

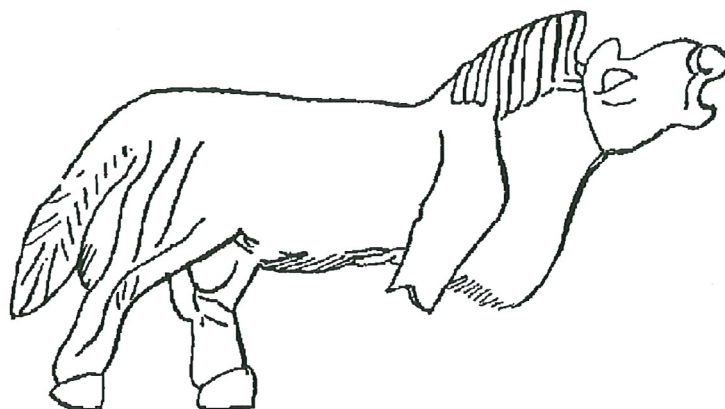


ARCHAEOZOOLOGY OF THE NEAR EAST IV B

Proceedings of the fourth international symposium on the
archaeozoology of southwestern Asia and adjacent areas

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M. Mashkour, A.M. Choyke, H. Buitenhuis and F. Poplin



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Przewalski from Susa (nacre – mother of pearl)

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BONE REMAINS FROM SACRIFICIAL PLACES: THE TEMPLES OF ATHENA ALEA AT TEGEA AND OF ASEA ON AGIOS ELIAS (THE PELOPONNESE, GREECE)

Emmanuelle Vila¹

Abstract

The archaeozoological data from two temples at Tegea (Geometric Period) and Asea (Archaic Period) are discussed in this article, with reference as well to the textual and iconographical evidence.

Résumé

Les principaux résultats de l'étude des restes de faune de deux sanctuaires, l'un à Tégée (époque géométrique), l'autre à Asea (période archaïque), sont présentés dans cet article. Les données obtenues sur les espèces sacrifiées, les âges d'abattage, les parties du squelette représentées sont confrontées aux informations fournies par les textes et l'iconographie du rituel sacrificiel grec.

Key Words: Greece, Sacrificial Place, Sacred Butchery, Burnt Remains

Mots Clés: Grèce, Lieu de sacrifice, Boucherie sacrée, Restes brûlés

Introduction

Greek sacrifice with its ritual, its religious practices, its social and ideological functions has been described and analysed by many historians (Meuli 1946, Burkert 1972, 1977, Vernant 1980, Durand 1986, 1987, 1991, Détienné and Vernand 1979, etc.) who have based their studies on over a millennium's worth of texts, from those of Homer among the most ancient to those of the more recent Hesiod, Plutarch, and Porphyrios. The sacrificial space has also been shown in iconography, mostly as representations on vase paintings and votive reliefs (Durand 1991, Van Straten 1995). In this way, iconographical studies may complement the textual data.

Another branch of research has an important role in the study of this subject is archaeozoology. There is a growing interest in the study of animal remains as documentation for Greek sacrifice in ancient times, as well as for the treatment of animals. Studies of bone remains collected from sanctuaries are becoming more numerous. Most of these studies were carried out on sanctuary material in Asia Minor (Ephesus, Milet, Halicarnasse) or on the Greek islands (Samos, Knossos and Kommos in Crete, Tamassos and Kourion in Cyprus, Thasos, Eretria). There are also studies on material from sanctuaries from Africa (Cyrene in Libia), and from continental Greece (Athens, Delphi)².

New excavations at the sanctuary of Athena Alea at Tegea

The sanctuary of Athena Alea at Tegea has long been known from the descriptions of an ancient author, Pausanias, and was already excavated by French, German and Greek archaeologists at the beginning of this century, and again by a Greek in 1976-1977. In 1990, new excavations were carried

¹ Archäologisches Institut, Gräfrasse, D-60054 Frankfurt, Germany.

