



University of Groningen

# **Greek Normative Animal Sacrifice**

Bremmer, Jan N.

Published in: A Companion to Greek Religion

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version Publisher's PDF, also known as Version of record

Publication date: 2007

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA): Bremmer, J. N. (2007). Greek Normative Animal Sacrifice. In D. Ogden (Ed.), A Companion to Greek Religion (pp. 132-144). Blackwell Publishing.

Copyright Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverneamendment.

#### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

#### GREEK NORMATIVE ANIMAL SACRIFICE

by

## JAN N. BREMMER

In recent decades it has been increasingly recognised that sacrifice was the most central religious act for the Greeks. Yet its analysis has always been rather one-sided, since previous generations of scholars had to depend mainly on literary sources, which present a rather idealised and selective picture of what actually went on. In recent decades, however, new sacrificial calendars have been found, Greek vases have been shown to be very informative about sacrificial ideology and practices, and, even more excitingly, biologists have started to analyse the faunal remains of excavated altars. Consequently, we must continuously compare literary descriptions with artistic representations and, where possible, with the archeological evidence. It is only in this way that we will gain a more realistic picture of the complex of Greek sacrifice.

Step-by step accounts of Greek sacrifice often do not distinguish between Homeric and post-Homeric, mainly Attic evidence. Yet it is clear that the ritual considerably expanded in the course of the Archaic Age, when growing urbanisation and concomitant wealth provided the means and leisure for a more generous and more dramatic performance of sacrifice. Not only do we hear in the fifth and four centuries more about a special outfit for the sacrificers and a more elaborate ritual around the altar, the killing of the animal itself was also sometimes dramatised in a most curious manner. As our detailed analysis will show, sacrifice was not an immutable ritual block, handed down unchanged over the centuries, but a living ritual, responding to the needs, possibilities, and intellectual questioning of the ever-changing Greek culture.

These new developments warrant a fresh look at the matter. We will start with a short description of the normative ritual (§ 1), then study its ideology and practices (§ 2-4), proceed with some non-normative sacrifices and libations (§ 5), analyse the insiders' views of sacrifice (§ 6), discuss the views of the most important contemporary students of Greek sacrifice (§ 7), and conclude our study with some observations on the history and function of Greek sacrifice (§ 8).

#### 1 Normative animal sacrifice

We are fortunate that sacrifices already abound in our oldest literary source, Homer (ca. 700 B.C.). The most detailed description occurs in the Odyssey (3.430-63), which we will take as our point of departure. After Telemachos had arrived in Pylos, Nestor prepared a sacrifice in honour of the goddess Athena by sending for a cow to be fetched by a shepherd. On its arrival, a blacksmith covered the horns with gold foil and Nestor, together with his family, went in procession to the altar. Two sons guided the animal by the horns and the other three carried, respectively, a jug with lustral water and barley groats in a basket, an axe, and a bowl to collect the blood. Having arrived at the place of sacrifice, where the fire was already ablaze, Nestor 'began the rite with the lustral water and the sprinkling of barley meal', prayed fervently to the goddess Athena, cut some of the hairs of the cow and threw them into the fire. Then the others prayed and also threw barley groats forward. After these preliminary rites a son severed the tendons of the cow's neck, an act greeted by the cry *ololygê* of the females present: Nestor's wife, daughters, and daughters-in-law. Then the sons lifted the cow up, cut its throat, and 'its lifespirit left the bones'. They dismembered the animal and cut out its thigh-bones, which they wrapped up in fat at both folds, with bits of raw meat upon them. Nestor burned them on wooden spits, having poured a libation of wine upon them. When they had burned the thighbones and tasted the innards, they carved up the rest of the carcase and roasted the meat on fivepronged forks. Having roasted it and pulled off the spits, 'they dined sitting', wine not being absent. And it is only after the end of this meal that for Homer the ceremony has come to an end.

#### 2 Before the kill

Having seen the whole of a Greek sacrifice, let us now take a more detailed look at its parts. The sacrificial scene in the *Odyssey* starts with the choice of the animal. Naturally, Nestor sent for a cow, the largest domesticated animal available and the predominant victim in literature and art. Yet after the Dark Age most sacrifices were not of cattle, and smaller animals were the rule for small communities and private sacrifice. Evidently, the cow was too valuable to be given away, even to the gods, and we should never forget that sacrifice is a matter of some economic calculation as well as a ritual obligation. As a symbolic statement, though, cattle remained the

preferred animal and Athenian colonies and allies had to send a sacrificial cow to the Panathenaea. In important sanctuaries, cows (oxen) also constituted the majority, and in Apollo's temple in Didyma they remained the favourite victim, even though often quite young as in Artemis' sanctuary in Boeotian Kalapodi.

The next expensive full-grown sacrificial victim was the pig. Contrary perhaps to expectation, it was not the most popular animal in sacrifice. The pig was kept mainly for meat, in particular for fat, but it is a scavenger of human wastes; its rooting, digging habits makes it less suitable for densely populated areas, and it needs the presence of water and shade, neither of which is continously available in most places of ancient Greece. We do not find pigs, then, much employed in the great sanctuaries, except perhaps in Cypriotic sanctuaries of Aphrodite, and few gods were connected with the pig in particular. The exceptions, confirming the case, are Hestia (who was the customary recipient of a preliminary, usually cheap, sacrifice), Demeter (the goddess whose sanctuaries were often situated outside the city and whose myths and rituals contained peculiar, uncanny motifs), and Dionysos (the god of wine, but also of a temporary dissolution of the social order). The choice of the pig seems to confirm Demeter's and Dionysus' 'eccentric' places in the Greek pantheon. The low appreciation of the pig was not only shared by the Jews, whose abhorrence of the pig is well known, but also by Israel's *Umwelt*, including the ancient Egyptians. It thus fits a larger Mediterranean phenomenon.

Piglets, on the other hand, were very cheap. They were therefore popular for preliminary and, in particular, purificatory sacrifices, which were not meant for consumption and had to be burned whole. Interestingly, many terracotta's representing girls, much less frequently boys, carrying piglets have been found in sanctuaries on Sicily and the Peloponnese. Since the mythical daughters of king Proitos of Tiryns were purified with pig's blood at the end of their initiation, a connection with adolescense seems very likely in this case.

