PASTORALISTS UNDER PRESSURE?

Fulbe Societies Confronting Change in West Africa

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CHAPTER TWO

WHY ARE THERE SO MANY PASTORAL GROUPS IN EASTERN AFRICA?

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Introduction

If the pastoral societies of sub-Saharan Africa are plotted on a map of the continent, an uneven pattern of distribution is immediately evident. East Africa has a wide variety of pastoral groups, speaking diverse languages and specialised in different livestock species and species-mixtures. West Africa, by contrast is virtually limited to a single group, the Fulße, spread from Senegambia to Chad, with outliers virtually as far as the Red Sea Coast of Sudan. The desert regions proper have a lower density of pastoral groups but these are more evenly spread; from west to east, spaces are occupied by Moors, Tamasheq, Teda/Daza, Zaghawa, Arabs and Beja.

This striking imbalance has yet to be convincingly explained; indeed it has been barely approached by historical geographers. A number of explanations suggest themselves; historical, ecological and anthropological some of which are contingent and some structural. This chapter will consider some of the models that might be advanced to explain this situation and use them to focus on a particular problem, the coherence of identity among the Fulbe.

African pastoral systems

Classification of pastoral strategies

The literature on nomadic pastoralism has expanded substantially in recent years and there are now a number of textbooks on 'world' pastoralism (Spooner 1973, Weissleder 1978, Equipe écologie et anthropologie des sociétés pastorales 1979, Dyson-

Hudson and Dyson-Hudson 1980, Galaty and Salzman 1981, Galaty and Johnson 1990, Salzman and Galaty 1990, Barfield 1993). African pastoralism has also been the subject of a number of specific overviews (Robertshaw 1990, Galaty and Bonte 1991, Smith 1992, Fratkin *et al.* 1994, Scoones 1995).

African pastoral systems are distinguished first and foremost by the husbandry of particular species; camels, cattle, sheep and goats. Donkeys and horses are used for transport or portage in specific environments, but their numbers are low compared with the principal ruminant species. Ecology is the single most important determinant of species herded; the more arid the climate, the greater proportion of camels. Similarly, although species of goat and sheep adapted to high humidity environments exist, these are usually kept by settled peoples. The large races of small ruminant in the semi-arid and subdesertic regions are usually herded by pastoralists. In wetter regions, cattle and dwarf goats are preferred to the exclusion of other species.

Pastoralism is not always easily defined. In the desert regions proper, where agriculture is not feasible, pastoralists are often the 'pure' nomads beloved of anthropology textbooks and popular imagination. However, where herders occupy a higher rainfall zone and regularly come into contact with farmers, they almost always display a mix of production strategies. These can be plotted on a cline from exclusive pastoralism to mixed farming. A number of key stages are described below; these should be thought of as nuclei around which strategies cluster.

Exclusive pastoralists

Exclusive pastoralists are livestock producers who grow no crops and depend solely on sales of dairy products and/or animals to buy grain. This is usually the case in the arid and semi-arid zones, where pastoralists such as the Moors, Tamasheq, Teda and Bedu, may move very long distances every year. Where pastoralists keep cattle they often have long-standing arrangements with farmers to make use of crop residues. Herders of browsing species such as camels and goats prefer unfarmed regions since these support higher tree densities. Such pastoralists have traditional migration routes although they only diverge from their existing patterns in

the face of drought, failures of the pasture or the spread of an epizootic.

Transhumant pastoralists

Transhumant pastoralists have a permanent homestead and base at which the older members of the community remain throughout the year. The herd is usually split, leaving behind milking or weak animals in the care of the part of the family that is residentially stable. The herds are kept on the move by the younger members of the family in response to seasonal changes in the quality of grazing and disease challenge. Housing styles vary in complexity and usually depends on the time they anticipate spending at one particular grazing area. The travelling unit normally consists of a common herd owned by close male relatives, father and sons etc. who return at the start of the wet season to help with crop cultivation. Grain and other basic needs are purchased from the proceeds of selling milk and dairy products by the women in the local markets. If necessary, income is supplemented with the sale of surplus male sheep or cattle. Such pastoralists grow crops primarily for their own use rather than for the market.

Agro-pastoralists

Semi-settled or agro-pastoralists cultivate sufficient areas to feed their families from their own cereal production. Agro-pastoralists hold land rights, use their own or hired labour to cultivate land and may even grow tuber crops in addition to the staple cereals such as sorghum, millet and maize. While cattle are still valued property, their herds are on average smaller than in other pastoral systems, possibly because they no longer solely rely on cattle and depend on a finite grazing area around their village that can be reached in a day.

