

LOAN WORD EVIDENCE FROM THE NUBA MOUNTAINS: KORDOFAN NUBIAN AND THE NYIMANG GROUP

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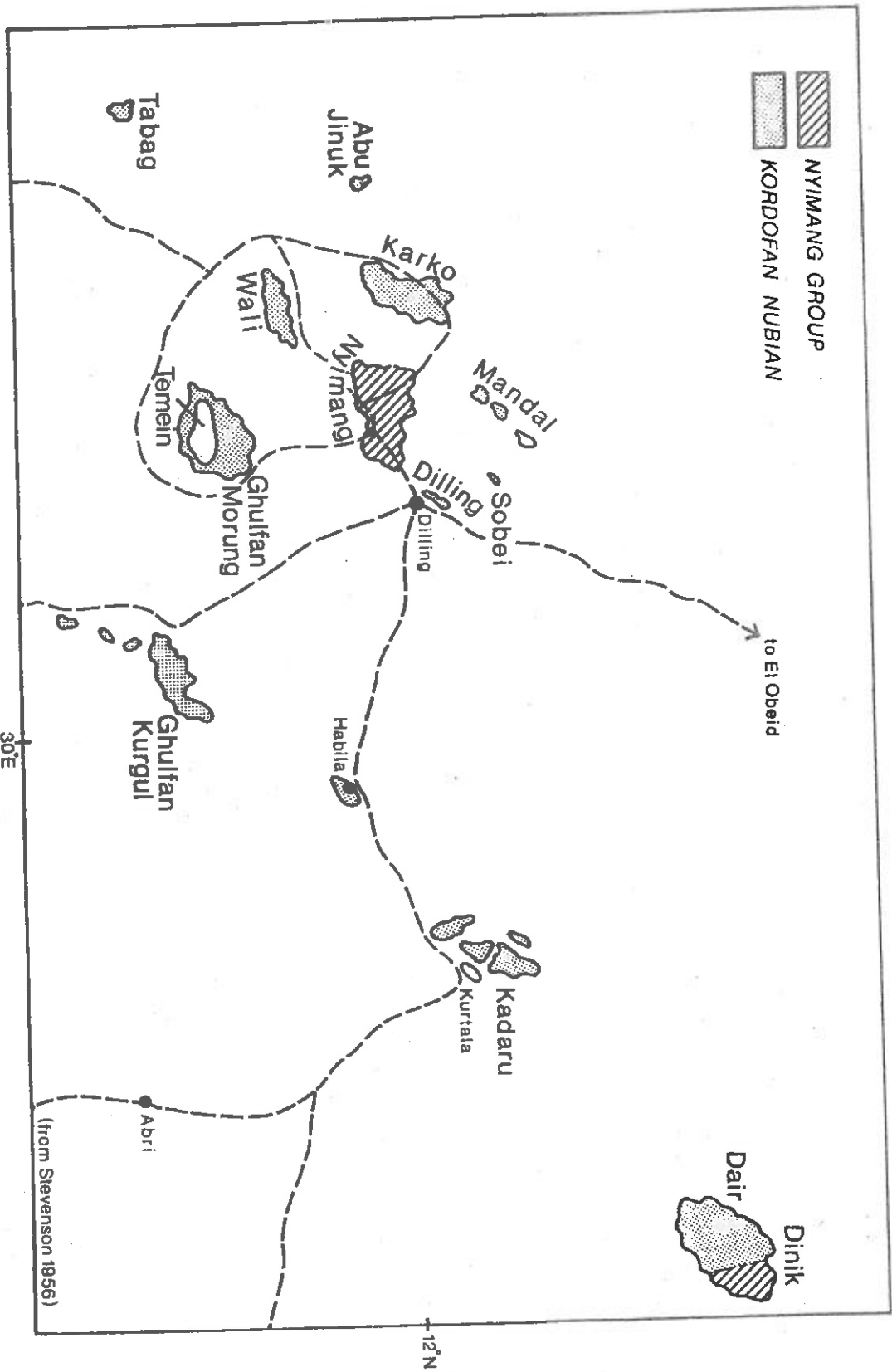
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1. Introduction

In general, speakers of Kordofan Nubian and of Nyimang group languages are neighbours in the Nuba Mountains. Therefore, in studying lexical borrowing between the two groups we are not concerned with establishing the fact of contact nor with migrational routes but rather with discovering a pattern of communication which may have existed in pre-Arabic times.

