# Was there an interchange between Cushitic pastoralists and Khoisan speakers in the prehistory of Southern Africa and how can this be detected?

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# 1. Introduction: the origin of the 'Hottentots'

The Khoisan populations of Southern Africa are conventionally divided into the Khoekhoe and the San, the main logic of the dichotomy being that the Khoekhoe were pastoralists at first contact, while the San subsisted purely by foraging (Barnard 1992). This does not entirely correspond to the linguistic classification of the Khoisan languages, but nonetheless represents a fairly significant division, especially as it later became apparent that the pastoral groups were lactase tolerant, while the hunter-gatherers were not, arguing for a genetic split of some antiquity (Nurse et al. 1985: 97).

In the early literature, the Khoe were usually referred to as Hottentots, a word of disputed etymology. First recorded in Dutch in 1677, it is said to mean stutterer; or to be an ideophonic representation, *hot en tot*, of the stereotyped sounds in the Khoe language. Very early, observers of the Khoe peoples noted features of their culture that set them apart from both San and Bantu and it soon came to be assumed these were evidence of Semitic origins. Kolb (1731) observed;

'These customs, in which the Hottentots agree with both the Jews and the Troglodytes, being, 'tis pretty certain, all or most of 'em as old as the time of Abraham, which was but 300 Years after the Flood, refer their Tradition so clearly to Noah, as to put the matter almost out of doubt'.

Somewhat later, Mentzel was to account for the phenotype of the Khoe by assuming they were Asian children shipwrecked on the South Africa coast<sup>1</sup>. However, more broadly, the tendency was to assume that if the Khoe indeed had 'Semitic' affinities, they must in some way have migrated from NE Africa. This is the model found in Stow (1905) and expanded by Jeffreys (1968), who maintained there were 'Semitic influences' on Hottentot culture. Indeed Jeffreys, always an author to defend entirely improbable theories with immense scholarly apparatus, followed Mentzel in holding that the Khoi were the result of seagoing Semites landing on the coast and intermarrying with the local San stock. Carl Meinhof's (1912) *Die Sprachen der Hamiten* provided a spurious linguistic justification for these views, linking as it did Cushitic, Nama and Fulfulde (a West African Niger-Congo language). All of these writers drew the conclusion that the ancestors of the Khoe must therefore have migrated from elsewhere, most likely NE Africa. Shorn of Semitic rhetoric, even later, more archaeologically informed writers such as Ehret (1982: Map 13) and Elphick (1985) assumed an origin somewhere in northern Botswana, NE of the present range of the Khoi.

A secondary development of these ideas was that there must be 'Hamitic' elements in the culture of the Bantu herding peoples along the Angola/Namibia border, notably the Herero, Himba and Kwanyama/Ambo. Anthropological texts such as Irle (1906), Estermann (1950) assumed *chamitique* influence, a view enshrined in Baumann's (1940) overview of African peoples. The argument typically depends on the sacred nature of cattle and the complex of rituals around them, although the parallels adduced are often remarkably short on detail. The possibility that cattle pastoralists might develop elaborate rituals around the most important element in their subsistence strategies seems not to have occurred to these authors.

Loeb's (1962) *In Feudal Africa* argued for 'Indications of early Mediterranean influence' on the culture of the Kwanyama people on the border of Namibia and Angola. This goes back to a Germanic tradition describing the purported wanderings of the *Hamiten* (see, for example, Adametz (1920) or Lebzelter (1934)). Loeb refers to 'noticeably Caucasian features' (p. 6) and a tradition that the Kwanyama 'lived originally in the region of the Great Lakes of Africa' (p. 9). According to this version of prehistory, the same sort of NE African pastoralists as originated the Khoe must have migrated to SW Africa, bringing with them herding culture, but being largely absorbed phenotypically. This in turn was held to be responsible for 'stratification' in the culture of the Bantu pastoralists.

'Hamitic' is a conflated cultural/racial category which lumped together Cushitic/Nilotic peoples and even Bantu peoples, such as the Tutsi, who were deemed to have Hamitic characteristics. Composite terms such as 'Nilo-Hamites' were invented to cover peoples whose linguistic identity did not seem to match their cultural traits. Greenberg (1963:24, 69) largely skewered the crypto-racial nature of the Hamitic theory,

<sup>&</sup>lt;sup>1</sup> By some chance, Asians (a Thai embassy to Europe) were shipwrecked on the South African coast in the seventeenth century, unfortunately too late to be responsible for such a remarkable confluence of races (Smithies 1999).

particularly in relation to Fulfulde, although as Boonzaier et al. (1996:14) point out, it continues to live a shadowy life in school textbooks.