Defining pastoralism

This fluidity, which is such a signal feature of pastoralism, risks the danger of contributing to a definition so inclusive as to cover most of the peoples of semi-arid Africa. To limit the boundaries, this paper proposes that the defining characteristic of pastoral society

must be movement; it is, after all the movement of herds that gives pastoral society its distinctive character. This excludes many Bantuspeaking peoples who keep cattle and attribute to them a high cultural value; and effectively ignores agro-pastoralism.

Ethnic affiliations of pastoral groups

Summarising the diversity and complexity of the pastoral peoples of Africa is clearly a task for the unwary. Apart from the known diversity of many groups, there is a problem of weak descriptive literature, especially in the Ethiopia/Sudan borderland. It can be clear from an anthropological monograph that a given people are interested in cattle, but it is often very unclear whether they can be described as pastoralists. With large complex groups such as the Somali, Kanuri or Fulße there is the additional problem of the status of the diverse subgroups. With this in mind Table 2.1 presents a synoptic classification of Africa's present-day pastoral peoples. They are organised by language for reference purposes, but this should not be taken as a hypothesis relating language and subsistence strategy. Their approximate locations are shown on Map 2.1.

Jahnke (1983) presents a map of African pastoralists using a rather more inclusive definition than that used here; many of the Bantuspeaking cattle-owners of Southern Africa, such as the Kgalagadi of Botswana, are marked. However, once cattle-ownership becomes a criterion then most of the peoples of semi-arid Africa might be included.

Comments on individual groups

Nilotic pastoralists

Although there is a strong association between pastoralism and speakers of Nilotic languages, there is considerable variety within Nilotic and even within large, ramified groups such as the Dinka. Almost all Nilotic peoples practise forms of cultivation, with the

Map 2.1 Distribution of African pastoral peoples.

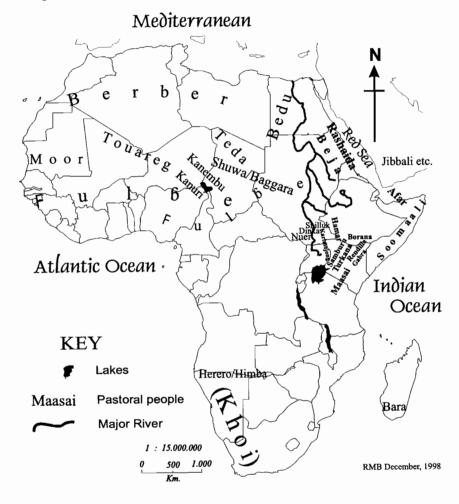


Table 2.1 Pastoral Peoples of sub-Saharan Africa

Branch	Language	Group	Location	Main Pastoral Species*
		Phylum	Afroasiatic	<u> </u>
Omotic	Hamar	Hamar	S.W. Ethiopia	Cattle, sheep, goats
Cushitic	Bedauye	Beja	E. Sudan	Camels
Cusinic	Somaali	Somaali	Somalia	Camels
	Afar	Afar	Somalia/Djibouti	Camels
	Borana	Borana	Ethiopia/Kenya	
	Rendille	Rendille	Kenya	Cattle, sheep, goats Camels, sheep, goat
	Gabra	Gabra	Kenya	Camels, sneep, goat
Chadic	Yedina	Yedina	Lake Chad	Cattle
Berber			Central Sahara	
Semitic	Tamasheq Arabic	Touareg		Camels
Semilic	Arabic	Baggara/Shuwa	N.E. Nigeria to Sudan	Cattle, sheep, goats
		Uled Suliman Moors	Lake Chad region	Camels
			Mauretania	Camels
		Rashaida	Red Sea Coast	Camels
C-1	***************************************	Phylum	Nilo-Saharan	
Saharan	Kanuri	See Table 2.2	W. and N. of Lake Chad	Cattle, Camels
	Kanembu	Kuburi, Sugurti	N.E. Borno/ Niger	Cattle
	Teda/Daza	Teda (Tubu)	Nigeria/Niger/Chad	Camels, donkeys
P. G. 4. 1	Zaghawa		Chad/Sudan	Cattle, camels
E. Sudanic				
Nilotic	Maa	Maasai	Kenya/Tanzania	Cattle
	il-Camus	Samburu	N. Kenya	Cattle
	Turkana	Turkana	N. Kenya	Cattle
	Karimojong	Karimojong	N.E. Uganda	Cattle
	Jie	Jie	N.E. Uganda	Cattle
	Shilluk	Shilluk	S. Sudan	Cattle
	Anywak	Anywak	S. Sudan/ Ethiopia	Cattle
	Dinka	Dinka	S. Sudan	Cattle
	Nuer	Nuer	S. Sudan	Cattle
	Atuot	Atuot	S. Sudan	Cattle
Surmic	Didinga	Didinga	S. Sudan	Cattle
	Murle	Murle	S. Sudan	Cattle
		Phylum	Niger-Congo	
Atlantic	Fulfulde	Fulße	Senegambia-Sudan	Various
Benue-Congo	Herero	Herero/Himba	Namibia	Cattle
D. d.			Austronesian	
Barito	Bara	Bara	Madagascar	Cattle
***		Phylum		
Khoi	Khoi	Khoi †	Southern Africa	Cattle

