Besprechungsartikel

The Classification of Nilo-Saharan

by Roger Blench

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Introduction

In the last seven years, two subclassifications and reconstructions of the Nilo-Saharan language phylum have been published, Bender (1996a) and Ehret (2001). Although Ehret has only recently reached print, pre-print versions have been in circulation since the early 1980s and indeed Bender has published at least two critical evaluations of a manuscript dated 1984 (Bender 1996a: 171 ff., 1996b: 12 ff.). In view of the publication of the revised ms., the time is ripe for a detailed look at the contributions of these two scholars, especially as historical-classificatory issues do not seem to be engaging the younger generation of Nilo-Saharanists and they may therefore stand for some years[1].

Nilo-Saharan has the distinction of being the 'youngest' of the world's language phyla to be identified; prior to Greenberg (1955, 1963, 1971) there is no literature suggesting that a disparate group of languages stretching from Mali to Tanzania were to be conjoined in a single phylum. Bender's first approaches in print are Bender (1976, 1981) as well as a series of edited volumes (Schadeberg and Bender 1981; Bender 1983, 1989, 1991). The first monographic study of the phylum is Schadeberg (1981a) although this is cited by neither Ehret nor Bender. Westermann (1911) developed a concept of *Sudansprachen* that encompassed both Nilotic languages and Niger-Congo but he dropped this in later publications. As late as the 1960s, Tucker and Bryan (1966) treated many Nilo-Saharan languages as 'isolated units'. Most recently, Mikkola (1998, 1999) has re-examined Greenberg's

original proposals for Nilo-Saharan etymologies and tested them against external data, concluding that they broadly support the unity of the phylum. The internal diversity of Nilo-Saharan is such that doubts about its coherence remain, especially among non-specialist linguists, and there is no doubt that the absence of a vast tome demonstrating its unity has allowed those doubts to remain unresolved. The successful series of conferences celebrating Nilo-Saharan that has been running since 1981 suggests that field researchers are not troubled by similar problems. The question therefore is whether the two volumes under consideration will quell the doubts of other linguists.

Bender and Ehret take very different approaches to reconstruction and both have some quirks in terms of conventional historical linguistics. Table 1 summarises some of these differences, which are discussed in more detail in the following paragraphs.

Table 1. Comparison of Bender (1996a) and Ehret (2001)

FEATURE	BENDER	EHRET
Membership of Nilo-Saharan	All groups	Krongo (i.e. Kadu) and Shabo excluded
Literature cited	Extensive	Highly selective
Discussion of previous authors	Some	Virtually none
Justification of subgroup coherence	Extensive	None
Sound-correspondences	Little used	Extensive
Classification type	Tree + co-ordinate branching	Strict tree structure
Cultural and historical background	Extensive	None
Linkages with other African phyla	Extensive	None

Two recent publications in the Festschrift for Franz Rottland illustrate neatly the contrastive approaches of these two authors (Bender 2000a; Ehret 2000). Ehret discusses the affiliation of Krongo (the Kadu languages) which he is now alone in believing not to be Nilo-Saharan. Normal scholarly practice would presumably be to evaluate

the approaches of more specialised scholars who have proposed a Nilo-Saharan affiliation (e.g. Schadeberg 1981b; Dimmendaal 1987; Stevenson 1991) and show why their arguments should be discarded. Instead Ehret compares Krongo to his own (unsupported) Nilo-Saharan reconstructions and concludes that there are few shared items. This wilful failure to encounter prior scholarship is unfortunately typical of the whole style; a confident face to scholars outside Nilo-Saharan but dismaying to anyone with some knowledge of the phylum. Bender (2000a), on the other hand, attempts to justify the genetic position of Nilotic by examining comparative independent pronouns. He provides comparative data tables, both of Nilotic and of the other Eastern Sudanic and nearby languages, thereby allowing the reader to judge the empirical support that exists for his argument.