² Jarman 1973, Nobis 1976/77, Bammer *et al.* 1978, Højlund 1981, Foster 1984, Boessneck and von den Driesch 1988, Reese 1989, Crabtree 1990, Des Courtis and Pariente 1991, Stanzel 1991, Peters and von den Driesch 1992, Peters 1993).

out at the temple by an international team lead by Eric Østby from the Norwegian Institute in Athens³. The investigation of the area left unexcavated between the two parallel foundations of the cella's inner collonade has reached levels associated with two, or maybe three older buildings; the material has been dated to the second half of the 8th century BC, i.e. from the late Geometric Period. It is one of the few examples which takes us back to the beginning of Greek culture. Animal bones were among the material recovered in the old structures (called buildings 1, 2 and 3) as well as from an area (E1s) in the pronaos of the classical temple. This would have been a likely place for an altar belonging to those early structures⁴. During the excavation of E1s, pits filled with ashes, burnt clay, metal slag and a mixture of burnt and unburnt bones, were found. The burnt bones are either black or white. Save for a few pieces, their fragmentary condition and size, less than 3 cm, did not allow any specific or anatomic identification. The faunal assemblage recovered during the excavation of the oldest buildings is also very fragmentary and from the pieces, which barely exceed 5cm, 2,316 specimens, 6,5 kilogrammes, could be identified to species. The remainder, which were not identifiable, number 13,000 fragments weighing about 10 kilogrammes.

General overview of the bone remains

The general inventory of the identified bones displays a limited range of species. They are almost all from domestic animals: sheep, goat, cattle and pig. Only one specimen was identified as being of canine origin (a fragment of mandible with cut marks on its lateral side) and similarly there is a single donkey bone (a proximal radius). Wild fauna are represented by roe deer (a burnt phalange II), red deer (a calcaneum, a fragment of frontal bone, and a molar fragment), hare (a distal tibia with a cut mark on it) and juvenile mustelid (a humerus, probably from a weasel). In addition to the mammalian remains, there are some bones of tortoise, frog as well as unidentified birds with the exception of a raven carpometacarpus. The appearance of frogs and tortoises may be attributed to the presence of permanent water in the sacred fountain near the temple and to some marshes lying near the sanctu-

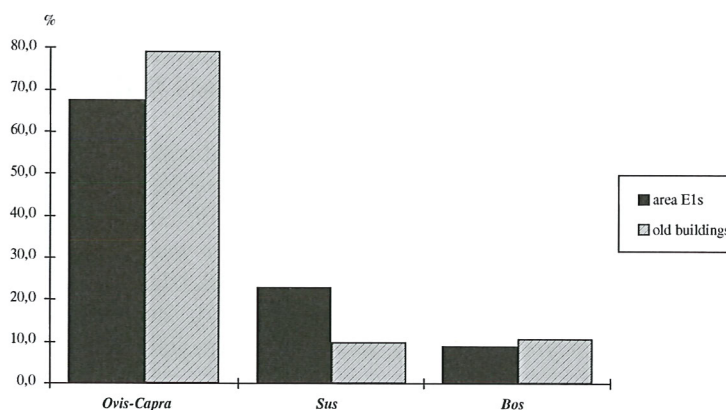


Fig. 1. Histogram of species frequencies (number of identified bones)

³ The Norwegian Institute at Athens initiated this programme of archaeological investigation in Tegea in collaboration with the Greek archaeologists T. G. Spyropoulos and A. Delivorrias, the Swedish Institute and the French Archaeological School, as well as Italian and American archaeologists, cf. Østby *et al.* 1994.

⁴ I am very grateful to Prof. F. Poplin for giving me the possibility of studying the bone material of Tegea. I sincerely thank Prof. E. Østby for permission to work further on this material and for his kind hospitality at the site. My grateful thanks are due also to Dr. J. Forsén for allowing me to analyse the bone remains of Asea. I am very grateful for the interesting discussions and all the help provided by Dr. U. Mandel. I sincerely thank Prof. J.-W. Meyer for his support and advice. Finally, I am very grateful for the assistance of Marc Shamma'a and

ary. Less clear are the remains from human bones. One might explain their presence as resulting from earth movement or coming from even more ancient graves, but the remains all come from the skull region (nine fragments of parietal bones). Although this has yet to be confirmed, it suggests that they may have a significant connection with the sanctuary.