The notion of a Hamitic culture brought together a bundle of obsessions of scholars at the period, that racial and linguistic categories went hand in hand, that 'tall' people were somehow superior, that cattle-herders trumped cultivators and that migration from an appropriate homeland could explain widely distributed cultural features. Can anything be salvaged from this? Do any of these observations have validity or is this just racist nonsense? This paper will argue that these earlier authors *had* observed something important, but lacking an interpretative framework to make sense of it, they veered off into a wild hinterland of speculation. Shedding the more *outré* assumptions of the earlier literature, a still more intricate story can be told of early contact between different cultures and the way in which evidence can be overprinted by subsequent population movements.

However, perhaps the ground should be cleared before developing a more positive argument by saying that;

- Evidence for Semitic influence is non-existent
- Evidence that the Khoe migrated from 'elsewhere' is entirely lacking
- Evidence that the Bantu herders of Southern Angola migrated with their present culture from NE Africa is absent
- There is no proven genetic connection between Khoisan languages and Afroasiatic or any other group

Mitchell (2002: chap 9) provides a very judicious account of the archaeological context of Khoe pastoralism but reaches no firm conclusions about its origins. Contra the Hamitic model, a more 'indigenist' tradition exists in the archaeological literature. John Kinahan (1991) who has probably contributed more than any other researcher to the archaeology of pastoralism in Namibia, states in his hypothesis 1, 'Nomadic pastoralism arose out of the indigenous Central Namib hunting economy when a fundamental ideological change permitted the accumulation of property in domestic livestock'. It could be argued that this is actually circular; once you start building up herds you inevitably undergo a 'fundamental ideological change'. Kinahan does not address the question of the source of specific livestock breeds nor the mechanism of their transfer to the Khoe.

This paper will argue that the explanation for some continuities of pastoral culture between NE Africa and the Khoe-speaking peoples is really quite simple; pastoralists speaking Cushitic languages once spread as far as south-central Africa, where they were in contact with the ancestors of present-day Khoe-speakers. This led to a transfer of both species of domestic animals and also some rather specific techniques of pastoral lifestyle including dairy-processing etc. Khoe pastoral culture is known mainly from records and their original sheep and cattle breeds have now become heavily crossbred. The explanation for related traits among adjacent Bantu peoples is likely to be a similar, subsequent transfer from the Khoe to the Bantu, although it is possible that there was also direct Cushitic contact with the Bantu in the same region. It is further likely that this was connected with the expansion of the Khoe peoples, explaining why their language subgroup is remarkably coherent within Khoisan, which is otherwise characterised by a high level of internal diversity, reflecting its considerable antiquity. The importance of the pastoral revolution in Southern Africa led to the borrowing of livestock terms into other branches of Khoisan.

# 2. Hypotheses as to the origin of Khoe livestock culture

It has long been observed that some groups of Khoe peoples of south-western Africa acquired pottery, sheep and cattle within quite a short time window (ca. 2000 BP) before attested contact with expanding Bantuspeakers. Links between the pastoral cultures of NE Africa and the culture of the Khoe and adjacent Bantuherding peoples are much less certain. The mechanism for these innovations has been much debated, as the introductory discussion shows. The pottery *might* be an independent invention, although given the geographical proximity of other pottery-makers, this is unlikely, but the livestock *must* have been transmitted by another group of livestock-keepers as sheep and cattle have no wild relatives in Southern Africa. As it turns out, some very specific techniques associated with pastoral production are also shared between SW and NE Africa, making cultural transmission the only reasonable assumption. Several hypotheses might account for this: pastoralists made their way to SW Africa and were assimilated, 'becoming' Khoe or Bantu; Khoisan speakers were once resident in modern-day Tanzania, as the evidence of Hadza and Sandawe appears to show, and the transfer took place there; or that both were once in contact in an area now dominated by Bantu-speakers, such as modern-day Zambia (Blench 2006). Güldemann (in press) takes the view that the ancestors of the Khoe were originally resident in East Africa and were not physically Khoisanoids. Indeed, as Smith (2005:163) notes, no Khoisan-type skeletal material has ever been found north of the Zambezi. In this model, as the ancestral Khoe migrated southwards and interacted with the click-speaking foragers, they came to resemble them more closely, both linguistically and culturally. Fauvelle-Aymar (2004) reviews some of the cultural connections between Khoe pastoralism and the pastoral practice elsewhere in Africa and points to similarities he sees with Nilo-Saharan, a view similar to that espoused by Ehret (1998). This paper<sup>2</sup> will present some of the evidence for contact, focussing on livestock breeds, material culture and linguistics and interpreting it in the light of modern archaeological evidence.