Membership of Nilo-Saharan

Greenberg's Nilo-Saharan has undergone considerable expansion and internal renaming since his first proposals. Bender's writings always assume a maximal set of members for Nilo-Saharan as follows;

Songhai	For	Berta	Kuliak
Saharan	East Sudanic	Kunama	Kadu
Maban	Central Sudanic	Gumuz	

He lists Shabo under East Sudanic (Bender 1996a: 27) although noting the possibility that it is a separate branch as Fleming (1991) thought. Ehret (1995a, 2000) always excludes Shabo and Kadu (which he calls Krongo for unknown reasons, Krongo being the name of a single language) and indeed argues for a Niger-Congo affiliation for Kadu.

Discussion of previous authors

Typically, attempts at phylic subclassification are accompanied by an evaluation of previous efforts in this direction and discussion as to why the author's new publication is an improvement on previous attempts. In particular, where hypothetical roots have been previously reconstructed it is usual to refer to these, if only to underline the superiority of the new proposal. Bender refers and takes into account other

literature. Ehret, however, omits almost all reference to publications that might contradict his proposals on a scale that is almost unique. Most notably, he omits reference to Bender's (1996a) Nilo-Saharan reconstruction and to Bender's family-level reconstructions of Central and Eastern Sudanic[2] (Bender 1992, 1996c), to his study of Koman (Bender 1984), to Schadeberg's (1994) comparative Kadu, to Edgar's (1991a) proto-Maba, to Dimmendaal's (1988) and Rottland's (1997) Nilotic reconstructions, to Nicolai's (1981) comparative Songhai and to Boyeldieu's Sara-Bongo-Bagirmi (published 2000 but available since 1993). Although he refers to Thelwall (1981) on Daju, Rottland (1982) on Southern Nilotic and Voßen (1982) on Eastern Nilotic, in each case he prefers his own amended reconstructions. The pattern is unfortunately all too evident; every time a published reconstruction could challenge those used by Ehret, he systematically omits all reference to it.

Apart from the general literature on historical reconstruction, Ehret has an idiosyncratic response to material on individual languages. He cites the Ph.D. thesis of Angelika von Funck (= Jakobi) on Fur rather than the published version of her grammar (Jakobi 1990). He ignores the Kanuri dictionaries of Cyffer and Hutchison (1990) and Cyffer (1994) in favour of Lukas (1937). He glosses over the compilation of Edgar (1991b) on comparative Maba, citing only Trenga (1947). For an author somewhat prone to hector the historical linguistics community on its inadequacies of method (Ehret 2001: 66 ff.), this seems somewhat inconsistent.

Nilo-Saharan reconstruction is heavily dependent on unpublished and semi-published materials. Bender has always been scrupulous about citing these and as far as possible, publishing them, even where they do not meet modern standards of transcription. Ehret, on the other hand, has no discussion at all of the quality of sources or indeed which citation is linked to which source. As a consequence it is often difficult to know where his citations come from, when they differ from the obvious source.

Justification of subgroup coherence

Phylum-level reconstruction, to be manageable in length and presentation, must partly depend on the prior acceptance of the coherence of subgroups and usually on citations of reconstructed proto-forms. One area where Bender cannot be faulted is the prior publica-

tion of language data both on individual groups and reconstructions of the most important subgroups of Nilo-Saharan, notably Koman and Central Sudanic (Bender 1984, 1992). Ehret, by contrast, performs his own reconstructions on published data, often by less than transparent procedures, and then cites the resultant starred forms. This is most striking in the case of Central Sudanic, where Ehret's unpublished reconstructions differ widely from the published results of Bender (1992) and Boyeldieu (2000). It is, of course, somewhat easier to find regular sound-correspondences with your own starred forms than those inconveniently put forward by other authors.

