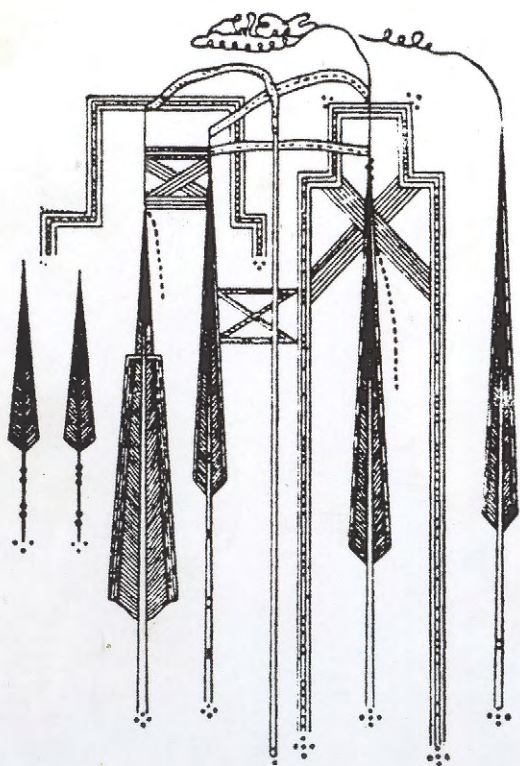


Archaeology and Language IV

Language Change and Cultural Transformation



Edited by Roger Blench and Matthew Spriggs

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ARCHAEOLOGY AND LANGUAGE IV

Language change and cultural transformation

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London and New York

1 *The languages of Africa: macrophyla proposals and implications for archaeological interpretation*

ROGER BLENCH

INTRODUCTION

The question of the genetic classification of the language phyla of the world, from being a marginal study outside mainstream linguistics, has again begun to command considerable attention from both professional linguists and researchers in related disciplines. There appear to be two major forces behind this change in attitudes: the potential for correlation with genetics, notably mitochondrial DNA, and the opening of the former Soviet Union to the world.

Hypotheses generated by DNA studies need to be confirmed by other types of evidence, and language groupings offer broader, older and more coherent structures than archaeology. Moreover, in sampling terms, more is known about languages and their affiliations than archaeology in almost all parts of the world. Geneticists have therefore looked to macrophyla classifications as evidence for their continent-spanning hypotheses (e.g. Excoffier *et al.* 1987; Cavalli-Sforza *et al.* 1994).

At the same time, the tradition of genetic linguistics in the former Soviet Union, with its often idiosyncratic methods, had remained almost unknown to western scholarship until the frontiers began to open. A concern with large-scale language groupings and long-range comparison has been the thrust of much of this tradition. Although many of the actual results of these researches are properly treated with scepticism by scholars in the western tradition, access to publishing has meant that classification has been placed firmly back on the agenda of linguists. Indeed, the now notorious conflicts over Greenberg's 'Language in the Americas' underlines the newly developed importance of classification.

One consequence has been to reopen many existing questions relating to both the internal classification and the external affiliations of African languages. Older proposals claiming that the major African language phyla are to be united with other, non-African phyla, have again been given prominence. At the same time, what can only be described as disarray rules in relation to the internal arrangement of the principal phyla.

The purpose of this chapter is to summarize the present situation, and to present to archaeologists and prehistorians what can be salvaged from this academic chaos in terms of cross-disciplinary interpretation. It sets out some recent views of the traditionally recognized phyla and explores some recent more wide-ranging and speculative theories. Although DNA studies have been important in returning language classification to the agenda, they are dealt with here only in passing (see summaries in Ruhlen 1992; Renfrew 1991, 1994).

CLAIMS ABOUT RECONSTRUCTION

The recent revival of macrophylum theory has led to some striking claims for the reconstructibility of lexical items of cultural and historical significance in African language phyla. Most notable in the context of this chapter are the claims made for Afroasiatic, for example in Militarev (1990) or Orel and Stolbova (1995). According to these authors, almost a full set of terms connected with both agriculture and livestock production can be reconstructed for Afroasiatic. However, a detailed investigation of terms for domestic animals in Afroasiatic (Blench in press, b) could not substantiate these claims. An investigation of Proto-Omotiic by Bender (1988) suggested that the only terms for crops that could be reconstructed in Omotiic were those that were already part of the native flora of Ethiopia.

A similar problem has arisen in the case of Nilo-Saharan. Not only is the internal structure of the phylum much disputed, but opposing claims have been made about the reconstruction of food crops. Ehret (1989, 1993, in press) has claimed that cultivated plants are reconstructible to a high (i.e. ancient) level. Bender (1991b, 1996a) has been unable to substantiate such reconstructions.

This poses an important methodological question: if different linguists have opposing views about reconstructions, can others make use of their results? The only conclusion that can be drawn from this is that extreme caution is necessary when using reconstructions of lexical items carrying such a heavy interpretive load. Obviously, serious researchers claim to exercise such caution; the existence, however, of major disagreements must suggest that very different notions of the comparative method coexist. The strategy for dealing with this is:

1. no reconstructions can be accepted without data tables;
2. reconstructions based on isolated occurrences of words must be regarded with extreme scepticism.

These probably seem quite restrictive demands that would exclude the imaginative approach sometimes necessary in historical linguistics. However, where a cultural revolution so major as, for example, the inception of agriculture is being implied, a necessary scepticism is essential.

THE LANGUAGE PHYLA OF AFRICA

In contrast to the New World and Papua, the composition of the major language phyla of Africa is generally agreed within the scholarly community (Blench 1993a, 1997). Their internal classification remains disputed, as does the position of various isolates. However, given that Africa has the highest absolute number of languages of any continent, their classification remains a considerable achievement. Figure 1.1 shows a sketch of the approximate distribution of the major language phyla.