According to classification by origin, the species proportions are variable (Fig.1). For instance, the difference between area E1s and the area of the old buildings consists mainly in the frequency of pig, which at more than 20% of the remains are clearly higher in E1s. In the area of the buildings their frequency is around 10 %. In these two areas, sheep and goat are the most common species (composing 70 to 80 % of the remains). The frequency of cattle rests at about 10 % in both areas.

Age estimate of animals

An estimate of the age at death was carried out, using tooth eruption and height and/or wear of the crown. The combined sheep and goats curve in the old buildings shows no indication of a preferential slaughtering age (Fig. 2). Some lambs were killed when they were very young (milk lamb), the other animals were slaughtered from about 6 months old. There seems to be a somewhat greater preference for sub-adult individuals in the age class of one to two years. However, bones from adults as well as mature animals, older than six years, are present. The age distribution in area E1s displays the same slaughtering pattern (Fig. 3). All age categories (juvenile, sub-adult, adult, mature and senile) are present with a gap of the age class of 2 to 6 months and very few bones of animals between two and four years. Milk lambs are more common than in the area of the old buildings.

An age estimate for pigs carried out on the remains found in area E1s clearly shows a real preference for juvenile animals (Fig. 4). The pigs were slaughtered before they had reached the age of six months. There are no animals older than two years. Judging from the postcranial evidence, some of the remains might come from neo-natal or foetal individuals. The question remains as to whether there might have been sacrifices of pregnant sows, as related in ancient texts (sacrifice to Demeter, Le Guen-Pollet 1991: 16; Jacquemin 1991: 95-96).

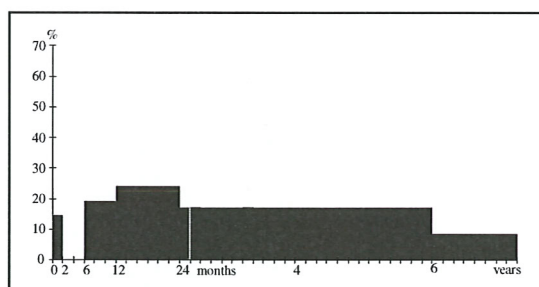


Fig. 2. Histogram of age frequencies for sheep and goat: buildings 1, 2, 3 (57 teeth)

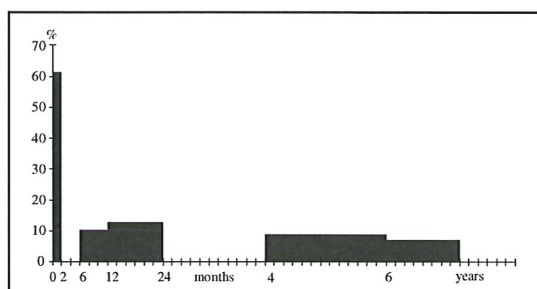


Fig. 3. Histogram of age frequencies for sheep and goat: area E1s (34 teeth)