exception of some Massai, but at the same time, cattle-herding remains the prestige activity in their society. A very distinctive feature of Nilotic pastoralism is the consumption of blood, drawn from live animals, mixed with dairy products. It is generally considered that some Nilotic peoples have undergone language shift and assimilation and that some cattle-oriented Bantu populations such as the Tutsi of Rwanda and Burundi are at least in part of Nilotic origin.

Arabs

The Bedouin groups of the Egyptian desert are directly related to those living throughout the Near East, described in Blench (1995a and further references). However, there has also been a flow of Rashaida Bedouin across the Red Sea from Saudi Arabia and these now practise camel nomadism along the coast, ranging between southeastern Egypt and Eritrea.

There are three major Arabic-speaking pastoralists on the southern fringes of the Sahara. The largest of these is the Shuwa/Baggara complex, which spreads from Northeast Nigeria into Sudan under a variety of clan names. The Shuwa/Baggara all derive from a series of migrations in the medieval period, part nomadism, part military conquest (Zeltner 1970). The Baggara intermarried heavily with local populations and are often indistinguishable from them phenotypically. However, they retain a formal, sometimes rather classical, Arabic speech and a clan system resembling those of the Near Eastern Bedu.

The Uled Suliman are Libyan Arabs who have penetrated NE Nigeria since about 1980. Originally from the Fezzan, they migrated first into Chad in the 1930s, and thence into the Republic of Niger in the wake of the Chadian Civil War. Their earlier history is narrated by Le Rouvreur (1989: 436-441). The Uled Suliman are camel-pastoralists who build distinctive whale-backed tents from dum-palm mats over a wooden frame and sell *cuku*, dried camel-cheese, or occasionally the camels themselves, to buy grain.

The Moors, specialised camel-pastoralists who inhabit Mauritania and parts of adjacent territories are often regarded as distinct form the Arabs, but they speak an Arabic dialect, Hassaniya, and essentially preserve many features of the culture of Maghreb Arabs.

Teda/Daza

The Teda are usually thought of as the inhabitants of the Tibesti mountains in Chad, and Gustav Nachtigal first described them in the 1870s. Most ethnographic descriptions of their social organisation and subsistence patterns refer to those of northern Chad, e.g. Le Coeur (1950) and Le Rouvreur (1989), although Baroin (1985) has recently described the Teda in the Republic of Niger.

The Teda are one of Africa's most scattered peoples, and they migrate across a vast zone encompassing Libya, Sudan, Chad and the Republic of Niger. There are also a number of small communities of Teda in Nigeria, in northern Borno where they appear to have settled in the nineteenth century or before (Baroin, 1985: 27). The Teda can be divided into two main sub-groups, the Teda and the Daza, who speak essentially the same language. Like the Kanembu, the Teda-Daza have a blacksmith caste, the Aza, who are ceremonially and socially separated from the main body of the tribe. The Daza are divided into numerous clans, one of the most important of which is the Kecherda, which originates from Borku in north-eastern Chad (Chapelle 1957: 147).

Kanuri/Kanembu complex

Kanuri/Kanembu form part of the Saharan subgroup of Nilo-Saharan and include both nomadic pastoralists and full-time cultivators. Like the Fulße, their social organisation ranges from highly individualistic nomadic herders (the Koyam) with powerful lineage structures and little allegiance to the centralised authority to the well-known and historic sultanates based both east and west of Lake Chad.

The Kanuri proper were originally one people with the Kanembu, the people of Kanem, the region north-east of Lake Chad. However, the two groups separated at an unknown time and now speak different, but closely related, languages. Kanuri is often taken by outsiders as a term covering all the Kanuri-speaking peoples, such as the Manga and Mober, but in Borno these are usually distinguished, and 'Kanuri' is applied only to the people inhabiting the central area. Standard Kanuri (the Yerwa dialect) is generally understood throughout Borno although individual groups have their own speech-forms. Zakari (1985) gives a useful

recent synthesis of the complex source-material on the peopling of this region. Table 2.2 shows the major subgroups of Kanuri/Kanembu;