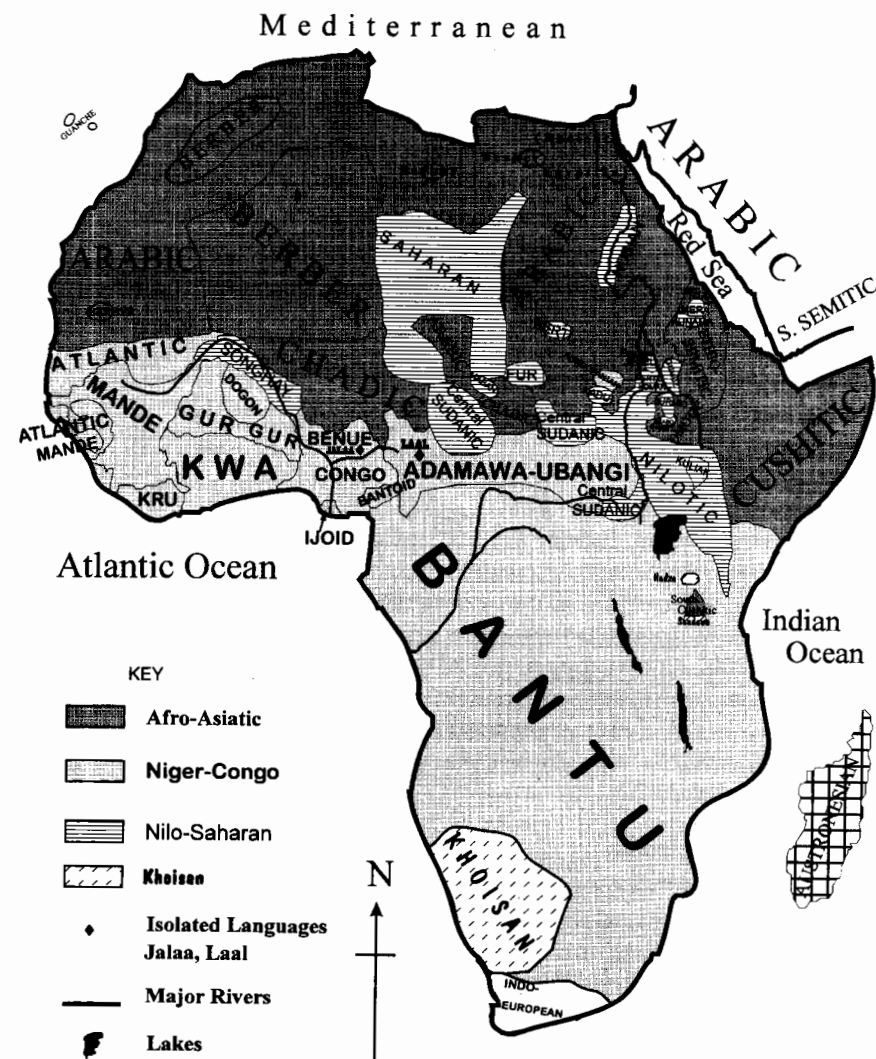


Figure 1.1 Approximate distribution of the major African language phyla
Source: Blench

Isolated languages

The existence and classification of language isolates in Africa remains controversial. Table 1.1 shows the languages often considered to be isolates. The inclusion of Hadza and Sandawe on this list is controversial, because in many quarters these are still considered to be related to Khoisan. Jalaa, like Laal in Chad, has a significant proportion of loanwords from a scatter of neighbouring languages, but a core of apparently unidentifiable lexemes. Little is known about Kujarge, except that Doornbos and Bender report a 29 per cent cognacy with neighbouring Chadic languages. New data has recently become available on Ongota (Fleming *et al.* 1992), and Blažek has argued that it is Nilo-Saharan, but his case has yet to be accepted. The existence of Oropom has been questioned (Heine, *p.c.*) and certainly no new information on these people has come to light.

Table 1.1 African language isolates

Language name	Location	Source	Comments
Jalaa (=Cun] Tuum)	Nigeria	Kleinwillinghöfer (in press)	
Laal	Chad	Boyeldieu (n.d.)	
Kujarge	Sudan	Doornbos and Bender (1983)	Perhaps Chadic
Ongota	Ethiopia	Fleming <i>et al.</i> (1992)	Perhaps Afroasiatic
Oropom	Uganda	Wilson (1970)	Existence unconfirmed
Hadza	Tanzania	Sands (1995 and <i>p.c.</i>)	
Sandawe	Tanzania	Sands (1995)	Perhaps Khoisan
Kwadi	Angola	Westphal (1963)	Perhaps Khoisan

These languages are almost all threatened, at the very least. There were only a handful of speakers of Kwadi when Westphal investigated the language in the 1950s; given the disruption of the Angolan civil war, there may well be none today. The number of Ongota speakers had fallen to six in 1997 (Mikesh, *p.c.*) whilst there are only a few of speakers of Jalaa (Kleinwillinghöfer, *p.c.*). Laal and Kujarge were recorded prior to the wars that have become a chronic feature of the Sudan/Chad borderland since the 1970s.¹ Some of Africa's most crucial languages, in terms of reconstructing its linguistic prehistory, may well become extinct before they are adequately recorded.

