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THE HORSE IN PRE-COLONIAL WEST AFRICA

Horses were of enormous importance in pre-colonial West Africa. Most obviously, they were extensively used in warfare. Cavalry was employed in war throughout the savanna area of West Africa, and indeed for several centuries formed the dominant element in armies in this region; this dominance of cavalry was threatened by the introduction of imported European firearms from the sixteenth century onwards, but generally remained intact until the European colonial conquest at the end of the nineteenth century. The possession of horses also served as a token of political power, high social status and wealth in many West African societies; they served this role, indeed, even in areas where, because of their small numbers and the nature of the terrain, they could play no significant part in warfare, including some societies in the coastal forest belt, such as the kingdom of Benin, where the king and chiefs rode horses on ceremonial occasions, and among the Igbo of south-eastern Nigeria, where horses were imported to be sacrificed in title-taking rituals.

The keeping of horses had important implications for West African economic and political structures. The West African environment was in general highly unconge-

nial to horses - especially in the prevalence of diseases to which horses are vulnerable, such as trypanosomiasis - and consequently, horses could be successfully bred only in the northern areas of the region; societies to the south, including several which made use of horses in warfare on a large scale (such as the Yoruba kingdom of Oyo, in south-western Nigeria), therefore depended for their supplies of horses on importation from the north.

The trade in horses was a major sector of long-distance commerce in pre-colonial West Africa; since horses were often exchanged for slaves, and were themselves regularly employed in warfare which generated captives who might be sold as slaves, the horse trade tended to be closely bound up with the trade in slaves, trade and warfare feeding upon one another in a self-sustaining process - creating a "slave-horse cycle" comparable to the "slave-gun cycle" which historians have often posited in the operation of West Africa's trans-Atlantic trade.

The maintenance of horses in West African conditions also posed considerable logistical problems, absorbing great quantities of labour (in pre-colonial conditions, often slaves) in the task of fetching fodder.

The high costs involved in acquiring and keeping horses had significant implications for West African political structures, tending to create clearly differentiated ruling elites, whose power was both based upon and symbolized by their possession of horses, and favouring the development of decentralized "feudal" systems of military organization which entrenched the political power of aristocratic estates in opposition to the central authority of the monarchy.

For several years in the 1970s, I undertook research on the use of horses in pre-colonial West Africa, the results of which were presented principally in a book, *The Horse in West African History*, published in 1980 (Law 1980a).

This work was not, of course, conducted in a historiographical vacuum, but built upon earlier relevant studies. Insofar as this research dealt primarily (although not exclusively) with the use of horses in warfare, it drew upon the earlier pioneering work, on the history of warfare in pre-colonial West Africa more generally, by Robert Smith (1976). It also synthesized earlier detailed research on the use of horses, and more especially on cavalry warfare, in particular regions or societies of West Africa, including above all the work of Humphrey Fisher (1972-3) and Joseph Smaldone (1977) on the central Sudan (mainly northern Nigeria).

Beyond that, it was based principally on contemporary written documentation, mainly published European sources but also including Arabic material available in translation, supplemented by twentieth-century ethnographic accounts and local fieldwork of my own conducted in Nigeria and (to a lesser extent) in Ghana.

The purpose of the present paper is to consider how study of this subject has de-

veloped during the last fifteen years, and how far the arguments developed in the book of 1980 may be held to stand up or require revision, in the light of more recent research. In this, however, it has to be said that, disappointingly, there has not been all that much new detailed research into the use of horses in pre-colonial West Africa since 1980.

At any rate, the second, revised version of Robert Smith's general study of West African warfare, published in 1989, cites no post-1980 publications relating specifically to horses or cavalry (Smith 1989). A general study of *African Arms and Armour* published still more recently by the British Museum does have a chapter on "warfare in Sudanic Africa", which pays considerable attention to cavalry (as reflected in the title of the chapter, "Knights of the Savanna"). But this offers essentially a synchronic description of warfare as practised in the nineteenth century, rather than a serious historical analysis; and further, cites no literature relating to cavalry specifically in West Africa published later than 1977 (Spring 1993).

