Food Ethics, Domestication and Togetherness

A Close-up Study of the Relation of Horse and Dog to Man in the Bronze Age Settlement of Apalle

Inga Ullén

This paper deals with the attitude to the horse and the dog at a later Bronze Age site in central Sweden. Three different phenomena of social practise are linked together: the deposition of bones, slaughter marks on bones, and pictorial representation in rock-carvings and on artefacts. Two chronological phases at the settlement are compared in order to see if they display changes, regarding the three different phenomena, over time.

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"Animals are brought into human social categories by a simple extension to them of the principles that serve for ordering human relationships. The method is to do the painstaking work of tracking how the categories are used" (Douglas 1990:36)

Proximity and remoteness are fundamental opposites in our relations with others, including our attitude to animals. There are many works of social anthropology dealing with animals from this aspect, inspired above all by Levi-Strauss (1966). The present article owes much to Tambiah (1969), whose view and studies of the relation between animals and edibility have strongly coloured the following interpretations of the role of horse and dog in Apalle. Tambiah, taking Douglas (1966) and Leach (1964) as his starting point, argues that the rule for the eating and prohibition of certain animals have to be understood in relation to other social regulatory codes, among them the idea of social distance (1969:452). In Sweden, Ericson & Kjellberg (1995), Jonsson (1995), Lepiksaar (1969), Nyegaard (n.d.), Wigh (1995), and Åkermark (1995c) have contributed to the knowledge of the dog and the horse at Bronze Age settlements.

This article sets out to find if discernable changes in the attitude towards the two animals, the dog and the horse, can be traced throughout the settled history of the site Apalle. Three different phenomena of social practice will be linked together for an integrated interpretation, over time. The first phenomenon concerns the pattern of deposition of the bones of the dead animals, in refuse heaps and pits outside the houses. The second is a classification of food ethics, i.e. whether the animals were slaughtered or not. The third phenomenon concerns the pictorial representation of the animals in rock carvings and on artefacts, away from the settlement. In simple terms, the coming inter-

pretation is based on the connection between food ethics, body and picture, within two chronological horizons. All three phenomena can be seen as representations of reality and can be linked to Bourdieu's habitus concept (1993:298): "Habitus simultaneously generates and is generated by social classifications reproduced in practice."

THE SITE

Apalle is located in the south-western part of Uppland, about 50 km northwest of Stockholm (Fig. 1). It was investigated by the Central Board of National Antiquities between 1986 and 1990 (Fig. 2). The Bronze Age settlement occupied the southern edge of a flat valley extending across the middle part of Håbolandet. The actual settlement faced south, towards a sheltered side-valley. During the Bronze Age, the wide, flat valley north of the site was a shallow lagoon, between 15 and 20 metres asl. Seasonally at least, it was probably water-filled. The whole of Håbolandet at the time was a separate island, with Ullfjärden (fjord) to the east and Ekolsundsviken (bay) to the west. In addition to Apalle, the former island has one very large and several smaller Bronze Age settlement sites. Two of the smaller ones were excavated in 1986 (Ullén & Åstrand 1995; Göthberg & Holm 1995). Adjoining most of the settlement sites are sites with rock carvings and cup marks, and about 15 km west of Apalle is Uppland's largest complex of rock carvings, near Enköping, numbering 1,100 carving sites.

The Bronze Age settlement at Apalle has been chronologically divided into two principal phases: an earlier one, mainly between the 13th and 11th centuries B.C. (within Montelius per III-IV), and a later one mainly between the 9th and 8th centuries B.C. (per V-VI). These datings are still preliminary. Between the two principal phases there was

