Language, linguistics and archaeology; their integration in the study of African prehistory

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Roger Blench
Kay Williamson Educational Foundation
8, Guest Road
Cambridge CB1 2AL
United Kingdom
Voice/ Fax. 0044-(0)1223-560687
Mobile worldwide (00-44)-(0)7967-696804
E-mail R.Blench@odi.org.uk
http://www.rogerblench.info/RBOP.htm

1. Introduction

Much has been made of the 'new synthesis' in recent years, the integration of archaeology, linguistics and genetics (Blench 2004, 2006; Sanchez-Mazas et al. 2008). A key assumption of this type of transdisciplinary enterprise is congruence, that patterns of language distribution can in principle match results from archaeology and genetics, since they directly reflect human activities. The logic of this is transparent congruence in the present; culture and language clearly reflect one another and any divergences can be explained by well-established sociolinguistic processes¹.

Africa constitutes a mosaic of some 2000 languages, falling into four major phyla and a small number of isolates. The density of languages and their patterns call for interpretation and explanation in terms of prehistory. Linguists would like to understand and model the processes responsible for the synchronic situation and typically turn to archaeology and more recently, genetics. Archaeologists have been more circumspect, with a great many ignoring the results of linguistic research or actively opposing any conjunction of the disciplines (e.g. Eggert et al. 2006). Where interest has been shown, for example the Bantu expansion, it can be highly selective, bypassing many other significant problems, such as the homeland and expansion of the Mande peoples. This failure to explore integrated prehistory does not necessarily operate elsewhere the world, with the Indo-European and Oceanic regions more encouraging examples of synthesis and co-operation.

Despite this, the study of African languages should have much to teach us about the prehistory of the continent. Languages are spoken by peoples, and human migration is as much a fact of the past as it is visible in the present. Not only does the pattern of languages testify to these movements on a broad scale, but embedded in the lexicon of individual languages is a complex texture of reconstructible terms relating to subsistence and loanwords can provide rich evidence for micro-level case histories. This chapter² will outline the major methodological issues around relating language to other disciplines in African prehistory and sketch some recent case histories that illustrate these procedures.

2. The general pattern

African languages are conventionally divided into four continental phyla, Niger-Congo, Nilo-Saharan, Afroasiatic, Khoesan as well as Austronesian on Madagascar (Greenberg 1963; Blench 2006). Two of these phyla have significant numbers of speakers outside Africa; Afroasiatic, because of the expansion of Arabic northwards and eastwards and Austronesian, which is mainly centred on SE Asia and Oceania. Using the estimates from Ethnologue (Lewis 2009), some 2000 African languages are spoken today. Language numbers are distributed very unevenly across the phyla (Table 1);

¹ English is the most intensively studied language in the world, and recent explorations of its varieties can account for both variation and homologies of the cultures of its speakers.

² The author has published a book-length study of the integration of archaeology and linguistics in Africa (Blench 2006). This chapter avoids summarising that text and focuses on issues and case studies the have come to the fore since its submission to press. I am not part of any institution; my thanks are thus to individuals who have worked with me, read my papers, given me access to unpublished data and generally provided encouragement. These are listed in my 2006 volume so I shall not repeat them here, but I would like to thank the Kay Williamson Educational Foundation for support to my research since 2006.

Table 1. Numbers of African languages by phylum

Tuble 1. Mullibers of Milleum languages by phytum			
Phylum	Number	Source	
Niger-Congo	1514	Lewis (2009)	
Nilo-Saharan	80	Bender (1996a)	
Afroasiatic	341	Lewis (2009)*	
Khoesan	70	Güldemann & Vossen (2000)	
Austronesian	1 (in Africa)	Lewis (2009)	
Unclassified	7	Author	

^{*}Arrived at by deducting thirty-four Arabic dialects from total

In the case of Khoesan, many languages have become extinct in historic times³ and only inadequately transcribed data remain. Civil insecurity in Angola has meant that it is unknown whether important languages like the unclassified Kwadi are still spoken. New Niger-Congo languages continue to be reported every year, although none have radically challenged existing classifications.