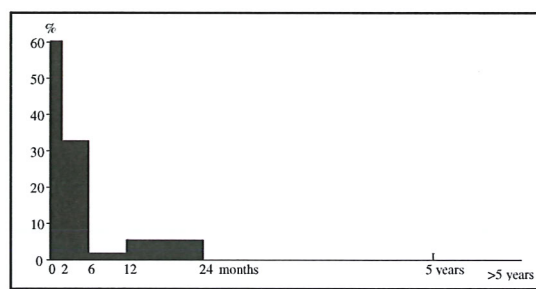
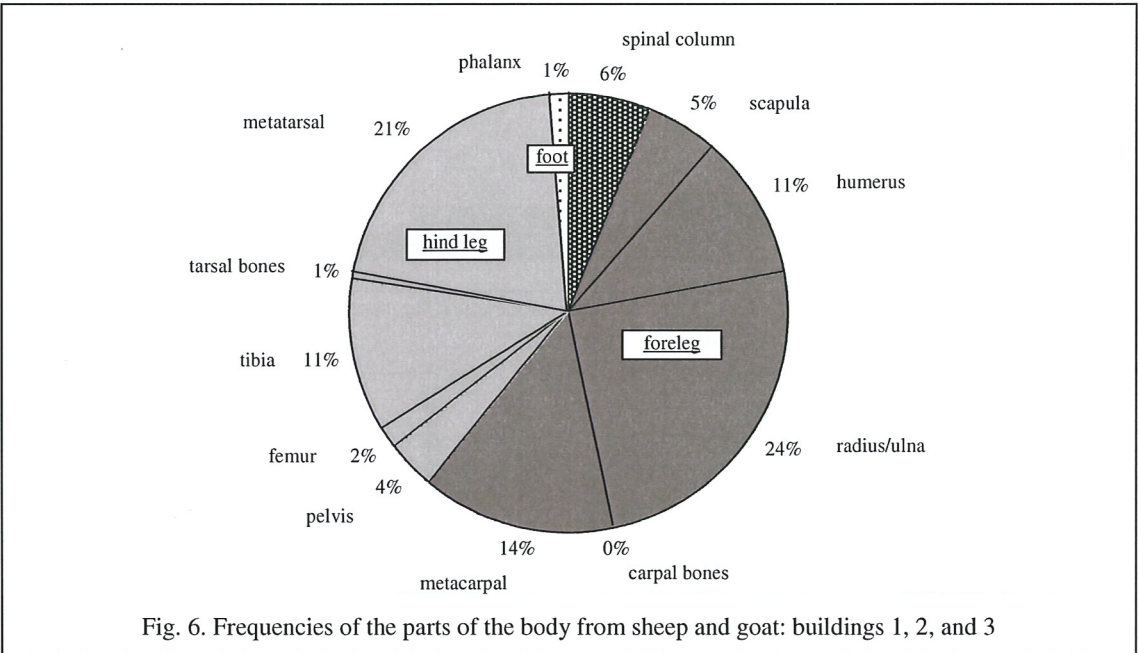
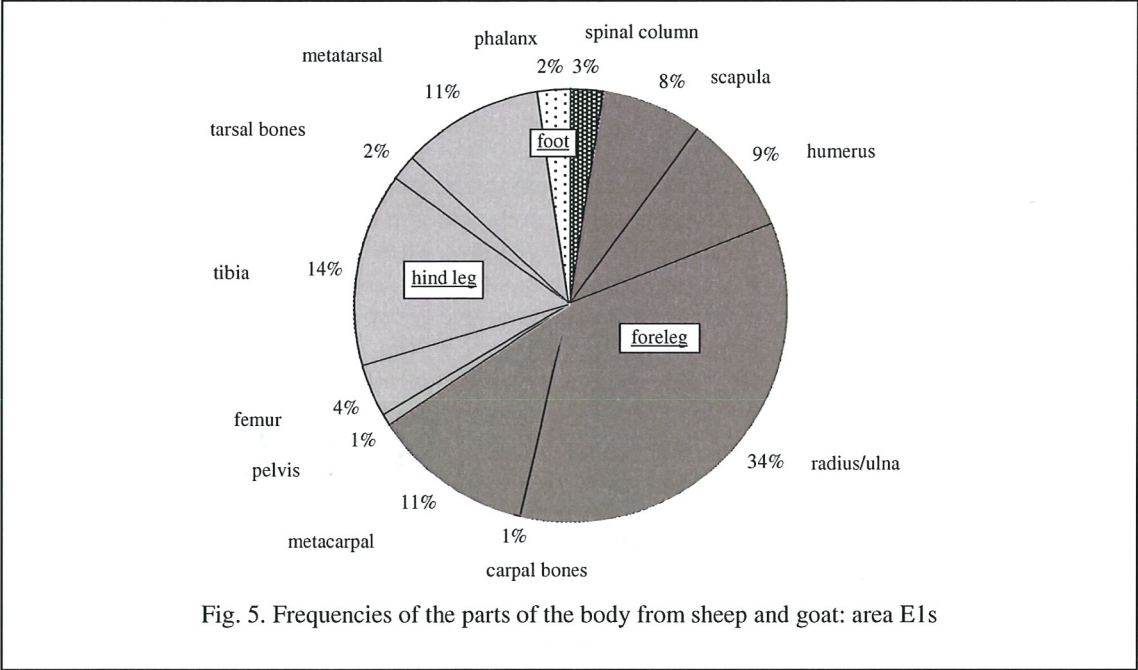


Fig. 4. Histogram of age frequencies for pig: area E1s (25 teeth)

However, since none of the adult remains provide information about sex, this possibility remains only a hypothesis. Age evidence for pigs in the area of the old buildings is insufficient for building a slaughtering curve; piglets younger than two months are few in number, and in general, the animals are older than those from area E1s.