Sociolinguistic surveys carried out in the Nuba Mountains in 1975/76 and 1985/86¹ have statistically confirmed what is impressionistically evident: the pervading dominance of Arabic over the local vernacular languages in the area. This applies in particular to inter-ethnic communication which -as we can imply from the figures obtained- is almost exclusively maintained in Arabic. Competence in a vernacular other than one's own is practically non-existent. There is no hierarchy among vernaculars in the Nuba Mountains in terms of functional importance (inter-ethnic or intra-ethnic) or number and width of domains. In a sociolinguistic frame work they all are isolated units on the same level of unimportance below Arabic. The domination is to be seen as an ongoing process which may eventually lead to the extinction of at least some of the languages spoken in the area. We do not know when the process began, but we must assume that "by the beginning of this century or even earlier the Arabs were already

¹ For the 1975/76 survey cf. *Language Survey of the Sudan* (1979). The 1985/86 survey was carried out by a joint team from the University of Bayreuth and the Institute of African and Asian Studies, University of Khartoum. We thank the Deutsche Forschungsgemeinschaft who sponsored our entire research in the Nuba mountains via the Special Research Programme (SFB 214) "Identities in Africa" of the University of Bayreuth. We also thank the Sudanese Government for giving us research clearance. The results of the survey have been put down in ms. form (in German), the ms. being available from the authors. Finally, we also thank Tanja Kümmerle for assistance in the preparation of the data for this paper.



established in the jabals" (Ibrahim 1985:54). How well their language was established can partly be estimated by the defeat of all colonial efforts to protect the Nuba Mountains against the continuing spread of Arabic (Ibrahim 1985 *passim*).

We do not know, however, whether there ever was a pre-Arabic, all-vernacular inter-ethnic communication pattern in the Nuba Mountains, and if so, what it was like. The only way to gather knowledge on this matter seems to be the investigation of contact phenomena (borrowing or interference) in the present-day languages. The data base for such an investigation is still largely insufficient. From what is available to us (cf. 3 below) the resemblances between the two groups under consideration seem to be the only substantive ones.

2. Area, Population, and Language Names

The term "Nyimang group" for the languages and dialects under consideration has been taken over from Tucker and Bryan (1956). The speakers inhabit mainly hilly ranges west and northwest of the town of Dilling, viz. the Nyimang hills, the Mandal hills and part of Jebel Sobei (cf. map). The exception is Dinik, which is spoken some 150 kms northeast of Dilling in the northern and eastern part, i.e., the Sidra area of Jebel Dair. Their neighbours in the rest of the jebel are speakers of Dair, a Kordofan Nubian dialect (cf. map). Based on the 1955/56 population census, Stevenson (1984:26) gives the following population figures: Nyimang Hills 33,473, Mandal Hills 5,346, Sobei (part) 1,850, which amounts to a total of 40,669 for the ethnic Nyimang (largely equivalent to speakers of the Nyimang group) west and northwest of Dilling. We have no figures for the speakers of Dinik.

According to Stevenson (1984:26) *Nyima* or *Nyimaŋ* is the name of the highest peak in the area which was introduced into Arabic as an ethnic label and which is accepted by everybody in an Arabic-speaking context. Outside linguistic classification the term Nyimang never includes Dinik. In a wider Nuba Mountains context it may include all three varieties (Nyimang, Mandal, Sobei), but in a narrower context it refers only to the variety spoken on the Nyimang hills. For the purposes of this paper we refer to Nyimang (Ny), Mandal (Ma), and Dinik (Di), respectively, as languages of the Ny group (leaving out Sobei, for which we lack data). In their own language the Nyimang (of the Nyimang hills) refer to themselves as *ama* and to their language as *amadu waa*, in Ma the equivalent label is *ima* (Stevenson) or *emba* (Rottland). Di has since Kauczor (1923) and the MacDiarmids (1931) been known as *Afitti* and has hitherto appeared under this name in Stevenson's publications as well as in Tucker and Bryan (1956) and (1966) for which Stevenson gave the information. Stevenson, however, later came to the

conclusion that Afitti is the name of a clan section and that speakers of Di have a tendency of referring to their language by the name of their clan section (earlier linguistic work having been carried out among the Afitti clan). According to the information Stevenson gathered in 1977 Di is the name used by the speakers in order to distinguish their language from that of their Hill Nubian neighbours (Stevenson ET AL. 1987:2). We have therefore adopted this name to replace *Afitti*².

The term Hill Nubian (German: "Bergnubisch"), though being established for long, is an ambiguous term as other Nubian languages, like Midob and Birgid, are spoken on hills or mountains as well. We suggest to replace it by Kordofan Nubian (KN) which designates a group of closely related dialects scattered over the northern Nuba Mountains. The area roughly forms a triangle with the dialect of El Hujerat on the western edge, Debri on the southern and Dair on the northeastern angle. While Dair is spoken on the south-western part of Jebel Dair and borders on Di spoken on the northeastern part, the western KN dialects embrace the Ny and Ma area to the west and northwest of Dilling. According to Stevenson (1984:27) the 1955/56 population census gave the following figures for the "Hill Nubian" tribes and hill-groups: Dair (part) 1,503, Kadaru 8,886, Dilling (hill) 5,295, Ghulfan Morung 8,980, Ghulfan Kurgul 7,806, Debri 984, Karko 12,986, Sobei (part) 1,850, Wali (part) 6,454, Hills in western Kordofan 5,252, these figures amounting to a population of 59,996 "Hill Nubians". Obviously some of these ethnic group labels cover more than one "hill-group" for Stevenson (1956:95-96) lists many more names of KN speaking groups. The hill-groups do not necessarily agree with linguistic units.

