



HAL
open science

A Linguistic Sketch of Tiba (Gà)

Raymond Boyd

► **To cite this version:**

Raymond Boyd. A Linguistic Sketch of Tiba (Gà). *Afrika und Übersee*, 1999, 82, pp.1-17 ; 213-249.
hal-00323718v1

HAL Id: hal-00323718

<https://hal.science/hal-00323718v1>

Submitted on 23 Sep 2008 (v1), last revised 24 Aug 2014 (v3)

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Voici réunies les deux parties de cette esquisse concernant la langue tiba (gà) publiées dans deux fascicules successives de la revue *Afrika und Übersee*.

L'interprétation la plus directe de cette documentation permet d'affirmer l'appartenance probable de cette langue au groupe mumuye-yendang de la branche adamaoua de la famille Niger-Congo, malgré l'assimilation massive de termes empruntés au tchamba-daka qui l'entoure et qui est connue et utilisée en bilinguisme parfait par les Tibas.

Cette conclusion est en contradiction avec la classification fournie par L'Ethnologue :

http://www.ethnologue.com/show_language.asp?code=ttb

A Linguistic Sketch of Tiba (*Gà*), Part I

by R a y m o n d B o y d

I.0. Introduction

The Tiba area can be reached at present by leaving the main Gombe-to-Yola road in the direction of Mayo Belwa, then continuing on through Jada towards Ganye via the longer route passing by Mbulo. The traveler will then turn westward at Mbulo towards Tola. Some twenty kilometers beyond the town of Pola lies Gambe, the Tiba center on this axis. Most Tiba people nevertheless reside, not in Gambe, but in hamlets on the surrounding hills. There are no census data or any means of counting the number of Tiba speakers, but a local speculative guess puts the figure at less than ten thousand.

The Tiba tend to shun outsiders, as many mountain peoples do. It was therefore with some difficulty that we found an informant, after several people had promised to help us and then not appeared. Finally, we were able to contact Abdullahi, called Awdi, son of VwèkKaàmì and resident in the hamlet of KékPáán. He was unable to give himself a precise age but would seem to be in his early thirties.

It will be noticed that Awdi's father's name and the name of his hamlet are Chamba Daka (hereafter CD). This is said to be ordinary among the Tiba, i.e., at least when Islam was less widespread, they traditionally gave themselves CD names, and are certainly all fully bilingual in this language. They are also said to have adopted Chamba customs, but this has not been verified in any way. A doubt would even seem to be cast on this affirmation insofar as Awdi did not give an identical term for the fundamental Chamba institution of *lángsí*, and in fact seemed unclear about its exact nature.

The Tiba (*Tibá* in CD) do not use this name for themselves. Rather, they call themselves *àGàá nīā* 'Tiba people' and their language *àgà ñjá* ('Tiba mouth', i.e., 'Tiba language'). Roger Blench has called to our attention the fact that there is a word of the form *tiba* in the Adamawa group 4 language "Momi", which means 'blacksmith'. Now neither the Tiba themselves nor the surrounding Chamba seem to have any recollection that smithing was an original role of this people. While it may be that there was interethnic blacksmithing in this region (i.e., that one ethnic group would seek its blacksmith population among a neighboring group), and that this original relationship is now forgotten in the case of the Tiba, it may also be that terms for 'blacksmith' are not always obtained as some derivative of the terms for 'forge', 'to forge', or some other notion associated with smithing, but rather from words meaning 'outsider, stranger' (cf. CD *dōō* 'stranger, outsider, pagan', "a pejorative term for stranger, especially non-Chamba speakers,

applied in particular to 'less developed' neighbors", Richard Fardon, pers. comm.). The common term for the Tiba people and for Momi blacksmiths may thus signify simply that both are viewed as "outsiders" with respect to their neighbors.

Our survey was conducted entirely in Nnakenyaare CD, as Awdi had practically no knowledge of English. Isa Saadu, a teacher currently resident in Pola, was present throughout in order to provide all the necessary clarifications. It might be feared that, if the informant were not committed and alert, such a procedure would tend to throw up large numbers of CD loanwords. There were indeed many cases in which the Tiba term was identical with the one recorded in CD, and it is possible that some of these cases may be attributable to the informant's fatigue after hours of the mechanical repetition required of him in the early stages of this survey. Nevertheless, the bulk of the lexical data is clearly distinct from CD, consisting either of different roots or of cognates showing important phonological variations. Grammatical and syntactic features, too, were characteristic, though often showing interesting correlations with CD. Our impression is that the degree of CD/Tiba interference was minimal.

Our sessions with Awdi took place over a period of exactly six days (plus a short additional session in 1998 to obtain further information on the pronominal system). While the author is practiced in linguistic survey work, it should be clear to everyone that, given the conditions, the data presented here are very far from sufficient for a reliable description of Tiba. The attempt has nevertheless been made to suggest some kind of analysis for most of the salient features of the language. The reader will take these analyses for no more than what they are worth: nothing said here is not subject to review in the light of further research.