Reconstruction of the PNS phonological system

Bender (1996a) and Ehret (2001) come to strikingly different conclusions in relation to the PNS phonological system. One important reason for this is the very different internal structure they assign to the phylum. Ehret's proposal for a very large number of consonants reflects his conviction as to the priority of Koman, although it also has the effect of making it easier to account for a great diversity of synchronic forms. Indeed, Ehret's sound-system mimics that proposed for Twampa (Thelwall 1983) although Thelwall is not explicitly mentioned in the text at this point. Tab. 3 and Tab. 2 show the Bender and Ehret consonant systems contrasted;

Tab. 2. Ehret's PNS consonant system

ɓ		ɗ	ɗ̣	ɠ
b	ḏ	d	ḍ	g
p	ṯ	t	ṭ	k
pʰ	ṯʰ	tʰ	ṭʰ	kʰ
p'	ṯ'	t'	ṭ'	k'
	θ	s, z	ṣ	
m		n	ɲ	ŋ
mb	nð	nd	nḍ	ŋg
w			y	
'w			'y	h
	ḷ	l, r		

Tab. 3. Bender's PNS consonant system

b	d	d₂ (?)	j	g
		t	t₂ (?)	k, kʰ
f	s			
m	n			ŋ
w				y
	l, r			
	r₂ (?)			

It is not the place of an article such as this to determine how these two proposals are to be evaluated. Proto-phonological systems have no natural tendency to be simple or complex. But we should be wary of what Blust has called 'proto-form stuffing', the attribution of all the features recognizable in the daughter-languages to starred forms. Ehret's reconstructed phonology depends strongly on accepting his genetic tree; once that is questioned the whole system falls apart. Bender's more modest proposal is also clearly more robust.

Vowels are always more problematic than consonants, with Bender proposing six and Ehret seven Proto-Nilo-Saharan vowels, although Ehret also reconstructs a length contrast for all vowels. Recent analyses of Nilo-Saharan vowel systems appear to suggest quite a different solution, touched on in the section 'Other issues' below. Bender makes no reference to tone in Nilo-Saharan but Ehret (2001: 48) comments as follows;

'Proto-Nilo-Saharan can be provisionally reconstructed to have had three phonemic tones, high, mid and low'

and he offers a table of provisional tone-correspondences. Tone-systems remain so weakly described and their analysis so controversial, especially in East Sudanic, that it is unlikely this issue will be resolved in the near future.

Semantics

In many ways, semantics is the core of large-scale phylum-level reconstruction. If a wide semantic range is permitted, then this increases the potential for 'regular' sound-correspondences as well as opening up a spectrum of morphological similarities. Both Ehret and Bender accept a range of semantics that is both broad and not justified in their respective texts; in both cases, such a spread would be unacceptable in many other language phyla. In Austronesian or Niger-Congo, for example, reconstructions can be made while retaining highly conservative semantics. I have noted some of the more extreme semantics in Blench (2001) and this example is updated here. Table 4 below shows some egregious examples;

Table 4. Semantic equivalences in Bender and Ehret

Bender (1996a)	
p. 77	belly, inside, liver, outside, intestines, heart
p. 79	follow, enter, exit, hunt, chase, dance, return, rise, turn
p. 137	earth, country, land, ashes, down, dust, mud, sand, charcoal

Ehret (2001)	
No. 1129	husk, shell, fur, to slide under, to shovel up, hair pulled out in fright, tweezers, hair, feather, to remove
No. 1134	to descend, to deflate, to be asleep, to trim lamp
No. 1262	to drip, blood, sap, cold, cataract, tear, river, dew

The source of this generous attitude to cognacy is the great difficulty in finding evidently related forms across the whole range of Nilo-Saharan. But perhaps we may need to accept the total number of true PNS forms *will* always be small, as a consequence of the great time-depth of the family. A parallel may be Greenberg's claims for the unity of Amerind, the great phylum he proposed to unite most of the languages of the Americas. Greenberg (1987) put forward common glosses that involved dramatic semantic shifts which were not accepted by Amerindianists; some fifteen years on, they still remain in the wilderness.

An important difference between Bender and Ehret is in their approach to what may be called hierarchical semantics. Bender is content to allow the equivalence of different glosses to stand without proposing a gloss for PNS. Ehret, however, as in his other publications, notably in Afroasiatic, conjoins the synchronic meanings of glosses to deduce a still more abstract meaning. To caricature this slightly, if he considers that 'fox' and 'hole' are cognate, then the reconstructed meaning is 'foxhole'. More concretely, Ehret's Proto-Nilo-Saharan form for 1262 above, 'to drip, blood, sap, cold, cataract, tear, river, dew' is glossed 'to seep'.