This division into phyla owes much to the work of Joseph Greenberg (1963), although there have been many changes and additions since his proposals were first set out. The coherence of the first three phyla is generally accepted among scholars although single, authoritative sources that provide the type of proof usual in Indo-Europeanist or Austronesianist circles are lacking. Until recently, most Khoesan scholars were sceptical of the unity of Khoesan, partly because of the inadequate documentation of so many languages and partly because of the wayward transcription of clicks (e.g. Westphal 1962, 1963; Köhler 1981). However, following new research in the 1980s and a clearer perception of how sound correspondences work with clicks most Khoesanists now consider that Southern African Khoesan does form a group (Traill 1986; Voßen 1997). Two languages, Kwadi and Eastern ‡Hõã, have resisted integration in the North/Central/South scheme now widely adopted. In both cases, poor documentation makes any final judgment provisional. Hadza and Sandawe, both spoken in Tanzania, are often assigned to Khoesan because of the presence of clicks, but evidence for joining them to Southern African Khoesan is sorely lacking.

Apart from the well-known and largely established phyla, a few African languages defy easy classification. Actually, it is surprising that their number should be so small. In other continents with high language diversity, notably the New World, Papua, Australia and Siberia, isolates are common. On the assumption that the origin of modern humans lies in Africa, there should be many more. The synchronic pattern of African language phyla must therefore reflect large-scale population movements, change and assimilation in a relatively recent period. Table 2 lists the languages that have remained unclassified;

Table 2. African language isolates

Tuble 24 Till Team language Isolates				
Language Name	Location	Source	Comments	
Jalaa (=Cuŋ Tuum)	Nigeria	Kleinwillinghöfer (2001)	Probably extinct	
Bangi Me	Mali	Blench (2007a), Hantgan (p.c.)		
Laal	Chad	Boyeldieu (1977)		
Kujarge	Sudan	Doornbos & Bender (1983); Blench	Perhaps Chadic or	
		(in press a)	Cushitic	
Ongota	Ethiopia	Fleming (2006), Sava & Tosco Perhaps Afroasiatic		
		(2000)		
Oropom	Uganda	Wilson (1970) Existence unconfirmed		
Hadza	Tanzania	Miller (p.c.)		
Sandawe	Tanzania	Sands (1998) Probably Khoesan		
Kwadi	Angola	Westphal (1963), Güldemann	Perhaps Khoesan	
		(2008)		

With the exception of Bangi Me, these peoples are either foragers or were so until recently, which suggests that they were marginalised communities, relics of a once more widespread interlocking network of hunter-gatherers. The broad pattern is thus a small number of phyla expanding relatively recently and assimilating a complex mosaic of forager peoples speaking highly diverse languages.

³ Although premature obituaries are also announced. The Southern Khoesan language !Nuu, thought extinct, was rediscovered in 2007 and is now the subject of a salvage linguistics project.

3. Methodologies

3.1 Classification

The classification of African language phyla has a wayward history, in part because of the simultaneous use of very different paradigms. Four main strategies can be distinguished (Table 3);

Table 3. Types of classification applied to African language phyla

Category	Sense
Genetic	Languages that go back to a common ancestor
Typological	Languages that share common features (phonological, morphological, etc.)
	but which have no necessary genetic connection
Areal	Languages that are geographically proximate and may share features but
	which do not constitute evidence for genetic affiliation
Referential	Systems that assign a classification purely for reference purposes