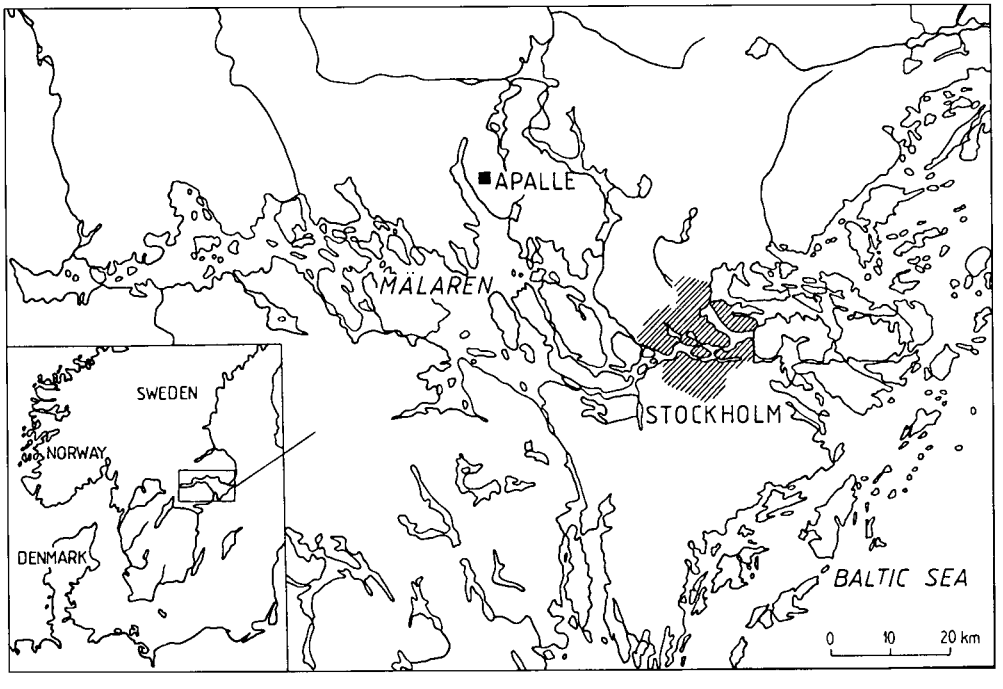

Fig. 1. Map of South Sweden and parts of the Mälaren region. Drawn by Annica Boklund.

a transitional phase. Even if all the houses in each phase did not exist simultaneously, several of them did. The settlement is therefore interpreted as a society containing several houses/households in each phase. Of the 45 houses which have been found altogether, 22 have so far been analysed more closely. They consisted of longhouses of varying length, interpreted as dwelling houses, a shorter rectangular house and two circular enclosures or house structures. There were also parts of two heaps (piles) of fire-cracked stones and seven wells (Ullén 1995c). Five of the wells were situated on the fringe of the settlement, and two in the centre of it. South of the houses from the earlier phase there was an open space, possibly used for livestock or as a meeting point. A larger system

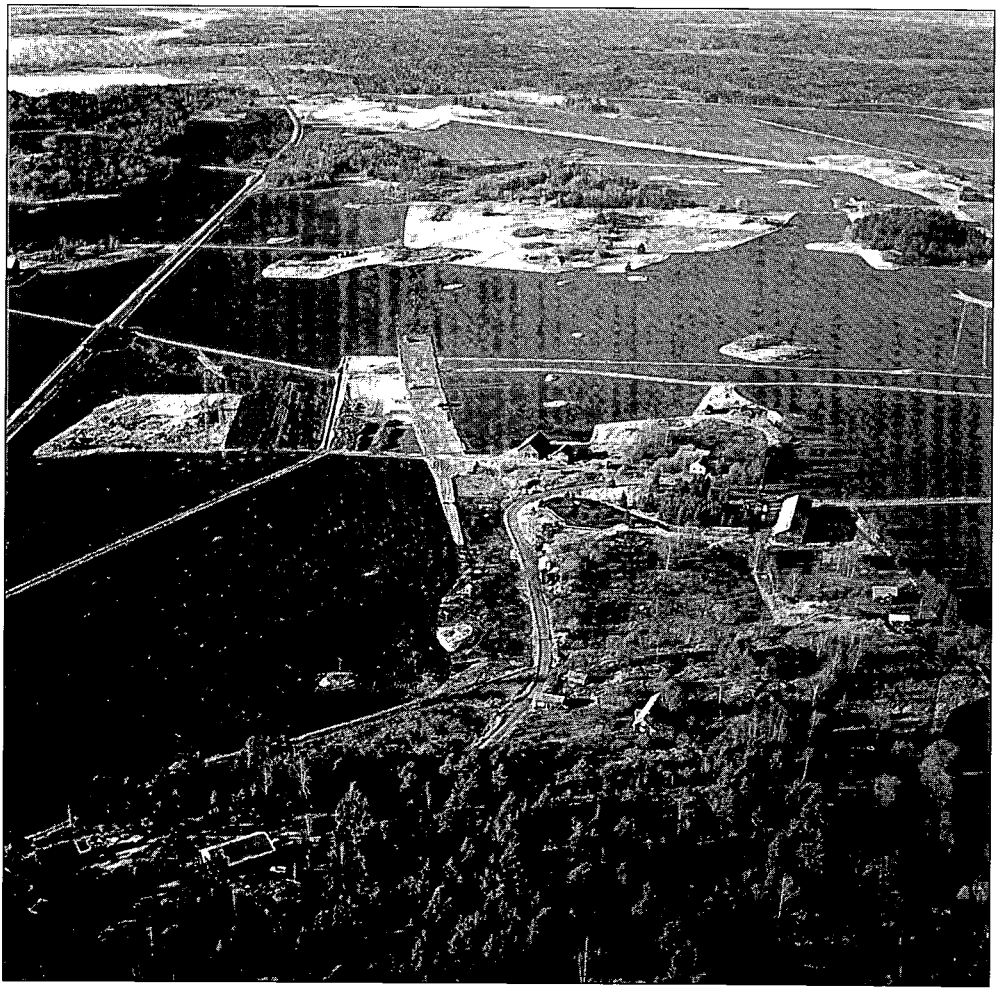

Fig. 2. Air photograph of Apalle settlement site. The excavations were prompted by the construction of just over 20 km of new motorway between the village of Bålsta and Enköping. The settlement is along the line of the road and the field and outfield of the former village of Apalle, in the foreground. Ekolsundsviken can be glimpsed in the background. Photo: Jan Norrman, Riksantikvarieämbetet.

of pits, taken to be clay pits for daub, was discovered on the southern boundary of the settlement.

