 415–646.

- Renfrew 1985 C. Renfrew, *The archaeology of cult: the sanctuary at Phylakopi* (BSA, Suppl., 18), Athens 1985.
- Shaw 2000 J.W. Shaw, 'Ritual and development in the Greek Sanctuary', in *Kommos: an excavation on the south coast of Crete*, Vol. IV: *The Greek sanctuary*, eds. J.W. Shaw & M.C. Shaw, Princeton 2000, 669–731.
- Stanzel 1991 M. Stanzel, *Die Tierreste aus dem Artemis-/Apollon-Heiligtum bei Kalapodi in Böotien/ Griechenland*, München 1991.
- Stocker & Davis 2004 S. Stocker & J. Davis, 'Animal sacrifice, archives, and feasting at the Palace of Nestor', in *The Mycenaean feast* (= *Hesperia* 73:2), ed. J.C. Wright, Princeton 2004, 59–75.
- Taylour 1970 W. Taylour, 'New light on Mycenaean religion', *Antiquity* 44, 1970, 270–280.
- Valmin 1938 N. Valmin, *The Swedish Messenia Expedition*, Lund 1938.
- van Straten 1988 F. van Straten, 'The god's portion in Greek sacrificial representations: is the tail doing nicely', in *Early Greek cult practice. Proceedings of the Fifth International Symposium at the Swedish Institute at Athens*, 26–29 June, 1986 (*ActaAth-4°*, 38), eds. R. Hägg, N. Marinatos & G.C. Nordquist, Stockholm 1988, 51–68.
- van Straten 1995 F.T. van Straten, Hierà Kalá. *Images of animal sacrifice in Archaic and Classical Greece* (Religions in the Graeco-Roman world, 127), Leiden, New York & Köln 1995.
- Vermeule 1974 E. Vermeule, *Götterkult* (*ArchHom* V), Göttingen 1974.
- Whittaker 2004 H. Whittaker, 'Some reflections on Mycenaean ritual', in *Celebrations. Sanctuaries and the vestiges of cult activity. Selected papers and discussions from the Tenth Anniversary Symposium of the Norwegian Institute at Athens, 12–16 May 1999* (Papers from the Norwegian Institute at Athens, 6), ed. M. Wedde, Bergen 2004, 95–110.
- Whittaker forthcoming H. Whittaker, 'Ritual meals in Mycenaean cult buildings', in *Atti of the conference Cibo per gli dei, cibo per gli uomini*, Piazza Armerina 4–8 May, 2005, ed. M. Cultraro.