Data for an age preference in cattle are also sparse. It would appear that individuals from all age categories were killed, with bones of calves of less than two years old of age appearing more often.



Distribution of the postcranial remains among the skeletons

Comparing the distribution of the postcranial remains, it is clear that some parts of the body are uncommon or missing, without any relation to side, because right and left sides are both present among all body parts. Remains of spinal columns, foot bones, and of the carpal, tarsal, and femur are rare. This particular anatomical representation, shown here for the sheep and goat (Figs. 5 and 6), is true for all species and for both excavated areas. One could easily explain the absence of foot bones because they might have been bound with the skin of the sacrificed animal and they do not in any case belong to the parts which were eaten: these parts are also missing at other sanctuaries (for example in Heraion on Samos, Boessneck and Von den Driesch 1988, as well as that of Artemis in Ephesus). The absence of carpal and tarsal bones is more difficult to understand because metapodia are present. This is not the result of partial recovery or excavation problems because the collection of bones was carried out very carefully, sometimes sieving. Gnawing marks are very rare on the surface of bones (nine fragments show canid tooth marks). Thus, canids clearly played no role in the disappearance of such body parts. It is possible that a special interest in those bones, small and with a curious shape, lead to their being set aside, as is attested for the astragalus.

The scarcity of the femur is somewhat more interesting. It takes one back to a moment in the sacrificial ritual clearly described in ancient texts and identified on a representation on a vase from the beginning of the 5th century BC (cf. Durand 1987, Fig. 3 or Van Straten 1995, Fig. 157; Attic oinochoe, Boston MFA 99.527). This ritual was where the thigh was presented to the priest as a prime cut of meat from which the bone was then extracted for ritual burning in honour of the deity. This scarcity of femur and patella in the faunal remains has also been observed in the Heraion on Samos (Boessneck and von den Driesch 1988).

Reasons for the lack of remains from the spinal column are unclear. From ancient texts and iconography, the caudal vertebrae, that is the tail, is also known to have been burnt (cf. for example, Van Straten 1995, fig. 129, 130, 131 etc). But how does one explain the absence of the cervical, thoracic and lumbar vertebrae? In fact, it is known that the spinal column was also considered to be a significant part of the body which was to be given to important persons (Svenbro 1987).

The excavated area E1s clearly corresponds to the pit connected with the altar and contains the remains of sacrificial meals and residues of offerings burnt in honor of the deity. The question remains as to whether it should be possible to find the remains of the hard body parts burnt to the deity, that is femora and caudal vertebrae, or whether they would have been completely destroyed in the sacred fire.

The burnt remains of the sanctuary Asea

The answer was provided by material from another sanctuary, a Doric temple at Asea (c. 500 BC), located on a hill, Agios Elias, about 20 km from Tegea. The deity to whom this temple was dedicated is not known. In 1997, a small joint excavation was conducted under the supervision of J. Forsen (Swedish Institute at Athens)⁵. On the east side of the temple an exploratory excavation (4m long, 50cm wide and 50cm deep) was carried out in an attempt to find the altar. An accumulation of burnt bones was discovered in this area. The dig yielded more than 8000 fragments of black and white heavily burnt bones, less than 3 cm in size, which are mostly fragments of proximal, distal and diaphysis parts of femora, patellae, caudal vertebrae and fragments of sacra from sheep/goat. Due to poor preservation and heat shrinkage, it was not possible to actually distinguish between sheep and goat. According to the degree of epiphyseal fusion, it seems that most of the specimens belong to animals older than 3 years. Right and left sides are both present. Nearly 40 diaphyses of femora may have come from infantile or neonate individuals: identification to the species level is uncertain, as they might have come from either piglets or lambs. Three patellae from cattle could also be identi-

⁵ The cooperation was between J. Forsen, B. Forsen (Finnish Institute at Athens) and E. Østby (Norwegian Institute at Athens)

fied. Considering their thickness some other unidentified fragments might originate from cattle femora. According to the number of patellae from sheep and goat, 160 pieces, the excavated assemblage (a tenth of the whole ash accumulation) corresponds to about 80 adults, plus an additional 20 neonatal lambs (or piglets ?) and two cattle.