The predominant sacrificial victims were sheep and goats, animals whose bones are often very difficult to distinguish. Attic sacrificial calendars prescribe mainly adult animals, but in Kalapodi Artemis received more she-goats than billy-goats. The state of the teeth shows that in Didyma adult, not young or aged, animals were preferred, but in Kalapodi younger animals were sacrificed throughout antiquity. Similarly, at the altar of Aphrodite Ourania in Athens, 77.2% of the sheep or goats were under 3-6 months and only about 3% as old as 2.5-3 years. In the case of Aphrodite even cheaper offerings were quite normal (below), and the sacrifice of

kids and lambs fits this picture.

In addition to the main sacrificial victims, there were a number of more marginal animals. Dogs were used for purificatory purposes but not normally eaten, except at the margin of the Greek world, such as Didyma and Cyprus. The Greeks themselves thought of this sacrifice as typical of foreigners, such as Carians and Thracians, and used it to differentiate cruel Ares and spooky Hekate from the more civilised gods. Birds were brought to Aphrodite, and cockerels to Asclepios - both less important gods, whose status reflected itself in the gifts they received. Finally, randy Priapos, ghostly Hekate, but also lovely Aphrodite received fish, which probably played only a small part in the subsistence economy of ancient Greece and was not highly rated symbolically. Consequently, receiving fishes was a dubious honour and indicative of the low place of these divinities in the divine pecking order.

Listing victims in the way we have done, could suggest that they were all more or less acceptable to the gods. Such an impression would hardly be true. In addition to the age of the victim, the worshippers also had to make decisions about the sex and colour of the victims. In general, male gods preferred male victims, whereas goddesses rather had female ones. Yet this was not a fixed law but rather a rule with notable exceptions, as in Artemis' sanctuary in Kalapodi the bones of bulls have been found, in the Samian Heraion those of bulls, rams, and boars, and Persephone frequently received rams. Similarly, sacrificial regulations often specified the colour of the victim, black being the preferred colour for chthonic deities. Yet the prescriptions were not at all consistent and it may be doubted whether colour was an important symbolic marker in Greek sacrifice. The choice of a sacrificial victim, then, was subjected to many rules and constraints, even if these are often hard to understand. Social and ritual values played a role, but also the availability of animals at only particular times of the year: kids, lambs, or calves were simply not around all year long. We know that the most popular victims were sheep and goats, but every sanctuary had its own rules, and every new excavation has presented surprising new results. This variety hardly suggests that the proto-Greeks had brought along a fixed sacrificial tradition ( $\S$  7).

Having looked at the choice of the victim, we now turn to its treatment. Naturally the gods only rejoiced in splendid gifts, so the victim had to be perfect and undamaged. Admittedly, sacrificial calendars often specify wethers (castrated rams). And indeed, bones of a whether have been found in Kalapodi, just like in Didyma the bones of castrated oxen were encountered,

but these animals had evidently been reclassified as 'undamaged'. This mental operation must have been facilitated by the fact that castration improves the size of animals and the quality of their meat. It was only in Sparta that sacrifices were small, cheap, and even allowed mutilated animals. This practice must have been influenced by Spartan ideology. Too much free meat would have softenened up the warriors, and the main Spartan meat supply had to come via the hunt; indeed, Laconian hounds were famous all over the ancient world.

In order to enhance the festal character of the occasion, Nestor had a smith cover the horns of the cow with gold. This was obviously something only a king or a wealthy community could afford, but the practice lasted well into Hellenistic times. It was more normal, though, to adorn the victims with ribbons and garlands round their heads and bellies. The sacrificers themselves also rose to the occasion. They took a bath, put on festive white clothes and, similarly, wreathed themselves; it was only in a few preliminary or peculiar sacrifices that wreaths were lacking. When during a sacrifice Xenophon heard that his son Gryllus had fallen in the battle of Mantinea (362 BC), he took off his wreath, but when he later heard that his son had fought courageously, he put it on again and continued the sacrifice. Yet a bath, white clothes and wreaths could also fit other festive occasions. The sacred character of the sacrifice was stressed by the absence of shoes, as the vases clearly show.

In Homeric times, we do not yet hear about these extensive preparations of the sacrificers, but the classical period had clearly dramatised the beginning of sacrifice. This appears also from the sacrificial  $pomp\hat{e}$ , which in the *Odyssey* is only small, but in archaic times developed into quite a procession, as texts and vases clearly demonstrate. In fact, archaic black-figure vases only show the procession but never scenes around the altar; which became only popular on the later red-figure vases.

At the front of the procession an aristocratic girl (the *kanêphoros*) walked with on her head a beautiful basket, sometimes of silver or even gold-plated, which contained the sacrificial knife covered up by barley-groats and ribbons. Male adolescents led along the victim, and a male or female piper played the music indicating the walking rhythm. Depending on the occasion, there could be various pipers and (exclusively male) players of string instruments. The great Panathenaeic procession may even have known as many as sixteen musicians: the largest orchestra known from classical Greece! This music had become such an integral part of the ritual in post-Homeric times that Herodotus (1.132) was struck by its absence in Persian sacrifice. Then adult males and females followed in a throng, sometimes knights among them. It is interesting to note that the central place of sacrifice reflected itself in the participation of representatives of the whole community in the event. Boys and girls, men and women - all had a role to play.

In the *Odyssey* the animal was guided along by the sons of Pisistratus. Evidently, it did not give any trouble, as is to be expected in a text picturing an ideal sacrifice. Indeed, voluntariness of the victim was an important part of the Greek sacrificial ideology, which stressed that the victim was pleased to go up to the altar, sometimes could even hardly wait to be sacrificed! This voluntariness goes back to archaic hunting practices, where the hunters pretended that the animal voluntarily had appeared to be killed. The importance of the theme appears from the fact that even in the twentieth century legends about voluntarily appearing victims have been recorded in those countries still practising sacrifice: Finland and modern Greece. Oviously, ideology and practice did not always concur and vases show us ephebes struggling with the victim, or the ropes tied to its head or legs in order to restrain it.

Having arrived at the sacred place, the worshippers stood around the altar, as the texts say. In reality, the topography of the ancient temple indicates that they must have stand in a semi-circle between the altar and the temple, with the temple at their back. Now the actual sacrifice could begin. One of the sacrifical assistants carried a jug with lustral water and the sacrificial basket round the altar, counterclockwise, the right being the favourable direction. Then the sacrificer dipped his hands into the jug, as can be clearly seen on the vases. Subsequently, he took a brand from the altar, dipped it in the jug, and sprinkled and purified the participants, the altar, and the sacrificial victim. This inaugural act separated the sacrificial participants from the rest of the population and constituted them as a distinct social group. Its significance was such that 'to share the lustral jugs' can be used to express the belonging of a slave to the household, and a law ascribed to the seventh-century lawgiver Draco prescribed to keep away the murderer from the 'lustral jug, libations, kraters, sacrifices, market'. In other words, Draco's decree turned him into an outcast.