Table 2.2 Kanuri/Kanembu subgroups

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Group	Subgroup	Location	Main species		
Kanuri	Badawai	Central Borno	Cattle		
	Jetko	North of Geidam/Niger	Camels		
	Kanuri	S.C. Borno	Cattle		
	Koyam	S.C Borno	Cattle		
	Manga	N.W Borno	Cattle/Camels		
	Mober	N.E. Borno/Niger	Cattle		
Kanembu	Kuburi	N.E. Borno/Niger	Cattle		
	Sugurti	Niger/Chad	Cattle		

Khoi and other pastoralists in Southern Africa

As Khoi pastoralism is in effect defunct it is included as a matter of historical interest only. The Khoi seem to have been nomadic pastoralists moving throughout the Western Cape and up into modern-day Namibia, dependent on large herds of cattle and sheep (Kinahan 1991, Boonzaier et al. 1996). Some small fragments of this tradition can be recovered, as an ethnoarchaeological study quoted by Smith (1992: 210) shows. However, one of the unique features of this system, its interaction with hunter-gatherers rather than cultivators, has definitively disappeared.

The other pastoralists in Southern Africa are the Herero/Himba in Namibia and Angola (Estermann 1960, Vivelo 1977). Today these would best be described as agro-pastoralists similar to the Nuer and Dinka, but there is some evidence to think that these people were once more exclusively pastoralist (Smith 1992: 186 ff). Similarly, there is both archaeological and historical evidence to suggest that pastoralism was an important element in the southward expansion of the Bantu. Garlake (1978) argues that the inhabitants of Great Zimbabwe depended on transhumant pastoralism. These systems have effectively disappeared with the intensification of agriculture throughout this region.

Fulbe: cultural diversity and linguistic unity

Fulbe pastoralists are the most numerous and by far the most geographically widespread of African pastoral peoples. A striking feature of Fulfie culture is its social structural variation across a broad territorial range. The major division within Fulbe is undoubtedly the rather stereotyped distinction between the 'town' and 'bush' Fulbe, between Fulbe wuro and Fulbe ladde (Blench 1990). Nomadic and transhumant herders are scattered the length of the west African Sahel, from Senegambia as far as Central Sudan¹ (see map in Boutrais 1994a) owing no allegiance to any centralised hierarchy and maintaining lineage systems of social organisation (Stenning 1959, Dupire 1962, 1970). Among these, the Wodaabe are one of the best described but there are many others. These nomadic herders contrast with the various pockets of settled Fulbe throughout the region and with the highly structured Emirates and Lamidates in Niger, Nigeria and Cameroon. In the Hausa-speaking areas, Fulbe took on existing structures and indeed largely adopted Hausa culture, eventually giving up the Fulfulde language. However, in Cameroon, a different political dynamic eventually led to the establishment of Fulfulde-speaking Lamidates that were effectively 'new' political entities.

Across this vast range, the Fulfulde language remains largely comprehensible. Fulße can travel considerable distances across the savannahs and still make themselves understood without major problems. This is despite the apparent variations in dialects and in particular the noun-class system, which is in various states of disrepair in different locations. Part of the mythology of urban Fulße is that the Fulße ladde (the Peuls nomades of the Francophone literature and often, but inappropriately referred to as 'Bororo') are the true bearers of Fulße culture, the laawol pulaaku. Interactions between the nomadic herders and urban Fulße are often slight and may be restricted to milk and livestock sales or the herding of stock for wealthy urban residents. Nonetheless, there is a widespread feeling that the 'bush' Fulße have retained the true speech and culture of the tribe.

At a cultural level this is simply sentimental mythologising; Fulbe ladde are protean, flexible and culturally diverse. However, at the level of language it probably is important. There is little doubt that the more complex aspects of Fulfulde morphology are better

retained by the pastoralists (see, for example Labatut 1973). This is in part because in remote areas they do not have to interact with the plurality of experience that towns offer both in the linguistic and material spheres. More importantly, however, to be a successful pastoralist is to depend on information systems. Mobile herders depend on changeable resources, pasture and water that vary from year to year. Herders both have to find out where pasture is located and assess the likely competition for a scarce resource.

Pastoralists tend to be multilingual; it is fairly essential to be able to communicate with farmers and traders. But they need to communicate with much greater precision with other pastoralists who have similar concerns. Fulbe groups in West Africa are not in oppositional relations with one another and can usually arrive in remote or unfamiliar markets and be given access to information about grazing, market prices or disease. This can be seen at a practical level any day in markets in the West African savannah - herders seated in circles discussing issues of concern to the herds. Periodic Sahelian droughts compel herders to move farther than usual to research unfamiliar areas and this has a major reinforcing effect on language uniformity. Communicating with unknown members of your ethnic group leads to constant relexification from adjacent lects. Hence Fulfulde retains a remarkable homogeneity over a considerable range. However, this is clearly not the situation in East Africa and this contrast needs to be explained.