#### 3. Livestock

The Khoe were in possession of cattle, sheep, goats and dogs when first encountered by European observers (Boonzaier et al. 1996). Table 1 shows selected early dates for Southern African livestock in the archaeological record;

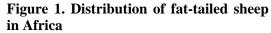
Table 1. Early dates for Southern African livestock									
Species	Location	Site	Calibrated date						
Sheep	Namibia	Falls rockshelter°	190 BC-383 AD						
Sheep	Botswana	Toteng	190 BC-AD 20						
Sheep	South Africa	Blombos	82 AD-215 AD						
Sheep	South Africa	Spoegrivier	165 BC-AD 13						
Ovicaprines	South Africa	Ma38	200–300 AD						
Cattle	Botswana	Toteng	190 BC-AD 20						
Cattle	Botswana	Lotshitshi	>200 AD						
Cattle	South Africa	Happy Rest	>300 AD						
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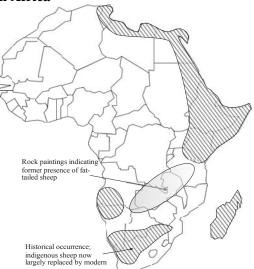
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Expanded from Sealy & Yates (1994), Henshilwood (1996), Bousman (1998); Smith (2000), Robbins et al. (2008)

It seems likely that the ovicaprines were sheep. Goats were herded by the Khoe when European observers first encountered them but their exact antiquity is uncertain. Badenhorst (2006) in a review of the evidence for goats in Southern Africa, comments on the difficulty of distinguishing goat and sheep bones, but notes a marked absence of early dated goat bones. The general assumption is that the Khoe acquired goats following contact with the expanding Bantu. A piece of contributory evidence for this is that while southern Bantu languages such as Xhosa have borrowed their words for 'sheep' and 'cattle' from Khoe, words for goat are not borrowed (§5.).

The breeds of sheep and cattle found among the Khoe provide clues to their origin. The sheep were all of the fat-tailed type, common in NE Africa and Arabia but otherwise entirely absent in West-Central Africa (Epstein 1971; Blench 1993). Figure 1 shows the distribution of fat-tailed sheep in the recent past; they have practically disappeared in recent times in the





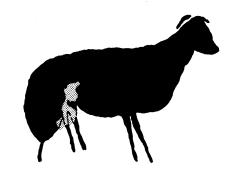
Southern African region, but plenty of evidence for their distribution is provided by existing documentation. Goodall (1946) first illustrated the fat-tailed sheep in Zimbabwean rock art (Figure 2) and they also occur in paintings in the western Cape (Manhire et al. 1986; Hollman 1993). The rock art of Southern Angola is now

<sup>&</sup>lt;sup>2</sup> Thanks to Tom Güldemann, Maarten Mous, Karim Sadr and Bonny Sands and for helpful comments on an earlier version. Wilhelm Möhlig kindly supplied me with further comparative data on livestock names

quite well-known (Gutierrez 1996, 2008) and there is no trace of sheep or indeed any livestock representations, providing reasonable evidence that the migrant early pastoralists did not colonise this area.