In Homer, Nestor started the sacrifice with the 'lustral water and the barley-groats'. These two elements had been carried by one of his sons, and in classical times beardless sacrificial assistants can still be seen on the vases with a jug with lustral water in one hand and in the other the sacrifical basket. Only after Nestor had pronounced a prayer, the other participants in

the sacrifice 'threw the barley-groats forward'. In classical times they were employed somewhat parallel to the lustral water, as the barley now mixed with salt, was sprinkled, or thrown, on the altar and the victim during the prayer. In fact, the barley-groats had become so prominent, that Herodotus (1.132) noted their absence in Persian sacrifice; despite their prominence, though, their meaning still remains obscure. Compared with Homer, then, the beginning of the sacrifice was considerably dramatised. This dramatisation was also evident at Athenian public meetings, where at this point an officiant asked 'who is here' and the participants replied 'many good men'. The sacrificial prayer could be spoken by the highest magistrate but also by priests or individuals. Its content depended of course on the occasion. In Euripides' *Electra* Aegisthus prays to the Nymphs to harm his enemies, and in Isaeus' oration *On the estate of Ciron* (8.16) the grandfather prays for the health and wealth of his grand-children. As some scholars see in sacrifice little more than a roundabout way of getting meat (§7), it is important to note that prayer was an absolutely indispensible part of sacrifice.

The 'lustral water and the barley-groats' were said to have 'begun' sacrifice and, as we have seen, all participants took part in this 'beginning'. In Homer, though, the most important person present, Nestor, started this part of the ritual, and that custom seems to have persisted in historical times. As Thucydides (1.25) tells us, the Corinthians turned against the Corcyrans, since 'at their sacrifices they did not give priority at the "beginning" to a Corinthian, as the other colonies did'. In other words, the Corcyrans did not let a Corinthian 'start' the sacrifice, as Nestor had done. Once again, sacrifice reflected the social and political hierarchy.

#### 2 The kill

After these preliminaries the time had come to kill the sacrificial victim. The throwing of the barley-groats had uncovered the sacrificial knife, which had been lying hidden below them in the sacificial basket. The officiant now took the knife and, like already Nestor, first cut a few hairs from the brow and threw them in the fire, the beginning of the actual killing. The gesture was such a clear indication of the coming death, that quite a few representations of the sacrifice of Iphigeneia in Aulis show us the sacrificer cutting a lock of her hair instead of the actual murder.

It made of course a difference whether a large or a small animal had to be killed. With a bovid or a large pig it was wiser to stun the victim first. In the *Odyssey* it is one of Nestor's sons

who performs this act, and at least on the island of Keos it seems to have remained the duty of young men, but in classical Athens a special officiant, the 'ox-slayer' (*boutupos*), was charged with this blow. It is only on two non-Athenian vases that we can see an axe hover over the head of an ox, and the instrument is never mentioned or shown in connection with the sacrificial procession, where it would have disturbed the festal atmosphere. Presumably, it was produced only at the very last minute.

The largest animals were not necessarily always stunned first, though. In order to demonstrate their physical prowess, ephebes, 'in the way of the Greeks' (Euripides, *Helen* 1562), lifted up the animal to have its throat cut. This custom is attested in many texts and inscriptions but was doubted by Paul Stengel, the greatest expert of Greek sacrifice at the beginning of the twentieth century. He therefore put the question to the Berlin abattoir, where the possibility was laughed away. Yet the sixth-century athlete Milo of Croton had gained great fame for lifting a four-year old bull on his shoulders and carrying it round the stadium at Olympia. Moreover, a recently published sixth-century amphora shows us a group of adult males with a bull on the shoulders, clearly on their way to the sacrifice, and on an early red-figure kylix we see ephebes struggling with a bull in order to throw him off balance. Modern spectators of bulls or oxen will probably share Stengel's doubts, but in ancient Greece bovids were considerably smaller than nowadays. For example, in seventh-century Samos, as the bones show, the sacrificed cows were only between 95 cm and 1,15 m, one bull measured 1,26 m and an ox 1,35; in Kalapodi bulls were about 135 cm. Still, despite the difference - and bovids on the mainland may have been larger - the 'lifting up of the bulls' remains a feat to be admired.

The participants to the sacrifice now lifted up the (stunned) victim with its head up high, towards heaven, and a priest or another officiant cut the throat with the sacrificial knife. At this very emotional moment the pipes stayed silent but the women present raised their high, piercing cry *ololyge*, which Aeschylus in the *Seven against Thebes* (269) calls the 'Greek custom of the sacrifice cry' (*ololygmos*). The cry poses two problems which are hard to answer. First, why was it raised by women and, secondly, what did it mean? In Homer, Eurykleia wants to shout the cry from joy when she sees the suitors killed (22.408, 411), and in Aeschylus' *Agamemnon* (595) Clytaemnestra raises it as a cry of jubilance in connection with sacrifice. This seems indeed to be the most natural interpretation in connection with sacrifice. Admittedly, the piercing character of the cry made it also suitable for other occasions, such as lamentation or Dionysiac

ritual, but originally it will have been a cry at the moment that the tension was broken. As the males were busy with the actual sacrifice, it is perhaps understandable that the women played a more vocal part. In any case, the custom lasted well into Hellenistic times because a 'piper and an *ololuktria*' during sacrifices to Athena were still employed in Pergamum in the second century B.C.

Great care was taken not to spill the blood of the victim on the ground. When the animal was small, it was held over the altar and its blood blackened the altar itself or was allowed to drip on a hearth or in a sacrificial pit; for larger animals, a bowl (*sphageion*) was used to catch the blood first. In Homer the blood is not mentioned, only the bowl (*Odyssey* 3.444), but in the classical period the blood is prominently present on the altars as many vase-paintings show: the lasting proof of the otherwise perishable gifts to the gods.

It was now time to skin the victim and carve it up. Whatever the local differences, it seems clear that in this phase the gods were the main objects of attention, even though their share was not very impressive. After the two thigh-bones had been taken out and all meat removed from them, they were wrapped in a fold of fat, small pieces 'from all the limbs' were placed on top, and the whole was burned as an offering to the gods. In later times, the latter part of the ritual is only rarely mentioned and it had probably fallen into disuse in most places, but the removal of the thigh-bones has left archaeological traces, since in Ephesus deposits of burnt thigh-bones have been found, whereas in Samos these proved to be absent among all the bones found: evidently, they were buried elsewhere. Homer interpreted the small pieces on top as a first-fruit offering (*Odyssey* 14.428), but historical and anthropological comparison shows that these acts reproduce age-old customs of hunters. By gathering the bones the sacrificers symbolically returned the animal to the god(s) to insure future succes at the hunt.