It may seem that these would be quite distinct, but in fact they tend to slide into one another, where an individual author is arguing for genetic affiliation. For example, Niger-Congo is often said to be characterised by the presence of nominal affixes marking noun-classes and Greenberg (1963) used this as a major feature in assigning the Kordofanian languages to Niger-Congo. But alternating nominal affixes also occur in scattered Nilo-Saharan languages (Daju, Koman, Kadu); thus a feature that was considered to be an indicator of genetic affiliation turns out to be purely typological. When Doke (1945) and Guthrie (1948) first developed their classification of Bantu, it was an explicitly referential, a numerical and geographical scheme intended to help bring order to a large number of languages whose relationships were then unknown. Later, as Herbert & Huffman (1993:58) point out, Guthrie (1967-71) began to refer to his numbered zones as if they were genetic, as if the historical relations between the alphanumeric groups had somehow been demonstrated. The Nuba Hills in Sudan represent are a clear example of areal features confounding perceptions of genetic affiliation. Although the languages of the Nuba Hills include both Niger-Congo and several quite different groups of Nilo-Saharan, a common lifestyle and extensive intermarriage and cultural interaction has created a zone with many areal features in common. There is thus a tendency to refer to 'Nuba Hills Languages' as if they represented a genetic unity.

3.2 Lexicostatistics and glottochronology

Lexicostatistics is the counting of cognate words in a standardised list and assigning a numerical value to their relationship. Despite some nineteenth century precursors, it was not until Swadesh (1952) that this idea made a significant impact on the scholarly community. Lexicostatistics initially proved attractive to Africanist researchers as a way of ordering a large mass of languages of uncertain relationship and one early use of it in Africa was to classify the Gur languages (Swadesh et al. 1966). Related to lexicostatistics is glottochronology, the hypothesis that languages change at a standard rate over time, and by applying an algorithm to lexicostatistical results, the approximate ages of language families can estimated. Armstrong (1964) applied glottochronological methods to estimate the time-depth of the Kwa languages of Southern Nigeria. Although there is a long list of sceptical evaluations of lexicostatistics, its mathematical presentation is very alluring and there have been many attempts to modernise it (e.g. Lamb & Mitchell 1991; Ehret 2002). Its most recent incarnation is the Automated Similarity Judgment Programme (AJSP) proposed by the Max Planck which eliminates human cognacy judgments (Miller et al. 2009). Although its output is somewhat idiosyncratic (for example, linking Dogon with the Caddoan family of North America) it is seen by advocates as a major advance in modelling language relationships. It is safe to say that such methods will continue to be promoted by their advocates as they have virtually no empirical content, but will be ignored by researchers with a field-based approach.

3.3 Proto-forms and the comparative method

Much of the interplay between linguistics and archaeology in Africa depends upon the assignation of a genetic affiliation to the languages under consideration. Where we place individual languages in the global mosaic of language phyla is essential to developing an archaeological interpretation. The key strategy in determining genetic affiliation is the identification of shared innovations. When any new speech-form develops, it is marked by innovation. Changes occur in the speech of individuals and may spread to the whole community over time. These changes can be extended by analogy to other sounds, lexemes or clauses,

according to rules internal to the language. Is the mutual interplay of historical linguistics and archaeology and in particular the identification of reconstructible lexical items of significance for the prehistory of linguistic groups that can potentially be linked to archaeology. The methodology of reconstruction is usually known as the comparative method, and has a venerable, if often controversial, history (Durie & Ross 1996).

Shared innovations are a set or bundle of changes that have occurred at the level of a proto-language, are reflected in the daughter languages and which allow linguists to assign a particular language to a genetic grouping. However, proto-forms can also encode cultural information that is directly relevant to the reconstruction of prehistory. For example, terms livestock species such as 'goat' or crops such as 'Bambara groundnut' can be reconstructed to proto-Bantu, and it is thus a reasonable assumption that the Bantu began their journey across the equatorial forest with these species as part of their cultural repertoire.