The houses lay in cultural layers up to one metre thick. They contained about 2,400 objects, of which 60 were made of bronze and the others of bone, stone and clay. In addition there were 360 kg pottery, 1.7 tonnes daub and 850 kg bones, both burned and unburned. Altogether about 19,000 square metres were investigated.

THE BONES

The animal bones were one of the biggest and most interesting categories of material from Apalle. It has been analyzed by Dr P G P Ericson and his collegues A Kjellberg, A Åkermark, H Hedelin and B Wigh, Swedish Museum of Natural History and the Central Board of National Antiquities, Stockholm. Altogether there were 261,593 fragments, of which about 64,500 could be identified (Ericson & Kjellberg 1994). These broke down into 25% cattle (16,340 fragments), 29% sheep/goat (18,483 fragments), 9% pig (5,907 fragments), 1% various, wild bird species (814 fragments), 29% fish bones and scales (18,625 fragments) and 3% (1,905 fragments) other game.

Sheep/goat and cattle predominated among the domestic livestock (Fig. 3). Bones from these animals occurred all over the settlement site, both scattered in the different layers and deposited in special contexts. Perch and various cyprinids were the commonest fish species, while bones from the bean goose and mallard dominated the bird sample. Generally speaking, the bone material from Apalle has a high degree of fragmentation, the reason being that it was often trampled down into the cultural layers. Many bones also show traces of chewing. The best-preserved bones come from dog, which also provided the majority of whole or nearly whole crania (Wigh 1995). The deposition pattern for dog was therefore more easily distinguishable than for other species.

The group "other" among the wild animal species represented at Apalle can be divided into big game, small game and small mammals, especially rodents of various kinds (Fig. 4-5). The small game consisted mainly of mountain hare, followed by fox, beaver and otter. The big game was predominantly elk, but also included bear, as well as wolf.

THE HORSE AND DOG AS REFUSE AND BURIAL

Two of the domesticated animal species at Apalle, the dog and horse, had a somewhat different distribution from the other domestic animals and were found in depositions outside the refuse heaps, during both the earlier and later phases of settlement. Horse bones comprised 4% (1,728 fragments) and dog bones 1.3% (568 fragments) of the total number of identifiable bones from domesticated animals on the site.

During the earlier phase of settlement, horse bones occurred gathered inside one of the heaps (pile) of fire-cracked stones, located in the middle of the site. Interesting to note, the species was weakly represented in connection with the kerb round the pile, where fragmentary crania of the other domesticated animals were placed (see below). The one and only horse fragment that was found here, was right next to a cooking pit at the bottom of the pile of fire-cracked stones. There were several horse bones in the cooking pit, and so the cranial fragment belongs, if anything, there rather than to the stone kerb. Apart from large concentrations of bones in conjunction with two cooking pits, only a few isolated horse bones were found outside the heap of fire-cracked stones. They were scattered about the settlement (Fig. 6).

The deposition of the dog bones was different from that for the horse during the early phase of settlement. The dog occurred but was very poorly represented in the pile of fire-cracked stones, by isolated fragments; and these also occurred all over the settle-

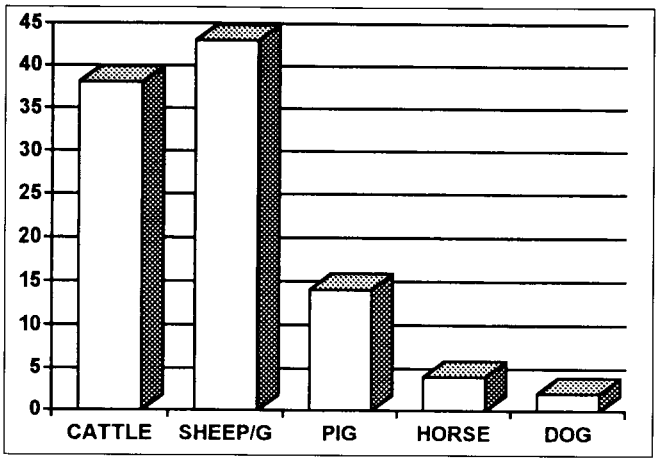

Fig. 3. The livestock at Apalle. Tables showing the percentage distribution of the number of identifiable fragments per species. n=43,174. Figures from Ericson & Kjellberg 1994.

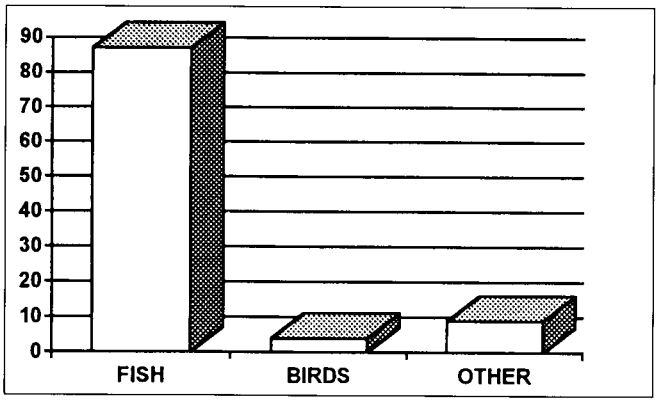

Fig. 4. Wild animals at Apalle. Tables showing the percentage distribution of the number of identifiable fragments per species. n=21,344. Figures from Ericson & Kjellberg 1994.