The unity of a pastoral people is a matter of focus. The Fulße represent a pastoral group spanning half the continent; they are therefore highly visible in any geolinguistic exercise. The Beja occupy only a small region of Red Sea Province and appear as just one pastoral people among many in the Horn of Africa. Yet the Beja too have been exercising their trade in almost the same place for millennia and yet have developed almost insignificant cultural and linguistic variation. In other words, the same processes that have allowed the Fulße to remain relatively stable are also at work among the Beja; their restricted geographical range makes the two groups seem more different than they really are, at least in structural terms.

Some hypotheses

This section explores some of the main hypotheses that can be advanced to explain the contrast between East and West Africa.

I am grateful to Amin Abu-Manga for correcting original statements on the distribution of Fulöe in the Sudan.

These are:

- a) Time-depth of establishment
- b) The urban/rural divide
- c) The impact of Islam
- d) The nature of trade-routes
- e) Social structure
- f) Political centralisation and the elimination of inter-group warfare
- g) Ecology and the incidence of patchy resources
- h) Co-evolution with arable systems
- i) Information systems and linguistic uniformity

These hypotheses can be sub-grouped into what may be described as specific historical (a-d) and general structural (e-g). The first three hypotheses are all versions of the argument that the recent history of the Fulße accounts for their homogeneity rather than any more profound underlying cause. Hypotheses d) and e) both suggest that structural features of the society or the environment better explain the situation.

Time-depth of establishment

The most economical hypothesis is probably a straightforward historical explanation; the Fulbe have only been pastoralists for a relatively short period of time compared with their East African counterparts. The fact that they still show a remarkable unity across a very broad area reflects no more than a shallow time-depth; in another thousand years they would perhaps form distinct ethnolinguistic groups. East Africa pastoralists have been splitting up for considerably longer; reports of pastoralists in the Horn of Africago back to the Alexandrian geographers, while archaeological evidence shows that pastoralists were in the region earlier still (Robertshaw 1990).

The problem with this hypothesis is both exactly how the age of Fulße culture can be ascertained and whether indeed the Fulße do represent the inception of pastoral culture in the West African savanna. Stenning (1959: 21) follows Delafosse (1912) in assuming that the initial expansion was just under a millennium ago and this date has not been seriously questioned. However, cattle appear to

be far older in West Africa than the dates given for the Fulße diaspora (MacDonald & MacDonald, in press). Indeed the transmission of cattle to West Africa implies pastoralism, since even where they are today used in village-based production systems, their origin must have been in a traversal of the Sahara. In other words, there may be a danger of mistaking the mythic origin of Fulße pastoralism for its chronological inception.

Has the spread of Fulbe pastoralism eliminated diversity in the West African Sahel?

A rather different view would be that Fulbe unity is built upon the *elimination* of diversity in the West African Sahel. At some level this must almost certainly be true; evidence for varieties of pastoralism go back far beyond the era of the apparent genesis of the Fulbe. Cattle must have been brought across the Sahara by pastoralists much prior to the present-day camel peoples who inhabit it. These pastoralists are represented in rock-paintings, together with their richly illustrated ceremonial life (Muzzolini, in press). There are, for example, rock-paintings of humpless longhorned cattle in Northern Nigeria that were presumably genetically related to the ndama breeds of Senegambia of which no trace remains today (Blench 1993).

Some remnants of this pre-Fulbe tradition can still be discerned today in Northern Ghana; this is the only remaining region of West-Central Africa where West African Dwarf cattle are still herded in substantial numbers. They are in the hands of the local Gurspeaking populations and are usually managed within short-distance transhumance systems. There is both textual and oral evidence that such systems used to be substantially more common across the ecozone in semi-arid savannahs. Elsewhere a combination of the rinderpest of the late nineteenth century, the prestige of zebu and the spread of Islam combined to eliminate large-scale herding of WAD cattle. Only cattle in ritual or village based zero-grazing systems have persisted in all but the forest zone (Blench 1998b).

Only when the Ful6e reached Lake Chad, did they encounter pastoralists they could not assimilate; resident Kanuri and (possibly) Shuwa pastoralists. The Ful6e had spread rapidly from west to east by exploiting an ecology desert-based pastoralists

avoided because of the prevalence of tsé-tsé. However, they eventually met up with pastoralists who were sufficiently well-adapted and numerous not to be simply culturally assimilated; this had a major impact in terms of slowing their migration eastwards.