3.4 Tracking loanwords: interpretations of contact and borrowing

A distinctive feature of the history of African language classification has been a widespread unwillingness to analyse commonalties between languages as the result of contact and borrowing, except in the case of transparent and recent loanwords. Historical linguists seek reconstructions that can be assigned to proto-languages. Shared words common to a group of languages may indicate relatedness, but may also point to the spread of a new technology or social change. How we interpret a common form exists in a feedback relationship with our historical understanding of its cultural role and chronology. We assume that people have always eaten and drunk, slept and died, and that where we find a widespread root referring to these concepts it can be used in historical reconstruction. By contrast, words for 'tobacco' in Africa are all resemble one another, in part because they were adopted from colonial languages together with the introduction of tobacco from the New World (Pasch 1980). The tracking of loanwords can provide much information that is unavailable through other means. In East Africa, an ancient maritime culture has been responsible for a series of transformations of indigenous societies from the early period of the Austronesian voyages to the later incursions of the Portuguese. Their subsequent replacement by colonial nations has led to these eras being airbrushed out of the narrative. But loanwords can reveal periods of intense interaction long after they have passed beyond oral tradition (Kiraithe & Baden 1976; Walsh & Blench in review). The nautical vocabulary of the Swahili shows clear evidence of borrowing from both Old Malay and Portuguese (Table 4);

Table 4. Sources of Swahili nautical vocabulary

Swahili	Gloss	Language	Source word	Gloss
sambo	'ship' (archaic)	Old Malay	sambaw	seagoing vessel
sap ^h a	raft	Javanese	sampan	harbour boat; canoe
taliki	rope to lift cargo	Malay	tarik ~ tarek	pull, haul, drag
utari	ship's cable	Malay	tali	rope, cord, line
batela	small boat	Portuguese	batel	
bereu	tar	Portuguese	breu	
gana	tiller	Portuguese	cana	
bunta	pontoon	Portuguese	bunta	
barakinya	schooner	Portuguese	barraquinha	
furutile	dock	Portuguese	flotilha	

Source: Walsh & Blench (in review), Kiraithe & Baden (1976)

Similarly, linguistics can be used to track the spread of introduced crops, including vegetative species that leave no archaeological trace (Blench 2009a; Blench et al 1997; Bahuchet & Philippson 1998).

3.5 Pidgins, creoles and lingua francas

As with language shift, trajectories of language change observable in the present clearly also occurred in the past, although they muddy the waters of conventional language diversification models. One important such process is pidginisation and the related creolisation (Thomason and Kaufman 1988). Earlier descriptions often characterise them as highly 'simplified', but simplification is a culturally loaded term. A language may be simplified from the point of view of a speaker of a particular language, partly because they do not recognise complexity in an area that is underdeveloped in their own language. Creoles and pidgins have grown up in Africa in a variety of situations, most notably for trade, as a consequence of slavery or in armies (as the Arabic pidgin kiNubi spoken in Uganda (Heine 1982)) and for communication between

employers and employees (as in the mine-speech Fanagalo in South Africa) (Mesthrie 1989). The characteristic of creoles is that they mix vocabulary, phonology and syntax from their source languages. It has more than once been suggested that the Ancient Egyptian language was a creole (e.g. Lambdin 1961); certainly Ancient Egypt had that character socially. At this point the underlying prejudices of archaeologists and linguists kick in. Trigger et al. (1983) are manifestly relieved that Ancient Egyptian can be characterised as Afroasiatic and thus aligned with the prestigious Semitic languages. Takács (1999, 2001) by virtue of not seriously considering non-Afroasiatic sub-Saharan African etymologies is able to reinforce embedded stereotypes of Egyptian civilisation.

4. How far do linguists agree and what results should archaeologists use?

A problem for archaeologists attempting to make sense of linguistic hypotheses is that linguists by no means all agree. Although there is a general consensus on the four established phyla, beyond that their internal classification and membership remain much disputed. For example, the classifications of the prolific Christopher Ehret are disputed by almost all other researchers in the field. In the case of Nilo-Saharan, Ehret (2001) reconstructs some 1700+ roots for proto-Nilo-Saharan, whereas Bender (1996) could only find 100+ (Blench 2002). Ehret includes names for cultivated plants while Bender finds none; clearly the trust placed in an individual author reflects the reader's presuppositions about the antiquity of a language family. Similarly at odds are the reconstructions of Afroasiatic by Ehret (1995) and Orel & Stolbova (1995). Afroasiatic is a case where there is a fundamental dispute between those who believe it is associated with the Natufian the Near East and those who canvass Ethiopia and the Horn of Africa. A Near Eastern origin is typically supported by Semiticists (such as Militarev 2003) and archaeologists who have been swayed by them (e.g. Bellwood 2005). Linguistically, it is difficult to see any other solution but Ethiopia, which is home to the greatest diversity of Afroasiatic.

