AFRICAN LANGUAGE ISOLATES

Chapter for a book: **Language Isolates**

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ABSTRACT

Africa might be expected to have numerous language isolates, given the antiquity of humanity in the continent. However, there are few undisputed isolates, as well as a number of languages which have been considered isolates but which turn out either to be affiliated to a larger phylum or to be undecidable for lack of further data. The paper presents an overview of the main methodological issues which have divided African scholars. According to one view, there may be many more isolates, as some phyla are insecure. The paper focuses on four languages, Laal, Hadza, Bangi Me and Jalaa which are relatively uncontroversial. The longer list, which includes, Ongota, Shabo, Merotic, Mpra and others is discussed in less detail. Finally it considers whether substrates can be detected in the language of foragers who now speak the languages of their settled neighbours.

1. Introduction

One of the notable differences between Africa and most other linguistic areas is its relative uniformity. With few exceptions, all of Africa's languages have been gathered into four major phyla, and most recent progress in classification has been in resolving details. The number of undisputed language isolates is very small. By contrast, Australia, Papua and the New World are extremely diverse at the phylic level and all have substantial numbers of isolates or very small phyla. Eurasia is hard to classify; Europe is undiverse and is characterised by a small number of geographically extensive languages, but Siberia and NE Asia are diverse on a level with the Amazon. SE Asia, on the other hand, is somewhat similar to Africa, in having a relatively small number of phyla, each with many languages and almost no isolates. Given the time-depth of human settlement in Africa, this is somewhat surprising. If the *ex Africa* hypothesis for the origin of modern humans is accepted, then we have to assume that *Homo sapiens sapiens* originated some 150-200 Kya and spread to Eurasia from Northeast Africa, largely displacing, but perhaps also interbreeding with, the hominids already *in situ*. Looking at the worldwide pattern of isolates, it is evident that they are very unevenly distributed. There is almost a gradient from west to east, with few in Europe and the greatest number in the New World.

The explanation for this is unclear and indeed for some authors this is based on a mistaken analysis of the genetic affiliation of individual families or specific subgroups. The identification of isolates in Africa has not been without controversy. Joseph Greenberg, whose classification of African languages remains the principal framework in use today, was a committed 'lumper' and was inclined to ensure every language found a classificatory home, sometimes on the basis of extremely skimpy evidence. Recent years have seen a sceptical counter-trend, to consider that some of the languages or branches classified by Greenberg and formerly accepted, are isolates. If this is so, then Africa may be the home of many more isolates than are usually listed. This chapter[1] describes the controversies over the identification of isolates, covers with more detail those generally accepted and deals more briefly with more controversial cases. For some languages, fragmentary data makes an uncontroversial resolution impossible. The chapter also considers briefly the identification of substrates, and claims about residual foragers, which may well point to a prior, more diverse Africa.

2. Methodological issues

2.1 Traditions of classificatory research in Africa

The perceived diversity of a linguistic region is not entirely the result of a rigorous scientific process; it also reflects strongly the patterns established in the early period of scholarship. In African studies, the intellectual tradition has been characterised from an early period by continent-spanning hypotheses. The discovery that Bantu languages from Cameroun to South Africa were related dates back to the seventeenth century (Doke 1961) and the discovery of noun-classes in West African languages led some nineteenth century scholars to speculate on their relation to Bantu. Wilhelm Bleek (1862, 1869) went so far as to include a West African division in the family he named Bantu. Diedrich Westermann (1911) posited a 'Sudanic' family divided into 'East' and 'West', corresponding to Meinhof's work on Bantu, bringing together what we would now consider Nilo-Saharan and Niger-Congo.

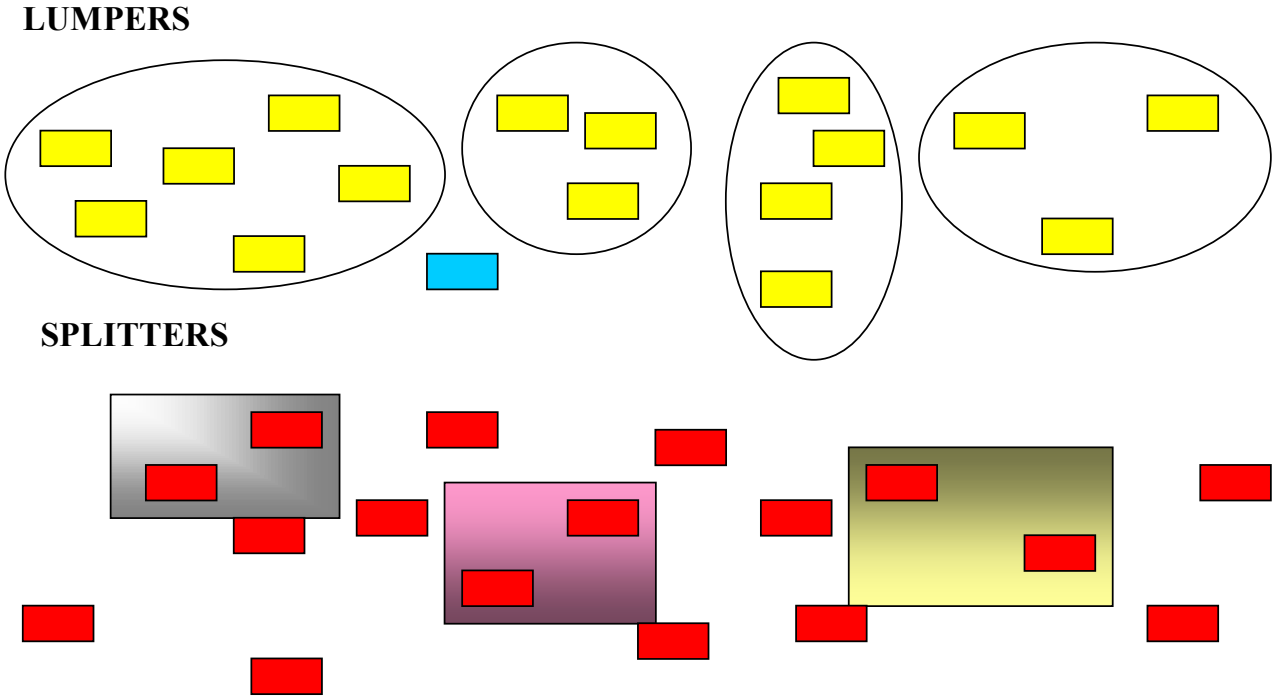
Joseph Greenberg took a fresh look at the classification of African languages in a series of articles published between 1949 and 1954, later collected in book form in Greenberg (1963). He combined 'West Sudanic' and Bantu into a phylum he named Niger-Congo, while he treated 'East Sudanic' as a different phylum, renamed Nilo-Saharan. He renamed the 'Hamito-Semitic' languages Afroasiatic and re-iterated the hypotheses of Dorothea Bleek (1956), who had assumed not only that all the Khoisan languages were related to one another, but that the languages with clicks in East Africa were also part of a presumed Macro-Khoisan. The effect of this was to tidy up the linguistic picture of the whole continent –every language was theoretically 'placed' (Blench 1999a). Greenberg's desire not to admit any isolates has been enormously influential on succeeding generations of Africanist scholars. Indeed Greenberg's later publications, first on Indo-Pacific

[1] This chapter draws the presentations and discussions at a workshop held in Lyon December 3 and 4, 2010, and a presentation circulated for that meeting. I am grateful to Harald Hammarström for helping me to get access to a variety of scarce documents.