In addition to the thigh-bones, the gods also received some other parts, such as the gallbladder and the tail. Athenian vases often represent the tail of the sacrificial victim burning on a high altar and, like the thigh-bones, the tail-bones are lacking among the bones found in the sanctuary of Artemis in Kalapodi and the Heraion of Samos. Understandably, ancient comedy made fun of this 'important' present to the gods. Is it perhaps the poor quality of these gifts which made later times re-interpret them and use the tail and gall-bladder for divination? The custom is not mentioned by Homer but was widely spread in the classical period. Similarly, Homer does not yet know of hepatoscopy but the most recent books of the *Iliad* and *Odyssey* 

already mention a seer inspecting entrails, and inspection of the liver occurs on Athenian blackfigure vases. Most likely, the technique of sacrificial divination had entered Greece from the Orient around 700 B.C.

In classical times the gods also seem to have received a share of the innards, *splanchna*, in which the Greeks included the spleen, kidneys, liver and, probably, the heart and lungs. These parts of the victim were the first to be eaten. This preliminary consumption also belonged to the inheritance from the hunting peoples, who presented the innards often only to a select group or the gods. It was not that different among the Greeks, since Nestor's son presented a share of the entrails to Telemachus and the disguised Athena on their arrival in Pylos (*Odyssey* 3.40-4). Many vases show a boy, the *splanchnoptes*, holding the innards on long (sometimes 1.65 m.) spits, *obeloi*, roasting over the fire. The meat went sometimes together with the *pelanos*, a kind of cake, which had apparently been brought along in the sacrificial basket, often shown standing next to the burning altar. The close connection of *obeloi* and *pelanos* also appears from the fact that both developed into terms for money without us knowing exactly how and why. Together with the food, the gods received a libation of mixed wine, just as the humans combined food with drink. Athenian vases often portray the sacrificer pouring a libation from a cup in his right hand, while he extends his left hand in a gesture of prayer. The custom was traditional, since Nestor also performed a libation, although he had spoken a prayer before sacrificing (above).

After these preliminary acts, the actual carving up of the victim was continued. This was a complicated affair, which in classical times was entrusted to a specialist 'butcher', the *mágeiros*. Various vases show chunks of meat hanging in the trees: testimonies to the pleasure that was taken in the display of the meat. After the carving, the meat had to be boiled before it was distributed; archeologists have even dug up supports of the ancient cauldrons in which the meat had to simmer. The act of distribution was so important that the Homeric term used for banquet, *dais*, is etymologically connected with a root \**da* 'divide, allot'. However, distribution must have created big problems immediately, as not all meat is of the same quality or easily cut in exactly similar portions. In Homer, we often find the combination *dais eisê*, 'an equal feast', but this expression should not be taken to mean that everybody always received an equal share. On the contrary. In the strongly hierarchical Homeric society, meat was distributed depending on the rank and status of the guests. Typical in this respect are the scenes in the *Odyssey*, where Eumaios offers the chine of a pork to Odysseus (14.437), and the *Iliad*, where Agamemnon offers a prime cut, the chine complete with ribs, to Ajax, although the feast is explicitly called a *dais eise* (VII.320-2). Evidently, the ideology of equality did not exclude unequal distribution in case of special persons or special merits. In fact, unequal distribution lasted well into classical times, since in Sparta the chine was offered to the kings; in Crete the best pieces were given to the bravest and the wisest, and in democratic Athens around 335 a decree ordered the officials in charge of the sacrifices during the Lesser Panathenaea to give special portions to the prytaneis, archonts, strategoi and other officials. On the other hand, the ideology of equal distribution also remained alive, and in Hellenistic Sinuri the portions of meat had to be weighed before distribution.

The importance of the distribution also appears in a different way. The names of the most important gods of fate, Moira and Aisa (related to Oscan *aeteis*, 'part'), are also words meaning 'portion'. The name of Ker, 'Death', the god connected with man's definitive fate, is probably related to *keirô*, 'to cut', and for sudden and malevolent interference the Greeks usually blamed a *daimôn*, literally 'distributor'. Apparently, the Greeks took their ideas about fate from sacrifice, *the* occasion in life where portions were cut and distributed. Even the later Greek word for 'law, order', *nomos*, literally means 'dispension'; originally, it may have meant the right order of sacrificial distribution. Evidently, the importance of sacrifice for early Greece can hardly be overrated.

After the distribution of the meat the meal could start. In Greek literature, division and distribution of meat is regularly described in detail, but its consumption is hardly ever mentioned. Similarly, vases never show somebody eating, although the various phases of sacrifice are often represented. It is therefore appropriate to bring this section to a conclusion and to proceed to those sacrifices where eating was not the apogee of the ritual.

### 4 Non-normative sacrifices and libations

If normative Greek sacrifice ended with a banquet, there were also sacrifices where food was absent or on purpose denied to the sacrificial participants, as various types of sacrifice show. First, the victim could be drowned: the Argives submerged a horse with bridle in the sea for Poseidon, and the Rhodians, wealthy as they were, a chariot with four horses for Helios. These costly sacrifices must always have been rare, and they seem to go far back into time.

The other extreme, in being extremely cheap, were purificatory sacrifices. Here the

victims were usually piglets, who after the sacrifice were thrown out in order to carry away the pollutions (§ 1). Piglets were also sometimes used for a preliminary sacrifice, in which case they were burnt whole. A holocaust was indeed not unusual in Greek sacrifice: in Patrai and other places even whole collections of animals ranging from edible birds to bear cubs could be burnt whole. These rituals, which sometimes were connected with myths relating human sacrifices, only took place at intermittent festivals and evidently marked very special moments in the life of Greek societies, in particular the initiation of its youths.