The issue here is that all types of large-scale phylum level reconstruction are highly preliminary; the type of scholarly honing characteristic of Indo-European or Austronesian has yet to be undertaken. The datasets are vast and constantly under revision. The archaeologist is probably better off regarding proposals on this scale as tools for thinking, than as some finished product that can be picked up and interpreted.

5. Genetics, material culture and other parallel disciplines

Since the 1990s there has been a substantial growth in publications on the human genetics of Africa and an overview of African mtDNA (Salas *et al.* 2002) observes 'Africa presents the most complex genetic picture of any continent, with a time depth for mitochondrial DNA (mtDNA) lineages >100,000 years.' Tishkoff et al. (2009) say 'We also observed strong associations between genetic and linguistic diversity, reflecting the concomitant spread of languages, genes, and often culture'. This type of congruence sounds immediately attractive, as does the scholarly weight of the authors and the prestige of the journal, until you realise that the entire continent is represented by just 121 sampling points and that these are extremely unevenly distributed (Tishkoff et al. (2009) Supporting Material Map A) and that references to publications on African genetics and linguistics that do not support the argument of the paper are systematically omitted.

Despite this optimism, convincing large-scale correlations with archaeology and linguistics are probably still far in the future. On a smaller scale, the potential for correlations between the distribution of the Bantu languages, archaeology and genetics would seem to be high. Underhill *et al.* (2001) have suggested the haplotypes defined by M2/PN1/M180 polymorphisms as markers of that expansion. They present evidence of strong founder effects in that sub-clade (40% of the members share the M191 mutation). This was independently supported by results from Y-STR haplotypes in a South African Bantu population (Thomas *et al.* 2000), where the proportion of YAP⁺/sY81G lineages was 80±5%, of which more than half shared the same 6 Y-STR based haplotype or its one-step neighbours. Pereira *et al.* (2001) have tracked the mtDNA of Mozambican populations both to the Bantu heartland and its outliers in the diaspora, while Beleza *et al.* (2005) establish possible patterns of the Bantu 'western stream' focusing on a movement down the coast to Angola. Mateu *et al.* (1997) look at the island populations of Bioko and São Tome and show that the Bubi of Bioko are the result of the ancient migration of a small founder population with virtually no admixture, whereas the populations of São Tome are more mixed and result from multiple recent movements (the São Tomeans were transported by the Portuguese in the 17th century and have no language of their own).

Apart from genetics, greater knowledge of African biogeography can increasingly be linked to the expansion of language families. Biogeography generates the most productive hypotheses in constrained environments such as islands or deserts. The study of the faunal and vegetational history of Madagascar now suggests that settlers reached the island prior to the spread of the current inhabitants, the Austronesian-

speaking Malagasy and that the language of the earliest foragers exists now only as a substrate in the current speech (Blench 2007b). On a larger scale, much of the zoogeography of the Sahara reflects its palaeoclimatology at the beginning of the Holocene (Drake, Blench et al. in review). A series of lakes and rivers allowed numerous sub-Saharan species with aquatic specialisations to move northwards into what are currently hyper-arid regions. This abundance of resources attracted hunter-fishers who spread west and north from the Ethio-Sudan borderlands. The current distribution of Nilo-Saharan languages argues strongly that they can be correlated with this expansion, also marked by archaeological finds of bone harpoons, thought to be used for spearing hippos and crocodiles (which, not coincidentally, can be reconstructed in Nilo-Saharan, e.g. Table 5).