The cattle typical of expanding Bantu pastoralists were the Sanga, a cross between zebu and the humpless taurines previously found across Middle Africa. The Horn of Africa seems to have once had both humpless longhorns and shorthorns, to judge by rock paintings and surviving relic populations (Blench 1993). Gifford-Gonzalez (2000) points to the disease challenges to pastoral expansion and the taurines, as the longer-adapted race, would have found survival easier in the high-challenge environments of southern Africa. Although zeboids cannot always be reliably identified in archaeozoological assemblages as identification depends on the presence of the bifid vertebrae (or on finds of models of humped cattle) the relatively late dates for such indicators strongly associate their southward movement with the

Figure 2. Fat-tailed sheep represented in rock-art in Mazowe district, Zimbabwe

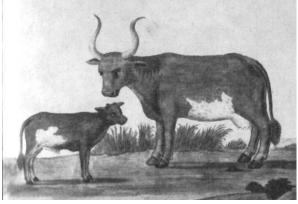


expanding Bantu (Magnavita 2006 esp. Figs. 1 & 2). To judge by early representations of the Khoekhoe, their cattle were all of the longhorn taurine kind (Figure 3 and Figs. 23, 28 in Boonzaier et al. 1996), and similar types survived among some pastoral groups in Southern Angola until recent times (Hauenstein 1980 Figs. 1-6). Indeed these are referred to as 'Hamitic longhorns' in older literature. Epstein (1971, I:482) retains the idea that the 'Africander' cattle are humped cattle, even though both his illustrations and indeed quoted early literature explicitly deny this.

# 4. Material culture

#### 4.1 Pottery

It has long been observed that pottery appears in the Southern African archaeological record prior to the arrival of the Bantu. A recent review concludes; 'Thin-walled, fibre tempered pottery appears [in Southern Africa] two to four centuries before the arrival of Iron Age agro-pastoralists who were uniformly associated with thick-walled ceramics' (Sadr & Sampson 2006). Thin-walled pottery, is often identified as Bambata ware in the literature since the early 1980s although this only designates one subtype Figure 3. Khoi cow depicted at the Cape, 1778



(Robbins et al 2008). Sadr (2008) provides a comprehensive review of the differentiation between the two pottery types. He says 'thin ware is found in small and large, open and sheltered sites, always associated with LSA stone tools, some combination of hunter-gatherer-forager-fisher-herder subsistence pattern and no evidence for the cultivation of domestic crops' (Sadr 2008:106). Surveys of the Kavango river on the northern fringe of the Kalahari 2005-2007 have provided evidence for a Ceramic Later Stone Age (CLSA) associated with microlithic tools, pottery and sheep dated to the 1st millennium BC (Kose & Richter 2007). Vogelsang & Wendt (2007) map the CLSA sites for Namibia, where they are abundant along the coastal strip but thinly scattered in the interior. Smith (2005, 2006) has argued for a connection between the thinwalled 'Pastoral Neolithic' ceramics of East Africa with those of Southern Africa (described in Robertshaw 1990: 198). In particular, he compares the spouted wares of Hyrax Hill and Ngamuriak in Kenya with the spouted pots at Bambata in Zimbabawe and those from the Western Cape (Smith 2005: 177). Indeed, he floats the suggestion that these are actually milking pots. This comparison remains controversial but would certainly fit with the argument of this paper. Given that the pottery is broadly contemporaneous with arrival of pastoralism, it would not be extravagant to assume that it was part of the same wave of introductions, although Sadr & Sampson (2006) argue for independent invention.

## 4.2 Mat tents

One distinctive feature of Nama culture is the *matjeshuis* or mat house, a house made from a semi-circular frame covered in layers of mats. These are illustrated in Boonzaier et al. (1996: Figs. 25, 26, 27, 77, 78). They are characteristic only of the Khoe and not their pastoralist neighbours, and have persisted, at least partly, as a cultural symbol among today's non-pastoral descendants. The 'mat house' is also typical of the pastoral peoples from Upper Egypt to NE Kenya, particularly the Cushitic-speakers such as the Rendille and Beja. Figure 4 shows a typical mat house among the Bisharin Beja, but similar constructions are found throughout NE Africa but not in intervening areas. Lest it be thought that such a construction is typical of pastoral peoples, it can be noted that no similar houses are found among nomads anywhere else in Africa (Prussin 1995) or indeed in Africa in general (e.g. Oliver 1971).

#### 4.3 Butter-making

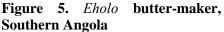
One of the most characteristic techniques of the Bantu-speaking pastoral cultures along the Southern Angola/Namibia borderland is the production of butter using a leather bag (or a gourd framed in leather) suspended from two poles and swung from side to side by a seated producer (Figure 5). This system is found among the cattle producers in the Horn of Africa, Ethiopia and all the way to Egypt, but not in the region between these two areas. It also does not occur among other African pastoralists such as the West African Fulbe or the Nilotic peoples of Southern Sudan. There seems to be no clear evidence for its possible distribution among Khoe speakers.