The KN speaking people usually call themselves and their various dialects after the locality where they live, although, as Stevenson (1956:112ff. and 1984:12) has pointed out, there is the ethnonym *ajaj* by which they may refer to the entire group of KN speaking people. Side by side with the KN local names for dialects there are Arabic names used in an arabophone context. The latter are the ones used in this paper.

3. Data

Apart from published sources we were able to rely on extensive field notes (on both Ny and Di) and scripts which the late Roland Stevenson put at our disposal and on which he worked with us at two occasions (leading to Stevenson ET AL. 1987). Fieldwork conducted by

² Ehret (1983:389) uses "Afitti (Dinik)" probably based on information from Stevenson.

Rottland and (more extensively) Jakobi 1985-87 in the Nuba Mountains and later (due to political circumstances) in Khartoum resulted in wordlists (610 items each) of Ny, Ma, Di, and (outside the Ny group) of Temein³ and KN. We both visited the Nyimang Hills and gained a few impressions of the external setting. We were unable, however, to visit the Dair region. Eleven KN dialects have been documented by our wordlists: Abu Jinuk, Kasha, Karko, Kujuria, Wali, Dilling, Ghulfan, Dabatna, Kaduru, Kururu, and Dair. For the reconstruction of the proto-KN (pKN) phoneme system (cf. Jakobi in prepar.) and of the pKN items presented in the tables below, Jakobi has additionally drawn from four other less extensive Ms wordlists provided to us by Stevenson. They document the KN dialects El Hujerat, Fanda, Kudur, and Debri. We did not document all KN dialects or local varieties listed in Stevenson (1956:95-96) but at the same time we do not know whether they correspond to distinguishable linguistic units.

4. External Classification

The Ny group has been classified by Greenberg (1963) as a branch of Eastern Sudanic, other groups in the Nuba Mountains such as Daju, Nubian, and Temein equally each forming an independent branch of Eastern Sudanic. Whereas the internal classification of Eastern Sudanic has been revised in later years and some of its former members have been eliminated, the position of Ny (together with Daju and Temein) within core Eastern Sudanic has never been challenged (cf. Bender 1981, 1983, 1991, Ehret 1983, Rottland and Omondi 1991). Nubian has been ranged by Ehret (1983) into a new North Sudanic branch.

5. Internal Classification

5.1 Speakers' Judgements

Stevenson (1984:12) states that the Dinik "have no direct links with the Nyimang and are unaware of the connection". He also reported (pers. comm.) that there is no mutual intelligibility between Di and the rest of the group. Both points were confirmed by our own (Ny and Di) informants. There is, however, mutual intelligibility between Ny and Ma, and the

³ We went through the Temein lists (including one collected by Rainer Voßen in 1987) but found so surprisingly few correspondences with either KN or the Nyimang group that we decided to disregard Temein for the purpose of this paper.

speakers are of course aware of it. They are also aware of 'accent' differences between villages inside the Ny area, e.g., Sallara and Nihil. Speakers' judgement, then, has related Ny and Ma against unrelated Di.

The use of the ethnonym *ajaj* shows that the KN Nubian speakers are aware of the genetic relationship between their dialects. Usually they do not know the whole group of dialects but only those which they happen to be acquainted with. As the dialects form a dialect continuum we suppose that at least those dialects which are geographically close to each other are mutually intelligible.

5.2 Lexicostatistics

Thelwall and Schadeberg (1983) - based on Thelwall (1981) - record for the Ny group an internal divergence of about 60% - a value identical to those recorded for Temein and Daju while Nubian is given 85%. Our 'minitest' based on 52 items of Rea's 100-list gave the following results: Ma/Ny 88%, Di/Ny 39%, Di/Ma 37%. Even if the percentages were maintained on a full 100-list, Di would still be within the Ny group since inter-group relations are around 20% (Thelwall and Schadeberg 1983:221). The Ny group thus has a Ny-Ma and a Di branch.

A subgrouping of the Nubian language group based on lexicostatistical calculations was first undertaken by Thelwall (1978) and included two KN dialects, Kadaru and Debri. After slightly modifying Thelwall's list and including the Dilling dialect Bechhaus-Gerst (1984:16f.) has shown that these three KN dialects share more than 90% of their basic vocabulary. Without giving detailed linguistic evidence Stevenson (1956:112f.) has claimed that the KN dialects may be assigned to two languages A and B, the afore mentioned Dilling dialect belonging to the A language and Kaduru and Debri to B.

5.3 Phonology

5.3.1 Inventories

Vowels and consonant inventories within the Ny group are largely identical and may be rendered by the following tables from Tucker and Bryan (1966:243).

Vowels

i e ε a ɔ o u

plus ɪ and ʊ as variants of unclear status and a central vowel ə occurring in Di only.

