CATTLE IN ANCIENT NUBIA

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Summary

Excavations in Northern Sudan have revealed evidence for an important civilisation with a distinct culture, which, for the millennium between 2500 and 1500 BC, maintained its independence from the powerful Egyptian civilisation to the north. The Kerma civilisation had its capital at Kerma, approximately 20 km south of the third cataract. This paper looks at the role of cattle at Kerma. Excavations of the town deposits have shown that cattle bones represent a significant proportion of the animals consumed, whereas, in the sub-desert conditions of modern Sudan, cattle form only a very small proportion of the livestock. It suggests that while the high proportion of cattle bones can be used to support the argument for a moister climate than at present during the early part of the third millennium BC, there is evidence to suggest that cattle may have been brought to the capital from other parts of the Kingdom as tribute on the death of someone powerful or important.

Key Words

Africa, Kerma, Cattle, Tribute

Résumé

Les bovins en Nubie antique.

Les fouilles dans le nord du Soudan ont apporté la preuve d'une importante civilisation dotée d'une culture propre qui, durant le millénaire situé entre 2500 et 1500 BC, lui a permis de maintenir son indépendance vis à vis de sa puissante voisine septentrionale égyptienne. La capitale de cette civilisation Kerma était Kerma, située à environ 20 km au sud de la troisième cataracte. Cet article examine le rôle des bovins à Kerma. Les fouilles de la ville ont montré que les os de Bœuf représentent un pourcentage important parmi ceux des animaux consommés, alors que, dans les conditions subdésertiques du Soudan moderne, les bovins ne constituent qu'une très petite proportion du cheptel. La fréquence des ossements de Bœuf peut être considérée comme la preuve d'un climat plus humide que maintenant durant le début du troisième millénaire BC, mais il semble aussi que des bovins aient pu être apportés comme tributs de différentes autres parties du royaume dans la capitale, à l'occasion de la mort d'un sujet puissant ou important.

Mots clés

Afrique, Kerma, Bœuf, Tribut

The archaeology of Nubia, the region comprising the northern part of the Sudan, was for many years overshadowed by Egyptian archaeology, and Egypt's southern neighbour was given relatively scant attention. However, our knowledge of the early history of Nubia has been greatly expanded in recent years, through, in particular, the work of the Swiss and French Archaeological Missions to the Sudan.

The autonomy of this region, which was previously considered as little more than an annex of Egypt, has now been established for some important periods of its history. One of these periods was the thousand years between 2500 and 1500 BC, for which there is evidence for the flowering of a distinct civilisation, known as the Kerma civilisation. The civilisation flourished during the periods of the Old and Middle Kingdoms in Egypt, until the region was conquered by the armies of Tutmes I, one of the early kings of the Theban New Empire, around 1500 BC (BONNET, 1983). The Swiss mission, under the direction of Charles Bonnet, has concentrated its efforts on the excavation of the capital of this kingdom of Nubia, Kerma, the site that has given its name to the culture (for a recent synthesis, see BONNET, 1990).

Kerma is situated approximately 20 km south of the third cataract of the Nile (fig. 1), but other sites of the Kerma civilisation are found further south, towards the fourth cataract, and further north beyond the second cataract. Excavations of some of these sites, such as those at Saï to the north of Kerma, carried out by French archaeologists, have complemented our understanding of the capital (GRATIEN, 1986).

Excavations at Kerma have focused on two areas, the ancient town, situated 1.5 kilometres from the banks of the Nile and the vast necropolis in the desert, 6 kilometres from the Nile.