## **4.4 Further suggestions**

A variety of other items of material culture could be adduced, for example, the characteristic skin sandals manufactured by the Khoe (Boonzaier et al. 1996: Fig. 31) which are virtually identical to those in use by East African herders today. Similarly, children's dolls, with beads and characteristic leather skirts, used by the San and Zulu (Frobenius 1933: Taf. 107) are stylistically identical to those made by Nilotic herders in Northern Kenya. All of these items have broadly the same distribution; a zone between southern Angola and the Cape and NE Africa, pointing strongly to their having been brought from this region and the distribution made subsequently discontinuous by the southwards spread of the Bantu.

Figure 4. Bisharin mat-house, Red Sea Province, Sudan







## 5. Linguistic evidence

The classification of Khoisan has alternated between uniting all click languages in a single phylum and regarding the different branches as independent and unrelated. Bleek (1956) by implication, Greenberg (1963) and Ehret (1986) argued for a 'macro-Khoisan' including all Southern African Khoisan plus the two East African click languages, Hadza and Sandawe. Westphal (1962) took the opposite stance, that Kwadi, **#**Hoa and even the three recognised branches of Khoisan were independent of one another. This position is now considered extreme and in Güldemann & Vossen (2000) Kwadi was 'undetermined', Hadza and Sandawe 'isolates', and **#**Hoa an isolate within 'Non-Khoe'. The internal classification of Southern African Khoisan remains controversial, but it is usually agreed to form three major subgroups (Northern = Ju or Zhu, Central =Khoe and Southern = Tuu) plus disputed isolates. Few specialists would include Hadza within Khoisan today although evidence for a relation between Sandawe and Khoe is considered more likely (e.g. Elderkin 1986). The extinct Kwadi language in SW Angola has previously been considered an isolate, although Güldemann (2004) and Güldemann and Elderkin (in press) now argue it is related to Khoe. **#**Hoa has previously been considered an isolate but recent views relate it to Northern or Ju languages (e.g. Honken in press).

If the linguistic case for Khoisan/Cushitic contact were obvious, it would presumably have been pointed out by now. It is therefore likely that contact was either with groups that have now disappeared or that the nature of contact led to relatively few lexical transfers. Meinhof (1912:231-240) proposes common lexical items as part of his 'Hamitic' argument, although only a few of his comparative series include Nama. As Meinhof wanted to prove a genetic relationship between his Hamitic peoples much of his argument hangs on morphology, and as Greenberg (1963:69) rightly observes, his case is very weak. An alternative model has been presented by Ehret in several places, but most recently in Ehret (1998:323). According to this view, it was not Cushites but Eastern Sudanic-speakers (Eastern Sahelian in Ehret's terminology) who were responsible for the transmission of cattle culture. This seems highly unlikely, in part because the Maasai and other Nilotic incursions into East Africa are manifestly subsequent to the Cushitic substrates in East African Bantu languages; see Ehret & Nurse 1981). Ehret's proposed cognates are with his own Eastern Sudanic reconstructions rather than with actual forms and are generally markedly *ad hoc*.

Table 2 presents the most salient and widespread cattle terms in Khoisan. The common root for 'cow' may possibly be cognate with widespread terms in Cushitic that have a similar form.

Branch	Group	Language	Cow	Cow	Bull	Comparison
Northern		Ju/'Hoan	gúmí			cf. Proto-Agaw kəmi
		!Xun	gùmì			_
Central	Khoekoe	Nama	koma			PEC korma 'bull'
		Khoekhoegowab	goma-s		goo	
	Khoe	//Ani	góè			
		Khwe	góé		kx'áò	
	Naro	Naro	gòè		//òò	
	//Ana	/Ui	gúè			
	Shua	Cara		bé		
	Tshwa	Kua		dzú bé		
	Kwadi		goe-			
Southern		!Xóõ	gùmi			
		Xam	-		xoro	'oxen'

Table 2. Words for 'cattle' in Khoisan

Sources: Voßen (1997, 2007), Haacke & Eiseb (1999), Visser (2001), Kilian-Hatz (2003), König & Heine (2008), Güldemann (n.d.)