To my knowledge, the only recently published research dealing in detail with horses/cavalry in pre-colonial West Africa consists of two important articles on the Senegambia region, by Ivana Elbl (1991) and James Webb (1993), both of which do propose revisions of my analysis of 1980 in certain respects.

In addition, attention may be drawn to two more general studies of the political economy of warfare in cavalry-using areas, in the middle Niger valley by Richard Roberts (1987) and (outside West Africa properly speaking, but in a contiguous area) in the kingdom of Bagirmi (in the modern Republic of Tchad) by Stephen Reyna

(1991) - though both of these, in their stress upon the interrelations which existed among the trade in horses, raiding for slaves, and the appropriation of revenue in tribute and plunder, seem to reinforce rather than to challenge the general thrust of the analysis developed in my book.

In more detail, we can look at the principal conclusions of my earlier research, to consider how far these have been confirmed, revised or refuted by subsequent work. This will be considered under three main headings: first, the history of the introduction of horses into West Africa (and secondarily, the spread of their use within West Africa); second, the nature of the original (pre-Islamic) tradition of horsemanship in West Africa; and third, the hypothesis of a revolutionary transformation of West African horsemanship and cavalry warfare, associated with the introduction of new breeds of horses and new techniques of riding and combat from the Islamic world north of the Sahara, from the thirteen or fourteenth centuries onwards.

First, as regards the introduction of the horse into West Africa. It is, I believe, not contested that the horse (*equus caballus*) is not indigenous to Africa (though other equids, including the donkey, are), but an importation from Asia. In Africa, horses are first documented in the Nile valley, in the seventeenth century BC, and it is assumed that they had then been introduced only recently.

How they got to West Africa is a matter for speculation, but it seems reasonable to presume that they spread first from the Nile valley westward into northern Africa, and from there south across the Sahara into West Africa. When originally introduced into Egypt, horses were employed to draw wheeled chariots rather than ridden, and

this use of horse-drawn chariots spread into northern Africa and the Sahara, as evidenced by the well-known depiction of such vehicles in Saharan rock paintings and engravings. Whether the horse-drawn chariot ever reached West Africa, however, is doubtful; in historically documented times horses were used there exclusively as riding animals (Law 1980b).

The date at which horses reached West Africa seemed uncertain in 1980, and essentially remains so. Horses were already established in West Africa south of the Sahara by the time of the earliest extant contemporary descriptions of conditions there, in Arabic accounts of the states of ancient Kanem, Gao and Ghana, in the tenth and eleventh centuries AD; and further south, there is also the evidence of one of the bronzes excavated at Igbo-Ukwu, in south-eastern Nigeria, apparently representing a horseman, which is dated (albeit controversially) to the ninth century AD. But this leaves a period of around 2,500 years, between the original arrival of the horse in the African continent and the earliest record of its existence in West Africa, within which it seems impossible to date the introduction of horses into West Africa more precisely.

In 1980, I expressed the hope that the progress of archaeological research in West Africa would eventually clarify the date of the introduction of horses there; but this has not so far happened. Indeed, as regards archaeological documentation of the horse in early West Africa, the position has in a sense regressed rather than progressed. In 1980 I did cite one isolated piece of apparent evidence for the early existence of horses in West Africa, a supposed horse tooth found at excavations in a rock-shelter at Rop, on the Plateau of central Nigeria, dated to the

first millennium BC. But it now appears that this was a misidentification, and that the tooth in question was that of a donkey (*equus asinus*) rather than a horse (and more probably of a wild rather than a domesticated animal) (Sutton 1985). The liquidation of this particular piece of evidence is, in one sense, not unwelcome, since (as originally misinterpreted) it implied that horses had reached West Africa surprisingly (though perhaps not impossibly) early; but it restores an effective vacuum of evidence.