(Greenberg 1971), then gathering all the languages of the Americas into three phyla (Greenberg 1987) and bringing together Eurasian languages into 'Eurasiatic' (Greenberg 2000), a version of Nostratic, show that he was a committed 'lumper'.

These views remain very much at odds with more conventional scholarly opinion on the languages of Papua, Australia and the New World. In these regions, linguists have generally entered the field with no preliminary assumptions about relatedness or macro-groupings –and so progress has been much more 'bottom-up'. Small groups have been derived from data and gradually built into larger ones. But, unlike Greenberg's proposals for Africa, Amerind and other intellectual constructs have gained almost no assent from the scholarly community. The intellectual tradition of a region is thus extremely powerful in determining the pattern of phyla, families and isolates. If Africa were in Melanesia, as it were, its linguistic geography might well be represented as a few larger phyla and many isolates characterised by complex contact phenomena. Figure 1 is a schematic model of lumpers and splitters which tries to visualise the impact they have on our perception of the linguistic geography of a region.

Figure 1. Schematic model constrasting lumpers and splitters



Is the conclusion that we might also be wrong about Africa? That Nilo-Saharan, Niger-Congo or Khoisan are no more than networks of isolates, or much smaller phyla, and the supposed cognates simply borrowings or chance? If we depended only on Greenberg's 'mass comparison' this might indeed be the case, since it is now all too apparent how significant borrowing can be between languages. For Niger-Congo, Greenberg depended on a mass of prior work which he rarely cited, but which had provided much of the evidence for his proposals. The comparative nominal morphology of Niger-Congo was first laid out in detail by Westermann (1935) and it is largely one of the accidents of history that this is not cited as the key paper in establishing the phylum. Recent publications (beginning with Dixon 1997 but characterising some of the papers in Heine & Nurse 2008) and conferences, such as 'Beyond Niger-Congo' have used geographical and typological mapping of traits to suggest that Niger-Congo in particular is somehow not a valid phylum. As an example of this type of construct, consider 'Macro Sudanic' (Güldemann 2008a, 2011). This consists of a series of maps and tables showing that particularly phenomena (labial-velars, logophoricity, vowel harmony) have quite similar distributions across a wide area of northern Sub-Saharan Africa. Güldemann concludes from this that the historical linguists are wrong and that 'the Macro-Sudan belt is genealogically highly heterogeneous'. In other words, this is a reprise of the arguments of Dalby (1970) concerning a 'Fragmentation Belt' across Africa. But to imagine that demonstrating that widespread phenomena can be partly attributed to genealogical characteristics of language and partly to contact is not in any way to

discredit the findings of historical linguistics. The point, and it is an important one, is that some linguistic phenomena are more prone to diffusion than others. Linguistic geography is highly contingent; it depends on the phenomena you decide to map, the literature you consult, and the state of linguistic description, which itself may reflect politics and financial resources. It has little to do with the argument about whether cognate morphemes in Niger-Congo affixing systems constitute proof or otherwise of the reality of the phylum[2].

2.2 Doubts over the major phyla

The situation with the other proposed phyla is more complex. Greenberg (1971) is largely responsible for the concept of Nilo-Saharan as a construct and there was neither a body of existing scholarship binding together its putative subgroups nor was the case self-evident. Indeed publications such as Tucker & Bryan (1956) had treated many of the groups falling within Nilo-Saharan as 'isolated units'. Widespread doubts over the affiliation of languages claimed to be Nilo-Saharan inevitably reflect the way historical linguistics is conventionally conducted. Compared with other African phyla, the difficulties of demonstrating the reality of Nilo-Saharan have typically propelled authors into methodological excursuses (Bender 1997; Ehret 2001; Blench 2002). It seems highly unlikely that Nilo-Saharan will ever pass the tests of regular sound correspondences and possibly an agreed internal structure that are now part of the formula for the usual textbooks on historical linguistics. In other words, Nilo-Saharan will never look like Austronesian or Dravidian. There are simply not enough undisputed lexical cognates to set up secure correspondences or develop clouds of isoglosses illustrating particular subgrouping hypotheses. This has led various linguists either to dismiss it wholesale (Dixon 1997), to exclude individual subgroups on unspecified grounds (Dimmendaal 2011). The extreme form of this is the online resource Glottolog, the major non-Ethnologue resource for global languages, which treats all its branches as isolates or unproven.

In the case of Afroasiatic, in its avatar as Hamito-Semitic, it has been generally considered a phylum since Cohen (1947) with many earlier precursors. The major controversy arose over the identification of Omotic, a complex ensemble of little-known languages in SW Ethiopia, previously considered Cushitic. The first monograph on Omotic is Bender (1975) and Omotic has generally found acceptance as a genealogical unit (e.g. Hayward 1990; Bender 1988, 2000, 2003). Nonetheless, persistent doubts as to its Afroasiatic affiliation remain in the literature.

Finally Khoisan is undoubtedly a case where a single typological feature has over-ridden the usual canons of historical linguistics. A single feature, the presence of clicks, led most researchers to suppose all languages with clicks were related (e.g. Bleek 1956; Greenberg 1963). The contrary case was put by Westphal (1963) who broke up Khoisan into seven unrelated families. This notion implicitly lives on in the recent Khoesan languages synthesis (Voßen 2013). This is demonstrably not the case with Dahalo (Tosco 1991). However, the incorporation of the East African click languages, Hadza and Sandawe, was shown to be based on poor transcription of clicks and wishful semantics (Sands 1998). Currently Hadza is treated as an isolate, whereas Sandawe is argued to be linked to Khoesan (Güldeman & Elderkin 2010). More problematic are two languages Kwadi and Eastern Hoã. Kwadi is extinct and its affiliation cannot be resolved although Güldemann (2004, 2008b) treats its as Khoesan. Similarly Eastern ǂHoã, a living language, was first considered an isolate and is now usually incorporated within Khoesan (Traill 1973; Heine & Honken 2010).

2.3 Excluding chance resemblances

The identification of isolates depends on the tools used to classify languages. If a language shows only a small number of problematic cognates with its proposed relative, then its genetic affiliation will inevitably be questioned. Nilo-Saharan and Khoisan in particular include languages whose inclusion in the phylum remains debated. Several of the languages of the Ethio-Sudan borderland, such as Shabo and Gumuz within Nilo-Saharan and the 'Mao' languages, particularly Ganza, within Omotic, have very low lexical cognate count with their relatives. If we claim that a substrate in a language can be identified in the lexicon of a quite different language, what counts as proof of lexical resemblance? Three explanations are possible;

[2] Larry Hyman (2011) has also presented a detailed critique of Güldemann's methods and results, although using very different examples from those given here.

a) the putative branches have been diverging away from the rest of the phylum for sufficiently long for natural vocabulary erosion to be responsible for low lexical counts
b) apparent similarities with the other branches of the phylum are due to borrowing
c) or to chance

Linguistic analysis, the demonstration of regular sound-correspondences or the detection of loanword phonology should be sufficient to show whether a) or b) are probable. But what about chance? There is a literature suggesting that lexical lists of any two languages in the world might show up to 5% resemblances of CVC stems (Bender 1969). Calculations by Ringe (1992, 1999) have applied a great deal of energy to algorithms illustrating the difficulties of showing languages are related. So the suggestion that the resemblances leading to a proposal of a relationship are 'chance' appears at first sight persuasive. But the calculations made by Bender above assumes that languages have no structure, that in principle any combination of CV phonemes may arise. But of course in practice this is not true. Most languages are extremely constrained in their permissible canonic structures. If two languages are related, then the set of lexemes said to be cognate should have constraints on both phonology and canonic forms. The assumption of chance is thus an unusable tool. We can draw up tables of more or less likely cognates, and whether these are accepted by other linguists is a function of the credibility of the sound-meaning correspondences and demonstration that these are not borrowings.