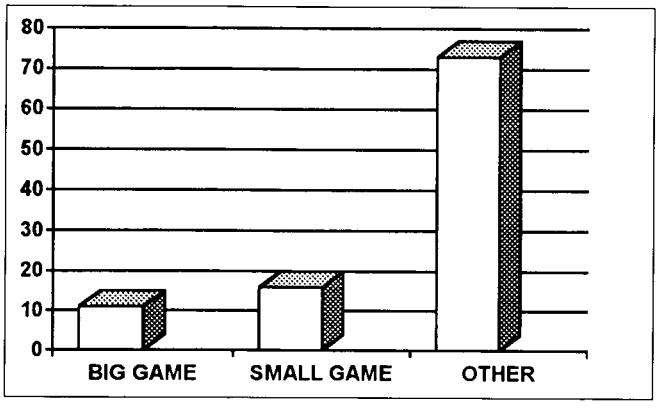

Fig. 5. Animals in the "other" group. Tables showing the percentage distribution of the number of identifiable fragments per species. n=1,905. Figures from Ericson & Kjellberg 1994.

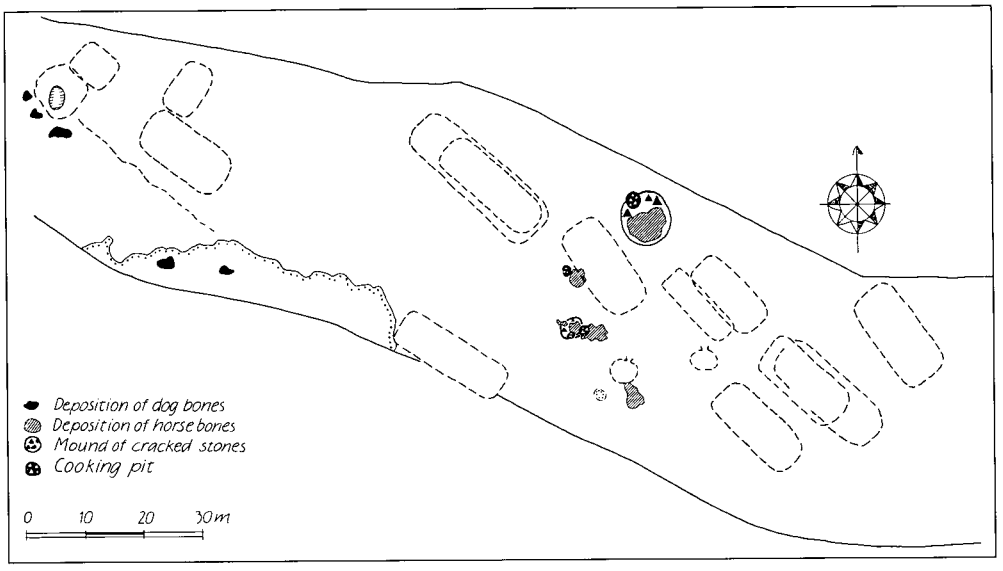

Fig. 6. Deposition of horse and dog bones during the earlier phase of settlement at Apalle (southern part of the site). Drawn by Eva Crafoord.

ment. The distinct concentrations of dog were on the outermost boundary of settlement, in the south, where there were five depositions (burials), three of them close to one of the wells (Fig. 7). These dog-pits contained parts of jawbones, crania and bones from different parts of the dog's anatomy. Finds here included the cranium of one of the biggest dogs in the settlement.

During the later phase of settlement, the pattern of deposition changed for both horse and dog bones (Fig. 8). In contrast to the bones of other domestic animals no horse bones occurred at all in the small concentrations of fire-cracked stones, i.e. the form of refuse areas which replaced the heaps from the earlier period. Instead, concentrations of miscellaneous horse bones, with no particular internal structure, lay in small pits, taken to be refuse pits, outside the individual houses.

The tradition to put the bones of the dog in pits continued during the later phase. They were now situated next to every house, mostly outside the end wall or the entrance. No complete dog skeletons occurred, but bones from different parts of the entire skeleton were found collected together with at least one, sometimes two crania in each burial. The crania were more or less intact. Since the dog bone material in general was also more intact, deposition probably occurred within a relatively short time after death and the burials can be said to have had a grave-like character, with dogs being deposited individually or in pairs. In this way they differ from the pits of horse bones, which have not been ascribed any secondary burial significance. One feature observed from the early phase of settlement was the deposition of animal crania and jawbones - canine ones included - in the houses. This tradition apparently survived into the later phase. In two houses, dogs' jawbones were found buried beneath the clay floor to either side of the entrance.

Summing up, a connection between horse and dog could be made in the later phase,

through their similar deposition in pits, segregated from the refuse deposition of other animals. The biggest difference lay in the earlier phase, in the connection of the horse to the content inside of one of the piles of fire-cracked stones, occupying a central position in the settlement, and the dog's position on the boundary of the settlement. Bones from the two animals also differed with regard to their degree of preservation, above all in that canine crania were a good deal more intact than equine ones.