Khoisan

The Khoisan or 'click' languages in eastern and southern Africa parallel the languages of Australia, in that they are defined by shared phonological features rather than by an evident common lexicon. Arguments for the links between all the Khoisan languages have been advanced by various authors, but no one schema is generally accepted. Westphal (1971) was a strong advocate of the view that even the Khoisan languages of southern Africa did not all fall into a single phylum. Most recent classifications follow the extended study of Köhler (1981), who proposed a series of isoglosses linking the major Khoisan families. Traill (1986) has put forward further isoglosses linking Khoi

and San, whilst warning that until our understanding of the process of lexical diffusion improves, guaranteeing that these are proof of genetic relationship remains difficult. Central Khoisan is the most well-substantiated family with a significant number of reconstructions (Voßen 1988, 1997).

Bleek, Greenberg and, most recently, Ehret (1986) argue that Khoisan is in turn linked to Sandawe and Hadza, click languages spoken in east Africa. This has been questioned by other Khoisanists (e.g. Elderkin, 1983 for Sandawe). Sands' (1998) study of Khoisan relationships has shown that especially in the case of Hadza, most of the lexical arguments that were advanced to support this case rest on very doubtful correspondences or erroneous lexical citations.

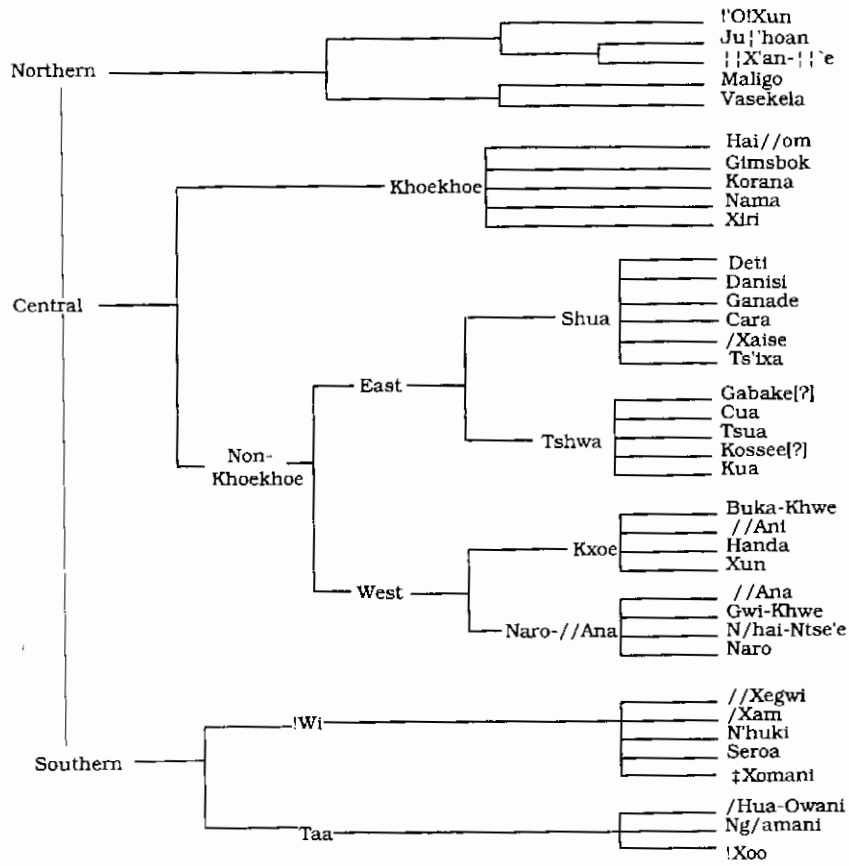
The classification and indeed the inventory of Khoisan speech forms remains in doubt. One recently published 'tree' following Köhler is Grimes and Grimes (1993). This has been combined and corrected in consultation with Rainer Voßen (and compared with Voßen, 1990) to produce the tree given in Figure 1.2. However, the present diagram represents an uneasy compromise, since it does not eliminate the lects mentioned in Grimes and Grimes that could not be reconciled with other known speech-forms.²

Nilo-Saharan and a proposed Niger-Saharan macrophylum

Nilo-Saharan was first characterized by Greenberg (1966, 1971), and extended by Bender (1983a, b, 1989, 1991a, b, 1996a, b) and Ehret (1989, 1993, in press). Later studies have confirmed Greenberg's basic hypothesis as to the overall unity of the family. The most elaborate proposals for the subclassification of Nilo-Saharan have been developed by Bender (1996a). Bender bases his classification on grammatical isomorphs and shared innovations, but it is considerably at variance with that of Ehret. Bender (1996a, b) considers at some length the reasons for this dissonance and relates it to rather general philosophies of classification. Figure 1.3 shows the classification proposed by Bender.

The details of the classification remain to be fully worked out, but the essential feature is a split between the outliers (Songhay, Saharan, Kunama-Ilit and Kuliak) and the remaining languages including the Sudanic languages, For, Berta, Koman and Kadu (=Kadugli-Krongo). The membership of Kadu (=Kadugli-Krongo) and Kuliak is not accepted by all researchers (e.g. Ehret 1995a). It has recently been argued that Shabo³ is part of Nilo-Saharan, although its position is disputed (Blench 1995a). The case for Ongota is even more precarious: Fleming *et al.* (1992) express the opinion that it is Afroasiatic, whilst Blažek (1991) has argued for Nilo-Saharan affiliation. Moreover, the relationship between the members is still uncertain and no overall 'tree' is yet agreed by scholars.

Although Greenberg considered Nilo-Saharan to be a wholly distinct phylum, there has been a succession of papers adducing evidence for a close link with Niger-Congo. Gregersen (1972) originally proposed a 'Kongo-Saharan' superfamily, and Blench (1995a) has presented a detailed case for a unification of Nilo-Saharan and Niger-Congo, suggesting that Niger-Congo is most closely related to the Central Sudanic languages. The proposed macrophylum would be named 'Niger-Saharan'.



Data exists for Eastern †H6ā, but this language remains to be convincingly classified.