Attributing resemblance to 'chance' is a virtually worthless heuristic, because it is an untestable proposition, since no empirical data can ever be adequate to exclude it. Amassing evidence may make any linguistic proposition more likely, but a negative can never be demonstrated. In other words, it can never be shown that the apparent relation between two lexemes is *not* due to chance. Clearly, it is always possible to find unrelated languages where individual items show close sound/meaning correspondences. Our assumption that the languages in question are unrelated is partly determined by geography, partly by the lack of a regular relationship. But the regularity of a relationship can really only be determined by comparative data. If one language shows lookalikes and its genetic relatives do not, borrowing or chance may be the explanation. But if languages have no close relatives, then it is problematic to exclude these alternatives.

3. Language isolates in Africa and elsewhere

3.1 African isolates and claimed isolates

The list of African isolates remains controversial and few have not been the subject of some proposal as to their affiliation. There is at least one language which appears to be spurious (Oropom). Table 1 lists the languages about which few doubts exist;

Table 1. African language isolates not generally disputed

Language Name	Location	Source	Speakers
Bangi Me	Mali	Blench (2007a), Hantgan (2013)	2-3000 est.
Jalaa (=Cuŋ Tuum)	Nigeria	Kleinwillinghöfer (2001)	Probably extinct
Hadza	Tanzania	Sands (1993), Kirk Miller (p.c.)	4-500
Laal	Chad	Boyeldieu (1977), Faris (1994), Lionnet (2010)	800 ?

Jalaa may well be extinct; although individuals claiming Jalaa ethnicity are still present in the Cham-speaking area, none even remember any words of the language.

There are further languages which have been reported initially as isolates but which seem to be affiliated to known phyla, or can otherwise be excluded. A list of these is given in Table 2;

Table 2. African isolates: reported, suggested, controversial

Name	Location	Source	Comments
Bēosi	Madagascar	Birkeli (1936), Blench and Walsh (n.d.)	Austronesian with unknown ? Southern Cushitic substrate
Dompo	Ghana	Painter (1967), Blench (n.d. a)	Guang language with unknown substrate
Guanche	Canaries	Wölfel (1965)	Extinct. Absence of basic vocabulary makes classification impossible to resolve
Gumuz	Ethiopia	Bender (2005), Ahland (2004, 2012)	Nilo-Saharan isolate branch
Kujarge	Sudan	Doornbos & Bender (1983); Lovestrand (2012), Blench (2013)	Perhaps Chadic
Kwadi	Angola	Westphal (1963), Güldemann (2004)	Perhaps Khoesan
Mbre	Cote d'Ivoire	Creissels (n.d.), Blench (n.d. b)	Niger-Congo isolate branch
Meroitic	Ancient Sudan	Rilly & De Voogt (2012)	Certainly a close relative of Nubian
Mpra	Ghana	Cardinall (1931), Blench (n.d. c)	Extinct. Kwa language
Ongota	Ethiopia	Fleming et al. (1992), Sava & Tosco (2000)	Probably Afroasiatic
Oropom	Uganda	Wilson (1970)	Probably spurious (Heine pers. comm..)
Sandawe	Tanzania	Sands (1998), Güldemann & Elderkin (2010)	Probably Khoisan
Shabo	Ethiopia	Bender (1977), Fleming (1991), Teferra (1991, 1995)	Nilo-Saharan isolate branch

Meroitic and Guanche became extinct long ago, while for Bēosi, Kwadi and Mpra, it is unlikely that further data can be collected, so the question cannot be resolved. The status of Kujarge is unknown but no speakers have been encountered since Doornbos' original record, and the civil war that has passed over their homeland may well have finalised their demise. Map 1 shows a composite map locating the language isolates, the controversial cases given in Table 2 and the location of residual foragers who might represent former language isolates.

3.2 African isolates, undisputed

3.2.1 Bangi Me

The Bangi Me language is spoken in Mali, in seven villages east of Karge, reached by turning off the Sevare-Douentza road 38 km. north of Sevare. The population of Bangi-me speakers is likely to be 2-3000 (2005 estimate). Its existence was first reported in Bertho (1953) and later in Hochstetler (2004). Both these surveys considered it to be part of the surrounding network of Dogon languages, and speakers consider themselves Dogon. Blench (2007a) conducted new fieldwork and first argued that this was a language isolate. The deceased Dutch linguist Stefan Elders conducted further fieldwork which has been salvaged[3]. Hantgan (2012; 2013) is an extended wordlist and grammar of Bangi Me. The