Table 5. Cognate words for 'hippo' in Nilo-Saharan languages Subgroup Attestation **Family** Language Gumuz Kokit bana Maba Aiki bùngùr Central Sudanic Nar àbà Sara Songhay Kaado bànà Songhay Koyra Chiini bana

6. Case histories

6.1 The Bantu expansion

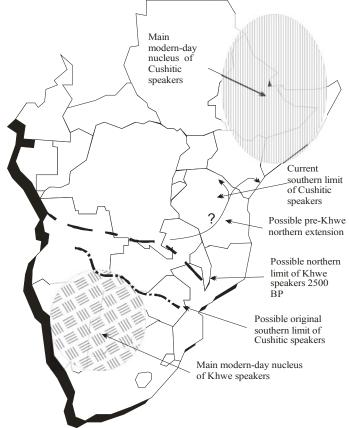
The Bantu languages, despite their broad geographical spread, represent a recent expansion. Their relationship to one another is well attested and they share a large number of phonological, morphological and lexical isoglosses. It is usually accepted that the Bantu expansion contained a major element of migration, 'demic diffusion' in archaeological language. Its earliest phases were apparently situated within sparsely inhabited tropical rain forest. The widely accepted model has the Bantu splitting into at least two groups, one heading east along the northern edge of the rainforest and the other staying in the west and moving south and southeast through the rainforest. The relatively recent date of these events has made it possible to link particular groupings with pottery styles in a manner that is so far not possible elsewhere in Africa (Phillipson 1977). There seems to be convincing evidence for this, both in Eastern and Southern Africa and in Gabon. The evidence for Gabon is most striking as it shows a 'Neolithic' population appearing quite suddenly in the archaeological record at the Epona II site ca. 3500 BP (Clist 2005). These incoming populations have lifeways significantly different from the resident foraging populations and bring pottery and village settlements. Eggert (1992), takes a critical approach to simplistic correspondences between pottery styles and Bantu subclassification. Nonetheless it is evident that the different ceramic traditions, notably the *Pikunda-Munda*, on the Sangha and neighbouring rivers in Congo-Brazzaville and which date to ca. 2200 BP represent an 'aquatic settlement' of this inhospitable region. Wotzka's (1995) detailed study of archaeological pottery types in Central Africa led him to link the intrusion of the Imbonga style of ceramic on the main waterways of the DRC, dated 400-100 BC, to the incoming Bantu populations. East African region Urewe ware is essentially similar to Kwale ware and first occurs in sites near the coast as early as 200 AD. There is every reason to link this with the expansion of the Bantu east from the Great Lakes region to the coast (Forslund 2003). In other words, the geographical dispersal of the Bantu languages does correspond to a physical movement of population.

6.2 Cushites and Khoisan

One of the puzzles of African prehistory is the timing and circumstances of the spread of livestock production to Southern Africa (Sadr & Fauvelle-Aymar 2008). It has long been observed that both livestock and pottery appear 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). Despite being archetypical foragers, Khoesan languages incorporate deep-level etymons for livestock-related activities (Vossen 2007).

Map 1. Map showing potential overlaps between Cushitic and Khoe speakers

Pastoral systems in SW Africa show evident cultural features similar to those of Cushitic herders in NE Africa (Blench in press b). This argues that there was a 'lost' branch of the Cushitic family whose speakers encountered the early Khoe and transferred basic herding skills as well as the animals (fat-tailed sheep and longhorn taurine cattle). 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. The diffusion of animal names to Kwadi and the languages of both the Northern and Southern branches with little or no phonological alteration suggests they can reasonably be associated with the first archaeological records of livestock and pottery in the region. Map 1 depicts this interaction somewhere in present-day Zambia, a region now entirely occupied by Bantu speakers. Cushitic languages have almost entirely disappeared, overwhelmed by the expansion of Neolithic farmers in a later period.