Ehret is aware that his approach to semantics has not commanded widespread assent. He has a short section (op. cit. 72 ff.) defending this innovative method, aimed at convincing the sceptical reader that these remarkable leaps do indeed have some foundation in the synchronic semantics of Nilo-Saharan, although his argument is somewhat bare of concrete examples. The point, which can hardly be reiterated too often, is that while surprising semantic shifts do indeed occur in all language phyla, without some synchronic examples sup-

porting a particular proposal it will remain difficult for other researchers to accept them. If they are not accepted then they no longer constitute evidence for the proposed phonological correspondences.

Classification type

Classification theory has been intensively discussed in recent times, partly because of increased understanding of levels of borrowing and creolisation processes. Typically, Greenberg offered only a co-ordinate branch solution, identifying the branches of Nilo-Saharan but proposed 'Chari-Nile', conjoining what we would now consider the distinct Central and Eastern Sudanic as well as Kunama and Berta. Ehret's classification, first published in Ehret (1989) and not substantially altered subsequently, is a strict tree model positing a primary split between Koman-Gumuz and all other languages. Many of the nodes are given new titles, such as Rub, Kir-Abbaian and Astaboran, reflecting Ehret's assertions about internal branchings. Bender, by contrast, offers as combined model which has grown between publications, dividing Nilo-Saharan into 'Core' and 'Periphery' and not subclassifying 'Periphery'.

The internal diversity of Nilo-Saharan and its wide geographical spread rather suggests a mixed Benderian model than a strict tree. However, if a tree can be justified by nodal reconstructions at every level, rather like Oceanic in Austronesian, then there may be reasons for accepting it. But this is far from the case. Ehret has published a reconstruction of Southern Nilotic and of Kuliak, but no other group; nor do such nodal reconstructions appear with their justification in the present text.

Cultural and historical interpretation

By a paradox, Bender and Ehret swap positions when it comes to presenting cultural and historical interpretations of their proposals in their monographs. Ehret has typically pursued historical linguistics with the reconstruction of prehistory in mind and has published a cultural interpretation of his Nilo-Saharan classification mysteriously not cited in the bibliography (Ehret 1993). Bender, by contrast, usually stays with strictly linguistic issues, but here branches out into the interpretative arena (Bender 1996a: ff. reprised in Bender 2000b). Neither of these interpretations stand up to much historical scrutiny;

Ehret (1993) linked his reconstruction of sorghum with a long-discarded ancient date from the Sudan. I was charmed, however, by Bender's (1996a: 48) view that 'sporadic' cats are linked with Nilo-Saharan.

There is an important difference that relates to our historical understanding of the phylum. Ehret includes a number of reconstructions that imply agriculture and livestock production were known to the speakers of PNS; Bender does not. This in turn is linked to Ehret's unique conviction that Nilo-Saharan is a tight phylum with a large number of traceable proto-forms and thus of limited historical time-depth. Bender (1996a) offers no immediate estimate of the time-depth of Nilo-Saharan although he does comment that it 'agrees very well with the Khartoum Mesolithic-Neolithic back to 30,000 years B.P.'. It is unclear how seriously we are meant to take this, but the point that Nilo-Saharan vocabulary is pre-agricultural is well taken. If indeed great internal diversity is characteristic of Nilo-Saharan then an antiquity much greater than agriculture in Africa is thereby implied. If so, there *should be* no convincing reconstructions of agricultural terms at the level of the proto-language. Phonology, semantics and cultural reconstruction thus become all of a piece.