Güldemann & Elderkin (in press) make the interesting alternative suggestion that '\*goe 'cow' in both Kwadi and Kalahari Khoe could be a Bantu loan which underwent similar sound changes \*gombe > \*gobe > \*goe'. However, it is certainly the case that cattle reach southwestern Africa prior to the Bantu incursions in the region making the chronology of the borrowing somewhat difficult to understand. Westphal (1963) was the

first to observe that Southern African Bantu languages have replaced widespread inherited Bantu terms for 'cattle' and 'sheep' with loans from Central Khoisan.

Table 3 tabulates the \*guu root for 'sheep' in Khoisan and a sample of comparative Bantu forms. This term is apparently borrowed into the Southern Bantu languages, replacing other roots such as #-kooko and #méémé. Reflexes of #-gu occur in Bantu zones K, R and S.

	<u> </u>		In Knoisan and So	Attestation
Phylum	Branch	Group	Language	
Khoisan	Northern		Ju/h'oan	gùú
	Central	Proto-Khoe		*guu
		Khoekhoe	Khoekhoegowab	guu
		Khoe	//Ani, /Ui	gû
		Khoe	Khwe	gùu
		Naro	Naro	gùu
		//Ana	/Ui	gŭ
		Shua	Cara	gù
		Kwadi	Kwadi	guu-
	Southern		!Xóõ	kūu
		!Ui	N uu	gŧaru pl.  oaχu
Bantu			Kimbundu	nguli
			Xhosa	igusha <sup>3</sup>
			Venda	'nngú
			Setswana	nku

Table 3	. The	*guu	root for	'sheep' in Khoisan	and Southern Bantu
וות	n		0	A	· · · · · · · · · · · ·

Sources: Tanaka (1978), Voßen (1997, 2007), Haacke & Eiseb (1999), Visser (2001), Kilian-Hatz (2003), Sands et al. (2007)

The occurrence of this root in !Xóõ and Ju/h'oan must be treated as loans, since the time-depth of sheep is too shallow to account for genuine cognates. As Vossen (2007: Table 3) shows, Ju/h'oan appears to have many of the same livestock terms as Khoe. More puzzling is the case of Kwadi. Information on this language can almost certainly never be expanded so we depend on Westphal's manuscript notes. Both the 'cattle' and 'sheep' terms closely resemble those in Khoe, and yet other elements of the language are quite distinct, arguing for a long period of separation from central Khoe (Güldemann 2004). This is rather in contradiction with the known facts about dates for livestock in the archaeological record. There are two possibilities to explain this situation; either the livestock names are borrowed (which would explain their near-identity with Khoe) or the idiosyncratic restructuring of Khoe has taken place within a surprisingly short time. Maho (2000) has compiled the names for sheep in sources for now-extinct Tuu languages which demonstrate a wide variety of unrelated roots. This suggests rather strongly that sheep were unknown to speakers of proto-Tuu but that they developed names from a diversity of lexical sources as a result of seeing sheep. Westphal (1963:254) provides further evidence for the extension of this root in Bantu.

The most widespread Khoisan term for 'goat' is shown in Table 4, together related Bantu terms. The nature of the link with Bantu is still obscure. The evidence from Bantu (documented by Guthrie but excluded from BLR3) is for a widespread root, \*-mpene, scattered from Eastern to Southern Africa.

<sup>&</sup>lt;sup>3</sup> Westphal (1963:254) notes that Xhosa adopted the name with the feminine Khoe suffix -s attached, confirming the direction of borrowing.

Group	Language	Attestation
Ju	Ju/h'oan	párí
Khoekhoe	Khoekhoegowab	piri
	Khwe	míní
	Naro, G//ana, G/wi	piri
Tuu	Western N uu	piri 'ram'
	Eastern N uu	miri
	Xam	puli
	Setswana	p <sup>h</sup> elau 'ram'
	Rundi	im-pene
	Hima	em-pene
	Gogo	hmene
	Luguru	im-hene
	Bena	imene
	Nyakyusa	em-bene
	Yeyi	imphèné
	Ju Khoekhoe	Ju Ju/h'oan Khoekhoe Khoekhoegowab Khwe Naro, G//ana, G/wi Tuu Western N uu Eastern N uu  Xam Setswana Rundi Hima Gogo Luguru Bena Nyakyusa