Consonants

lab.	den.	alv.	pal.	vel.
(p)	ʈ	t	(c)	k
b	ɖ	ɖ	j	g
f		s(ʃ)		
m		n	ɲ	ŋ
		l, r, ɾ		
w			y	

The following differences between Tucker and Bryan's (T/B) and our findings have to be noted:

- the exclusive occurrence of (p) and (c) in Di (as given by T/B) being confirmed for (c) only by our data;
- our addition of f to the table, its omission being taken as an oversight by T/B;
- the occurrence of geminated consonants in Di (recorded by Jakobi only): bb, dd, jj, ʈʈ, ɖɖ, cc, ll, nn.
- the occurrence of a final glottal stop in Di (as equally noted by Jakobi).

As for the prosodic features we agree with T/B that length is not distinctive (although noted in the tables where heard) and that there are three tone levels, viz. high (unmarked), mid (marked by ˘), and low (marked by ˙). The tone glides recorded are high-low fall (marked by ˘˙) and low-high rise (marked by ˙˘). There do not seem to be any glides involving mid tones.

The reconstructed phonological system of pKN differs from the inventory described in T/B (1966:313) in so far as pKN has a 8 vowel system, containing *i, *e, *ɛ, *a, *ɔ, *o, *u, plus the central vowel *ə, while T/B have given an inventory of 7 vowels, leaving out ə.

The reconstructed consonant system consists of the following items (cf. Jakobi 1989):

*f	*t	*ʈ	*ʃ	*k
*b	*d	*ɖ	*j	*g
*m	*n	*ny	*ng	
		*l		
		*r		

As for the prosodic features we have - in contrast to T/B - clear evidence of the distinctive function of vowel length and of three tones, high, low, and falling.

5.3.2 Correspondences

We are concerned here with (genetic) correspondences within each group, not with contact correspondences between the two.

Correspondences within the Ny group are illustrated by a table of cognate forms given in the appendix. We refer to particular cases by quoting the relevant English glosses. Between Ny and Ma vowel correspondences are mainly regular. They are less so for Di, especially when the Di central vowel is involved which apparently corresponds to almost any other vowel elsewhere. We have not been able to establish a pattern.

CwV sequences with a front vowel correspond to CV sequences with a back vowel (cf. 'belly', 'hunger', 'kindle', 'night'). Di has always the CV form in such cases, where Ny and Ma show an irregular distribution of CwV and CV between them, Ny having both forms as (probably) dialectal variants.

Consonant correspondences are also largely regular and involve identical consonants except for

- *ʃ* which is a variant of *s* before front vowels in Ny (T/B 1966:243) but irregularly also appears in Ma while Di has *s* throughout;
- CwV : CV mentioned above for vowel correspondences may also be interpreted in terms of labialized vs. non-labialized consonants where again we have an irregular spread in Ny and Ma and almost no labialization in Di;
- NC : C / C : NC (cf. 'bone', 'cow', 'egg', 'pain') where Di has altogether fewer occurrences of NC while Ny and Ma have an irregular spread of NC and C forms. As with CwV vs. CV forms, Ny seems to have both NC and C forms as dialectal variants. The data given in the tables are mainly from the Sallara dialect of Ny; a test with an informant from the Nitil dialect produced a higher rate of corresponding NC forms.

None of the phonological features discussed is diagnostic for a separation of Ny and Ma but in terms of frequency of occurrence they may be diagnostic for a separation of Di from the other two. We may say that Di shows more consistently *s* vs. *s/ʃ*, CV vs. CwV, and C vs. NC. We are not yet in a position to generally interpret any of these features in terms of innovation or retention (although we occasionally argue in favour of simplification when discussing the tables).

Stevenson's hypothesis (cf. 5.2.) that the KN dialects may be assigned to two languages A and B can be confirmed when the retention (versus loss) of pKN **f* is accepted as criterion: Whereas in the eastern dialect group (formed by Ghulfan, Debri, Dabatna, Kaduru, and Kururu) pKN **f* has been lost, in the western dialect group, which includes Dair in the far northeast, it has been retained or shifted to be realized as [h]. The fact that - according to its internal classification - the Dair dialect belongs to the western dialect group suggests that the Dair speaking people have migrated from the west to settle in the northeast.

6. Loan Word Evidence: Basic Assumptions

In order to facilitate the discussion of individual loan word evidence as given in section 7 we outline some basic assumptions underlying the selection as well as the interpretation of our evidence. These assumptions concern two main topics of any loan word discussion, viz. the probability of borrowing as against chance or cognation and the direction of borrowing.

The assumption of borrowing suggests itself by the spatial proximity of the languages concerned. Ny and Ma are surrounded by KN dialects; Di is bordering on the KN dialect of Jebel ed-Dair, an isolated mountain range in the northeastern plains, the surrounding plains being inhabited by various Arabic speaking groups.