This location must have been the sacred hearth where the remains of burnt offerings were left after the ceremonies. From the dating on the pottery, this spot may have been used for one and a half centuries (7-6th centuries BC). This altar had functioned before the erection of the Doric temple, suggesting that there might have been an earlier temple on this site. Some comparable assemblages were also found at the sanctuary of Aphrodite in Zeydin Tepe (Milet, Archaic period; Peters and von den Driesch 1992, Peters 1993), at Kommos (Crete, ca 700 BC; Reese 1989, 68), at the sanctuary of Apollo Hylates (Kourion, Cyprus, 7th century BC; Reese 1989, 69), at the altar of Demeter on Mytilene (Reese 1989, 68) as well as at Athens from the excavations of the monumental altar of Aphrodite Ourania (ca. 500 BC; Reese 1989).

Observations on butchery

Returning to the assemblage from the sanctuary of Tegea, a small percentage of the remains bears the marks of butchery. There are two types of marks which were observed on some of the body parts: thin cutmarks made with a knife and chopmarks made with an axe. Cutmarks on the mandibles and on the metapodia are probably related to the removal of the skin. The traces left on the mandibles under the processus coronoideus may be attributable to the disarticulation of the lower jaw from the skull and the extraction of the tongue. Cutmarks are present on the occiput of a bovid which might have occurred as the head was separated from the body. Most of these traces are to be observed, however, on the long bones. They tend to be very thin and are related to the removal of meat. Some cutmarks on the pelvis were left during the dismemberment of the femur when the ligaments were cut. Heavy chopmarks were observed on the scapula and also on long bones (humerus, radius, tibia, and metapodia). Some traces of burning are present at the broken edge of the diaphysis of tibia (12 examples) which indicates roasting.

It would appear that there are two stages associated with the butchery and division of the body of the sacrificial animal. First there is a sacred stage, and then a second secular, or profane stage. The first stage is distinguished by a careful and meticulous ritual process during which the animal is decorated and observed, up until the moment of slaughter, or felling in the case of the bovid. The behaviour of the animal is observed and interpreted throughout. Immediately following the sacrifice, the skin is removed, the viscera are carefully and precisely extracted, as is the thigh bone. Finally, the tail is cut off. During this process, the body is carefully dismembered at the joints. The second stage seems to be much more secular. It contrasts with the first stage in the lack of religious care taken. What remains of the body is carved up and shared out in equal portions without regard to the joints. The marks on the bones indicate the use of a chopper. One may imagine a different speed and lesser degree of care in the whole process.

Some remarks about the meaning of the bone remains in sacrificial contexts

Of the species sacrificed at Tegea, the most common is sheep, then goat, followed by pig and piglets, and less often calves. The significance in regard to the deity to whom the temple was dedicated in the Archaic Period, Athena Alea, goddess of cereals and protectress of the mills requires clarification⁶.

While sheep are the livestock of the shepherd, pigs in contrast are domestic animals par excellence, being the beasts of agricultural villagers. Therefore, it is not surprising that pigs and piglets were

⁶ Von Ranke-Graves 1986: 512. All the information about Alea show it to be a chthonic power of fertility and fecundity.