Linkages with other African phyla

Bender has always shown considerable interest in transphylic phenomena as well as chance convergence and sound-symbolism and his text illustrates links with Niger-Congo (p. 131 ff.), Afroasiatic (p. 137 ff.) and areal glosses (p. 126 ff.), as well as items he considers sound-symbolic (p. 120 ff.). Since Gregersen (1972) there has been widespread recognition of a relationship between Niger-Congo and Nilo-Saharan, generally argued to be genetic. This has been discussed in Blench (1995, 2001, in press) and in Boyd (1997), and it is relevant because it demonstrates that some lexical items are too widespread to be used for subclassification. Bender recognises this, although in the case of Niger-Congo his failure to make use of the two major references, Westermann (1927) and Mukarovsky (1976/77) makes his conclusions of limited use. Few authors have ever considered a genetic relation between Nilo-Saharan and Afroasiatic although documentation of extensive borrowing and creolisation is abundant. Bender notes a number of common lexical items whereas Ehret excludes this from his discussion, oddly in view of his own weighty tome on Afro-

asiatic (Ehret 1995b). Lexemes with significant common segments attributable to some sound-symbolic processes are undoubtedly widespread in Africa (Blench 1997), and to ignore these as Ehret does is problematic.

Other issues
Vowel systems

Both Bender and Ehret set out tables of possible reconstructed PNS vowel systems (see above). Ehret (2001: 49) also aligns his reconstructed proto-vowels with their reflexes in each of his proposed sub-families. However, neither consider the possibility that Proto-Nilo-Saharan was a phylum with a ±ATR vowel harmony system. Blench (1995) pointed out that such systems were reported from several branches of Nilo-Saharan and that this seemed to point to genetic relationship with Niger-Congo. Since the research for Blench (1995) in 1991 it has become apparent that ±ATR vowel harmony is widespread in Nilo-Saharan. For example, Yigezu (ms.) notes that Majang, a Surmic language, reported by Bender to have a six-vowel system (resembling Bender's Proto-Nilo-Saharan system) has in fact ten paired vowels. Bender (1992: 21) reconstructs 'a five-vowel proto-system with two more problematical ones' for Central Sudanic, despite increasing evidence for 9/10 vowels (e.g. Kutsch-Lojenga 1994). Recent work on Kadugli (Blandia & Blandia 1995) reports a 5+5 ±ATR vowel harmony system rather than the 7-vowel system reported by Schadeberg (1994). Although the issue is far from settled, a version of PNS with 9 or 10 vowels seems *a priori* a useful working hypothesis. By contrast, reports of systematic length contrast in Nilo-Saharan that cannot be analysed as sequences of similar vowels, as in Niger-Congo do not seem common enough to warrant setting up a length feature.

Unrefereed publication

A common feature of both monographs is that they were published in Germany from camera-ready copy. The use of such presses is understandable; Anglo-American academic publishers are slow, the product is expensive and all too often external reviewers are unsympathetic to the text without being major disciplinary experts. Nonetheless, the wilful omission of previous scholarly work that mars Ehret's text in particular would not have passed normal review

procedures. Moreover, production problems (which caused part of Bender's monograph to be omitted in the first version) and for text to be lost off the bottom of the page (Ehret 2001: 276) might have been avoided. One consequence is that non-specialist linguists might regard this as confirming their worst prejudices about reconstruction in non-Indo-European phyla.

Conclusion

It might be thought, on the basis of this review, that Ehret should not have been published at all. But there are two reasons why it is useful to have this work in the public domain. The first is that major manuscripts that circulate but are not freely available create a psychological block to further research. Younger scholars, entering this arena are concerned that they are duplicating the achievements of an older, more experienced, researcher. With the text available as a book it becomes possible to move forward. Secondly, the 'Nilo-Saharan Etymological Dictionary' that forms the bulk of Ehret's text is a fertile source of suggestions for isoglosses that can be more carefully worked out by other writers with more mainstream views about semantics and referencing previous work.

Nilo-Saharan is one of the most challenging phyla presently being researched; its internal diversity and the hyper-complex morphology of some languages, as well as the civil insecurity in many of the key areas where the languages are spoken, present a challenge to scholars both from the point of view of data collection and analysis. Nonetheless, the presence of a lively and growing international research community will ensure that research continues. The publications by Ehret and Bender have put some of the key issues on the table and contributed to the image of the phylum as a coherent research topic. The next stage will be to develop a consensus classification and a listing of credible proto-forms.

Notes

[1] My thanks to Anne Storch, Mechthild Reh and Kay Williamson for comment on a first version of this review.
[2] Bender has also circulated proposals for East Sudanic reconstructions to interested scholars.

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