On the other hand both groups are members of Greenberg's Eastern Sudanic family. Their genetic relationship is a hypothesis lacking orthodox historical-comparative evidence, especially in regard to their diachronic phonological development. Evidence for the genetic relationship of the Eastern Sudanic languages has e.g. been provided by Greenberg (1963), Ehret (1983) and Stevenson (ms.) in the form of assumed isoglosses compiled in comparative word lists. We have consulted these lists and discarded any pairs of corresponding lexemes from our evidence which (i) have possible cognates elsewhere and (ii) by the degree of their phonetic dissimilarity correspond to the remoteness of the genetic relationship⁴. By contrast, the evidence presented here has to our knowledge no cognates outside the two groups compared and the corresponding pairs are phonetically similar enough to make cognation less likely. (A few exceptions will be discussed in their turn.)

Similarly, we have discarded items from the culture vocabulary with an apparent areal spread (e.g. 'chief', 'hoe', 'pig', 'knife', 'spear') and, finally, items with probable onomatopoeic qualities ('to sneeze')⁵.

In sum, then, we have assumed borrowing wherever counterevidence is absent. In view of the spatial distribution indicated above we have thus applied the principle of *lectio facillior*.

Following the same principle we assume that contacts between the groups began in the Nuba Mountains, i.e., where the groups are today. This implies that contacts began after the separation of KN from other branches of Nubian. It further implies that KN is to be considered as the source language wherever in a set of corresponding lexemes the KN item has cognates in other branches of Nubian. This is our main criterion for determining the direction of borrowing, phonological considerations being used in a few additional cases. Where the two types of criteria do not apply the evidence remains on principle undetermined for direction of borrowing, but it may be summarized already here that in all cases where the source language

⁴ The remoteness has been enhanced by Ehret's (1983) revised classification of Eastern Sudanic.

⁵ Examples of cognates discarded from our evidence are the items for 'head', 'mouth' and 'ten', all displaying an unexpected degree of dissimilarity and all occurring in Greenberg's (1963:110ff) Eastern Sudanic Comparative Word List.

can be thus identified it is KN. This may suggest that the general direction of borrowing was from KN into the Ny group languages.⁶

7. Loan Word Evidence: The Tables

In this section we present 6 tables of sound-meaning correspondences or resemblances between the Ny group languages and the KN dialects. Comparative data for the KN dialects and the reconstructed pKN items are taken from Jakobi (in prepar.). Abbreviations given in brackets after a pKN item refer to cognates elsewhere in Nubian, i.e., in proto-Nubian (+pN), proto-Nile Nubian (+pNN), Birgid (+Bi), Nile Nubian (+NN), Midob (+Mi). The abbreviation (+N) refers to cognates in two or more branches of Nubian for which a pN reconstruction has not yet been established.⁷ The label 'comm' stands for 'comment' (indicating, where possible, the direction of borrowing).

Table 7.1 Nyimang-Mandal - proto-Kordofan Nubian

<i>gloss</i>	<i>Ny</i>	<i>Ma</i>	<i>pKN</i>	<i>comm</i>
brains	fūlūḏō	fōrḏō	*forḏo	
beard	ʃemē, semē	sagmē	*ʃalmɛ (+NN, +Bi)	<KN
desire	warḏa	ka-war	*war-	
eight	eḏḏ, eḏḏu	eḏu	*eḏḏ- (+pN)	<KN
gather, to /pick up	ḏigil-	ḏigilēn	*ḏigil-	
God	abīḏi	ībīḏi	*ebiḏu 'creator' (*bel 'God')	
hawk	ṭḏḏḏr	ṭḏḏḏr	*ṭoḏḏar	
nine	wweḏ, weḏḏu	wèḏu	*weḏḏ-	
seven	kwōlāḏū	kwōlāḏ	*koalaḏ- (+pN)	<KN
six	kwōrʃè, kōrʃè	kwarʃè	*koarʃ- (+pN)	<KN
steal, to	burgḏl 'thief'	borgḏl 'thief'	*bōrg-, ('thief' *bōrg-ar) (+N)	<KN

⁶ The alternative assumption would require that pKN borrowed from Ny-Ma and genetically transmitted the loans to all present dialects - a less likely assumption.

⁷ For proto-Nubian and proto-Nile Nubian cf. Bechhaus-Gerst (1984) who based her reconstructions on word lists of 100 items from all Nubian languages except for Haraza. For further Nile Nubian items cf. Werner (1987), Armbruster (1960), von Massenbach (1933), for further Birgid items cf. Thelwall (1977). for Midob cf. Thelwall (1983).

twenty	ɬərful	tarùb	*ɬarbu
unripe	ɬäjð	ɬäj	*ɬejje (also 'green') (+ N) <KN
work	deje	dej	*dej
wound, to	gè·r	gèr	*gɛr

The table contains 15 sets of correspondences of which 6 can be determined for the direction of borrowing. Our basic assumption (cf. 6) that within Nubian only KN is the source language finds support from phonological considerations. The initial labialized velar found in the Ny-Ma items 'six' and 'seven' reflects the corresponding KN initial but not simple [k] or [g] found in the other Nubian languages (cf. Bechhaus-Gerst 1984:67-68). The sound [j] in Ny-Ma 'unripe' reflects KN intervocalic [jj] and not the other Nubian cognates which have fricatives (cf. 'grün' in Bechhaus-Gerst 1984:59).