sacrificed in the temple. On the other hand, there are the remains of goats in Tegea, despite the fact that it is known that Athena in Athens did not accept goats as sacrifices (Le Guen-Pollet 1991: 13, note 7; *Athénée*, 587 A). It is possible, however, that not all the sanctuaries of Athena abided by this prohibition. According to other archaeozoological data, it appears that such interdictions might not have been fully respected. This could have been the case in Thasos, where an inscription from the 5th century specifies that nobody is allowed to sacrifice either goat or pig to Heracles Thasien. Nevertheless, some remains of pigs were found among the faunal remains from the sanctuary (Des Courtils and Pariente 1991: 71). Without being the animal attribute of a deity, as the deer was for Artemis, the piglet plays a great role in the purification rites for the sanctuaries of the goddesses⁷. Offerings of piglets are well documented by the numerous statuettes of women carrying piglets, one of which has been found at Tegea (Dugas 1921: 425, Fig. 52). Such figurines, which are very common in Sicilian sanctuaries, for instance, as well as on vase depictions (Deubner 1969: Fig. 2), correspond to young girls or women who bring the sacrificial piglet to the altar⁸.

The archaeozoological data testify that some species are preferentially sacrificed for specific deities: cattle for Hera (Samos) and pigs for Demeter and Persephone (Knossos, Cyrene). According to the *leges sacrae*, goats are especially sacrificed to Dionysos, Apollo, Artemis and Aphrodite (Van Straten 1995: 171, note 47).

Considerations about the origins of the Greek sacrifice

The extensive time and space of Greek sacrifice and the persistence of the whole ritual is a unique phenomenon. The oldest textual and archaeozoological data concerning Greek rituals date back to the Geometric Period, that is, the 8th century BC, and continue until the Classic Period throughout the Greek world: on continental Greece as well as on the islands and in Anatolia. The question of its origins remains open, although some evidence for it may be found in the Near East. In the Old Testament (Leviticus, La Bible de Jérusalem 1973: 129-135) parallels can be drawn between the biblical and the Greek ritual⁹, in that the blood of the sacrificed animal must spray the periphery of the altar. For some particular sacrifices, the fat and the entrails are burnt on the altar. It is specified that for the sacrifices of communion, the whole tail will be cut near the sacrum while the priest receives the chest and the right thigh. But even more anciently in Anatolia, the Hittite sacrificial ritual in the second millennium had some common characteristics with that of the Greek (Haas 1994).

Ancient texts from Anatolia describe the importance of the colour and the purity of the animal, the decoration of the cattle's horns with gold and silver and of the sheep's horns with oil and a bunch of grapes. Small animals, sheep, goat, and pig, were killed by slaughtering, and cattle by felling (a stroke to the forehead). It is written that parts of the entrails, an ear and a thigh, are burnt on the fire. Fat-rich parts were favoured by the deities. It is also mentioned that the sex organs and the thigh of 12 sheep were offered. Another text describes that the front legs are cut and the bones smeared with fat.

In Mesopotamia, as early as the third millennium BC, rituals are evidenced by texts as well as icon-ography (Limet 1989). The common aspects between the various rituals lie in the importance of the choice of animal and of its behaviour, in terms of whether it is considered propitious or not. Unfortunately, the rituals of the sacrifice itself, as far as we know, are not described in the texts. Clearly, most important at that time was the problem of divination, the need for foreseeing the future which could be read into everything, particularly in the behaviour at the moment of sacrifice as well as in the entrails of the animal. The rest was perhaps not important enough to be committed to writing.

⁷ Le Guen-Pollet 1991: 16. Jacquemin 1991: 95-96: According to the accounts of the hieropes and the *inscriptions Deli*, piglets were sacrificed during the Thesmophories as part of the purifications of the goddesses: a pregnant sow for Demeter, and piglets for Kore and Zeus Eubouleus.

⁸ Squaitamatti 1984: 55. The association on some statuettes of a sacrificial crown shows the sacrificial quality of the animal.

⁹ For more references cf. for example Bergquist 1993.

Evidence for sacrificial practices from Greek Period contexts in the form of animal bones has now been collected. These assemblages indicate an ancient and ongoing tradition which predated these periods. It is to be regretted that there is not much in the way of bone fragments from sacrifices in Mesopotamia and Anatolia dating from the third and second millennium BC which could contribute to this research and complement the information available in the ancient texts (West 1997). Further investigation in these areas could lead to a better understanding of the origins of Greek sacrificial practices and build a more complete picture of the historical relationships between the cultures of the ancient eastern Mediterranean.

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