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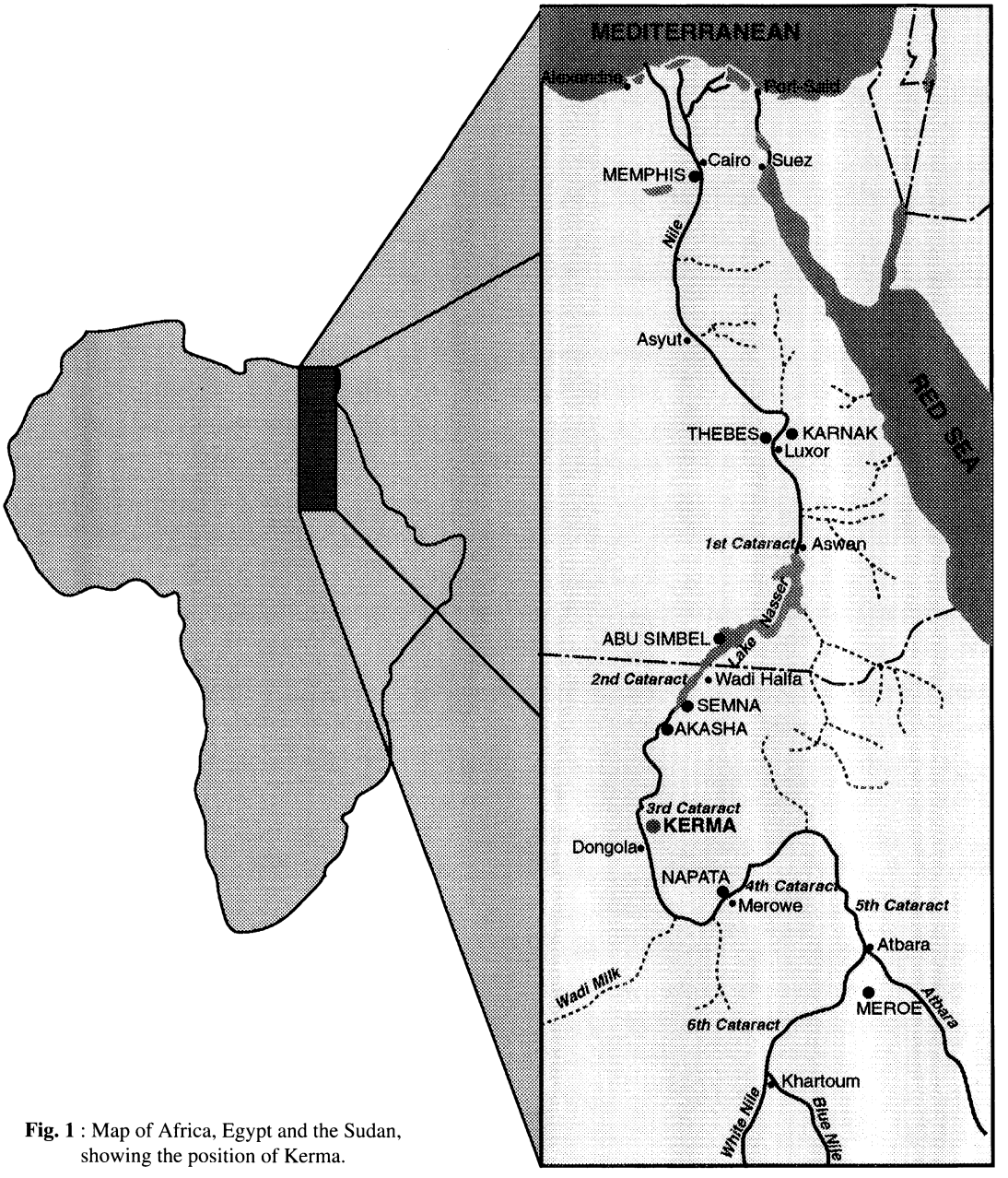

Fig. 1 : Map of Africa, Egypt and the Sudan, showing the position of Kerma.

Excavations in the town have uncovered a complex of domestic, public and religious buildings, of which the most impressive was a massive mud brick temple, still surviving to a height of nearly 18 metres, and known as a Deffufa. The necropolis contains over 30,000 tombs, many chapels and a second Deffufa, also relatively well preserved.

The role of animals in the Kerma civilisation

In this paper we are concerned with the role of animals in the Kerma civilisation, and in particular with the role of cattle. Animal bones and other animal remains have been found in the ancient town and in the

necropolis. Those in the town give some idea of the town's economy, and show domestic animals to be predominant, among which cattle, on average, form 34 per cent and sheep and goats 45 per cent (CHAIX, 1990). However, it should be noted that these are only average figures - cattle are most important during the early phase of the Kerma civilisation, the period known as Ancient Kerma. In the later Classic Kerma period, roughly the first half of the second millennium BC, cattle seem to loose some importance while sheep and goats bones increase in frequency.