Figure 1.2 Classification of the Khoisan languages

Source: Rainer Voßen and Roger Blench

If a Niger-Saharan macrophylum is accepted, Niger-Congo then becomes one branch of it, rather like Bantu, despite its size, is simply one sub-branch of Niger-Congo. The challenge is then to see exactly where Niger-Congo branches from Nilo-Saharan. Blench (op. cit.) argues that Niger-Congo split off from Nilo-Saharan at the same time as Central Sudanic. Excluding the branches further away from Niger-Congo, a minimal 'tree' of Niger-Saharan can be constructed as shown in Figure 1.4.

If this model is substantiated by further work, then a clear conclusion can be drawn from it: that Nilo-Saharan is far older than Niger-Congo. The deep divisions within Nilo-Saharan have led previous writers to this conclusion.

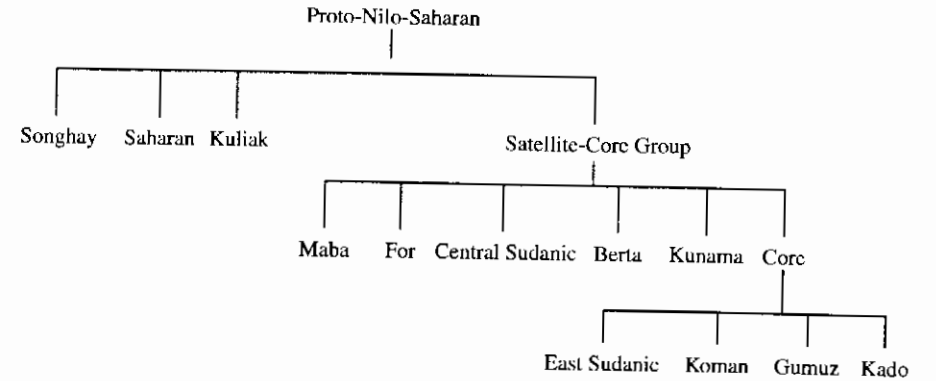


Figure 1.3 Nilo-Saharan in the classification of Bender (1996b)

Source: Bender 1996b

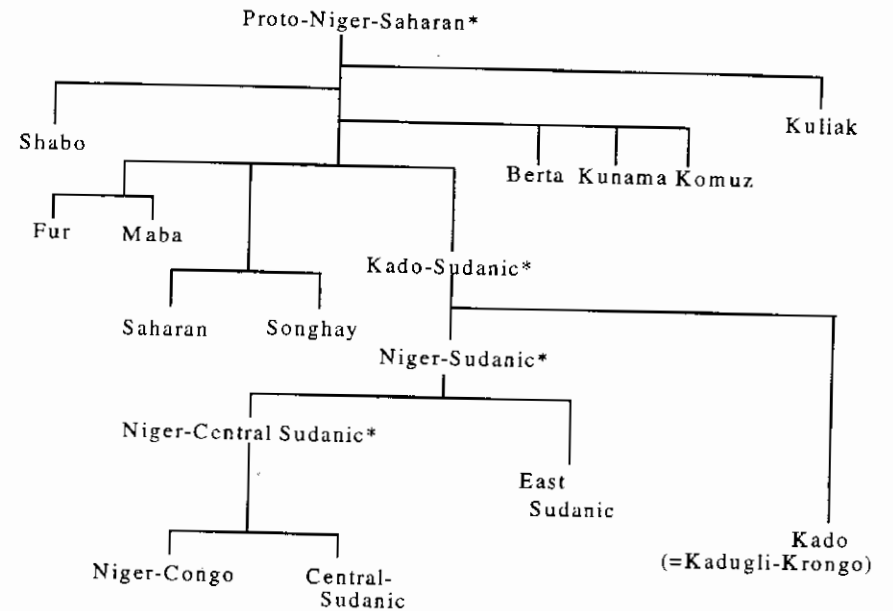


Figure 1.4 Proposed Niger-Saharan 'tree': minimal hypothesis

Source: Blench 1995a

The challenge is to attempt somehow to link this with processes evident in the archaeological record (see MacDonald, Volume II, Ch. 1).

Niger-Congo

Niger-Congo is the most widespread of Africa's language phyla and includes the majority of its languages – in excess of 1,500. The concept of Niger-Congo

has its roots in Westermann's (1927) *Sudan-Sprachen*, and many of the families recognized today were first established there. Westermann was the first to illustrate the strong links between the Bantu languages and those spoken in West Africa, and his demonstrations have generally been accepted by later scholars (Blench 1989, 1992, 1993b).

The possible linkage with Nilo-Saharan is discussed above. However, the internal structure of Niger-Congo has itself been under review as more data becomes available for the various subgroups. Figure 1.5 is based on a recent study of the distribution of lexical items (Blench in prep):

A notable feature of this revised classification is the treatment of both Gur-Adamawa and Kwa-Benue groups as continua rather than as discrete language families (Kleinewillinghöfer 1996). The representation of continua with transverse double lines derives from a convention introduced by Ross (1988) and supposes that these originally represented dialect chains that coalesced into distinct language groupings.

Afroasiatic

The Afroasiatic language phylum has a somewhat ambiguous status among the major language phyla of the world. As the grouping that includes not only several languages sanctified by major world religions, but also the earliest written language, it has benefited from a massive research and publication effort in certain rather specific areas. It also has old-established traditions of scholarship that have not always had a positive effect on innovative research.

Ruhlen (1991: 87 ff.) gives a useful concise history of the classification of the languages that constitute the phylum. The kinship of Hebrew, Arabic and Aramaic was recognized as early as the 1530s, and Ludolf pointed out the affinity of Ethio-Semitic with the Near Eastern languages in 1702. The name 'Semitic' was proposed in 1781 by von Schläzer. Berber and some of the Chadic languages, notably Hausa, were added during the course of the nineteenth century.