The question of the identities of the source language as well as the borrowing language(s) needs further discussion since the labels Ny-Ma and pKN are convenient but potentially misleading. The pKN forms are quoted here in order to indicate in each case a set of KN cognates which is similar enough to the Ny and Ma forms to make borrowing plausible. On the other hand, the similarity (or correspondence) is not such that either pKN or a single KN dialect can be identified as the source language. A few examples may illustrate the problem.

When comparing Ny-Ma 'beard' with the corresponding items in the KN dialects (not quoted here) we find that the two Ny items have dropped [l] and have replaced the vowel [a] by the front vowels [ɛ] or [e]. (We are puzzled that in spite of these front vowels the rule of complementary distribution of [s] and [ʃ] is neither applied to Ny *semē* nor to Ma *sagmē* - a possible explanation could be that this rule is not applied to loan words.) In the Ma item [l] seems to have been substituted by [g]. In the case of 'eight' we notice that the geminated dental attested in most of the KN dialects has been simplified in Ny-Ma. Moreover, the rounded back vowel found in both the Ny and Ma items does not reflect a corresponding vowel in any particular KN dialect or coherent dialect group. Similar findings can be made when comparing the other loan words to the corresponding KN items. We conclude that the source of borrowing is to be found within KN (including earlier stages) but cannot be further identified so far. The pKN forms, then, have to be read here as separated from their specific historical connotations. This applies to all following tables where pKN forms are quoted.

The label Ny-Ma only indicates what is evident, viz. the occurrence of the same loan item in both Ny and Ma. Borrowing by a common ancestor of both can neither be excluded nor

proven. Furthermore the present dialect situation with mutual intelligibility and apparently frequent contacts makes the application of a genetic concept (proto-Nyimang-Mandal with a subsequent split) somewhat difficult.

Semantically, table 7.1 is the only one revealing a discernible field, i.e., the number words for 'six' to 'nine' and 'twenty'. Showing a frequent pattern for African languages, the Ny group seems to have had originally a quinary system with primary terms for 'one' to 'five' and 'ten'. Ny and Ma have replaced the original derived terms for 'six' to 'nine' by loans from KN. Quinary systems are often combined with a vigesimal system which may equally have been borrowed together with the word for 'twenty'.⁸

Table 7.2 Nyimang - proto-Kordofan Nubian

<i>gloss</i>	<i>Ny</i>	<i>pKN</i>	<i>comm</i>
cold	kāwṑrìg	*orog	<KN
conversation	kù̀rè ð wə	*kòr-f-	
sand	sū̀dē	*ʃibiḍu, *ʃu:ḍ, (+NN)	<KN
throat	ḍulō	*ḍol	<KN

The few items which Ny has borrowed from KN and the few ones which Ma has borrowed from KN (cf. table 7.3 below) do not necessarily indicate an early separation of Ny and Ma and their independent borrowing from pKN. We rather assume that for each of the two tables the Ny items could also be found in the Ma dialect and vice versa, if we had had the opportunity to work with more than one Ma informant. Further to the (+NN) evidence for 'sand' the direction of borrowing is suggested by the shape of some Ny items, which have been adapted to a recurrent Ny structure: Ny 'sand' and 'throat' have been extended by a final vowel (similar to 'unripe' and 'work' in table 7.1). Ny 'cold' shows a verbal/adjectival prefix *ka-* which is not inseparable but occurs here due to the fact that the items elicited were often given as inflected forms (cf. head note in Appendix).

⁸ The items for 'six' to 'nine' and 'twenty' in Di could not be identified as borrowings. They are clearly not KN.

Table 7.3 Mandal - proto-Kordofan Nubian

<i>gloss</i>	<i>Ma</i>	<i>pKN</i>	<i>comm</i>
broom	ɸwaji	*ɸoje	
cat	buɸùr	*bòɸòr	
cloud	ɸòɸɸi	*ɸoiɸo (+pN)	<KN
spirit	woɸilāŋ,	*onɸəlāŋ	
of dead	woɸulāŋ		<KN

Borrowing from KN is suggested for 'cloud' by (+pN) and for 'spirit of dead' by the consideration that intervocalic [ɸ] in the Ma item is more plausibly explained as simplification of corresponding KN [nɸ] than the latter as an extension of a supposed original Ma [ɸ].

Table 7.4 Dinik - proto-Kordofan Nubian

<i>gloss</i>	<i>Di</i>	<i>pKN</i>	<i>comm</i>
blind	ɸonɸò·	*ɸonɸo	
breath	ɸèɸè	*ɸèɸè, ɸèɸè	
chat, to	gòrsàì (i.s.)	*kor-ɸ-	
dog	wəl	*bəl (+ N)	<KN
donkey	ò:nù	*onɸu	<KN
honey bee /honey	ɸò·mər	*ɸòmòr (+ N 'honey')	<KN
name	òrɸòŋ < òr-ɸòŋ ?	*or (+ N)	<KN ?
river	ì·rù	*ìr- (+ N)	<KN

Four of the eight correspondences displayed here can be identified as loans from KN by references to wider Nubian cognation. The simplification argument used in the comments for 7.3 may be applied to 'donkey' (but not to 'blind').