The apparent importance of cattle in the economy of the ancient town, even during the Classic period, is in marked contrast with role of cattle in this part of the Sudan today. While the importance of cattle in many of the cultures of eastern Africa is attested from antiquity right through to the twentieth century (see BARKER, SPENCER, this volume), the very arid, sub-desert environment of modern Nubia is more suitable for small ruminants than for large animals - at the present day, cattle account for less than 5 per cent of the domestic livestock, while nearly 90 per cent are sheep and goats. What is more, the bone remains demonstrate that the ancient Kerma cattle were large and impressive animals. Withers height estimates of 1.5 m show them to be much larger than the local breeds, such as the Sanga (EPSTEIN, 1971) which are kept in this part of the Sudan today, and similar in size to the Egyptian aurochs (GAUTIER, 1968 ;1976). The buchrania allow them to be classified as of the "longhorn" type, with a large skull, and developed horns, usually in the form of a lyre, but sometimes curving backwards. This latter horn type is found today in cattle from southern Sudan. The modern cattle from northern Sudan are small, dolicephalic animals with short horns.

Animals and ritual life

Animals had not only an economic role in the Kerma culture, but remains found in the necropolis show that they were also an important part of ritual and religious life. Complete sheep, goat and occasionally dog skeletons within the tombs testify to the sacrifice of animals to accompany the dead. The human dead were frequently placed on tanned cattle hides, many of which have survived in an exceptionally good state of preservation. While the bones of cattle are not found within the tombs of the Classic Kerma period, many tombs were surrounded by bucrania, that is the horns, frontal bones and sometimes the nasal bones of the skull.

The bucrania were usually placed on the southern edges of the tumuli, facing towards the burial pit (for example, BONNET, 1990 : fig. 73, 74). It appears that the number of bucrania found surrounding the tombs bears a relationship to the richness of the other grave goods found within the tomb, and thus, we may assume, to the social status of the deceased. One large tumulus was surrounded by 400 bucrania, a number estimated on the basis of a partial excavation of the tomb (CHAIX, 1982). Some have been completely excavated, and tomb 115, for example, had 129 bucrania, while there were 39 surrounding tomb 119. Smaller tombs had fewer bucrania, and some none at all. It is unfortunate that the American, George Reisner, who excavated many of the largest and richest tombs at Kerma at the beginning of this century, while noting the presence of bucrania, rarely gave any details of their numbers (REISNER, 1923a ; 1923b). At Saï, further to the north, bucrania were also found with Middle Kerma tombs - for example, there were 37 round one tomb and the twelve others had between one and nine (GRATIEN, 1986).

The complete excavation of tomb 115 at Kerma allowed a detailed study of the cattle bucrania. They were placed around the tomb as if they were a living herd, large males in front, followed by females, some of whom were accompanied by calves. Skulls of calves, aged from new born to ten months, have frequently been found placed behind those of a female around other tombs too. The age range of the cattle and the way that the bucrania were placed round the tombs, suggest a simultaneous killing of a herd of animals at the time of burial of an important personage. Those animals that were killed would seem to have included many that were productive, or, in the case of the calves, potentially productive, animals.

Thus these animal remains not only provide insights into the nature of the religious beliefs and practices of the Kerma inhabitants, but they also raise other important questions. How was it possible to have killed so many cattle without having a devastating effect on the local economy ? And, indeed, how was it possible to have kept such an apparently large proportion of cattle amongst the domestic herds and flocks ?

Cattle as tribute

Today, a single cow, one of the small, northern Sudanese type, requires between 0.8 and 1.6 hectares of pasture (ADAMS, 1977). The 129 animals surrounding tomb 115, for example, would have required a minimum of between 100 and 200 hectares to sustain them and

between 400 and 800 hectares would be required to feed the cattle whose remains were found round some of the larger tombs. These figures do not take account of the larger size of the ancient Kerma cattle, and they must also be considered within the context of the relatively small amount of productive land available in the region. The Nile provides a long, but very narrow and limited oasis through an extremely arid land. Much, if not most of the land that was productive would have been required for the cultivation of cereals - the importance of cereals in the diet is suggested by the large number of bakeries found in the town and the finds of barley grain within the tombs (BONNET, 1990 : 50).

One possibility that must be considered is that during the third and second millennia BC, the climate of the region may have been slightly better, that is less arid, than at present, with larger areas of land suitable for cattle grazing available. This proposition has been examined in more detail elsewhere (see CHAIX and GRANT, in press). Briefly, the paleo-environmental indications given by, for example, pollen remains in ovicaprid coprolites and other preserved plant remains, suggest an arid environment, with a predominance of plants such as acacia, jujube, cassia, Urticaceae, Graminae and Cyperaceae - thus an environment very similar to that of today. In addition, the exceptional state of preservation of organic remains in the tombs is also an indication of very low rainfall. There is certainly no unambiguous evidence for a substantially more humid environment than at present, at any time since the third millennium.