Table 4. The –mpene root for goat terms in Khoisan and Bant	u
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Haacke & Eiseb (1999), Visser (2001), Kilian-Hatz (2003)

The Khoisan terms are probably cognate with the Bantu root, although the vowel-raising  $e \rightarrow i$  is hard to explain. The Khwe form, *mini*, also suggests a distinct borrowing from a word with initial mp-. There are, however, also #puli forms found in Tuu languages, which resemble more closely the widespread Bantu root \*-bodi and which probably are direct borrowings. The whole complex suggests interference and re-analysis of two distinct roots.

Another shared root is \*-kumbo, found in both !Xun and neighbouring Bantu languages (Table 5).

Table 5. The	-guinoo root r Group	or goat terms in Northe Language	Attestation
Khoisan	-	!Xun	gkhúmbō
		Kwadi	khobo
Bantu		Kimbundu	hombo
		Manyo	shikômbo
		Herero	ongómbó
		Ndo	oshikombo
Sources: Guth	rie (1967-1971	). König & Heine (2008).	Möhlig (p c )

Table 5. The symbol root for goat tarms in Northarn Khoisan and Bantu

Sources: Guthrie (1967-1971), König & Heine (2008), Möhlig (p.c.)

Given its shallow extension, the Khoisan term is most likely borrowed from the neighbouring Bantu languages.

Terms for 'dog' in Khoe have no clear source, although the dog presumably appeared at roughly the same era. Existing terms point to two distinct roots, *2ari* and *2aba*, but no etymologies have been proposed for these (Voßen 1997: 453). Southern African Bantu languages have replaced the usual Bantu root #bóà for 'dog', but their terms do not resemble Khoe. Westphal (1963:254) also points out that the term for 'sour milk' (i.e. yoghurt) appears to be borrowed from Khoe languages into Southern Bantu.

Other livestock terms reconstructed to different levels of Khoe by Vossen (2007:180) include \*dubi 'to milk', \*!hada or \*kada 'cattle-kraal'<sup>4</sup>, \*n//gubu 'to churn', \*// $\tilde{a}\tilde{u}$  'to fence in', \*gude 'to herd', \*ts'ao or \*/x'ao 'to milk into container', \* $tsx\hat{o}m$  'to milk into mouth'. Many of these also have cognates in Ju/h'oan. The absence of any obvious etymology for these words is quite perplexing given that they are rather specific to herding and thus cannot be of any great antiquity. It certainly suggests that the original pastoral communities that adopted or developed these technologies were quite distinct from any surviving in the present. It is the case that the four surviving Southern Cushitic languages are all very closely related and

<sup>&</sup>lt;sup>4</sup> Though see Sandawe *hado*.

have undergone a 'lexical revolution'. It is likely that there were other pastoral Cushitic languages, perhaps more related to the poorly documented Asax and Qwadza, which contributed to the pastoral culture of SW Africa.

# 6. Genetic evidence

Attempts to use genetics to unravel the history of populations such as the Hadza go back to the era of bloodsampling, but results have been inconclusive or contradictory. Recent work, sampling Hadza, Sandawe and Southern Africa Khoisan, concludes that the divergence times between Eastern African click speakers and those in the south is very ancient (>35,000 years) and that even between Hadza and Khoisan, divergence times could be as much as 15,000 years (Tishkoff et al. 2007). Chen et al. (2000) explored the degree of differentiation between !Xun and Khoe and concluded both that Khoisan populations exhibit ancient lineages consistent with present dates for the evolution of modern humans and that Khoe populations have much more in common genetically with other African populations than !Xun. Indeed, Knight et al. (2003) argue that clicks must be traced back to the original language of mankind. Güldemann & Stoneking (2008) rightly argue that this is not a valid hypothesis and that contact phenomena and more recent language evolution can just as easily explain the present observable state of affairs. More directly germane to the hypothesis of this paper is recent work on pastoral populations of Southwest Angola by Coelho et al. (2008). They looked at lactase persistence genes and concluded that there one distinctive mutation, -14010, was brought directly from the East to Namibe by people speaking Afro-Asiatic or Nilo-Saharan languages. Nilo-Saharan can almost certainly be excluded, but the connection with the Horn of Africa is intriguing, if far from proven.