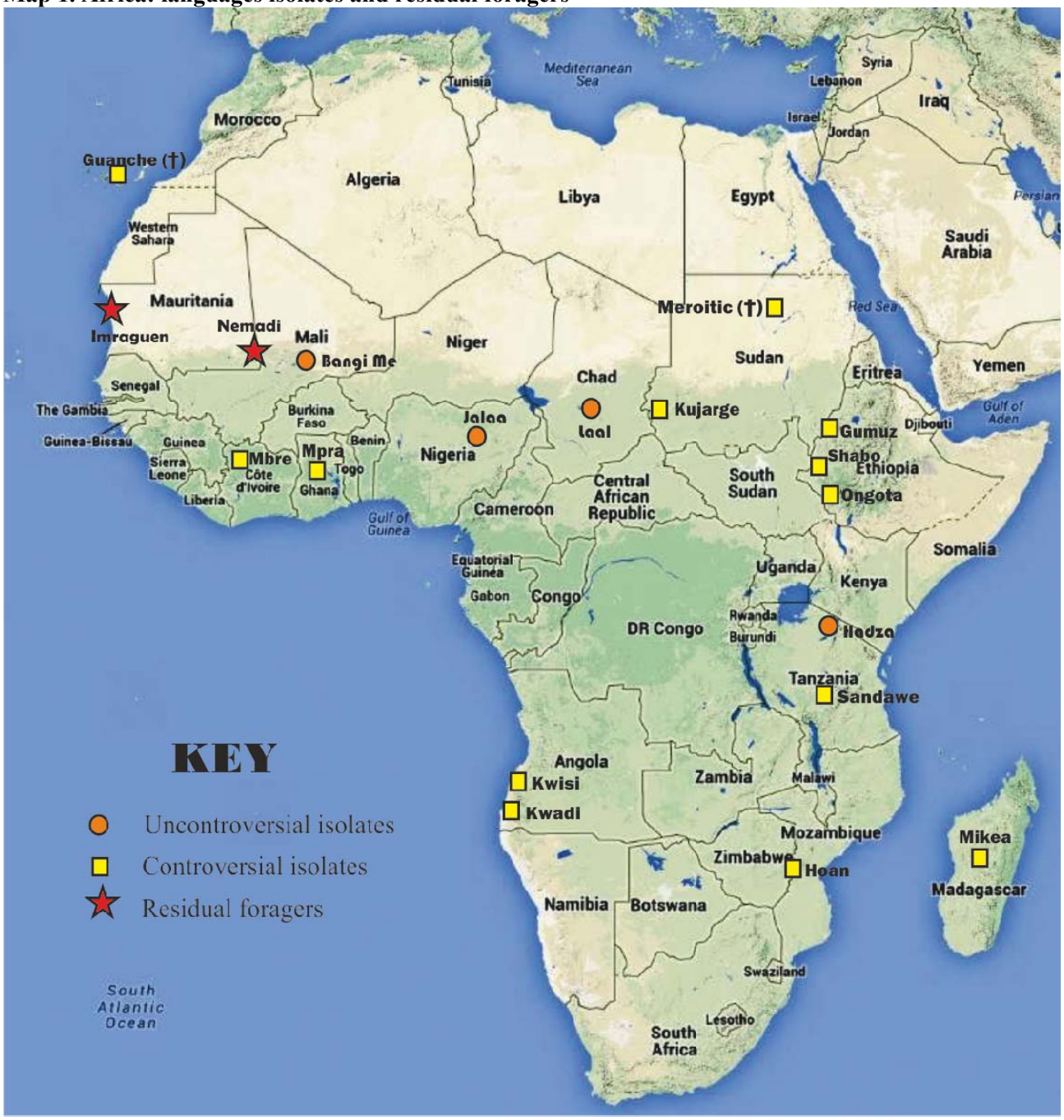
Photo 1. Bangi Me speakers at Niana

Source: Author Photo (2005)

[3] http://dogonlanguages.org/bangime.cfm

current situation in Mali has made ground fieldwork very difficult, but there is no immediate reason to consider Bangi Me endangered.

Map 1. Africa: languages isolates and residual foragers



Phonological features

Table 3 shows the consonants of Bangi Me. Marginal phonemes are shown in red.

Table 3. Bangi Me consonants

	Bilabial	Alveolar	Post-alveolar	Alveolo-palatal	Velar	Labial-palatal	Labio-velar	Glottal
Plosives	p b	t d			k g			
Prenalised	ᵐp ᵐb	ⁿt ⁿd			ᵑk ᵑg			
Nasals	m	n	ɲ		ŋ			
Fricatives		s	ʃ ʒ	ɕ	ɣ			h
Affricates				ʧ				
Approximants	[ʋ]	r	y			ɥ	w	
Nasal approximant		r̃	ỹ				w̃	
Lateral		l						

Source: Hantgan (2013)

/ʋ/ is an allophone of /b/.

Vowels
Bangi Me vowels are given in Table 4;

Table 4. Bangi Me vowels

	Front	Central	Back
Close	i		u
Close-mid	e		o
Open-mid	ɛ		ɔ
Open		a	

Nasalisation is predictable and non-contrastive. Vowel length is largely predictable, with few words contrasting on the basis of vowel length alone. Permissible diphthongs are;

[ie iɛ ɛe eɛ aɛ ɔo oɔ]

Tone
Bangi Me is tonal language, with two tones, high and low, with the mora the tone-bearing unit. On monosyllabic words with two morae, level tones can combine to create rising or falling melodies. Rising tones may appear on monomoraic syllables in word-initial position. Rising tones on monomoraic words usually appear after a velar consonant. A phonetic mid tone which is the result of a non-automatic downstep.

Morphology

One of the main attributes of Bangi Me that differentiates it from the Dogon languages is its lack of segmental, bound morphology. Like many Niger-Congo languages, Dogon languages are agglutinating, whereas Bangi Me is isolating. Bangi Me has no evidence for noun class marking or even remnants of one although there is a frozen diminutive suffix and an opaque frozen [–r] suffix. Bangi Me also differs from the Dogon languages in that tense, aspect, and mood markers are unbound morphemes. Verbs in Bangi Me are divided into different classes based on transitivity, phonological shape, and semantic category, whereas verbs in Dogon mostly take the same inflection, with the exception of change-of-state verbs.

Syntax

Although at the phrase level Bangi Me is head initial, with noun-postposition and noun-modifier word order (except DEF N and POSS N), at the clause level the basic constituent order is either SVO, SOV, or OSV. The ordering of constituents in the sentence depends on the tense/aspect/mood of the clause. A

feature not shared by any surrounding language is the use of tonal marking on the verb and object if present. Subject and TAM are marked by a combination of segmental and autosegmental features.

3.2.2 Hadza

The Hadza (Tindiga) language is spoken by about 800 individuals close to Lake Eyasi in Northern Tanzania. It has been the subject of intensive anthropological research with more than a thousand references, mostly focusing on the persistence of hunting and gathering[4]. The presence of clicks in Hadza encouraged earlier researchers to classify Hadza together with Sandawe (also in Tanzania) and the Khoisan languages of Southern Africa. This idea may first have been argued by Bleek (1956) in her 'Comparative Bushman Dictionary' and was then picked up in Greenberg (1963). Since Sands (1998) it is generally accepted that Hadza is an isolate, despite the presence of clicks and that the connections with Khoisan were based on unreliable transcriptions. Miller (p.c.) has been working on a grammar and dictionary of Hadza, but these are not yet in the public domain.

Hadza phonology is complex and the history of descriptions is marked by considerable variation between different accounts. The earliest modern description is Tucker et al. (1977), but the most complete overview of Hadza phonology is Sands et al. (1993), reformulated in Sands (2013). Table 5 is adapted from Sands et al. (1993).

Table 5. Hadza consonants

	Bilabial	Labio-dental	Dental	Alveolar	Palatal	Velar	Labialised velar	Glottal
Plosive	p^h p b			t^h t d	ʤ	k^h k g	k^{hw} k^w g^w	ʔ
Ejective	(p')					k'	k'^w	
Central oral click			k|	k!				
Lateral oral click					k‖			
Nasal	m			n	ɲ	ŋ	$ŋ^w$	
Nasal central click			ŋ|' ŋ|	ŋ!' ŋ!				
Nasal lateral click					ŋ‖' ŋ‖			
Prenasal plosive	mp^h mb		nt^h nd			$ŋk^h$ ŋg		
Prenasal affricate			nts ndz		nʤ			
Central affricate			ts dz		ʧ ʤ			
Lateral affricate					$tλ̥$			
Ejective central affricate			ts'		ʧ'			
Ejective lateral affricate					$tλ̥'$			
Fricative		f		s	ʃ			
Lateral fricative				ɬ				
Approximant					y		w	ɦ
Lateral				l				

Hadza has the five cardinal vowels: /i/, /e/, /a/, /o/, /u/ (Table 6). A few words show contrastive /ĩ/ and ũ/. Vowel length, pharyngealisation, glottalizsation and breathiness are not contrastive.

[4] According to Woodburn (p.c. May 2014) there are still Hadza who live almost entirely from foraging, despite the encroachment on their lands by herders and national parks.