Source: Blench (in press b)

6.3 Austronesians in East Africa

Austronesian is not usually regarded as an African language phylum, but it is spoken throughout Madagascar and on the Comoros and there is every reason to think it was once spoken on the East African coast. The East African coast was almost certainly visited by Austronesian mariners from an early period, although exactly when is in doubt. Archaeology in Madagascar has so far uncovered no site earlier than the 5th century AD, which seems remarkably late in view of a remarkable accumulation of evidence for direct Austronesian contacts with the East African coast prior to 0 AD (Blench in press c). This includes textual sources, maritime technology, plant and animal transfers, disease and other aspects of material culture. Pliny, in his geography, refers to the 'men who come across the great ocean on rafts [rati]' in contrast to the coastal traders. If we accept Pliny's account, then these were direct voyages by outrigger that brought spices and took back Graeco-Roman manufactures.

The outlines of the Austronesian family were first recognised in the early eighteenth century by the Dutch scholar Adriaan van Reeland, who compared Malay, Malagasy and Polynesian (Relandus 1708). Malagasy is Austronesian and is generally considered to belong genetically to the Barito languages, today spoken in SE Kalimantan (Dahl 1951). Earlier models of the peopling of Madagascar relied on a simple migration from insular SE Asia. However, it has clearly undergone considerable influence from Malay, whence it draws many nautical and other technical terms (Adelaar 1996). A combination of archaeology and a better knowledge of East African Bantu languages has allowed us to construct a more complex three-way model that includes multiple interactions between various migrant and resident populations at different periods as well layers of loanwords from diverse regions (Beaujard 2003; Walsh 2007; Blench 2007, 2009, in press c). There are numerous loans from the Bantu languages of the East African coast (Blench 2009b). Table 6 shows probable borrowings into Malagasy from the Sabaki languages, of which Swahili is the best-known representative, showing that the Austronesian mariners must have been in direct contact with coastal populations (Walsh & Blench in review);

Table 6.	Malagasy mamma	l names of Sabaki origin

Malagasy	English	Scientific name	Etymology
ampongy	Eastern avahi	Avahi laniger	cf. Swahili (Unguja) k ^h ima punju 'Zanzibar red colobus, <i>Colobus kirkii</i> '; Nyakyusa kipunji 'Highland mangabey, <i>Rungwecebus kipunji</i> '
ankomba, komba	Crowned lemur (& related lemur spp.)	Eulemur coronatus	cf. Swahili (Unguja) kⁿomba 'galago spp.'< Proto- Sabaki * nkomba 'galago'
antsanga	Bushpig	Potamochoerus larvatus	cf. Swahili (Unguja) kitanga 'solitary male bushpig'
antsangy	rice tenrecs	Oryzorictes spp.	cf. Swahili (Tanzanian mainland) sange 'elephant shrew spp.'; Mijikenda (Giryama) ts ^(h) anje 'Four-toed elephant shrew, <i>Petrodomus tetradactylus</i> '
gidro	Crowned lemur	Eulemur coronatus	cf. Swahili (southern dialects) ngedere 'Blue monkey, <i>Cercopithecus mitis</i> '

6.4 The African linguistic diaspora

The Atlantic slave trade was not only a movement of population but also of languages and there is considerable evidence for its impact in the New World as well as internally within Africa. Slavers were obviously not concerned with the languages of their victims, but speakers of Niger-Congo predominated in the Americas, since Afro-Asiatic and Nilo-Saharan languages tend to be spoken inland and so were less affected by the trade. The first major linguistic record of the slave trade is Sigismund Koelle's *Polyglotta Africana* (Koelle 1854), a massive comparative wordlist of the languages spoken by freed slaves in the colony of Sierra Leone in the 1840s. Koelle also included biographies of the individuals he interviewed and the routes by which they fell into the hands of the slavers, giving an invaluable image of the interior of Africa at a time when few outsiders had survived exploratory missions.