The absence of horses from the early archaeological record in West Africa presents, indeed, a continuing puzzle. In 1980 I acknowledged that no evidence for horses had been found at the few late prehistoric sites in West Africa which had been subject to systematic excavation - notably, Dhar Tichitt in Mauritania, and Daima in Nigeria. The more recent excavations at "old Jenne" (Jenne-jeno) in Mali, occupied between c.250 BC and c.1000 AD, seem to have been similarly negative, as regards evidence for horses, at least if one can judge from the silence of published accounts (McIntosh & McIntosh 1981).

To infer from this that horses were still unknown in this period would, however, be unwarranted, since the animal remains found at such sites probably represent essentially kitchen refuse, among which horses should perhaps not be expected to appear, since (at least in recent times) they have not commonly been eaten in West Africa. But some positive evidence for the existence of horses in this period would have been welcome.

The history of the diffusion of the horse within West Africa, from north to south, is not much less obscure. The evidence of the Igbo-Ukwu equestrian sculpture seemingly indicates that horses were already known

in the southern forest region at an early date - assuming, of course, that it was manufactured locally, rather than imported from elsewhere in West Africa. On the other hand, there seem to be no horses among the numerous animals depicted in the bronze and terracotta sculptures of ancient Ife, in Yorubaland, presumed to date between the twelfth and fifteenth centuries. Unambiguous corroboratory evidence for horses in the south is not available until the seventeenth century, when contemporary European sources attest their existence in the area of the modern Republic of Benin and south-western Nigeria - in the kingdoms of Allada, Oyo and Benin.

To trace the spread of horses within West Africa in more detail, we have to depend primarily on the evidence of local oral traditions. In many West African societies traditional histories do, in fact, make reference to the introduction of horses, which is regularly credited to immigrant invaders, often represented as coming from the Near East (Mecca, the Yemen or Baghdad), who are said to have founded the local ruling dynasties.

Taken literally, such traditions would suggest that the horse was introduced in relatively recent times - within the Islamic era. I expressed reservations in 1980, however, about the reliability of such traditions, and these doubts have been further strengthened since then. There is nowadays a growing consensus among historians of West Africa that the representation of founding ancestors as immigrants from the Near East has to be understood metaphorically, as defining more recent relations between West African societies and the Islamic world, rather than as reflecting actual historical migrations in earlier times (cf. Law 1984). The association of horses with such found-

ing ancestors, likewise, may reflect no more than the well-documented tendency of traditional history to attribute important institutions and practices to a stereotyped "culture hero". In this area also it may be said, paradoxically, the advance of knowledge in West African history has tended to diminish rather than to expand the evidential base for the reconstruction of the history of the horse.

Second, as regards the character of the original tradition of horsemanship in West Africa. The earliest Arabic descriptions of kingdoms in the West African Sudan describe the horses in use there as small. In 1980 I connected these reports with the existence of breeds of small horses (or "ponies") in certain parts of West Africa down to the present - in Senegambia, among the Bobo of Burkina Faso, in the Kotokoli area of northern Togo, and on the Plateau of central Nigeria.

These West African "ponies" stand between 10-12 hands (40-48 inches, or 1.00-1.20 metres) in height; as compared with 14-15 hands (56-60 inches, or 1.40-1.50 m.) for the Barb and Dongolawi breeds (derived from north-west Africa and the Nile valley, respectively) which are dominant elsewhere in West Africa. It was hypothesized that these "ponies" are the surviving representatives of the original horse population of West Africa, which has been displaced over most of the region by the Barb and Dongolawi breeds, imported in trade across the Sahara in more recent times.

There is, however, an alternative interpretation, propounded for example in the study of the origins of African domestic animals by Epstein (1971), which regards the West African "ponies" not as a distinct breed, but merely as degenerate variants of Barbs, subject to dwarfing after their in-

troduction into West Africa; and this view has been revived recently by Ivana Elbl (1991). The arguments in support of this hypothesis still seem to me unconvincing - the Barb-like features of West African pony breeds which are adduced in its support might reflect interbreeding with imported Barbs in recent times, rather than their remoter origins. But it may be suggested, anyway, that whether the West African "ponies" were in origin indigenized Barbs or a distinct breed is, strictly, a secondary issue.