#### 7. Synthesis and chronological scenario

Khoe-speakers of south-western Africa and their northern Bantu pastoralist neighbours share features of their culture with the pastoral peoples of NE Africa. Archaeology has shown that pottery, sheep and cattle appear in the archaeological record prior to the putative expansion of the Bantu into this region. Numerous wayward explanations were advanced for this in the earlier literature, both connecting the 'Hottentots' with the spurious cultural category of Hamites and proposing the Khoe were the offspring of miscegenation with seagoing Semites. However, it cannot be an 'indigenous' development; the breeds of cattle and sheep are only otherwise found in Northeast Africa.

While some of the more bizarre proposals can be summarily dismissed, the broader problem remains; how was pastoral culture transmitted to SW Africa? The paper proposes that this was a consequence of the interaction of Khoe speakers and Cushitic pastoralists in a location intermediate between their present area of distribution. To simplify the model, Figure 6 depicts this in Central Zambia, a region now entirely occupied by Bantu speakers. Cushitic pastoralists would formerly have spread down through Central Africa, at least as far as Zambia/Northern Zimbabwe, probably intermixed with hunter-gatherers. However, given the likely ethnolinguistic complexity of both the foragers and pastoralists, a more complex set of interactions is probable. Certainly the pattern of innovation, borrowing and re-interpretation of livestock terms set out in §5 points to this complexity. However, it is important to state that the pastoral communities that brought livestock to the region would have herded fat-tailed sheep and longhorn taurine cattle and known how to make pottery. They would not have been iron-users but would have hunted using microlithic points and be associated with the thin-walled ware of the CLSA, dated to earlier than 2000 BP.

About 2000 years ago these two groups encountered one another and the pottery skills and livestock breeds were passed between them along with associated material culture such as mat huts, sandals and buttermaking equipment. A diverse pastoral culture would have existed in this intermediate zone, observed by San hunter-gatherers who both traded with the herders and painted their animals. This explains why the typical Khoe terms for domestic animals also occur in Northern (Ju) and Southern (Tu) languages. Subsequently, the Bantu southwards expansion and from Tanzania to Zimbabwe assimilated or incorporated the Cushitic pastoral culture. The distinctive animal breeds became heavily crossbred and the languages disappeared or survived only as substrates. Figure 6 presents a hypothetical map illustrating this overlap and the possible zones of interaction;

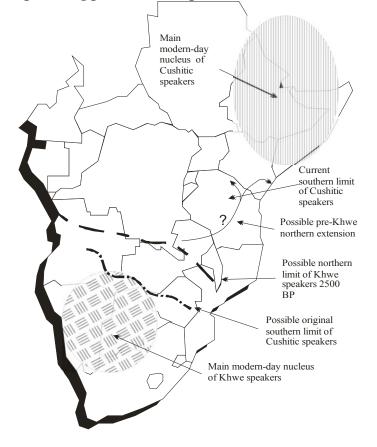


Figure 6. Map showing potential overlaps between Cushitic and Khoe speakers

The distinctive terminology of livestock and its production in Khoe has few likely Cushitic etymons despite the very evident 'Cushitic' features of pastoral systems in SW Africa. This argues that there was a 'lost' branch of the Cushitic family whose speakers encountered the early Khoe. The diffusion of animal names to Kwadi and the languages of both the Northern and Southern branches with little or no phonological alteration suggests this was a relatively recent process.

As the Bantu encountered the mixed Khoe-Cushites in western Zambia/Angola, different processes of cultural assimilation occurred for reasons as yet unclear. Language shift to Bantu took place, but much more of the NE African pastoral culture was retained, including features lost among the Khoe, at least by the time of the first European incursions. Hence some features of the culture of the Namibia/Angola pastoralists (which survives relatively intact) can be more obviously identified with the Cushites in the Horn of Africa.

Significant borrowing of livestock terms into Southern African Bantu languages from Khoe suggests that the only livestock of importance in the earliest phase of Bantu expansion in this region was the goat. The predecessors of the Zulu and others must have encountered pastoral Khoe and borrowed intensively from their culture including skills such as yoghurt production. Only later would the zeboid cattle, now predominant in herds throughout the region, have replaced the longhorn taurines originally herded by the Khoe.

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