The cases of 'dog' and 'name' need some more detailed discussion: Ny gìl and Ma jìl correspond to Di wəl and pKN *bəl. As it is implausible to assume a genetically motivated

sound correspondence between [g] and [j] on one side and [w] on the other, we rather consider wəl as resulting from convergency towards pKN *bəl. This, then is a case of borrowing (or reshaping of the cognate form) within a total set of probable cognates.

We do not know whether Di ʒrdʒŋ 'name' is composed from one morpheme or two. If the latter was the case and if the morpheme boundary was between the medial consonants, ʒr may have been borrowed from KN *ʒr.

Table 7.5 Mandal - western Kordofan Nubian

<i>gloss</i>	<i>Ma</i>	<i>KN</i>
clean	kāwōlāŋ	Krk: gwələŋ, Ksh: gwələŋ, Kuj: wəlŋo, Wa: wələŋo
forest	kwēd	AJ: kəɸd, Ksh: kəɸ, Krk: kəɸ'
noise	kùgùd	AJ: kəkòdɔ, Ksh: kùkùd, Kuj: kùgoɸd
warm	kakùm	AJ: kumù, Ksh: kō:m, Kuj: kù:m

The correspondences listed are within KN limited to the following dialects: Abu Jinuk (AJ), Kasha (Ksh), Karko (Krk), Kujurua (Kuj), and Wali (Wa). The geographical distribution can be determined as a western KN one. Borrowing from western KN seems more likely since several of the dialects (or a proto-variant) are likely candidates as the source language. Borrowing from Ma would assume the less likely case of some proto-variant of western KN having had exclusive contact with Ma. The Ma forms for 'clean' and 'warm' exhibit again the ka- prefix (cf. above).

Table 7.6 Dinik - Dair (KN)

<i>gloss</i>	<i>Di</i>	<i>Dair</i>	<i>comm.</i>
frog	tʒr	Dair, Kur tʒr (pKN *tʒar)	< Dair
head	ʒr	Dair or (pKN *or)	< Dair
knife	kə·ndù·	Dair kəndò (pKN *kənd-, +NN)	< Dair
termite	tʒre	Dair tʒre, Kur tʒra (pKN *tʒaɸa)	< Dair
twin	fərse·n/fərse	Dair fərfaɸù / fərɸe (pKN *farɸ-)	< Dair
wound	kə·lànɸ	Kur, Dair: kəlànɸ (pKN *koaləŋ)	< Dair

In this table we present six Di loan words borrowed from the neighbouring KN dialect of Jebel Dair. There is clear linguistic evidence of the recent contact between these two vernaculars: Only in Dair (and in the Kururu (Kur) dialect further west) the pKN vowel sequence **oa* (cf. 'frog', 'termite', 'wound') is reflected by [ɔ] whereas in all the other KN dialects it is retained and is realized as [wa]. Moreover, only in Dair, the most eastern KN dialect, and in the western dialects (El Hujerat to Wali) the initial pKN **f* has been retained. In the case of 'twins' the western dialects have replaced their reflexes of pKN **farʃ-* (which is cognate to pNN **barsi*⁹) by another root, namely **ʃob-*. Therefore, one can single out Dair *fārʃɛ* as source of the Di loan word, which has substituted [ʃ] for [s] but in which the Dair tone pattern low-high is preserved.

8. Conclusions

The tables contain forty-one sound-meaning correspondences for which borrowing can reasonably be assumed. The direction of borrowing cannot be determined in each case but wherever evidence is available it points to KN as the source. This applies to undetermined early KN dialects (7.1 - 7.4), to one or more later western KN dialects (7.5) as well as to Dair (7.6). The conclusion suggested by the evidence is that KN was the dominant partner in all contact relations between members of KN and members of the Ny group.

Since we have not searched for morphological and syntactic influences as more reliable indicators of intensive contact (cf. Thomason and Kaufman 1988) the overall degree of intensity can only be speculated upon. If we want to distinguish between degrees of lexical borrowing only it seems fair to say that we have no evidence for heavy borrowing, neither quantitatively nor qualitatively (little basic vocabulary).¹⁰

The semantic evidence of the tables is inconclusive, i.e., except for number words (cf. above) it does not reveal any cultural area in which borrowing might have been more intensive and systematic.

⁹ cf. "Zwillinge" in Bechhaus-Gerst (1984:80).

¹⁰ The items belonging to basic vocabulary in the lexicostatistical sense are 'cold' (7.2), 'cloud' (7.3), 'dog', 'name', 'river' (7.4), 'warm' (7.5), and 'head' (7.6).