Another occasion which cannot have taken place daily was the oath-sacrifice. The Greeks often swore an oath while grasping an object, the horkos (which gave its name to the Greek oath), embodying the powers invoked; so the gods swore holding a jug with water of the Styx. On the other hand, people could also stand on an object symbolising the fate awaiting the perjurer: it was normal to stand on the testicles of a sacrificial victim. Curiously, though, both elements are absent in the two most detailed descriptions of the ceremony, both occurring in the Iliad. The first takes place between the Greeks and Trojans in preparation before the duel between Menelaos and Paris (3.95-312). Agamemnon cut off hairs from the sheep, which he put in the hands of the heroes of both parties. Then he prayed to Zeus, the sun, the rivers, earth, and the Erinyes. Finally, he cut the throats of the sheep, which were taken home by Priam, who will have used them for a banquet. In the second example, Agamemnon cut off hair from a boar and invoked Zeus, the earth, the sun, and the Erinyes. Then he sliced the throat of the boar, which was subsequently thrown into the sea by a herald 'as food for the fishes' (19.250-68). The Byzantine bishop Eustathius (on Iliad III.310) indeed relates that some people cast the victims into the sea, whereas others buried them in the earth. Evidently, an oath sacrifice was sometimes excluded from consumption. In the last case the heightened tension of the occasion will have prevented the consumption of meat in a relaxed atmosphere. Banquets were naturally also absent at other emotionally laden moments. Thucydides (6.69.1-2) tells us that when the Athenians and Syracusans were going to meet in battle for the first time, 'the seers brought out the customary victims (sphagia), and the trumpets sounded and called the infantry to the charge. The two armies advanced'. It is clear that in this case, as in others, there was no time to sit down for a leisurely meal. Hardly surprisingly, the Spartans customarily choose a young she-goat as sphagion during such a pre-battle sacrifice; at most the seers can have have looked at the sacrifical victim for divinatory purposes.

It is this moment of tension immediately before battle which is also a favourite moment for human sacrifice. In his description of the sacrifice of Iphigeneia, Aeschylus (*Agamemnon* 231-5) refers to this custom of the pre-battle sacrifice when he says: 'Her father, after prayer, gave word to the attendants to take her resolutely as she dropped forward, wrapped round in her robes, and to hold her, like a kid, above the altar, and, by guarding her fair mouth, to check a sound that would be a curse upon the house' (tr. E. Fraenkel). Clearly, this is not the place to enter in detail in the complicated issue of human sacrifice in the Greek tradition. We need to stress only that the Greeks were no cannibals and that the Greek mythical imagination never suggests that these sacrifices took place for human consumption. On the other hand, epigraphical evidence has increasingly made clear that sacrifices to heroes, which many generations of scholars supposed to have been burnt whole, normally ended in a happy banquet.

Naturally food was also absent from the libations, the pouring of liquid to the gods. Its practice goes back to the earliest roots of Greek religion because from the two terms used, *spondê* derives from an Indo-European root *\*spend*, and *choê* is connected with the Indo-Iranian priest-title *hotar/zaotar*. It may well be that this grey antiquity of the ritual is responsible for the enormous diversity in the use of libations. *Spondai* took place to please the gods or to avert a plague, to celebrate a victory or a peace, to accompany a prayer or the sacrifice of incense, and, last but not least, before symposia and voyages. *Choai*, on the other hand, were especially used in purificatory and funerary circumstances. Schematically, we could say that the *spondê* was made from a jug and poured, in a controlled way, on raised altars for the Olympian gods, whereas in the *choai* a vessel was emptied on the ground for chthonic gods and the dead. Yet there are numerous exceptions to these rules, and the whole matter is in urgent need of a new treatment.

Just as sacrifice could be varied in many different ways, so libations were not always performed identically. Normative libation took place with mixed wine, the normal drink of adult males, but oaths were performed with libations of unmixed wine, whilst funerary libations contained milk, water, honey and oil. In Attica, a whole variety of gods, such as Helios, Mnemosyne, the Winds, and the Eumenides, received wineless libations. As has recently been noticed, the liquids other than mixed wine are in opposition to the normal drink and one of their functions is to mark a preliminary or deviant sacrifice.

# 5 The significance of sacrifice: the insider's perspective

Having seen that not every sacrifice in Greece ended with the consumption of meat, we can now turn to problems of meaning and history. Rather strikingly, modern studies rarely take the Greeks' own reflections about sacrifice fully into account. Admittedly, these are sometimes naïve and transpose structural differences into a chronological, mythological system, but these interpretations have the same value as those of modern anthropological informants and can only be neglected at our peril. As anthropologists stress, we must distinguish 'experience-near' and 'experience-distant' concepts, but it is only their concerted application which will truly illuminate the beliefs and practices of a given society. So we will now look at (1) what literary sources implicitly say about the nature and function of sacrifice, (2) the explicit reflection of Theophrastus, and, last but not least, (3) the myths connected with sacrifice.

Let us start with the literary sources. It would transcend the scope of this contribution to analyse all sacrifices in literary texts, but some observations can be made. Regarding the nature of sacrifice, epic and tragedy show it to have been an extremely holy affair, of which the proper performance was indicative of a man's relationship with the gods. In the third book of the *Odyssey* Homer clearly wants to stress the piety of Nestor by picturing him as engaged in sacrifice when Telemachos arrives in Pylos. The same effect can also be reached by contrast. In Greek tragedy perversion of the social order is repeatedly expressed through perversion of sacrifice: - especially Euripides liked to situate murders at sacrifice or during prayer.

Regarding the function of sacrifice, early epic shows that the gods shared in hecatombfeasts with Aethiopes and Phaeacians and liked the smoke of the fat. Hesiod (fr. 1) also mentions that the gods once shared the dinners of mortals, surely also the ones after sacrifice. Moreover, the ubiquitous feast of the Theoxenia (or Theodaisia) shows that at one time it was considered normal that the gods feasted together with the mortals; the fact that this is particularly the feast of the Dioscures suggest an archaic tradition in this respect. Yet the archaic Greeks already became to feel uneasy about the gods eating in the same manner as the mortals. When Athena attended the sacrifice of Nestor (§ 3.1), Homer says only that the goddess came 'to meet the offering' (*Odyssey* 3.435), as he clearly felt uneasy picturing the goddess feeding on the sacrifice. In fact, Homer progressively removed the most carnal aspects of the Olympian pantheon, and the other Greeks followed his direction.

This strategy of 'decarnalizing' the gods proved to be very succesful and the aspect of divine food no longer receives any mention in the discussion of sacrifice by Theophrastus.