SLAUGHTERING

The bodies of horses and dogs were differently treated during the earlier phase of settlement at Apalle. The concentrations of horse bones occurring outside the pile of fire-cracked stones lay in and near two cooking pits (Fig. 9). These were located on the eastern edge of the open, unoccupied space, i.e. in the centre of the settlement, and they were alternately filled with fire-cracked stones, carbon and soot. The layer picture shows them to have been used repeatedly. The horse bones both in and outside the pits came from both meaty and lean parts of the body, i.e. butchering refuse. Some of the bones had traces of butchering. It is hard to tell whether the horses were butchered near the cooking pits; criteria of refuse and food at that time were probably different from today's. Wherever the butchering took place, different parts of the horse's carcass were obviously cooked in the pits. The dog, on the other hand, was neither slaughtered nor cooked at this time; there are no traces of butchering on the bones. The attitude to the dog as non-food continued during the later phase of settlement, when the dogs were moved in, close to the individual houses of the settlement. The horses, now deposited in a new way, similar to the dogs, showed an interesting change. The horse bones too were now devoid of butchering marks, in spite of the fact that more bones from horse occurred during the later phase than during the earlier. Summing up, the horse and the dog became more closely related than before, regarding the way their carcasses were treated.

THE HORSE AND DOG AS IMAGES AND ARTEFACTS

The horse and dog occur in other contemporary contexts, albeit to a varying extent. They are both depicted in the rock carvings, while the dog, unlike the horse, does not occur as a reliable artefact motif.

In Uppland the horse and - probably - the dog, as well as pig and deer are identifiable on the rock carvings. There are also quadrupeds of various sizes. Animal depictions make up about 6% of the total number of figures (178 out of 3,157) in Uppland. Horses are separately depicted on the Örsta carving in the parish of Angarn (Raä 62, Fig. 10). Behind one of them, two interconnected spiral figures have been carved which are taken to be a wagon figure (Kjellén & Hyenstrand 1977:82). The wagon theme recurs in wheel form on the Hemsta carving in the parish of Boglösa (Raä 131:1). A similar scene occurs at Rickeby (Raä 73) in the same area. Both are interpreted as images of two-horse chariots, the latter only with reins behind the harnessed horses. A combined motif of horse, ship and circle also occurs on the carvings in Uppland, in which the animal figure-

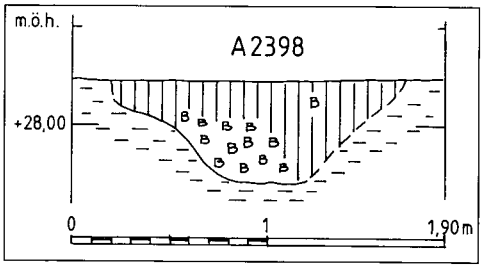

Fig. 7. Burial pit with dog bones (A2398), situated near one of the wells on the western fringe of the settlement at Apalle. From the earlier phase. Drawn by Eva Crafoord.

heads of the ships have been interpreted as horses. The connection of certain types of ships with bronze razors is of interest in this connection, because the latter also have naturalistic animal figureheads which have been identified as horses, mainly during per II-III. Analogously to Hedengran (1995) and Tilley (1991:144) one can speak of one design being transformed into another, as regards the ship-razor-horse. There are many instances of bronze razors with equine figure-heads from Skåne, Närke, Småland, Östergötland and Öland (Fig. 11 and Montelius 1917; Oldeberg 1974). The same equine determination is also made for the handle of the razor from the Ål burial ground in Vårfrukyrka parish, Uppland, which is in the vicinity of Apalle (Oldeberg 1974; Hyenstrand & Kjellén 1977).

The horse also occurs in a wider Nordic perspective. Best known of all, perhaps, is the bronze wagon object from Trundholm, Denmark, with the horses pulling a circular, gilded disc (Broholm 1952: fig. 199). The actual horses have a parallel in the Tågaborg horse from Skåne from per II(Malmer 1981:93; Montelius 1917: fig. 980). The Trundholm wagon has been categorised as a cult object and the horse as a cult animal. Thrane maintains that the horse was a Nordic symbol, corresponding to the European Hallstatt-duck, and was included in very firm combinations of motifs in the Nordic area (1975: 252). The horse as an rock-art image probably occurs already in Montelius Period II (Malmer 1981:93). Malmer, who has dealt with the animal in his chorological analysis of North European rock art (1981), takes the view that it formed part of the rock-carving art of South Scandinavia from the very beginning, with a centre of innovation in Skåne and Denmark.

The dog did not figure as prominently as horses in the rock carvings, nor does it occur as artefact or ornament. It occurs in the rock carvings, partly together with human figures.