Table 6. Hadza vowels

	Front	Central	Back
High	i (ĩ)		u (ũ)
Mid	e		o
Low		a	

Whether Hadza is tonal is the subject of some uncertainty. Tucker et al. (1977) transcribe both stress and three level tones. However, subsequent investigations have not confirmed this. Sands et al. (1993) and Sands (2013a) concludes that Hadza shows a simple two-way contrast and might well be considered a pitch-accent language.

Morphology

Hadza divides nouns into masculine and feminine, and marks both gender and number with suffixes. Table 7 shows number and gender marking for *n!e* 'leopard';

Table 7. Hadza number and gender marking

Gender	Number	Hadza	Gloss
M.	sg.	n!eø	single male leopard, many leopards
M.	pl.	n!e-bi'I	few leopards (paucal)
F.	sg.	n!e-ko	single female leopard
F.	pl.	n!e-be'e	few female leopards (paucal)

Source: (Sands 2013b)

Hadza verbs are inflected with suffixes, although initial reduplication can mark emphasis. Hadza also has plural verbs, or distributive which are marked with infixes.

Syntax

The basic constituent order of Hadza is SVO. For example;

'ela-ta-ta	mulinga-ko	ne-ta	gundida-ko
build-3F.sg.DO-1F..sg.UT	beehive-3F.sg	INST-F	hammer-3F.sg
I will build a beehive with a hammer			

3.2.3 Jalaa

The Jalaa (also Jalabe, Jaabe) live in a single settlement, Loojaa, in Balanga Local Government Area, southern Bauchi State, Nigeria. One person is *níí jàlàà* nd the people *jàlààbè*. They are also known locally as Cèntûm or Cùntûm, from a name for their former settlement. The only information available on the Jalaa is the wordlist in Kleinwillinghöfer (2001) which gives comparisons with neighbouring languages but includes no grammatical information. The Jalaa are surrounded by Adamawa-speaking peoples, such as the Cham and Dadiya, and they have been almost completely absorbed linguistically by the Cham.

Not much can be said of the phonological features, but the basic sound-system can be inferred from the data in Kleinwillinghöfer (2001). Table 8 shows the consonants of Jalaa.

Table 8. Jalaa consonants

	Bilabial	Alveolar	Post-alveolar	Alveolo-palatal	Velar	Labio-velar	Glottal
Plosives	p b	t d			k g	kp	
Nasals	m	n		ɲ	ŋ		
Fricatives	f	s					h
Affricates				ʧ ʤ			
Approximants		r	y			w	
Lateral		l					

Source: extracted from Kleinwillinghöfer (2001)

Jalaa permits labialised consontants /sʷ/, kʷ/, /bʷ/ as well as a palatal /dʸ/.

Vowels
Kleinwillinghöfer does not give the vowel system explicitly and uses the Nigerian convention of subdots to represent –ATR vowels. On this basis there is a nine-vowel system in Table 9;

Table 9. Bangi Me vowels

	Front	Central	Back
Close	i		u
	ɪ		ʊ
Close-mid	e	ə	o
Open-mid	ɛ		ɔ
Open		a	

Three level tones are transcribed, as well as a falling tone. Some long vowels are transcribed, for example *yúú* ‘sesame’ but whether length is systematic is remains difficult to discern.

Jalaa has a number-marking system with alternating suffixes for nouns, like the surrounding Adamawa languages. Whether this is original or borrowed is hard to determine. For example, Jalaa often has an identical suffix alternation for similar meanings to Cham, the language with which it has a strong borrowing relationship, despite quite different segmental material. Table 10 illustrates this;

Table 10. Jalaa number marking in comparison to Cham

Jalaa			Cham		
Gloss	**sg.**	**pl.**	**Gloss**	**sg.**	**pl.**
mouth	bɔɔ	bɔɔní	mouth	ɲii	ɲiini
tree	gwìràŋ	gwìtɛ̀	tree	riyaŋ	riitɛ
meat	lìbò	lìbòté	meat	nàm	nàmtɛ
hole	suroŋ	suroŋte	crocodile	kùlɔŋ	kùlɔ̀ŋtɛ
nose	yamər	yaməta	nose	ʤòr	ʤòtɛ
leg	kobər	kobta	knot	fúbər	fúbtɛ
fish	fui	fuuta	dog	ʤɔil	ʤɔɔtɛ
wife	ʧùwì	ʧùùbó	stranger	(nii) fui	fùbɛ
person	nətâ	nətaaba	person	nii	nə̀b

Source: adapted from Kleinwillinghöfer (2001)

As Kleinwillinghöfer (2001) points out, the similarities with nominal affix alternation with its Adamawa neighbours combined with striking rarity of common lexemes lead to the speculation that these number marking strategies were borrowed.

3.2.4 Laal

The Laal (Gori, Laabe) language is spoken in Central Chad in the Moyen-Chari Region, Barh Kôh department, between Korbol and Dik, Gori (center), Damtar, and Mailao villages. There were 750 speakers

in the year 2000. Damtar village was said to have its own dialect called Laabe with 3 speakers left in 1977. They do not have an autonym but refer to themselves as;

muǎŋ lá	people from Gori
muǎŋ ɓuāl	people from Damtar

The language name, *yəw láàl*, is 'language' + Gori.nominal suffix.

They are not hunter-gatherers, but have an economy based on fishing and farming.

Preliminary work on Laal was conducted by Boyeldieu (1977, 1982a,b, 1987, n.d.) who first drew attention to the difficulties of classifying it. Faris (1994) confirmed that the Laala had survived the civil war in Chad and Lionnet (2010, 2013) has begun new work on the description of Laal. Boyeldieu shows that although Laal incorporates elements of the neighbouring Chadic and Adamawa languages, it has a large corpus of unetymologisable lexemes.

Phonological features

Table 11. Laal consonants

	Bilabial	Alveolar	Palatal	Alveolo-palatal	Velar	Labio-velar	Glottal
Plosives	p b	t d	c j [ɟ]		k g		ʔ
Prenalised	ᵐb	ⁿd			ᵑg		
Nasals	m	n	ɲ		ŋ		
Implosives	ɓ	ɗ	ʸ [ʃ]				
Fricatives		s					h
Flap		r					
Lateral		l					
Approximants			y [j]			w	

Source: extracted from Lionnet (2010)

The consonant inventory of Laal is characteristic of the Southern Chad area, except perhaps for the palatal implosive [ʃ]. The vowels are represented by Lionnet (2010) as follows;

Table 12. Laal vowels

	Front	**Central**	**Back**
Close	i ü [y]	ɨ	u
Mid	e üo [ɥo]	ə	o
Open	i̯a (~ɛ) üa [ɥa]	a	u̯a (~ɔ)

Exactly what type of system this is slightly opaque, at least to me.

Boyeldieu (1979) transcribes three tone heights and a rising and falling tone.