In either case, it must be supposed that they were displaced by a new and larger horse stock imported across the Sahara subsequently. The question (not very clearly addressed by Elbl) is when the trans-Saharan importation of Barbs (or, on the Epstein/Elbl view, of a new stock of Barbs) began. On my reading, the extant contemporary sources do not suggest a significant scale of trans-Saharan horse imports into West Africa before the thirteenth or fourteenth century; and although such arguments from silence by their nature cannot be conclusive, the inference that the substitution of larger breeds for a pre-existing "pony" population began around that time still seems defensible.

My hypothesis about the pre-Islamic tradition of horsemanship in 1980 related not only to breeds of horses but also (and more critically) to equestrian techniques. The peoples of the Nigerian plateau are distinctive, not only in their breed of horses, but also in their equestrian equipment, using a form of single-reined bitless bridle, and riding without saddle or stirrups. Although this technique of riding is not documented historically before the nineteenth century, it was suggested that it represented, not a regional idiosyncrasy but an ar-

chaism, the Plateau peoples having preserved the original West African tradition of horsemanship, which has been displaced elsewhere by the introduction of the bitted bridle, saddle and stirrups from the Islamic world in relatively recent times.

This reconstruction, it must be conceded, was largely speculative, rather than based upon hard evidence. One early Arabic source, relating to Gao in the 10th century (al-Muhallabi), does, however, state explicitly that horses there were ridden barebacked. Indirect documentation of the recent introduction of the bit, saddle and stirrups could also be found in linguistic evidence - with the words for these items in some major West African languages (e.g. Hausa *likkafa*, *sirdi*, *linzami*) being readily recognisable as loanwords from Arabic (*rikab*, *sarj*, *lijam*).

Some support was also provided by the evidence of West African equestrian sculpture, for example the early horseman from Igbo-Ukwu, who seems to be riding without saddle or stirrups, and with a single-reined (and therefore presumably bitless) bridle. Upon further reflection, it seems to me that this is also true of some, though perhaps not all, of the equestrian figures among the bronze sculptures of the kingdom of Benin, dating perhaps from the 15th/16th centuries, which are likewise stirrup-less and with single-reined bridles.

By contrast (or at least, this is my non-specialist and unsystematic impression), more recent equestrian figures carved in wood in the neighbouring area of Yorubaland regularly show stirrups and double-reined bridles.

This hypothetical reconstruction of early West African horsemanship - as characterized by the use of small horses, bitless bridles, and the absence of saddles and stir-

rups - was linked to the third major hypothesis advanced in 1980 - which may, indeed, be regarded as the most important and original argument of that book. It posited a transformation of West African horsemanship, through the introduction of horses and techniques from the Islamic world, occurring from the thirteenth or fourteenth century onwards, which (it was argued) amounted to "a major revolution in the techniques of West African warfare" (Law 1980a, p.125).

The most obvious and readily documentable aspect of this "revolution" was the introduction into West Africa of larger breeds of horses - Barbs from West Africa, Dongolawi horses from the Nile valley. Initially, these were imported in trade, but they soon began to be bred locally in West Africa, either interbred with the indigenous "pony" breeds (producing somewhat larger hybrid variants of the latter), or displacing them altogether. The date at which such local breeding of larger horses was established in West Africa was difficult to determine, but it was suggested (on the basis of indirect inference, rather than explicit documentation) that it might have been during the sixteenth century. Once local breeding of large horses was established, it was argued that the trans-Saharan horse trade declined in significance, and was restricted to small numbers of horses of exceptional quality, essentially luxury items, rather than remaining of critical importance for the supply of the warhorses in general use.