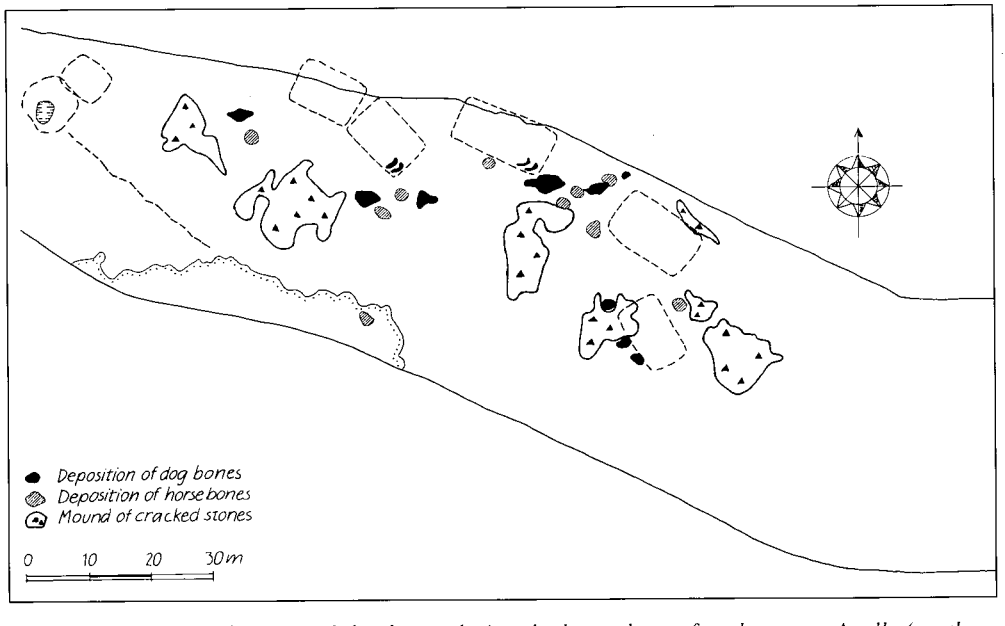

Fig. 8. Deposition of horse and dog bones during the later phase of settlement at Apalle (southern part of the site). Drawn by Eva Crafoord.

The Rickeby carving in Boglösa parish (Raä 94:1), Uppland, has two animal figures, interpreted as dogs, on either side of a human figure (Hyenstrand & Kjellén 1977: fig. 60), and in the Bohuslän "hunting scenes", the dog occurs together with deer (Bertilsson 1989:95, 118). One example of the dog-man combination is the Fossum carving at Tanum, Bohuslän, showing three men with axes and swords. Next to each of them there stands a dog (op. cit.:pl.5).

Summing up, the horse occurs, both in artefacts and in rock carvings, in special combinations of motif. There it has been ascribed both ritual and status-related properties (cf. Malmer 1981:106-108; Wihlborg 1978:128). The dog, on the other hand, is less in evidence, especially where artefacts are concerned. Chronologically, the cult objects and the razors of bronze with naturalistic equine associations mostly occur in the early and middle Bronze Age (per II-IV), whereas most of the Uppland rock carvings are taken to be of a somewhat later origin (per IV-V) (Hyenstrand & Kjellén 1977:105). Taken together, most of the artefacts and rock carvings correspond to the earlier and middle phases of the Apalle settlement.

FOOD ETHICS, DOMESTICATION AND CLOSENESS

Summarising the representation of horse and dog in the various find contexts at Apalle and the surrounding area, the following contextual series can be constructed:

Horse	
Earlier phase	Butchered.
	Deposited inside the heap of fire-cracked stones.
	Represented in artefact/image.
Later phase	Not butchered.
	Deposited in pits.
	Represented as an artefact.
Dog	
Earlier phase	Not butchered.
	Deposited in pits.
	Weak representation in images/artefacts.
Later phase	Not butchered.
	Deposited in pits.
	Not represented as an artefact.

Although artefacts, settlement refuse and rock carvings belong to different spheres, culturally speaking they are manifestations of a common circle of ideas during the Bronze Age, with comparable points of contact.

In this way, the ritual role of the horse in rock carvings/artefacts and the mode of its deposition at the Apalle settlement reinforce one another in underlining the distinctive nature of the horse, during the earlier phase of settlement. In the refuse pile containing horse bones, an interesting distribution of animal species and identified bones could be observed. The relation between the tame and wild animals has been briefly touched on before (Ullén 1995a). Immediately inside the surviving kerb and along its continuing, notional line where stones were missing, there were, above all, cranial parts but also parts of jawbones (Fig. 12). They came from a variety of species, but all belonged to tame, i.e. domesticated animals. Inside the pile, on the other hand, bones, and cranial parts from wild animals dominated.

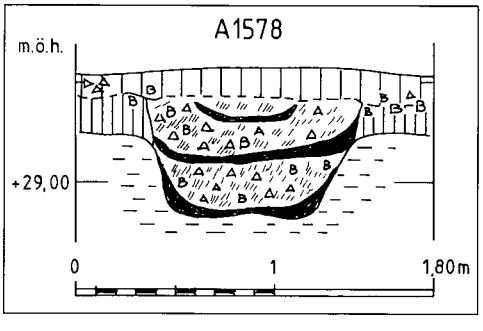

Fig. 9. Cooking pit with horse bones (A1578) from the earlier phase of the settlement. Drawn by Eva Crafoord.