Morphology

Number marking on nouns is extremely diverse. shows examples of the different number-marking strategies (Table 13);

Table 13. Laal nominal number marking

Gloss	sg.	pl.
mahogany	círám	cúrmú
bag	bwālāg	bólgó
mat	sún	súnà
cock	kògòr	kwāgrā
hyena	ŋyāāl	ŋēē
ear	sìgál	sìgíy
elephant	ɲé	ɲwáɲá
dog	ɓyāāg	ɓīīgāɲ
bird	ndíí	ndírmá
pigeon	lóóg	lwágmí
water	sū	sùgá
sheep	ɗēē	ɗwāārī

Source: Compiled from Boyeldieu (1979)

The striking feature of Laal which marks it out from all neighbouring languages is its threefold gender system. This is not marked on nouns, but on pronouns and the 'connective' particle. The three classes are;

masculine (human male)/feminine (human female)/neuter (non-human)

The subject pronouns are as follows;

Table 14. Laal subject pronouns

		masculine	feminine	neuter
singular	1	já	jí	–
	2		ʔò	–
	3	ʔà	ʔìn	ʔàn
plural	1 ex		ʔùrú	–
	1 inc		ʔǎŋ	–
	2		ʔùn	–
	3		ʔì	ʔuàn

Source: Boyeldieu (1982)

Although the usual comparisons for Laal are with Chadic and Adamawa languages, this gender system is strongly reminiscent of some of the systems in Nilo-Saharan languages, such as Krongo (Reh 1985), although there is no other evidence for a Nilo-Saharan affiliation.

Syntax

Basic constituent order of Laal is SVO. For example;

ʔà	sìr	sū
he	drinks	water

Every verb has three forms;

1. simplex: simplest, more frequent, unmarked for tense/aspect/mood
2. 'centripetal' form: marking movement towards the speaker in space or time
3. "participative" (instrumental) form: usually in complex utterances

These are marked by tone and occasionally by segmental morphology

Table 15. Laal verb forms

Gloss	1	2	3
take	tō	tòò	tòó
do	ká	kárá	kárá
refuse	pāl	pàlà	pàlá

Source: Lionnet (2010)

3.3 African isolates, controversial or undecidable

3.3.1 Bēosi

The island of Madagascar is today entirely the province of an Austronesian language, Malagasy, divided into a large number of dialects. However, there is strong archaeological and palaeoenvironmental evidence for hunter-gatherer settlement prior to the coming of the Austronesians parts of the island (Blench 2007b). Today there are number of forager groups scattered across Madagascar, bearing the names Mikea, Vazimba and Bēosi or variants of this name. All these people speak Malagasy today, and genetic studies of the Mikea have not indicated any unusual profile (Pierron et al. 2014). Nonetheless, some Mikea groups, particularly the Bēosi, have non-standard lexical items in their lect of Malagasy and also retain songs which cannot be interpreted. The only record of these is Birkeli (1936) although more recent reports show that some of these terms are still in use (Stiles 1994). Blench and Walsh (n.d.) have analysed this idiosyncratic vocabulary and suggest there is a possible Southern Cushitic substrate. This would not be unreasonable since the nearest forager group today on the adjacent mainland are the Southern Cushitic Aasax, whose language has unfortunately now been lost, but for which a reasonable record remains (Fleming 1969). However, many other lexical items are of unknown origin, and since it seems unlikely further data can be collected, this question will never be resolved with certainty.

3.3.2 Gumuz

The Gumuz language is situated on the Ethio-Sudan borderland and has 179,000 speakers in Ethiopia according to the 2007 census. It is heavily dialectically divided (Ahland 2004). Reports in 2014 show that there is a previously unreported language related to Gumuz, Dasin (Ahland p.c.). Bender (1979) is the first significant record of this language, although his work is a recension of earlier Italian sources. Bender (1997) generally treated Gumuz as a branch of Nilo-Saharan. However, Gumuz lacks many characteristic Nilo-Saharan features such as 'moveable –k' and three-term number marking (Ahland 2010, 2012). In his final statement on the subject, Bender (2005) treated Gumuz as an isolate. Ahland (pers. comm.) has prepared a comparative wordlist illustrating cognate items shared between the two families and the present author considers Gumuz is Nilo-Saharan and indeed related to the Koman languages.

3.3.3 Shabo

The Shabo language is spoken by the *Sabu* [Shabo] people of southwestern Ethiopia. The name found in earlier sources, *Mekeyer*, is used by the Majang (Jordan et al. 2007). The Shabo live in what used to be the Kafa Region, between Godere and Masha, among the Majang and Shekkacho. According to the current administrative divisions, most Shabo people now live in the Sheka Zone of the Southern Nations, Nationalities and Peoples Region (SNNPR) and the Majangir Zone of Gambela Region.

Under the name Mikeyir, Harvey Hoekstra seems to have been the first linguist to report this language, and using his data Bender (1977) classified it as possibly Surmic. The cognates identified are now seen to be the result of extensive loans from the Majang language rather than an indicator of true genetic affiliation. Since that data there have been a variety of attempts to classify Shabo, including Teferra & Unseth (1989), Fleming (1991, 2002), Ehret (1995) Bender (1983, 1997) and Schnoebelen (2009). None of these are conclusive, in part because of the small amount of available data. Bender's treatment of Shabo as an isolate branch of Nilo-Saharan is a reasonable conclusion from the existing data. Teferra (1991, 1995) constitutes almost the only descriptive work on the phonology and grammar of Shabo. Like Gumuz, Shabo lacks 'classic' features of Nilo-Saharan such as three-term number marking or moveable k-. Nonetheless it seems most likely that Shabo is related to its close neighbours Koman and Gumuz. Although these are close to one

another geographically, they are surprisingly dissimilar, they have enough common aspects to tentatively propose that they form a subgroup of Nilo-Saharan. Some typical items shared are given in Table 16;

Table 16. Koman, Shabo and Gumuz shared lexical items

	Shabo		Gumuz		Koman	
head	Shabo	ƙoy	CG	*k^{w}a	PK	kup
breast	Shabo	kowan	CG	*kúá	PK	*koy
horn	Shabo	kulbe	Guba	k'əla	Kwama	kwaap
sun	Shabo	uk^{h}a, oxa	Yaso	oka	Komo	k^{h}aala

Shabo is still spoken by some 400-500 individuals, although it is losing ground to Majang and latterly Amharic. A more detailed treatment of Shabo lexicon and grammar is imperative, as it is undoubtedly a language of considerable significance in the larger picture of African languages.

3.3.4 Ongota

The Ongota [=Birale] people live in a single village in SW Ethiopia, in the South Omo zone, on the west bank of Weyt'o river. Ethnologue (2013) reports ten speakers, but recent visitors suggest there may be as few as six competent speakers (Mikeš pers. comm.). Nearly all adults have switched to the Cushitic Tsamay or other regional languages such as Konso and Hamer. The first report of this language is in Fleming et al. (1992) and since then it has had considerable publicity, although in terms of actual data there is an extended wordlist and sketches of aspects of the grammar. Key references are Fleming et al. (1992), Fleming (2006), Sava & Tosco (2000), Yilma[5] (ined.) and Blažek (2007). These authors come to very different conclusions on the affiliation of Ongota. These views can be summarised as follows;

Table 17. Hypotheses concerning the classification of Ongota

Author	Summary
Fleming	Ongota is a separate branch of Afroasiatic, parallel with Cushitic and others, following the primary split of Omotic
Sava & Tosco	Ongota is a type of Dullay, albeit with heavy regional influences
Yilma	Ongota is a creole and thus cannot be classified
Blažek	Ongota is Nilo-Saharan (author's conclusion is not definitive)

None of these support the notion that Ongota is a true isolate, although the different conclusions concerning its affiliation make any definitive assignment problematic. It could indeed be an isolate with differing levels of influence from different languages. The present author considers Fleming's proposal for an Afroasiatic affiliation the most reasonable.