The importation of larger horses was also, it was argued, associated with the introduction of a new equestrian technology - the bitted bridle, the saddle, and the stirrup. Larger horses and the new technology (especially the stirrup) were in turn linked

to new techniques of cavalry warfare, involving fighting at close quarters with thrusting spears - whereas earlier it was assumed that cavalry used primarily missile weapons, mainly javelins (throwing-spears), which were normally cast from a distance without coming to close quarters: these were, for example, the normal tactics among the peoples of the Nigerian Plateau in recent times.

These new tactics of close combat were in turn associated with the introduction of new forms of armour for both horse and rider, including chain mail, but also (and more commonly) armour of quilted cloth (called *lifidi* in Hausa).

Larger horses, new equipment, new tactics, and armour, it was argued, constituted an interrelated complex of innovations: the tactics of shock combat depended upon the use of the stirrup, which gave the rider much greater stability on his mount, and required the elaboration of defensive armour; larger and stronger horses were required to carry the greater weight of this armour, and also made the tactics of shock combat more effective by lending greater force to the spear-thrust. These new tactics were held to have substantially increased the military effectiveness of cavalry, which now became (it was argued, for the first time) the dominant force in warfare in the West African Sudan.

The complex of imported horses, saddles, and increased reliance on cavalry is first clearly documented in Arabic accounts of the kingdom of Mali in the mid-fourteenth century. It was hypothesized that it had been recently introduced there from northern Africa, possibly (in a speculation that might perhaps be judged gratuitously romantic) as a consequence of the famous pilgrimage of Mansa Musa of Mali to Mec-

ca (via Egypt) in 1324. This may not, however, have been altogether the first introduction of the new equestrian technology into West Africa. In Kanem to the east, although the evidence was less clear, it was suggested that the importation of larger horses from northern Africa, together with the other innovations associated with it, may have begun already in the previous century, under Mai Dunama Dibalemi (c. 1210-48).

From Mali and Kanem, the new system of horsemanship and cavalry warfare was depicted as spreading to other West African societies during the immediately following centuries. The process was thought to be most clearly documented and precisely datable in Senegambia to the west, in the kingdom of Jolof, where the earliest European traders, in the mid-fifteenth century, noted that horses were few and not used in war, but by the beginning of the sixteenth century Jolof was reported to have a large force of cavalry (8,000 or 10,000, in different accounts).

In the case of Senegambia, it was suggested that a critical role in this transformation was played by the Portuguese, who imported horses and equipment into this area by sea, in competition with the trans-Saharan trade; this maritime trade in horses, however, disappeared (more completely than the trans-Saharan trade) after the sixteenth century - in consequence, it was supposed, of the establishment of local breeding of horses large enough to be suitable for use as cavalry mounts.

Elsewhere in West Africa, the spread of the larger breeds of horses, new forms of equipment, and new tactics of cavalry warfare was thought to be traceable through local traditions. In the upper Volta area, for example, the foundation of the Mossi king-

doms, perhaps in the fifteenth century, and of Gonja, in the mid-sixteenth century, according to tradition in both cases by bands of invading horsemen, was interpreted to reflect the introduction into these areas of the new and more effective techniques of cavalry warfare. Further east, the "Kano Chronicle" recalled the introduction of cavalry armour (chain mail and lifidi) in the fourteenth century, and the beginnings of an export trade in horses (in exchange for slaves) to the south, to Nupe and Kwararafa, in the fifteenth - and this new (or increased) demand for horses in the south was presumed to relate to the larger breeds, and to reflect the enhanced military value which cavalry now had. Further south again, the rise of the Yoruba kingdom of Oyo as a military power, based on cavalry, in the sixteenth century, seemed to represent a further southward diffusion of the new techniques.

In retrospect, it can be acknowledged that there was a degree of oversimplification in the way this hypothesized "revolution" was presented. In particular, the assumption that the tactics of mounted shock combat, saddles and stirrups, cavalry armour, and the use of larger horses formed an interconnected whole was misleading, to the extent that elements of this complex clearly spread within West Africa, at least to some degree, independently of each other.