A phylum under the name Afroasiatic goes back to Joseph Greenberg ([1950] rev. 1966). Previously, the preferred name had been 'Hamito-Semitic', an unfortunate conjunction both clumsy and redolent of suspect racial theories. Hamito-Semitic is by no means expunged from the lexicon, whilst other proposed names include Afrasian, Lisramic and, more strangely, Lislakh. These have not been widely adopted. Afroasiatic has been the subject of a number of overviews; historically, the most important of these have been Cohen (1947), Diakonoff (1988) and Perrot (1988). Reconstructions of Afroasiatic have been proposed by Ehret (1995b) and Orel and Stolbova (1995). The distribution of Afroasiatic languages is shown in Figure 1.6.

Significant developments in the classification of Afroasiatic have been:

- 1 the recognition that Greenberg's 'Western Cushitic' is quite distinct from other branches of Afro-Asiatic;
- 2 the break up of Southern Cushitic as traditionally constituted.

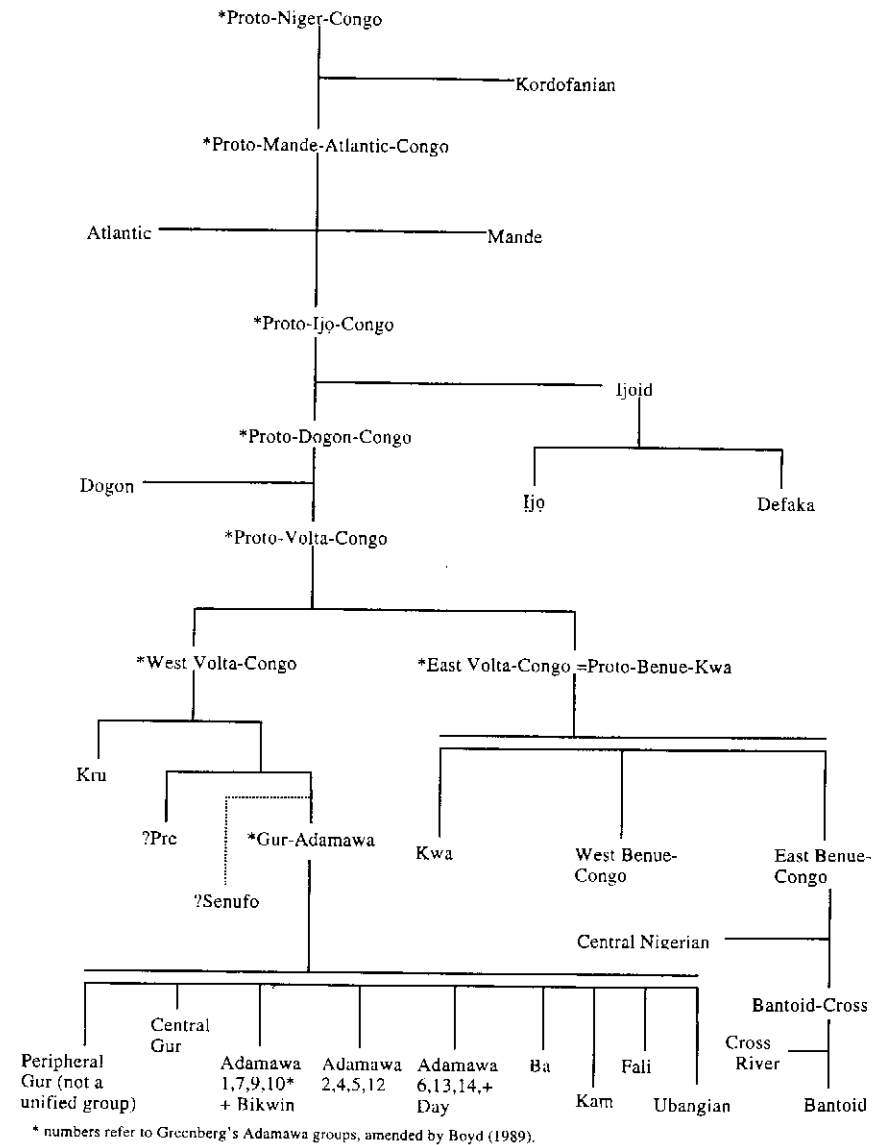


Figure 1.5 Niger-Congo: a reclassification

Source: Williamson and Blench 1999

Western Cushitic has been renamed Omotic (Bender 1975). Most scholars have accepted the coherence of Omotic as a group and agree on its assignment to Afroasiatic. Some researchers would prefer to retain Omotic within Cushitic, but these are now in a minority. In the case of the other branches of Cushitic, there has also been considerable discussion about whether it really

constitutes a family, and Beja, Ethiopian Cushitic and Southern Cushitic are often treated as distinct branches. Ehret (1987) has proposed a 'Proto-Cushitic', making explicit the hypothesis that these branches form a unity.