According to this scholar, 'there are three reasons one ought to sacrifice to the gods: either on account of honour or on account of gratitude or on account of a want of things. For just as with good men, so also with these (the gods) we think that offerings of first-fruits should be made to them. We honour the gods either because we seek to deflect evils or to acquire goods for ourselves, or because we have first been treated well or simply to do great honour to their good character' (fr. 584A, tr. Fortenbaugh et al.). All three reasons adduced by Theophrastus - honour, gratitude, want of things - can be found among the earlier Greeks. Honour was clearly a most important factor in sacrifice as appears from a number of myths. Homer (IX.534-6) mentions that the Calydonian Hunt was occasioned by Oeneus' omission of Artemis from a sacrifice to all the gods, just as, according to Stesichorus (fr. 223), Tyndareus once forgot to include Aphrodite; this angered the goddess to such an extent that she made his daughters Helen and Clytaemnestra desert or deceive their husbands: in other words, Tyndareus' omission eventually led to the Trojan War. Finally, Hera's anger at Pelias for not having been honoured set off the expedition of the Argonauts (Apollonius of Rhodes 1.14; Apollodorus 1.9.16). In short, the great pan-Hellenic expeditions were all occasioned by sacrificial omissions. It is hard to see how the aspect of honour could have been expressed more forcefully by the Greeks.

Gratitude is also present as a motif in Homer. After Odysseus had escaped from the cave of the Cyclops Polyphemus, he sacrificed the ram under which he had made his escape to Zeus, clearly as a sign of gratitude, even though it was not accepted by Zeus (9.551-5). Finally, it is clear that sacrifice was sometimes made with a utilitarian state of mind or used as an argument to get something done by the gods. When Chryses appealed to Apollo to receive back his daughter Chryseis, he requested 'fulfill me this wish, if I ever burned for you the fat thigh-bones of bulls and goats' (I.39-41). In fact, it is clear that punctiliousness in sacrificing was supposed to have created an obligation on the part of the gods to treat human donors well, as is illustrated by the reaction of Zeus who nearly saved Hector on behalf of his many sacrifices (XXII.170-2).

The interpretations of sacrifice mentioned by Theophrastus are closely interrelated when we consider them against the background of a society in which gift-giving played a central role in the establishing and maintaining of social relations. In such a society, sacrifice naturally could be seen as a gift or, in case of an act of gratitude, as a counter-gift. And by offering food to the gods the Greeks could expect divine favours in return according to the logic of gift-giving. The same logic required that large gifts were seen as an honour; only after the weakening of the archaic 'shame-culture' the gods were thought to rejoice more about the heart than the actual gift of the worshiper.

Finally, what did the collective imagination as expressed in myth single out as significant? The best known myth of sacrifice occurs in Hesiod's *Theogony* (535-61), which connects the origin of sacrifice with the invention of fire and the creation of woman. In order to settle a quarrel between gods and mortals, Prometheus took refuge to a trick. He let Zeus chose between, on the one hand, the flesh and fatty entrails of a slaughtered bull and, on the other, the white bones covered with glistening fat. Zeus opted intentionally (!) for the bones, and 'since then the race of men on earth burn white bones for the immortals on smoking altars'. Hesiod situates this event at the time that men and the gods were settling their dispute at Mekone on the Peloponnese. In other words, he has reworked a local myth, which originally had nothing to do with the procurement of fire and the creation of women. Apparently, the original myth was aetiological in intent and aimed at explaining the strange gift of the 'white bones'. Moreover, in this earlier version Zeus must have been really duped, as Hesiod all too clearly wants to rescue his prestige and omniscience. But whatever this earlier version was, Hesiod's account clearly locates the origin of sacrifice at the precise moment that gods and mortals were in the process of parting their common ways. Sacrifice was the pre-eminent act of the 'condition humaine', which definitively established and continued the present world-order, in which man dies and immortals have to be worshipped.

This significance of sacrifice also appears from other local myths. The mythographer Apollodorus (1.7.2) relates that Deucalion floated over the sea for nine days and nights, after Zeus had flooded Greece. When the rain ceased, he landed on the Parnassus and sacrificed to Zeus Phyxios or, in variant myths, to Zeus Aphesios, Zeus Olympios or the Twelve Gods. In all these cases the sacrifice is directed to the supreme god or the collective of the gods. The sacrifice paradigmatically expresses human gratitude, but it also inaugurates the present world-order, as subsequently humanity was created. For the Greeks, then, sacrifice ordered the correct relationship between man and his gods, but it did not mark the place of man between gods and animals, as especially the French structuralists have claimed.

# 6 The significance of sacrifice: the perspective of outsiders

The best modern students of Greek religion have produced rather different interpretations of the

origin, function and the significance of the central act of sacrifice, the kill. Having looked in detail at the ritual, its commentators and its myths, we are now in a better position to evaluate these views. Appropriately, we will start with the Swiss Karl Meuli (1891-1968), the scholar who has done most to enhance our understanding of the origin of Greek sacrifice. Meuli was a brilliant folklorist and classicist, who combined profound erudition with bold speculation. In his analysis of Greek sacrifice, he stressed that the Olympic (normative) sacrifice was nothing but ritual slaughter, to which the gods were latecomers. Moreover, this ritual slaughter found its closest analogues in the slaughter and sacrificial ritual of Asian shepherds, who derived their customs straight from their hunting ancestors. Although there is some truth in these propositions, they can not be accepted in their totality.

Let us start with the positive side. Meuli's investigation has shown that many details, such as the burning of small pieces of meat, the tasting of the innards and the traditional way of cutting up the victim, are extremely old and must go back to pre-agricultural times. On the other hand, the 'hunting connection' does not explain everything. The throwing of corns of grain on the victim evidently does not derive from hunting habits nor can the burning of the thigh-bones be parallelled in the customs of early hunters; in fact, burnt offering in Greece clearly originated in Syro-Palestine and did not derive from a straightforward tradition carried along by the proto-Greeks. Moreover, unlike real hunting tribes who sometimes returned all the bones to a Lady (Lord) of the Animals, the Greeks offered only a few bones to the gods. And again unlike hunting tribes, they broke the bones to extract the marrow, as the excavations in Samos, Didyma, and Kalapodi have shown. In this respect they had moved away further from their hunting ancestors than the early Indians and the Jews: the Old Testament still forbids the breaking of the bones.