3.3.5 Meroitic

Meroitic was the language of a substantial urban polity existed on the Nile between 8th century BC until about 350 AD, when it was destroyed by Axumite armies. Meroitic monuments contain numerous inscriptions which have proven problematic to decipher, which has fuelled a string of poorly-supported and indeed fringe hypotheses. Some of these are very bizarre, such as the proposal that Meroitic was Tocharian, the extinct Indo-European language of north-west China. The World Wide Web has created a new forum for individuals to publish their attempts at decipherment without the usual constraints of scholarship. The inhabitants of Meroe used hieroglyphs and initially wrote in the Egyptian language. By the first century BC, hieroglyphs gave way to a Meroitic script that adapted the Egyptian writing system to an indigenous language. Meroitic is an alphabetic script with 23 signs used in a hieroglyphic form (mainly on monumental art) and in a cursive. The cursive version was widely used; so far some 1278 texts are known. This new alphabet was phonetic, assigning syllabic values to hieroglyphs and occasionally using hieroglyphs in their original sense to explicate the texts, rather as Chinese ideograms are still printed alongside Japanese today. Meroitic was previously considered to be degraded Egyptian, but it was then unclear why it could not easily

[5] This document is referred to in Fleming (2006) but it seems never to have been published, nor is a full bibliographic reference available.

be read. Most serious attempts at decipherment assumed that the original language is Afroasiatic, although there was no particular reason to think this was the case. The proposal that Meroitic was Nilo-Saharan was first made in the 1960s, and Greenberg (1971) and Bender (1981) both assigned it to Nilo-Saharan. However, since 2000, considerable progress has been made, and there are now more than forty Meroitic terms transcribed with some certainty, Rilly & De Voogt (2012) argue that it was certainly a close relative of Nubian, and this has gained general acceptance among Nilo-Saharan scholars.

3.3.6 Oropom

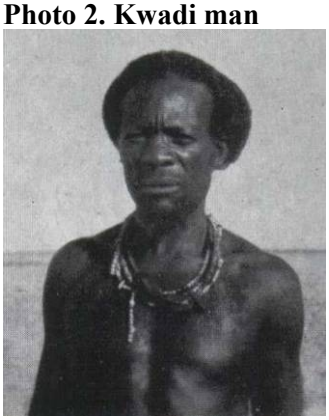
The Oropom language, said to be spoken among the Karamojong in NE Uganda, is recorded in a single source, Wilson (1970). Wilson claims that the Oropom were a subset of the Karamojong who used stone tools until the recent past. He recorded a 97-word list of the language, transcribed orthographically. Some ten years after Wilson's report, Bernd Heine went to seek rememberers of Oropom and could find no individuals who would even admit to this ethnic identity. For this reason he regarded the language as spurious, perhaps constructed on the spot by an informant. Souag (2004) re-analysed the vocabulary and found much of it borrowed from neighbouring languages, although with a core of unexplained lexical items. With no further reports, the safest conclusion is that Heine was correct in regarding Oropom as bogus.

3.3.7 Sandawe

The Sandawe are a people in the Kondoa district of Dodoma Region in central Tanzania, notable for their non-Bantu click language. They were predominantly foragers and pastoralists before Europeans colonised Africa. In 2000, the Sandawe population was estimated to be 40,000. Sandawe Ethnography and language was first described in Dempwolff (1916) and later in Ten Raa (1986). Sandawe grammar has been relatively well described (Van de Kimmenade 1954; Eaton 2010; Eaton et al. 2007; Steeman 2012) and there are two lexicons (Kagaya 1993; Ehret & Ehret 2012). The presence of clicks in Sandawe led Bleek (1956) and Greenberg (1963) to assume a relationship with Southern African Khoisan. More recent analyses have also reached the same conclusion (Elderkin 1983; Sands 1998; Güldemann & Elderkin 2010) although most of the earlier proposed cognates were compromised by poor transcription. Nonetheless, if this is correct the relationship is not close. Surprisingly, given that both are click languages in the same region of East Africa, Sandawe and Hadza seem to show no common lexicon.

3.3.8 Kwadi

Photo 2. Kwadi man



Source: Estermann (1956)

The Kwadi (Bakoroka, Cuanhoca, Cuepe, Curoca, Koroka, Makoroko, Mucoroca) are a group of foragers who formerly lived in the remote area in the extreme southwest of Angola. Strikingly, despite speaking a click language they do not have the typical phenotype of Khoisan speakers (Photo 2). They were first reported by Capello-Ivens (1886) and described in more detail by the ethnographer Estermann (1956 trans. Gibson 1976). Tape recordings of Kwadi were made by the ethnographer Almeida, but these have never been released. Westphal (1963) made a field trip to the area and made extensive notes on Kwadi, which remain in the archive of the University of Cape Town. However, for some reason he never published an analysis of this data although he considered Kwadi an isolate (Westphal 1963, 1971). Güldemann (2013a,b,c) has written up Westphal's notes from the point of view of linguistics. Güldemann (2004, 2008b) argues that Kwadi is part of Khoe, i.e. Central Khoisan, although the argument for this is complex, as the pronominal system and person marking seem to be very different from Khwe. The lexical cognates, however, seem to be at a level of near identity (Table 18).

Table 18. Kwadi-Khoe lexical correspondences

Kwadi	Gloss	Proto-Khoe	Gloss	Comment
guu-	sheep	*gu	sheep	
ha	to come	*ha	to come	
pa-	to bite	*pa	to bite	
pi-/ bi-	milk, breast	*pi	milk, breast	Also in Southern African Bantu
kho-	person	*khoe	person	
kõ	to go	*!ũ, *kũ	to go	(Kalahari East)
kuli-	year	*kudi, also kuri	year	
kum (also *kũŋ*)	to hear	*kum	to hear	(Kalahari)
kxo-	skin, fur	*kho, also kxo	skin, fur	
k''o- [= /kx'o/]	male	*kx'ao	male	
k''o- [= /kx'o/]	meat	*kx'o	to eat (meat)	
so-	medicine	*tso, *so	medicine	(Khoekhoe)
tame-	tongue	*dam	tongue	

Source: Güldemann (2008b)

Kwadi also shares a common Khwe root for 'cattle.

Khwe	góɛ́
Naro	gòè
//Ana	gúè
Kwadi	goe-

The near identity of the cognates suggests to the present author the possibility that the Kwadi language represents an isolate which has come under the influence of Khwe languages. Unfortunately, even in the 1950s there were few speakers of Kwadi and it seems the language has now vanished completely, so this question can probably no longer be resolved.