Fig. 10. Detail of the Örsta carving in Angarn parish, Uppland. Photo: Sören Hallgren, ATA.

The bones from these animals hardly occurred at all outside the pile of fire-cracked stones. The distribution of bones from horse with cranial parts and jawbones inside the pile, as well as the absence of horse bones in the surronding kerb and around the site in contexts together with tame animals, were very similar to the distribution of bones from wild animals.

During the later phase of settlement bones from the wild animals were scattered about on the site, together with the bones from domesticated animals. This change in the manner of depositing the wild between the earlier and later phases of the settlement has been interpreted in a symbolic perspective, inspired by the idea of domestication that Ian Hodder presents in the process of neolithisation in Europe (1990). Though Apalle belongs to a different time and a different social context, Hodder's view could be used in a more general way. One can construct a rule of social practice during the earlier phase, whereby the bones of wild animals

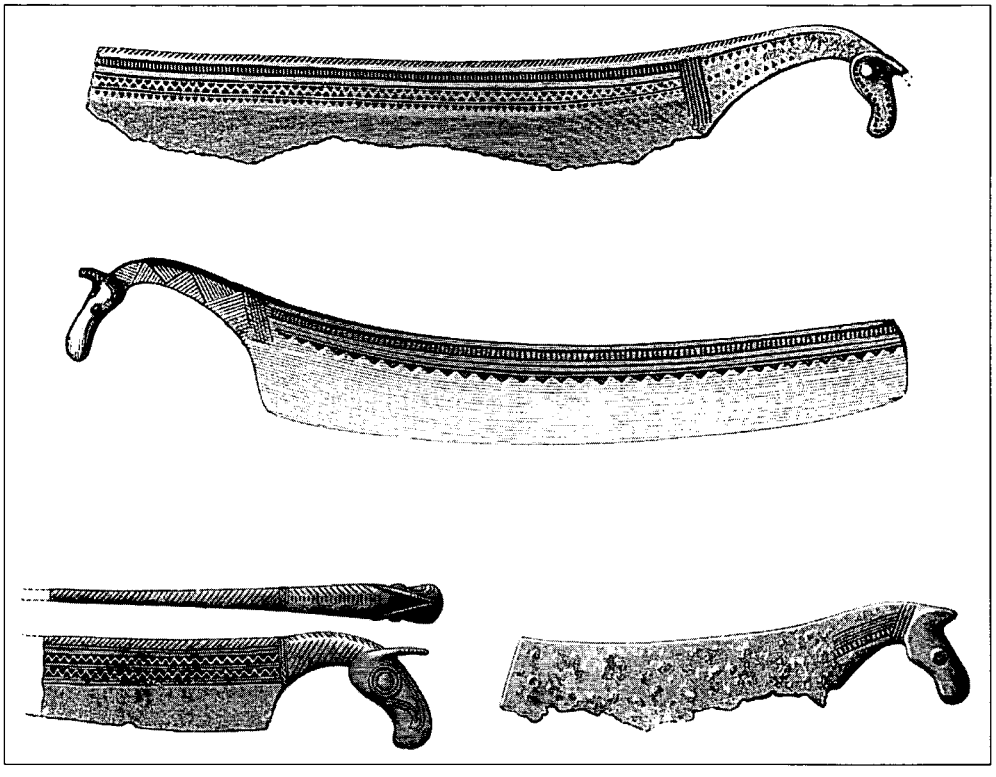

Fig. 11. Bronze razors with animal heads (horses) from Skåne (2/3, bottom right), Småland (1/1, top), Närke (1/1, bottom left) and Öland (1/1, middle). Drawings on wood by Olof Sörling, ATA. (Published in Montelius 1917:fig 927-930).

could not be scattered about the settlement but had to be placed within a controlled area, watched by the bones of domestic animals. The wild animals, in other words, were incorporated with death, in the centre of the domestic sphere. From this follows that during the earlier phase, there existed an attitude towards the wild animals, that differed from the relation to the domesticated animals.

An important aspect is that the horse as a tame animal is not known in reliable settlement contexts in Sweden before the later part of the Bronze Age (Liljegren & Lagerås 1993: 40). It was domesticated, then, later than the other domestic species. With this in mind, one can say that the deposition context and the symbolic/ritual role on rock carvings and artifacts, show that the social regulatory structure surrounding the horse was worked out in detail during the early settlement phase. As a cause of this problematisation, I would suggest that the horse in Apalle, had an intermediate cultural position beween wild and tame. So the cooking of the horse's carcass in the two big cooking pits that took place during the earlier period need not have been based entirely on an economic need for nutrition but may also have had a ritual undertone, touching on the relation between wild and tame.

During the later phase of the settlement the contextual serie for horse changed. Its flesh was no longer consumed and the bones

were no longer deposited together with the bones of wild animals. Instead they were deposited in pits, similar to the bones of the dog. The establishment of pathological changes and the treatment of the bones of the dead horse further underlines the changed attitude during the late phase. The pathological changes consisted of adhesion of the tarsals and metatarsals (Åkermark 1995b). Damage of this kind occurs, for example, in horses used as draught animals. The bones from horse were also used as tools. In a study Åkermark (1995a) has determined the raw material from eight utility objects, comprising needles, arrowheads, awls and a spatula as horse. The use of the bones shows that, even if the horse was not slaughtered during this period, there was no taboo on using its bones for practical purposes.