As there is no evidence of borrowing on the level of a hypothetical proto-Nyimang, i.e., by the ancestors of the entire group, we assume that contact began only after the split of Di from the rest of the group. This fits well into the scenario developed by Thelwall and Schadeberg (1983) according to which there were five successive waves of immigrants to the Nuba Mountains, each corresponding to one or more separate language groups: 1) Kordofanian, 2) Ny, Temein, Kadugli, 3) Daju I (Shatt, Liguri), 4) Hill (i.e., Kordofan) Nubian, 5) Daju II (Lagawa). This is a relative chronology, and the authors refrain from any speculation on dates or time spans; but the scenario would nevertheless allow for the spread and diversification of the Ny group before the resettlement (plus initial diversification?) of Nubians in the area and thus contacts began.

Borrowing continued after further diversification of KN, as the evidence from western KN and from Dair shows. Di probably had a period of contact with other (undetermined) KN dialects before it came under specific Dair influence. Di/Dair bilingualism is still reported for the seventies, although at a very low rate and predictably disappearing.¹¹

This brings us back to the point of departure, viz. the present overwhelming dominance of Arabic and the consequent search for historical (and probably different) patterns of communication in the Nuba Mountains. Our contribution to the search is rather limited but at least suggests that the assumption of a long period of KN/Ny group linguistic contacts with KN dominance is not unfounded.

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¹¹ *The Language Survey of the Sudan* (both titles listed in the bibliography) reports acquisition of Di by mother-tongue speakers of Dair rather than vice versa. This seems to be related to the fact that in both localities under consideration mother-tongue speakers of Dair are in the minority. In any case the figures quoted for the acquisition of Di are statistically insignificant.

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Appendix

Sample of Nyimang Group Cognates

(v. and n. stand for 'verb' and 'noun', respectively. The oblique stroke / separates alternative items given by different informants. Verbs are given mainly in a 3rd person form containing a kV- prefix.)

<i>gloss</i>	<i>Nyimang</i>	<i>Mandal</i>	<i>Dinik</i>
baboon	mògùr	mògur	mɔ·gír
barn	ʃe·lfo	ʃelib	ʃèrəbàn
belly	bwɪʃɪ/buʃi	bus	-
black	ʃèbio	ʃèbie	ʃìbià
blood	wìli	wùli	àlè
bone	a·mi	āmbi	à:ma
born, be -	kàsùŋò	kàsùŋèy	kàsəŋi
breasts	kāʃi	kaʃi/kasi	kassè
broom	-	ɖwaji	ʃajè
cooking stones	ʃùsà/ʃuʃè	ʃusà	ʃù·sà·
cow	bà·r	bàr	mbàr
dance n.	kifilɖà	ʃilɖ	fəlɖà·
deaf	minìŋ	minìŋ	mānəg
die	kalua	kāʃò	kəʃò
eat	kā·ʃàl	kaʃàl	kaʃlò
egg	ɖāmì	ɖambì	ɖò·mì
feather	kwɔʃi	kwɔris	kò·rò
fingernail	fali	falè	fà·là?
fire	mír	mër	m̄bər
firewood	ʃomà/ʃumà	ʃomà	ʃəma?
flesh	kwon/kon	kwon	kon
flour	kɔ·ro	kɔrɔg	kà·rəg
fry v.	kāʃià	kāʃèà	kəʃè·?

give	kaʃɛ·k	kaʃɛk	ʃàgè·
guinea fowl	ʃuʃɛ	ʃusi·	ʃà·sɛ·
hair	ʃɛ/ʃɛ	yɛ	ìyàʔ
heart	ʃulum	ʃulum	ʃàlɛm
honey	amì	āmbì	-
hunger n.	kwènɪgɛ	kwɛnɪgɛ	kòndɔŋ
I	ày	a·	ɔ̀ì
kidney	kwɔ̀rɔ̀	kwɔ̀l	kùrakùra·
kill v.	ká·ni	kànni	kəni
kindle v.	ʃùʃɛ/ʃwɪʃɛ	kaʃwɪs	ʃəssɔ·
knee	kujum	kujum	kùŋəŋ
liver	m·àlɛŋ	maʃɛŋ	mɔ̀·ŋŋ
meat cf. flesh			
milk n.	elo	elu	ɔ̀·lɔ
navel	kwürɛ	kürɛ	gùrwa
neck	bɛdɛ	-	bɪʔa
new	kàŋɛr	kɛnʃɛr	ŋɪ·ri
night	ʃwɪnɪŋ	ʃɪn	ʃu·nì·
pain n.	-	ʃamɔ̀	ʃəmɔ̀ʔa
pierce	ká·sɔn	kàsɔn	kəsɔ·n
rain n.	arɪgɛ	arɪgɛ	àrɪgà
red	ʃɛgɛlɛ	ʃɛgɛlɛ	gəla·
satiated, be -	káfu	kafu	fùì
smash v.	kaʃiɛm	kaʃɛm/kaʃim	kəʃàm
thou	i	i	ì·
wash v.	ʃɛgɛlɛ	ʃɪgɛlɛ	ʃəgəlɛ·
water n.	bwɔŋ	bɔŋ	bɔ·ŋ
wind n.	mo	mɔ	maʔ
white	ʃàbàr	ʃàbàr	ʃəbra