3.3.9 Kujarge

The Kujarge language is, or was, spoken on the Chad-Sudan border by a small and scattered group of hunter-gatherers. The fate of these people, whose homeland is exactly in the centre of the recent civil conflicts, is unknown, but prognostications cannot be good. The only published information on this language is Doornbos & Bender (1983). On the basis of 100 words they concluded that the language was East Chadic, although its cognacy rate with other East Chadic languages is very low. Recently, an unpublished manuscript containing additional words collected by Paul Doornbos has been circulated, together with some etymological commentary. Nonetheless, the sample remains small and the transcription and reliability of some forms can be questioned. Kujarge is clearly an important language, however, and the exiguous nature of the dataset is to be regretted. The present author has listed Kujarge as an isolate in various publications (e.g. Blench 2006) based on its low cognacy counts with its neighbours. However, Blench (2013) now considers it is part of East Chadic, although a highly divergent branch. Lovestrand (2012) has also established additional lexical resemblances to East Chadic languages. He classifies it as B1.3, a parallel branch to the Bidiya and Kajakse groups. The unlikelihood that more data will become available may mean that the classification of Kujarge remains unresolved.

3.3.10 Dompo

The Dompo language is spoken in West-Central Ghana in a settlement adjacent to Banda, the main town of the Nafaanra people. Painter (1967) gives a map reference as 8° 09′ N 2° 22′ W. Banda is reached from Wenchi by going northwards from the main road to Bondoukou in Côte d'Ivoire and is still south of the Black Volta. A visit by the present author in April 1998 established a longer wordlist. Dompo has a striking lexicon for wild fauna which is of unknown origin, but the main lexicon is undoubtedly Guan, and its closest relative is probably Gonja (Blench n.d. a). Either the names for animals constitute some sort of lexical avoidance or honorific system (Blench 2003) or Dompo is a relic hunting group almost completely assimilated by the Guan.

3.3.11 Mbre

The Mbre (Bere, Pre) language is spoken in Bondosso and Niantibo villages Worodougou Region, west of Bouaké in north-central Cote d'Ivoire. It was first reported by Denis Creissels (n.d.) and very little data has since emerged although a conference handout (Boukari 2009) points to further work in progress. The first circulated analysis of Mbre is Blench (n.d. b) who argued that it was neither Mande, Kwa or Gur. It is tentatively classified as an isolate branch of Niger-Congo, although there is no evidence for nominal classes and verbal extensions. Only more extended material can resolve the issue of its classification.

3.3.12 Mpra

Cardinall (1931) reported the existence of a language, Mpre [correctly Mpra], spoken in Central Ghana, which had nearly disappeared in his time. Goody (1963) revisited the settlement in 1956 and was able to add a few more lexical items. Mpra has been listed in some sources as an isolate (e.g. Dimmendaal 2008). To see whether any speakers still existed, the present author visited the village of Butei (Bute in Goody) on February 28th 2007. Butei is some 20 km. from the main Tamale-Kintampo road, branching east towards Mpaha shortly after the Fulfulso junction leading to Damongo, and between the two branches of the Volta. By 2007, although former speakers still acknowledged their ethnic identity, only personal names and a few songs in Mpra remained (Blench n.d. c).

Photo 3. Last rememberers of the Mpra language (2007)

Source: Author Photo

(Blench n.d. c) tabulates possible external sources of the lexicon. Overall, a large proportion of the vocabulary of Mpra has no evident source. the most notable source of parallels with Mpra is Avikam, a language spoken along the coastal lagoons of Cote d'Ivoire west of Abidjan (Hérault 1983b). Some of the lexical similarities are only shared with Avikam, to judge by Hérault (1983a), others are also found in other coastal languages such as Eotile, Adyukru and Nzema. The similarities to Lagoon languages might be ancient loans rather than true genetic cognates, particularly as many are extremely close in form and there are no obvious regular sound changes. There are also a few very specific parallels with the names of animals in the Dompo language (§3.3.). This is particularly surprising, as Mpra otherwise shows no Guan influence and is quite remote from Banda, where the Dompo live.

Table 19. Mpra-Dompo resemblances

Species	Mpra	Dompo
donkey	kwimi	kunumɔ
hartebeest	junga	cɔŋ
hippopotamus	chaji	ca
kob	volo	fulofulo
oribi	wulo	wuloŋ
roan antelope	bruguni	buruŋ 'waterbuck'

In the absence of further data, Mpra can probably be accepted as Niger-Congo, but whether it was an isolate branch or affiliated to a larger grouping can no longer be resolved.

3.3.13 Guanche

Photo 4. Guanche terracotta figure

Source: Museo de los Canarios

The Guanche were the ancient people of the Canary Islands, which were apparently settled around 3000 BP. Originally applied the inhabitants of Tenerife, the term has come to refer to what were probably at least four distinct languages. Modern European contact probably dates from the fourteenth century and the first record of the Guanche language appears in the work of the Genoese mariner Nicoloso da Recco in 1341. The Castilian conquest of the Canaries began in 1402 and Guanche disappeared as a spoken language in seventeenth century, though rememberers may have persisted somewhat later. Virtually all the existing language materials are collected in Wölfel (1965). Rock inscriptions in the Canaries include short sentences in both Libyco-Berber and Punic languages. Unfortunately these include hardly any basic lexicon, except numbers, and many items of unknown origin. It is generally considered that Guanche is related to Berber, mostly on the basis of numbers (Pietschmann 1879). However, it is equally likely that it was an old North African language of unknown genetic affiliation, and similarities to Berber are later borrowings.

3.4 Residual foragers

An issue which warrants brief discussion is the question of whether the residual foragers of the Sahara and the equatorial rainforest may represent the remnants of populations which spoke isolate languages. Two Saharan populations have been discussed in this regard, the Imraguen fishermen of the coast of Mauretania and the Nemadi, who migrate between eastern Mauretania and Mali (locations shown on Map 1). The literature contains a certain amount of misleading information concerning these populations, including the speculation that they spoke a 'special' language among themselves (Hermans 2013). As is often the case, foragers in contact with major languages often adopt an accent which makes them difficult to understand (this is also true of the pygmies of the equatorial forest). However, although the Nemadi retain special vocabulary in relation to hunting with dogs, they speak standard Hassaniya Arabic and there is no real evidence of any other language (Tayne-Cheikh 2013). Similarly, the Imraguen have idiosyncratic terms for the fish they catch, but this would be expected, given that the Moors are not fishing people. But again they speak only Hassaniya (ibid.). Similar arguments have been advanced concerning specialised vocabulary of some pygmy groups in Central Africa (Letouzey 1976; at greater length Bahuchet 1992, 1993). The question is whether idiosyncratic vocabulary among populations with a highly specialised knowledge of the environment constitutes evidence for a former substrate language. Blench (1999b) argues strongly that this is not the case.

4. Conclusions

This chapter has covered the complex methodological issues concerning the identification of language isolates in Africa and established a reference list of the most likely candidates, which are briefly described from a linguistic point of view. A longer list covers languages which have sometimes been considered isolates, but which are either undecidable for lack of adequate data, or now have a fairly certain genetic affiliation. It should be underlined that a spectrum of views exists, from a position where languages are considered isolates until their affiliation is proven to a very high standard of evidence, to a position linking almost known languages to larger phyla. The author has tried to tread a middle road and give a flavour of the debate. It is certain, however, that almost all candidates have only very small number of speakers, and living languages such as Laal, Bangi Me and Hadza deserve more description and analysis. Language isolates can provide clues to the language situation of Africa in the Pleistocene and enriching this sparse but valuable evidence must surely a high priority.

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