It is likely, although not certain, that the earliest Fulbe diaspora depended on the trypanotolerant ndama breeds rather than the zebu familiar today. Ndama are still the main cattle breed in the Fulbe heartland area in Guinea, and are trypanotolerant; the non-resistant zebu types were brought in from East Africa and have spread westwards across the continent. The process of acclimatising the original genetic material of cattle to the endemic pathologies of West Africa presumably took place in the hands of farmers, who had more labour resources to divert to the slow process of adapting animals to the more humid regions. When the pre-Fulbe turned to pastoralism they adopted a race of cattle that could exploit the higher rainfall semi-arid regions and therefore operate south of the desert pastoralists (presumably Berber at this period).

The urban/rural divide

A distinctive feature of Fulbe social structure which has no parallel in East Africa, but which strongly resembles the Arab world of the Middle East, is the existence of a strong urban/rural divide with a constant potential for flow between the two. Broadly speaking, in Africa, the agriculturalist and the pastoralist represent interlocking but different ethnolinguistic groups. Farmers are usually of one language group while the mobile herders are often linguistically and culturally distinct. This is particularly true in East Africa, where the strong association between Nilotic and Cushitic speakers with pastoralism contrasts with cultivators who are usually Bantuspeaking. By contrast, in the Middle East, Bedouin and settled rural and urban Arab populations share the same language and numerous cultural values. Indeed, most urban Arabs consider the Bedouin the repository of 'true' Arab values; hence the popularity or nomadic imagery in towns - sitting rooms decorated as tents and restaurants mimicking Bedouin dwellings. Although it is common for settled Arabs to suggest there is an absolute division between them and the nomads, the 'desert and the sown', in reality there has been a constant flow between the two in history (Blench 1995a).

The antiquity of the urban/rural divide in Fulbe culture remains a matter for controversy. The documented establishment of the Emirates in the eighteenth and nineteenth centuries was premised at least on a class of urbanised clerics (see Burnham & Last 1994). Whether such processes were still older in the Fuuta Jaloo is unclear. By the time ethnographers begin to describe the situation, all patterns were in existence – urban Fulbe without cattle, small farmers with small livestock holdings, transhumant and nomadic pastoralists. Urban nuclei continue to depend strongly on pastoralists for the supply of milk and meat and settlement remains an option for pastoralists who lose their herd in droughts or epizootics. Some of these return to pastoralism once their herd recovers, others change subsistence strategy permanently.

This fluidity paradoxically represents an important element that binds Fulße culture together, the sense that identity is not lost when translating between different sectors of society. Urban Fulße find themselves both in a dependency relation with pastoralists, both admiring their preservation of core values and yet having a contempt for their religious practice (they are commonly accused of being poor Muslims) and the rigours of their lifestyle.

The impact of Islam

One element of Fulße society that is sharply in contrast with East Africa is the adoption of a world religion, Islam. The association of the Fulße with Islam from the medieval period onwards must have played a role in developing the urban/rural divide, since the larger political structures established in historical times were all Islamic or quasi-Islamic, especially in the easternmost reaches. As to the date of their conversion, we must fall back on the speculations of Delafosse (1912) who gave an 11th century date for interactions with the Arabs in Mauritania/Senegal. The existence of Islam, a common ideology that bound together pastoralist and townsman, trader and craftsman, also contributed to cultural and linguistic uniformity.

The nature of trade-routes

West Africa differs from Eastern and Southern Africa by virtue of its elaborate and ancient network of trade-routes. Although north-south (i.e. trans-Saharan) routes are prominent in historical terms, in the semi-arid zone the real flow was east-west. Once goods reached Sub-Saharan Africa they were carried along a series of routes that crucially were laterally oriented. Such trade routes were strongly although not exclusively associated with the expansion of Islam and it may well be that there was a tendency for Fulbe expansion to follow the lines of these routes, especially as they were strongly dependent on interactions with cultivators (see below).

Social structural

Another important claim relates to the contrastive social structure of the Fulße and other African pastoralists. It is likely that almost all pastoral societies have clans or lineages of one type or another. However, the Fulße have a distinctive system, the lenyol (pl. lenyi) which persists across the great range of Fulße subgroups. This has been described in some detail in Dupire (1962, 1970) and is a flexible structure that is constantly redefined as groups split, merge and move into new social and geographical territory.

A feature of almost all East African cattle pastoralists is the existence of age-grade systems. These are systems whereby men of all ages are divided into age-classes, and they must gradually move from one class to another. These have been described regionally by Fleming (1965) as well as in many individual monographs (e.g. Legesse 1973). These systems have much less built-in flexibility than the lenyol system and depend on close contact between members of a age-grade over long periods of time. This is perfectly workable when the situation is stable; where major migrations are not required age-grading acts as a key bonding mechanism, developing close personal co-operation. This is not to say East African pastoralists are inflexible; indeed as both Spencer (1973) and Schlee (1989) have documented, many pastoral groups have interlocking clan structures and can co-operate effectively, especially when they herd different species. Such interlocking patterns may actually contribute to the situational nature of identity

in this region, but thus, paradoxically to the chronic warfare documented for the region.