Ehret (1980) argued for a Southern Cushitic based on a membership of:

West Rift	Iraqw, Gorwa, Alagwa and Burunge
East Rift	Asa, Kwadza
Outside	Ma'a(=Mbugu), Dahalo

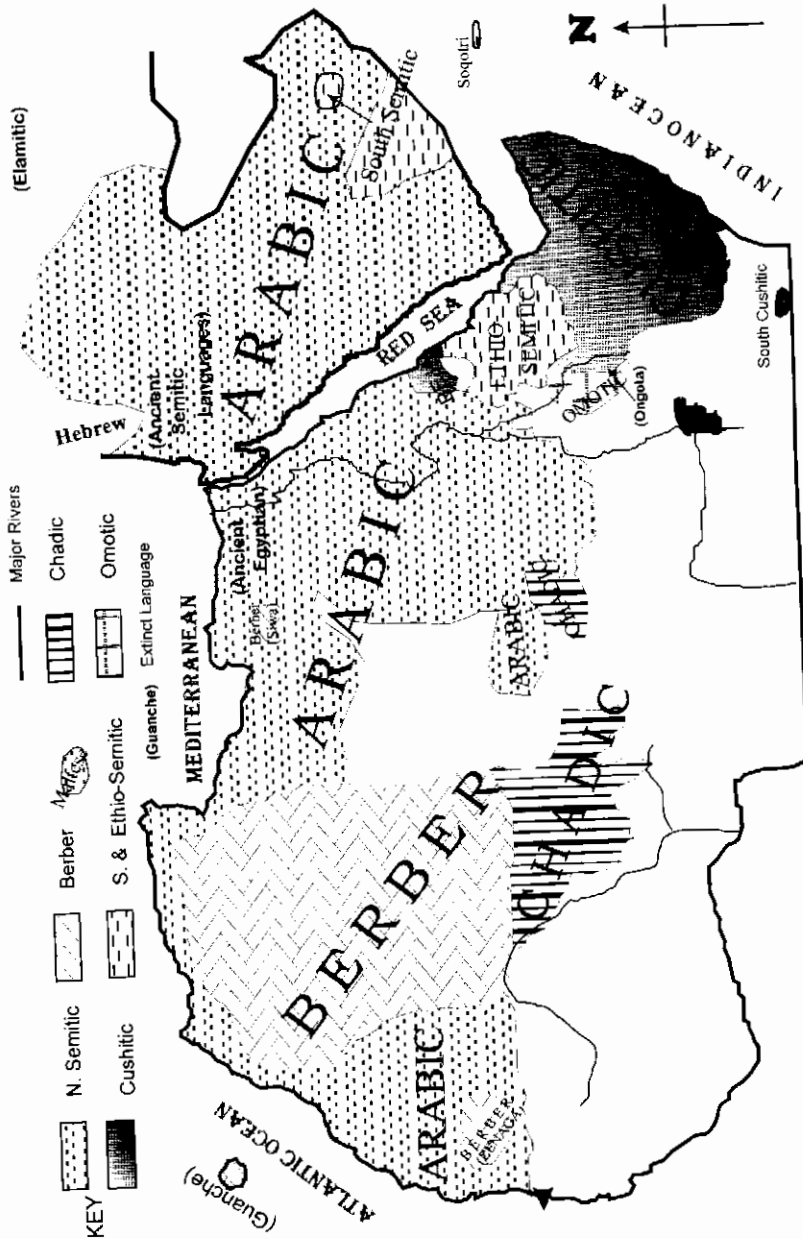
Recent work on Ma'a suggests that it is rather a 'register' of a Bantu language and that the Cushitic elements are a superstratum consisting of both eastern and southern elements (Mous, pers. comm.). Meanwhile, better data on Dahalo (Tosco 1991) suggests that it may either be a very aberrant member of Eastern Cushitic or form a branch of its own with Yaaku and Galaboid with which it shares some intriguing isoglosses. Ehret proposes the internal grouping of Cushitic shown in Figure 1.7.

Ehret's (1995b) schema of the internal structure for Afroasiatic is fairly similar to the models proposed formally or informally by other researchers. The major difference with Ehret's classification is that he does not see a special relation between Cushitic and Chadic, but does have Chadic branching off directly after Cushitic.

A radically different view is taken by Orel and Stolbova (1995), who consider that Cushitic and Omotic are not genetic groupings at all but an ancient *Sprachbund*. The outline proposed by Orel (p.c.) is shown in Figure 1.8.

Such a tree should be treated as a working hypothesis; it does not really address the relations of Berber-Egyptian and Semitic in detail, nor does it attempt to make the inter-relationships of Cushitic fully coherent.

Bender (1997) has also proposed a radically new structure for Afroasiatic ('upside-down Afrasian' in his terminology). His revised tree is shown in Figure 1.9. Bender proposes a homeland for Afroasiatic (the region where Chad, Sudan and Libya meet today) and a date (10,000 BP). Perhaps even more startlingly, he canvasses the possibility that Indo-European is somehow an offshoot of his 'Macro-Cushitic'. Whether these suggestions will be taken on board by the scholarly community will depend on the presentation of fuller evidence than is given in this short chapter.



RMB December, 1997

Figure 1.6 The distribution of Afroasiatic languages

Source: Blench

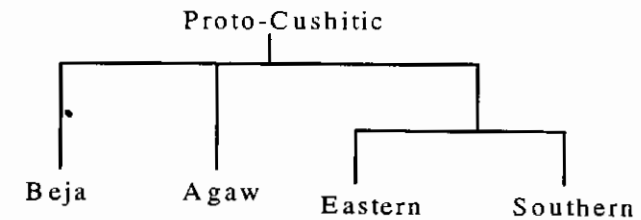


Figure 1.7 Internal structure of Cushitic

Source: Ehret 1995b

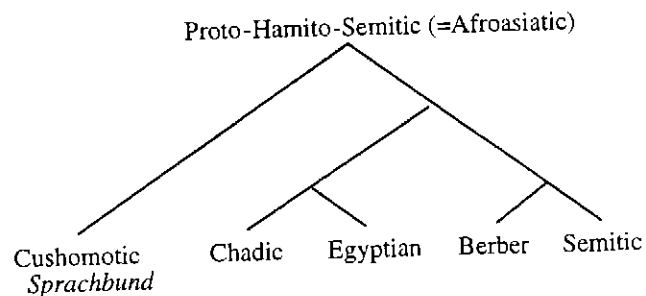


Figure 1.8 Internal structure of Afroasiatic (after Orel)

Source: Orel p.c.