We should like to raise an alternative possibility to explain the finds of cattle bones at Kerma. The relatively high proportion of cattle remains in the town deposits at Kerma, and the very large numbers of animals that appear to have been slaughtered at the same time, could be explained if the animals were not all locally raised. The cattle bucrania found around the Kerma tombs may not necessarily have been solely from animals in local herds, but may have been those of animals sent to Kerma from many places within, or even beyond, the Kingdom as tribute on the deaths of powerful and important leaders. The tributes may have included animals of all ages, allowing reconstruction of the "herds" in the placement of the bucrania around the tombs. What is also interesting is that among the cattle remains that are found in the town deposits, horn cores, the parts that are found round the tombs, are more or less totally absent (CHAIX, 1985). Perhaps the funerary rituals included feasting, the animals slaughtered and eaten in the town, while the skulls of the slaughtered beasts were placed around the tomb as a mark of the size of the tribute rendered, and thus the importance of the deceased.

The special status of cattle may also be visible in differences in attitudes to cattle and sheep within the funerary customs and perhaps thus also in domestic life. The meat of the cattle that we have suggested were offered as tribute to the dead seems to have been consumed within the town - there is no trace of postcranial remains within the tombs surrounded by bucrania. Many of these tombs, however, contained complete sheep burials - the good state of preservation shows that they were complete even as regards their skin and horn. Other deposits of sheep remains were as "joints" with the meat still attached. The sacrifice of sheep to the dead was a complete sacrifice - the living gained no apparent benefit from their slaughter, but these animals may have been more commonplace and more easily expendable and replaceable than cattle. The offerings of cattle, perhaps rarer and more important animals, may have enhanced or emphasised the status of the dead while at the same time feeding the living, perhaps during ritual feasts (cf. PARKES, this volume).

Many examples of the role of cattle as symbols of power, as currency or as offerings at funerary celebrations can be found in the ethnographic literature. In central Sudan, the Nuba sacrifice cattle during funeral ceremonies, distributing various parts of the animals to the friends and relatives of the deceased, while the forelegs are placed in the tombs. The horns, filled with cinders, are placed above, in order to give the necessary strength to the deceased to reach the country of the Nubian dead (RIEFENSTAHL, 1976). The scale of the sacrifice may force families into debt for several generations.

In Madagascar, for the Bara in the south-west (MICHEL, 1957) and the Mahafaly of the south (BOULFROY, 1989), cattle are important both in life and in death. At the death of the last Mahafaly king, Tsiamponde, in 1911, a large platform, 40 m square, which took six months to build was erected. At the funeral ceremony, 700 zebu bucrania were deposited, representing only a half of the total number of animals sacrificed. Fifty percent of these were taken from the royal herd itself, but the rest were given by vassal clans.

For the Toradjas of Indonesia, the buffalo plays an economic and symbolic role (BRISBOIS and DOUVIER, 1980). The number of animals sacrificed is a function of the social importance of the deceased, and is augmented by gifts from allied families. Thus, in 1987, at the final inhumation of a female tribal chief, who had died 30 years previously, 360 buffalo and

2,000 pigs were sacrificed. For these people too, bucrania are used to symbolise the power of the deceased and several may ornament the pediments of the huts of important families.

The movement of cattle, in some cases over considerable distances, is also attested in ancient Egyptian texts. A text of 2720 records that the pharaoh Snefru brought back more than 20,000 cattle from a raid into Nubia. The early Thinite Kings (c3300-2900) brought back thousands of prisoners of war and cattle from Libya and other foreign countries such as Nubia, in order to increase the supply of labour and improve and increase their animal stock (MORET, 1972).

Conclusions

While ethnographic analogy can suggest possible explanations, it must not be used as a substitute for firm evidence. However, we suggest that although the hypothesis that cattle may have been used as a form of tribute to the ancient Kerman dead cannot, on present evidence, be proved, it is a possibility that must be given serious consideration. The implication of this, that cattle may have been raised in one location, and slaughtered in another, must make us cautious of any conclusions we are tempted to draw about the nature of the local animal husbandry or indeed about the nature of the local environment from simple counts of the relative proportions of animal remains. We have hoped too, to raise some important issues concerning the possible social and political control within the Kingdom, consideration of which we hope will enrich our understanding of this unique and important period in Africa's history.

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