These changes indicate a household significance of the horse during the later phase.

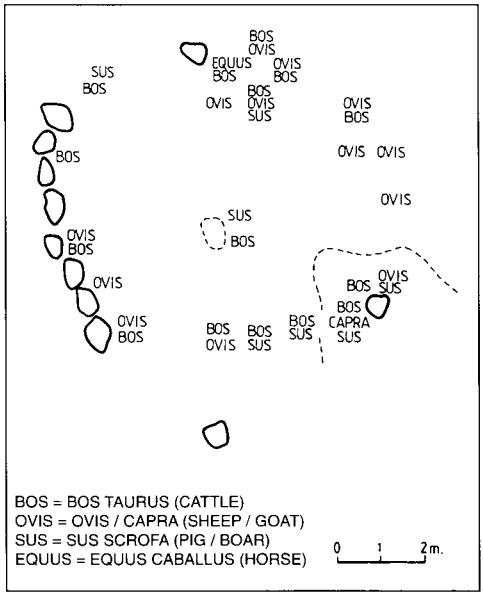

Fig. 12. Cranial and mandibular fragments of domesticated animals in the kerb surrounding one of the piles of fire-cracked stones at Apalle. Drawn by Annica Boklund, Riksantikvarieämbetet.

The horse seems to be socialised into the everyday sphere. With Levi-Strauss' (1966) conceptual apparatus metaphor and metonymy, the contextual series for the horse could be said to illustrate a slippage from emphasis of the horse as a metaphorical ritual/cult animal to a more metonymic one, i.e. with a closer relation to man.

The contextual series for the dog does not display any such changes between the earlier and later phases of settlement. Together the contexts suggest a close relationship between dog and man for the greater part of the Bronze Age.

All the time, however, there was one peculiar feature of the dog. Its bones were almost never mixed with bones of other animals in Apalle. In this respect, the dog cannot have been regarded in the same way as other animals. Moreover, the burial-like manner in which its bones were deposited and the fact that it was not eaten endow it with certain human traits. It seems like the animal had been inscribed in a regulatory code shared with man. This results in the dog having a much stronger metonymical relation to man than any of the other animals on the site. In certain respects the dog can even have been regarded as a non-animal. With one single exception, the dogbones have not been used as raw material for fabrication. The exception was an artefact of uncertain function. The reason for the absence of dog bones may be that they were deposited soon after the dog died, but it follows from the above argument that the bones of the dog, like its flesh, may have been taboo.

All in all, from the relationship between the three phenomena of social practice at Apalle, four hypothetical assumptions can be constructed.

(1) There was an ethic of deposition whereby the bones of animals which were not eaten were segregated from those of the animals which were slaughtered (and eaten). (2) The migration of the horse between the different contexts was an expression both of increased

(cultural) domestication and of a closer, more everyday relation to man in the course of the later Bronze Age at Apalle. Domestication in itself implied a problematisation, visualised in the material culture. (3) The dog as an animal metonymically close to man did not change fundamentally between the two phases of settlement, but this position was probably reinforced by the dog being physically moved closer to each house/household. (4) From (1)-(3) one can deduce a common attitude to the horse and dog, whereby closeness to man in this respect meant that the animals were not considered edible.

Mary Douglas (1990:34) means that the two spheres, human and animal, are constructed upon the same principles, derived from a concern to figure out how the world works. Douglas view raises the question if a change in the attitude towards an animal sometimes also correspond with other types of changes in a society?

In earlier articles I have discussed homes and refuse with reference to the relation between social togetherness and separation and between the private and the public at Apalle (Ullén 1995a, b). Briefly, one can say that a change in the interiors of houses was observable from the earlier to the later phase of settlement. This was based on differences in the proportions of the houses, the occurrence of clay floors, hearths and cooking pits inside and outside the houses respectively, the distribution of objects in different parts of the house and the occurrence of limestone streaks inside the houses. The changes in the houses were matched by a change in the handling of refuse, from centrally collected refuse during the earlier phase to individually deposited refuse areas near each house during the later phase. These observations have led to the hypothesis that a new notion of privatisation was introduced during the later phase, and that this included a re-grouping of families/households, as well as a new view of the ownership of land and cattle and, probably, a change in the emphasis of agrarian production. In a redeployment of this kind, the horse can be incorporated as a working animal at the settlement, primarily of local economic importance. Increased (social) domestication does not necessarily imply that the horse at Apalle lost a ritual role, but that role changed or came to be differently expressed. Somewhat later, at the break between the very late Bronze Age and the pre-Roman Iron Age, the horse appears in a new context, together with the rider, which ought to have resulted in a different symbolic valuation of the animal. The dog's metonymical association with man at Apalle did not display any great change over time. The reason to this may have been that the dog had a longer tradition as a domesticated animal combined with a special role in hunting as well as in the live stock farming, the foundation of the economy at Apalle.

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