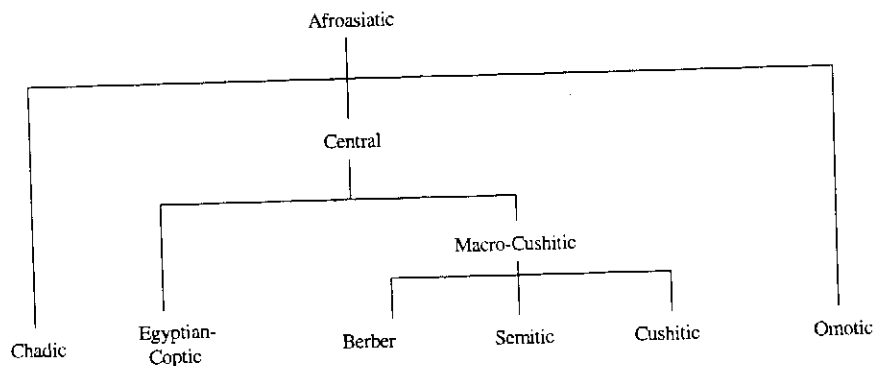


Figure 1.9 The internal structure of Afroasiatic (after Bender 1997)

Source: Bender 1997

Blažek (this volume) proposes that Elamite, an extinct language of the Ancient Near East, either constitutes a seventh branch of Afroasiatic or is co-ordinate with it. Elamite is usually classified with Dravidian, spoken in south India, but does show clear cognates with Afroasiatic. Blažek proposes a structure where Afroasiatic is related to Dravidian at a higher level and Elamite forms a bridge between the two. Whether the links between Elamite and Afroasiatic is a genetic relationship or simply a case of extensive loan-words remains to be explored.

Blench (in press, b) has put forward a view of the structure of Afroasiatic that is explicitly linked to archaeological data. This model proposes that Chadic and Cushitic are closely linked and that the Chadic speakers are in reality Cushitic pastoralists who migrated to Lake Chad along the Wadi Hawar. The resulting tree is not very different from that of Ehret, and I have adapted some of his proposed names for the nodes (e.g. North Afroasiatic and Erythraic). Figure 1.10 shows a composite view of Afroasiatic incorporating some of the recent proposals made concerning Elamitic, Ongota, etc.

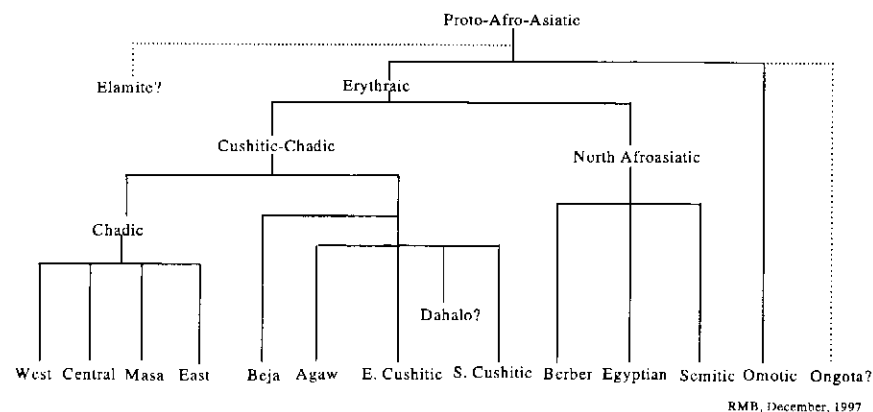


Figure 1.10 Proposed revised Afroasiatic classification

Source: Blench in press, b

EXTERNAL LINKS FOR AFRICAN LANGUAGE PHYLA

The Nostratic hypothesis

More speculative proposals have been advanced that are intended to explore 'deep-level' relationships of African language phyla. Afroasiatic is the African language phylum that has been most commonly proposed as related to other phyla of Eurasia. To enumerate all these proposals would be lengthy, but apart from Dravidian mentioned above, Afroasiatic is frequently connected to Indo-European and more broadly to 'Nostratic' (Bomhard 1994; Hegedüs 1997; Dolgopolsky 1998). Ruhlen (1991) provides a useful summary of these debates. Although there is definitely not a consensus in this area, there are two basic views:

- 1 that Afroasiatic (like Kartvelian and Dravidian) is co-ordinate with 'Eurasianic' (Greenberg, Starostin);
- 2 that Afroasiatic is a member of Nostratic (Pedersen, Illitc-Svityč, Bomhard, Dolgopolsky).

A compromise view is represented in Figure 1.11.

These hypotheses are stimulating; they extend the debate on broad connections and similarities between languages at a very great time-depth. However, they remain linguistic hypotheses; their conclusions should not be extended to other disciplines, notably archaeology. Macrophyllum classifications are much less well founded than low-level reconstructions. They are more tools to help linguists to think than representations of the past.