Meuli also neglected some obvious differences between the hunt and sacrifice. Although hunters often follow certain ritual prescriptions, especially when preparing themselves, the hunt itself is a profane activity, unlike sacrifice. It is true that our literary accounts do not insist very much on the connection of sacrifice with specific gods and neither do sacrificial scenes on vases display gods as often as we would expect, but there can be no doubt about the fact that sacrifice was considered a very holy affair by the Greeks. Second, whereas the hunt takes place outside civilised community, sacrifice often takes place in a sanctuary at its very heart. Third, whereas the hunt is typically a man's activity, Greek sacrifice is shared by the whole of the community. Admittedly, men normally killed the victim and received the largest part, although at the Thesmophoria women were the sacrificers. The male dominance of sacrifice was ideologically so strong that even the *kanephoroi* are often male in sacrificial scenes on the vases. Yet, as we have seen, women, girls and boys also had to play a role in the ritual; on votive reliefs with representations of sacrifice even children often appear.

Taking his point of departure in Meuli's views on the continuity between hunt and sacrifice, Walter Burkert (1931-) has refined and expanded this picture in various ways. From his many observations on sacrifice I would like to note here three aspects. First, Burkert stresses the role of ritual in the transfer of hunting rites during the enormous span of time that man (not: woman!) has been a hunter, and the prestige that hunting and the eating of meat carries virtually until the present day; he also notes that the excavation of the Anatolian town of Catal Hüyük (6000 B.C.) enables us to observe the gradual transition from hunt into sacrifice. Second, Burkert argues that participation in aggression unites a community; sacrifice, thus, helps the continuation of society. Third, following Meuli, who stressed that the hunters felt guilty for having killed their game and regularly tried to disclaim their responsibility, Burkert has made this feeling of guilt the focus of his sacrificial theory. His crown witness is the Dipolieia, an Athenian festival during which an ox was sacrificed because it had tasted from sacrificial cakes. Subsequently the sacrificial knife was condemned and expelled from the city, but the ox ritually reerected, yoked to a plough. In the aetiological myth the killer of the ox eased his conscience by suggesting that everybody should partake in the killing of the sacrificial victim. This 'comedy of innocence', which disclaimed responsibility for the sacrificial killing by putting the blame on the ox itself and the knife, is taken by Burkert to be paradigmatic for every sacrifice: humans experience Angst when actually killing the animals and have feelings of guilt over the blood which they have shed.

Burkerts's observations focus our attention on important aspects of Greek sacrifice and his views on the role of ritual in the tradition of hunting customs go a long way in answering the problem as to how various ritual details managed to survive the transition from hunting via shepherding into agriculture. We may perhaps add that practices and beliefs of hunters seem to be very persistent. Many of the parallels observed by Meuli derive from modern descriptions of Siberian and Arctic peoples, and clear traces of the belief in a Lady (Lord) of the Animals, to whom the hunters dedicated the bones of their game, survived in Western-Europe even into the twentieth century. As the hunt takes place in the wild outside society and civilisation, its practices are perhaps less susceptible to quick changes. Moreover, its high prestige, even among pastoralists and farmers, may explain the survival of some of its customs across profound changes in social structures.

On the other hand, Burkert's observations on the role of bloodshed in the evocation of Angst and guilt cannot be accepted in their totality. The main problem here is the virtually total lack of testimonies of actual fear and guilt among the Greeks. On the contrary, Attic vases constantly connect sacrifice with ideas of festivity, celebrations, and blessings. The ritual of the Dipolieia can not make up for this absence, since it constitutes a very special case. The existence of a month named Bouphonion, 'Ox-killing', on Euboea, its colonies, and adjacent islands suggests a ritual of great antiquity but limited circulation. In its attested form, however, the ritual is actually rather late, since it presupposes the developed Attic rules of justice. Moreover, as the ritual shows, the protagonist of the sacrificial happening was a plow-ox, which it was a crime to kill at Athens. It is only because of the vital position occupied by the plow-ox in Athenian society and its closeness to the farmer that the killing of the animal was the subject of an elaborate ritual: such closeness also explains why the Greeks did not eat horses via sacrifice, just like the English still export their old horses to Belgium to be killed and eaten on the Continent; in fact, horse-bones are rarely found even in the wastage of pre-historic settlements. Indeed, Theophrastus (fr. 584A) explicitly noted that this particular ritual was inaugurated to enable people to eat the ox. The expansion of the Athenian state, however, which required the sacrifice of numerous oxen in order to feed the people at the banquets accompanying statefestivals - Isocrates (Areopagiticus 29) mentions sacrificial processions of three hundred oxen removed the original tie with their plow-ox, which a much smaller Athens in earlier times still must have felt. It is no wonder, then, that already Aristophanes in his Clouds (984-5) considers the ritual an archaic affair. Consequently, we should not generalise from this particular sacrificial ritual to a general view of killing in Greek sacrifice.

Finally, in explicit opposition to Meuli and Burkert, Jean-Pierre Vernant (1914-) has argued two important points. First, Greek sacrificial rites should not be compared with hunting rituals but resituated within their proper religious, Greek system and, second, the killing of the victim is organised in such a way that it is unequivocally distinguished from murder and violence seems excluded. Regarding the first point, Vernant and his pupils have indeed success-

fully analysed the ideological presuppositions of Greek sacrifice, in particular its political significance as manifested by the Orphics' and Pythagoreans' refusal of sacrifice, that is to say, by groups which operated in clear opposition to the values of the polis. Vernant's equipe also has succeeded in bringing out the importance of studying the representations of sacrifice on Greek vases for a more profound understanding of its significance.

Much less persuasive is Vernant's attack on Burkert's interpretation of the kill and its corresponding unease as the center of gravity of sacrifice. He notes himself that rituals, myths, and representations are all painfully careful in avoiding any reference to the actual killing of the sacrificial victim. In this way the Greeks tried to exclude the elements of violence and *sauva-gerie* from their sacrifice in order to differentiate it from murder. His main arguments for this thesis are twofold. First, if the Greeks really felt uneasy about animal sacrifice, they should have also objected to the representation of human sacrifice. But when in archaic Greek vase-painting Polyxena is killed over the altar, we see her blood spurting, although we never see that of cows or sheep. Second, Vernant states that he refuses to impose a meaning on sacrifice different from the one explicitly given by the Greeks. Both these arguments are hardly convincing. Where would social anthropology or sociology be when they accepted only meanings explicitly mentioned by societies? But also Vernant's first argument is hardly persuasive. Representations of human sacrifice concern only mythological figures and are meant to suggest a monstrous offering not a pleasing gift.