The slaves carried their languages to the New World and in many cases continued to speak them for some considerable time. In some cases, well established Niger-Congo languages like Yoruba and Kikongo were parlayed into ritual languages used in the ceremonies of syncretic religions such as Santeria. Haiti and Cuba in particular have remained reservoirs of these languages up to the present and a dictionary of Cuban Yoruba ('Lucumi') has been published. We know that Nupe, spoken today by up to a million people in west-central Nigeria, was also spoken in Brazil in the 1850s under its Yoruba name, Tapa (Rodrigues 1932). But most of the transplanted languages died out, often leaving lexical and grammatical traces in the modern creoles spoken in many regions. Creoles such Berbice Dutch in Surinam draws its vocabulary from four distinct sources, Kalabari (in the Niger Delta of Nigeria), Arawakan, Dutch and English and appears to borrow even-handedly from all four (Kouwenberg 1993).

The possible African origin of words and place names in the Southern United States has been the subject of much controversy. As Vass (1979:ix) points out, the earlier trend was to identify exotic-soundings toponyms with Amerindian words, sometimes concocting strained etymologies. The turning point was probably the identification of 'Africanisms' in the dialect of the Gullah people on the Georgia Sea Islands (Georgia Writers' Project 1940; Turner 1949). Westcott (1974:31) examined the claims for a Bini [Edo] origin for personal names among the Gullah and considered that some twenty-nine were credible; indeed the Gullah forms are very close to the Bini originals. This precipitated a reversal of the pattern and seeking an African heritage became fashionable, with the consequence that elaborate claims for African sources were put forward, some of which depend on very contorted etymological chains. For example, Vass (1979) tries match Luba forms with both single lexical items and nonsense syllables in oral literature in a way that strains credibility. That said, a detailed comparison with individual languages can often yield plausible etymologies. Table 7 shows a number of words in American English whose origin is fairly uncontroversial;

American	Gloss	First	Etymology
term		citation	
chigger, jiga,	sandfly	1756	W. Indies chigoe (1668) (cf. Wolof and Yoruba jígà
jigger	•		"insect", Luba <i>njiga</i>
cooter ⁴	turtle	1835	kuta root is widespread in Africa, e.g. Bambara kuta, Luba
			kuda
gombay	cow	?	c.f. proto-Bantu * ŋgombe
goober	peanut	1833	Bantu (cf. Kikongo and Kimbundu nguba 'peanut').
gumbo	okra stew	1805	Luba kingumbo, Mbundu ngombo for 'okra'
jive (talk)	insincere,	1928	Wolof jev, jeu talk about someone absent, especially in a
	inflated speech		disparaging manner
okra	okra	1679	Twi and similar Kwa languages ŋkrũmã
pinda, pinder	peanut	?	mbenda in many coastal languages of southern Cameroun
	_		& Gabon (Pasch 1980)
tote	to carry	1677	Kikongo tota "pick up," Kimbundu tuta "carry, load
yam	sweet potato	1588	< Port. inhame or Sp. igname, from a W. African language
-	_		(cf. Fulfulde <i>nyami</i> 'to eat' Twi <i>anyinam</i> "species of yam")
zombie	living dead	1871	Kikongo zumbi 'fetish' Kimbundu nzambi "god"),

7. Conclusion

The language map of Africa provides an important starting point for a broad-brush history of the continent over the last 20,000 years. The pattern of phyla points to large-sale movements and in particular the gradual assimilation of diverse foraging populations by expanding agriculturalists. Historical reconstruction can provide striking insights into the economic history of particular regions, for example in relation to agriculture or pastoralism. Loanwords allow us to track the spread of innovations that may not be reflected in the archaeological record. New techniques in human and animal genetics are providing fresh insights into migration and domestication although the claims of their proponents frequently outrun their evidential value.

The classification of African languages is not without controversy, and new discoveries and fresh analyses ensure that the picture is constantly evolving. For archaeologists to make sense of the large-scale patterns of migration and cultural evolution, they need to maintain an informed but sceptical awareness of the current picture and to incorporate linguistics in the broader reconstruction of prehistory.

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⁴ Also 'cooter-grass', 'cooter-back road', 'cooter-log' -bench for idlers, and 'box-cooter' [uncommunicative person].

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