Political centralisation and the elimination of inter-group warfare

A feature of East African pastoral societies noted by many ethnographers is endemic warfare or inter-group conflict. Fukui and Turton (1979) have edited a volume of papers describing patterns of warfare among East African herders and the subsequent bibliography on this topic is voluminous. Such conflicts are strongly connected with cattle-raiding and only to a limited extent with acquiring permanent access to new grazing resources. Indeed, the historical persistence of a multiplicity of groups suggests that the aim is never really to eliminate them and that this is a type of 'explosive democracy', a phrase often applied to Berber clans.

This is very much in contrast with the other type of pastoral warfare which could be characterised as military/pastoral expansion. The Fulße lenyol (see above) never developed a sufficiently corporate nature to either wage war on a neighbouring lenyol or to become the seed of a distinct ethnic identity. However, Ful6e as a whole have a military history strongly interwoven with pastoral expansion. All across their range, smaller or larger political units have been established, usually drawing strongly on the existing traditions of political authority. At least in their later phases, when historical documentation is more complete, wars of conquest and the subsequent establishment of a centralised state were strongly associated with an ideology of purist Islam. The most notable example of this is both the take-over the existing Hausa states in the course of the jihad of Usman dan Fodio in the early nineteenth century and the establishment of new states east and south of the original focal area.

This type of military/pastoral expansion has many parallels in Eurasia, notably in the examples of the Arabs of the Middle East and North Africa and the Mongols of Central Asia. Both of these are correlated with a high degree of linguistic uniformity. Pastoral peoples' high degree of mobility and often aggressive stance in commanding pastures for their herds makes it possible to attain vast territories rapidly without high levels of internal culture change. The Mongol Empire fell apart because it was so highly centralised that decisions could not easily be devolved to regional power bases.

However, the Arab expansion, initially entirely military, rapidly developed outlying polities linked to the centre by a commonalty of language and belief. This situation very much parallels the expansion of the Fulße in West-Central Africa.

Ecology

It might be thought that the diversity of environments in which pastoralists exist rules out an overarching ecological explanation for the East/West contrast. The Fulße in particular have expanded into almost all ecological niches in West Africa, even colonising extremely humid areas such as the small patches of grassland close to the mangrove swamps of the Niger Delta in Nigeria (RIM 1984, RIM 1989, Blench 1991, RIM, volume II 1992). Nonetheless, in general pastoralists are confined to low-rainfall zones, often those with abundant grazing and low-density agriculture.

However, there is an important difference between East and West Africa: unimodal versus bimodal rainfall. Essentially, unimodal rain falls in a single patch in a restricted season of the year - the wet season in West Africa is approximately April-September in the semi-arid zone. Bimodal rainfallpatterns are common through much of semi-arid East Africa (see Farmer & Wigley 1985 esp. Figure 3.4). In West Africa these are characteristic of the forest zone, where there are few or no pastoralists. The consequence of this is that in West Africa there is agriculture in regions of aggregate annual rainfall similar to East Africa where the spreading of the rainfall across the seasons in bimodal patterns precludes it. Moreover, pasture is a scarce resource throughout much of the year and abundant within a short window. This explains why the digging of wells was much more prevalent in pastoral areas of West-Central Africa, since it enables pastoralists to exploit otherwise inaccessible pastures. Pastoralists such as the Fulbe have thus co-evolved with agriculture, defining themselves in relation to it rather than evolving apart from it, as in East Africa. Bimodal rainfall spreads precipitation over more of the year, actually assisting pasture growth, although inimical to crops, and is hence more reliable than the strongly seasonal unimodal systems.

If this argument is correct then we would also expect a diversity of pastoral groups in geographic regions where the environment is varied and pasture resources more reliable. There is at least one region outside Africa where this is the case; the Hadramaut. Along the southern edge of the Arabian peninsula, between Aden and Oman, live the non-Arab pastoral peoples who speak South Semitic languages, notably the Mehri, the Jibbali and the Harsusi, as well as the isolated Soqotri. Separated from the main body of Bedouin by the empty Quarter, these pastoralists enjoy a relatively favourable climate and pasture resources as well as a low density of agriculturalists. This has probably allowed them to survive, in contrast to elsewhere in the Arab world where related groups would long ago have been assimilated by Arabic-speakers. The diverse pastoral groups in southern Iran may well be similar although poor regional documentation makes this less certain.