The lost language of the pygmies

The question of the origin of the pygmies of the African rainforest and their relative antiquity has remained controversial (Cavalli-Sforza 1986). Although

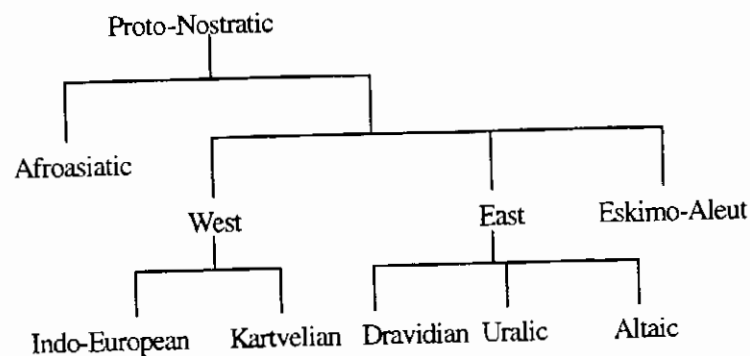


Figure 1.11 Afroasiatic and Nostratic (after Hegedüs, 1997)

Source: Hegedüs 1997

in many ways the pygmies appear to be the ancient inhabitants of the forest, partly displaced by the incoming Bantu, researchers have been disturbed by the complete absence of distinctive languages spoken by the pygmies and the ambiguous archaeological evidence.

Bahuchet (1992, 1993a, b) has recently presented an extremely challenging view of the history of the pygmy populations, in particular the Aka and the Baka. Despite speaking languages of quite different genetic affiliation, these groups prove to have common vocabulary, concerned especially with food gathering in the rainforest. If Bahuchet is right, then this vocabulary constitutes a trace of the lost language of the pygmies. Bahuchet further argues that the reduction in the rainforest at the end of the Pleistocene isolated pygmoid groups in relict forest. These groups diffused outwards when the forest began to expand again, eventually encountering the incoming Bantu cultivators. The results of this encounter, and in particular the evolution of client relationships, account for the ethnolinguistic pattern seen today.

An alternative view is presented in Blench (in press, a) which argues that the absence of a true pygmy language is no accident: that the pygmies are to be identified genetically with their cultivator neighbours. Instead, the fragmentary hunter-gatherer peoples and isolated languages that today form a ring around the rainforest represent the remaining traces of a lost complex of non-pygmoid hunter-gatherer populations, speaking highly diverse language, who inhabited Africa prior to the spread of the major language phyla. This diversity would then have been largely eliminated in the regions where the major language phyla expanded. Nilo-Saharan languages may have been the first to expand, but Niger-Congo was substantially more successful in terms of geographic range. If this is so, the situation would then resemble more closely regions of the world where hunting and gathering dominated the economies until recently and where no large-scale state systems evolved to impose uniformity. The main regions where this is the case are the New World, Australia, Papua and Siberia.⁴

CONCLUSIONS

The gradual increase in availability of data has led to major disagreements between scholars as to the internal classification of many of Africa's language phyla. As with Indo-European, it is easier to discern a large number of discrete groups than to fit them together into a hierarchical tree structure. Paradoxically, a slightly clearer image of African prehistory is beginning to emerge from the present synthesis. The four major phyla may be reducible to three if the Niger-Saharan hypothesis is accepted, but they are unlikely to split into more phyla. Even if the macrophyla proposals gain acceptance, they are unlikely to change estimates of the relative internal diversity of existing phyla and therefore estimates of their relative antiquity.

A scatter of 'remnant languages' across the continent may be unclassifiable because they have an extremely complex language history or because they are genuine survivors of otherwise vanished phyla. Such languages correspond to the position of Basque in Europe or Burushaski in Asia. These languages may be the only remaining traces of the earlier inhabitants of the continent. Originally spoken by mobile hunter-gatherers, they have remained in traces in isolated populations. Influenced by all the neighbouring languages, they usually show a complex texture of loanwords as well as a core of words of unknown etymology.

The Khoisan languages probably fit together but are so deeply internally divided that this question is likely to remain controversial. A useful parallel here is the situation in Papuan or Australian. Striking phonological similarities suggest genetic unity. There are good historical/archaeological reasons for supposing that we are dealing with essentially homogeneous populations in these cases. However, their languages have been ramifying for so long that the lexical connections between them have reduced to a point of near invisibility.

Khoisan is, therefore, probably the oldest phylum and the Khoisan languages that remain are just a fraction of those that were once spread over eastern and southern Africa. Whether the Niger-Saharan hypothesis is accepted or not, Nilo-Saharan is likely to be older than Niger-Congo and Afroasiatic. However, despite various claims, there are no convincing reconstructions of lexemes for agricultural items in the proto-languages of any of the African language phyla. In other words, the processes that led to their expansion took place in a pre-agricultural phase.

The likely correlate of these expansions is micro-climate fluctuations, but the doubt hanging over the internal classification of these phyla suggests that attempts to draw up large-scale models is presently a fruitless task. In the case of macrophyla proposals, it should be emphasized that these are very much linguists' constructs. Many of the methods used to argue for the very existence of these groupings are disputed by other linguists. Moreover, macrophylum proposals, especially in the case of language isolates such as Basque or Ainu, have a habit of producing multiplexes of different solutions.

More problematic is how the archaeologist should respond to the disagreements over the internal classification of the major language phyla. In principle,

trying to model the dispersal of an entire phylum is a fruitless task at our present stage of knowledge. Even Indo-European, the most-researched phylum, has yet to be analysed as a convincing tree-structure, and there is considerable disagreement about the link between archaeology and present-day linguistic geography.

The task then should probably be to work with much smaller-scale groupings. Every phylum is divided into manageable units, most of which are generally accepted by the linguistic community. Examples of these would be Mande, Bantu, Nilotic, Omotic, etc. Although a satisfactory model of the expansion of these families is yet to be worked out, they are neither so ancient nor so vast that such a task is in principle unachievable.

NOTES

- 1 I am grateful to Matthias Brenzinger for inviting me to the Round Table on Endangered Languages in Africa at Leipzig, August 1997.
- 2 In addition, the representation of clicks is not as accurate as it might be, due to limitations in the drawing programme.
- 3 I am grateful to Anbessa Teferra for data on the Shabo language.
- 4 Smaller subregions such as the Andamans could also be included.

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