Moreover, if the Greeks indeed wanted to differentiate sacrifice from murder, that would already indicate an underlying feeling of unease with the ritual, as is indeed confirmed by other indications. In the aetiological myth of the Dipolieia the killer of the ox is an outsider to Athenian society, and one cannot help noticing that the Greeks, like the Romans and other peoples, did not have a special word for 'sacrifice' but employed the euphemism 'to do'; the Indian *RigVeda* also uses only covert allusions to sacrificial killing. Without the previous existence of some mixed feelings about sacrificial killing, it remains equally hard to explain why religious reformers or deviants such as Zoroaster in Iran, Buddha in India, and Empedocles in Greece all have rejected animal sacrifice. It seems then that killing for sacrifice, if not generating fear and *Angst*, certainly generated feelings of unease among some sections of society in more than one culture. In ancient Greece, this unease only came to the fore in rituals concerning animals close to humans, such as the plow-ox, and only in more sensitive groups, such as the Orphics and

#### Pythagoreans.

#### 8 History and function of Greek sacrifice

What then have we learned about the history and function of Greek sacrifice? Sacrifice does not occur among 'primitive' hunting peoples, but it seems to have originated with the domestication of animals. Consequently, Aegean sacrifice cannot be much older than the 7<sup>th</sup> or 8<sup>th</sup> millennium B.C. On the other hand, in killing and processing their victims the former hunters kept, naturally, some of their hunting customs and techniques, as Meuli's investigations have convincingly shown. It remains difficult, however, to define the development of Greek sacrifice more precisely in time, since the early Indo-Europeans did not have a specific term for 'sacrifice'. Consequently, we have little information about the sacrificial rites which the proto-Greeks practised before they invaded Greece at the beginning of the second millennium (?). We are also badly informed about the state of sacrifice that the Indo-European invaders encountered in Greece. We cannot even be sure that the Minoans practised burnt-animal sacrifice. It is only in Homer that we find the first detailed descriptions of normative animal sacrifice, but although his description is rather formulaic, it does not look that old. Greek sacrificial practice, then, seems to have received its more definitive form only relatively late.

The chronology of sacrifice does not, of course, explain the reason(s) for its origin. Comparison with pastoralist tribes suggests that domesticated animals were considered so valuable for the nourishment of the community that they could be eaten only under the restraints of a ritual context. Once these restrictions were introduced, wild animals must have been considered no longer valuable enough to be offered to the gods and, consequently, they were excluded from sacrifice, although exceptions remained possible. In Artemis' sanctuary in Kalapodi, excavators have found bones of boars and deer; the latter have also come to light in the Theban Kabirion and the Samian Heraion. Epigraphical sources, such as sacrificial calendars, never mention or prescribe wild animals and a possible explanation for the finds would be to postulate an origin in a succesfull hunt. Yet we have at least one literary testimony for the sacrifice of a wild animal: in the *Cypria*, Artemis substituted a deer for Iphigeneia to be sacrificed. We may also observe that in ancient Israel, where, as in Greece, cattle, sheep and goat constituted the normal sacrificial victims, excavations have demonstrated incidental sacrifices of fallow deer. Evidently, there were sometimes fuzzy edges at the boundaries of the

accepted sacrificial victims in order to include the most popular game.

Once the sacrificial practice was established, the Greek symbolic and economic framework must have led sacrificers to introduce distinctions, such as between black and white, male and female, precious and less precious animals. Yet the absence of a professional priestly class prevented these attempts at reflection and systematization into developing into a rigid and complicated system as, for instance, happened in ancient Israel.

If for the Greeks themselves the primary aim of sacrifice was communication with the gods, their 'primitive' way of doing so remains curiously hard to accept for modern interpreters. For Meuli sacrifice was nothing but ritual slaughter, for Burkert the shared aggression of the sacrificial killing primarily led to the founding of a community, and for Vernant sacrifice was, fundamentally, killing for eating (§ 7). Rather striking in these modern explanations is the 'secular', reductionist approach, which does not take into account the explicit aims of the Greeks and tries to reduce sacrifice to one clear formula. It is absolutely true that sacrifice is ritual slaughter, does constitute a community, and is killing for eating, but, as we have hoped to show, it is similarly true that sacrifice is much more than that. It is also an occasion for showing off physical strength, for showing status, for having a nice dinner, for demonstrating the boundaries of the group, and, above all, for approaching the gods. A ritual act that stands in the very center of the community cannot but have economic, political, social, and cultural meanings, in addition to its religious significance. It will be the challenge for future analyses of Greek sacrifice to show the richness of all these meanings and not to fall into the temptation to reduce them to one formula, however attractive.

For the historical development of sacrifice see Meuli 1975: II.907-1021; Smith 1987: 202-05. For step-by-step accounts see Van Straten 1995; Bowie 1995; Bremmer 1996: 248-83 (from which my contribution is adapted); Himmelmann 1997. For the vocabulary of sacrifice see Casabona 1966 and for the economic aspects Jameson 1988. Burkert 1983 is a classic study of the role of sacrifice in Greek myth, ritual and society. The best introduction to the views of Vernant and his Parisian colleagues is M. Detienne and J.-P. Vernant (eds.), *La cuisine du sacrifice en pays grec* (Paris, 1979). For new ideas about sacrifice to heroes and chthonian gods see now Hägg and Alroth 2005.

Bowie, A.M. 1995. 'Greek Sacrifice: Forms and Functions'. A. Powell (ed.), *The Greek World*. London and New York. 463-82.

Bremmer, J.N. 1996. 'Modi di communicazione con il divino: la preghiera, la divinizazione e il sacrificio nella civiltà greca'. S. Settis (ed.), *I Greci e noi* I. Turin. 239-83.

W. Burkert, 1983. Homo necans. Berkeley, Los Angeles, London.

Casabona, J. 1966. Recherches sur le vocabulaire des sacrifices en Grec. Paris.

Detienne, M. and J.-P. Vernant (eds.) 1979. La cuisine du sacrifice en pays grec. Paris.

Hägg, R. and B. Alroth (eds.) 2005. *Greek Sacrificial Ritual: Olympian and Chthonian*. Stockholm.

Jameson, M. 1988. 'Sacrifice and Animal Husbandry in Classical Greece'. C.R. Whittaker (ed.), *Pastoral Economies in Classical Antiquity = Proceedings Cambridge Philological Society*, Supplement 14: 87-119.

Meuli, K. 1975. Gesammelte Schriften. Basle.

Himmelmann, N. 1997. Tieropfer in der griechischen Kunst. Opladen.

Smith, J.Z., 1987. 'The Domestication of sacrifice'. R.G. Hamerton-Kelly (ed.), *Violent Origins*. Stanford. 191-205.

Straten, F.T. van 1995. Hierà kalá. Images of Anmimal Sacrifice in Archaic and Classical Greece. Leiden.