The use of chain mail and lifidi armour, for example, remained rare in some of the southern societies which came to depend on cavalry warfare, including the Mossi and Oyo. Even in the heyday of cavalry warfare in Sudanic West Africa, some mounted forces continued to use javelins rather than thrusting-spears: for example, those of Gonja. And even the use of saddles and

stirrups was far from universal in some of the southern cavalry forces, including notably those of Oyo. But in a looser form, the idea that the adoption of new techniques of horsemanship and cavalry fighting, combined with improved breeds of horses, transformed the conditions of West African warfare, and made cavalry the dominant force throughout Sudanic West Africa, seems to have convinced, at least, most reviewers of the book in 1980, and still seems persuasive in its essentials.

Among more recent contributions to study of the history of cavalry in West Africa, this interpretation has been implicitly challenged by Ivana Elbl (1991), who adduces evidence for the use of horses in warfare, both in Senegambia and further east, prior to the date of the imputed "revolution". This criticism, however, seems to some extent misconceived, since it was not denied that horses were employed in warfare in earlier times - as, indeed, they have been more recently by societies which never adopted the Islamic tradition, as on the Nigerian Plateau.

The argument was rather that the introduction of larger horses and new forms of equipment transformed the role of cavalry, with the development of tactics of shock combat, and increased its military importance. Elbl's own account, in fact, acknowledges that there was a marked increase both in the numbers of horses kept and their importance in warfare in Senegambia during the sixteenth century, though she does not explicitly consider whether this was also associated with innovations in equipment.

This interpretation is also endorsed in the subsequent study of Senegambia by James Webb (1993), who speaks more emphatically of a "cavalry revolution", linked

to the introduction of larger horses and (critically, although this aspect of the matter is not discussed in detail) of the stirrup, which made possible more effective use of the spear from horseback.

The original interpretation of the Senegambian "cavalry revolution" does require modification in some of its details, however. Both Elbl and Webb argue, persuasively, that earlier writers, including myself, have exaggerated the significance in this region of imports of horses by the Portuguese, which were simply not sufficiently great in volume (maybe 40-45 horses a year imported into the Jolof kingdom, for example) to have had the decisive impact supposed. I underestimated the continuing importance of trans-Saharan imports of horses here into the sixteenth century and indeed (as Webb documents) even beyond, to the end of the nineteenth century.

There remains some ambiguity in this matter, however, since some of the detailed evidence cited by Elbl and Webb for the continued importation of horses into Senegambia from the north appears to relate to horses bred in the south-western Sahara itself, rather than imported across the desert from northern Africa. In part, therefore this was a question of trade within the West African region, rather than of continued importation from outside it, and reflected the establishment of successful local breeding of the larger horses in West Africa, which was an explicit (and indeed, emphasized) element in my original formulation of the "cavalry revolution".

Elbl did not offer any sustained discussion of the development of horse-breeding within the Senegambia region; Webb dealt with this question at considerable length, but found a dearth of hard evidence relating to early times, including the critical ini-

tial stages of the "cavalry revolution" in the fifteenth and sixteenth centuries. What is clear from Webb's account, however, is that it is necessary to distinguish more clearly than I did in 1980 between horse-breeding in the southern Sahara, which produced purer-blooded Barbs which were more valued as warhorses but also subject to greater mortality once imported south of the desert, and horse-breeding in Senegambia itself, which produced horses of inferior quality but which were more resistant to locally endemic diseases. Saharan horses continued to be imported in large numbers, not only (as my earlier account may be read to imply) to serve as high-class mounts for the rich and powerful, but also to up-grade the local Senegambian stock by interbreeding.

A similar dynamic applied, it seems certain, to the inter-regional horse trade in other parts of West Africa also - for example, the importation of high-quality "Bagazan" horses from Asben (in Niger) into Hausaland. In its broad contours, however, the "revolution" in West African warfare associated with the introduction and diffusion of a new Islamic tradition of horsemanship, together with its connection to the trade in slaves (internal, as well as trans-Saharan and trans-Atlantic) appears to remain a viable historical concept.

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