Co-evolution with arable systems

A key element that differentiates Fulbe pastoralism from its East African counterparts is its co-evolution with agriculture. Fulbe pastoralism appears to have always depended on co-operation with cultivators; classically through milk/grain and stover/manure exchanges. As with all relations of dependency, this relationship is frequently conflictual (e.g. Hurault 1964, Prioul 1971). This is strongly in contrast with much of East Africa, where many pastoral peoples had no contact with cultivation and grain was traded over long distances. In many of the pastoral regions of East Africa, there are no farmers because the bimodal pattern of rainfall excludes them. As with the trade-route argument above, this suggests that the distinctive pattern of Fulbe pastoralism reflected its interlinkages with commercial and agricultural expansion. From this perspective Fulfulde is thus like a trade language, used by pastoralists to communicate across a wide area, thereby corresponding more to Dyula than to Maasai.

Information systems and linguistic uniformity

Another way of approaching the relative cultural and linguistic uniformity of Fulße society is to consider the demands of information systems. Such uniformity is not a requirement for a widely scattered pastoral society but nonetheless tends to be present where conditions are harsh and resources widely scattered. This is true of the Berbers in the Sahara, the Mongol expansion into the steppes of

Central Asia and the Bedu who occupy the deserts of the Middle East (Blench 1998a). This reflects the relative importance of extreme mobility and thus of information systems. Put simply, if pasture resources are both scarce and patchy (see above) then to survive, pastoralists need to be extremely flexible and to move long distances, sometimes to unfamiliar regions, to protect their herds (Gallais 1977). They must have effective systems to obtain reliable information about pasture resources in these regions (see above). In consequence, either they must be extremely multilingual or simply speak the same language as the pastoralists who do have this information. In a region such as the Sahara or the Middle East, there would be rapid selection pressure against small groups maintaining their ethnolinguistic identity. Their herds would simply diminish in years where they did not have access to goodquality information. A parallel situation would be disappearance of hunter-gatherer languages in contact with pastoralists in East Africa; Yaaku and Elmolo have become assimilated to Maasai and Samburu since the 1960s.

A striking comparable case is Berber, both in the Maghreb and stretching down into the Sahel with the Tamasheq. Berber is an apparently ancient branch of the Afroasiatic language phylum and yet it is remarkably internally homogeneous (Willms 1980). Berber could be regarded as a single language spread over a swathe of Africa than larger even Fulfulde. If its lexical diversity is compared with, say the Chadic or Semitic families, then Berber is almost like a single language. However, its remoteness from other branches of Afroasiatic argues that it has been split from the main trunk for a long period. This situation can only be explained by assuming that Berber pastoralism contains strong centripetal forces that act to constantly keep the language uniform.

Conclusion

In the semi-arid regions of the world, pastoral populations can be crudely divided between relatively homogeneous groups spread over large areas and often with a highly militaristic tradition and regions of ethnolinguistic diversity, often associated with relative historic stability. Such a dichotomy is found between East and West Africa, which appears to reflect significant climatic differences, notably the presence or absence of bimodal rainfall systems. These

determine the relative availability of pasture and thus the type of information crucial to pastoralists hoping to exploit it. Connected differences that can be highlighted between East and West Africa are the presence or absence of long-distance trade and corresponding markets, a contrast in adherence to world religions and the present and absence of centralised state systems. Fulße expansion was far from the random migratory drift of pastoralists; it followed the growth of markets, the intensification of agriculture and the clearance of forests that harboured tsé-tsé.

Beyond environmental parameters, however, specific historical circumstances must also play a part and it is likely that the conversion of at least some part of the Fulße to Islam at an early period in West African history permitted the evolution of social diversity that extended their geographic range. Until very recently, the incidence of tsé-tsé and thus trypanosomiasis throughout the West African semi-arid region meant that Fulße with zeboid cattle were confined to the edge of the desert. With the increased population, cutting down of the gallery forest and hunting out of wildlife vectors, the Fulße expansion southwards into the subhumid and even humid regions has been recent and its long-terms effects on ethnolinguistic diversity have yet to become apparent (Bourn 1983, Blench 1994, 1995b).

Measures of human diversity and hence their likely explanation remain at best anecdotal. Though linguists have long sought to develop quantitative methods for mapping dialect differentiation but we are far from having the data to apply them to the cases discussed in this paper. The dynamic nature of pastoral society with its constant expansion and occasional retreats means that dated publications capture only a fixed image of a constantly changing pattern. As data accumulates it may be possible to make a more realistic map of pastoral diversity in Africa and come closer to a solution to the question underlying this chapter.