I.2. A cognate search

Tiba is a language concerning which practically no published information exists. Williamson (1989:269) calls it a "newly-reported" Benue-Congo language, insofar as the first linguistic knowledge concerning it came from survey work in the 1980's by Roger Blench. Williamson cites three terms in Tiba ('man', 'one', 'neck'), the first of which is assumed to be a "Benue-Congo innovation", the other two being "older [NC] roots". No other basis for classification is cited. In the same volume, Hedinger (1989:424), referring back to Williamson and Blench, cites Tiba as a separate branch of "Northern Bantoid"; Blench (1993) includes it with CD in "Dakoid".

The purpose of this article is not to dispute the classification of Tiba, though on a wider scale, the author would certainly dispute the usefulness of forcing many of the linguistic isolates in this region of intense contact into any branching sub-family structure, particularly in the case of NC languages. We simply note that a) Tiba is classifiable in Greenbergian terms as Adamawa (hereafter AD); indeed, if CD is assigned to AD, it is inconceivable, on the basis of the material presented here, that Tiba should not be. b) Tiba is located in fairly close proximity to undisputedly AD languages (there are predominantly Mumuye settlements only a few kilometers away). It is therefore pertinent to examine what similarities exist on the linguistic level between Tiba and AD; we leave to other interested parties the task of working out the relationships which may exist between Tiba and other language groups¹. Unfortunately, the published lexical data on

a number of languages which might interest us, particularly AD groups 5² (precisely the one containing Mumuye), 8 (Kam), and 9 (Jen/Munga), are scarce (limited practically to Meek 1931). Nevertheless, we have ourselves been able to obtain a set of some 500 lexical items in Yendang³ (the other part of AD5), and we are fortunate to have some fairly extensive material from the Mumuye portion of AD5 (Shimizu 1983), from AD4 (Blench and Edwards 1988 for Momi, Raen 1985 for Pere, Bohnhoff 1991 for Dii or Duru), and from at least one AD2 language, Chamba Leko, hereafter CL (an unpublished wordlist from the Balkossa Literacy Center).

All the AD languages cited above are conceivably part of a larger AD grouping (see Boyd 1989a:179-80, where an AD2, 4, 5 subgroup was mooted), which we may provisionally call "Southwestern Adamawa" (SWAD). Since a first look at the data reveals a multiplicity of striking lexical similarities between Tiba and SWAD, this paper will concentrate on specifying as many of these as possible.

Obviously, any cognate search can be extended to other AD groups. One of these would be another AD grouping including AD6 (Mbum) and AD13 (Bua). In this paper, we shall indeed incorporate data from a few languages chosen fairly arbitrarily for accessibility of material. Four of these are from AD6: Mbum (Hino 1978), Karang, Koh (Ubels, n.d.), and Pana (Lim 1997), belonging to the "Central" group (Boyd 1989a:185); three others are from AD13: Kulaal, Kwa (not the Kwa surveyed by Kleinwillinghöfer 1996) and Niellim, using unpublished word lists prepared by Pascal Boyeldieu (n.d.), including material collected by Claude Pairault for Kulaal (cf. Boyeldieu 1985, Pairault 1969), among others. While some interesting correlations are revealed, this search is of greater interest as an illustration of the phenomenon of "diminishing returns" than for providing new AD links for Tiba. A check of the AD6/13 citations will show that the majority of these are either cases of common AD (or NC) roots, or proof of the classificatory separation of the two groupings involved, or both. In few cases do they provide the only available cognates for Tiba roots. On the other hand, there are numerous citations from only one or more languages from AD2/4/5. If we extend our search again to AD11 Fali (see Sweetman 1981), we will find even less unique citations, barely one or two, e.g., *sip-* 'bury' (cf. Tiba *sî* 'bury' and *sîb* 'under'). Open-ended search processes are therefore of little use. Indeed, it will often quickly become apparent which languages give "results" (multiplicity and plausibility of cognates unattested on a wider scale) and which do not. Perhaps inevitably, the ones which do give "results" are close or fairly close geographical neighbors, or at least those with which recent historical contact can be affirmed.

There is, however, a third grouping, namely "Northwestern Adamawa" (NWAD) as defined by Kleinwillinghöfer 1996 (including AD7 Yungur, AD10 Longuda, AD1 Waja, AD9 Jen, and Bikwin and Kwa groups, unknown to Greenberg). A cognate search bringing this set of languages into play would be of considerable interest, particularly in view of the presence of AD9 Jen. Indeed, a check of the Jen and Munga lists presented by Meek (1931) reveals a certain number of interesting correlations, more in any case than with the other NWAD languages cited in that work. Furthermore, Kleinwillinghöfer stresses the affinities between the Jen and Bikwin groups and notes that neither has a noun classification system, unlike the other NWAD languages. A wider comparison between SWAD and NWAD is therefore in order; this, however,

will not be the subject of this paper. We shall here do no more than cite the relevant entries in Meek's Jen/Munga lists.

Naturally, given Tiba's geographical position, one hardly expects to find any BC language which could provide cognation on the same level as that provided by the AD2/4/5 grouping. This, of course, does not prove the classificatory position of Tiba in any more than a Greenbergian sense. In the light of basic vocabulary, CD and Tiba remain peripheral with respect to AD, each containing numerous items apparently unattested elsewhere. On the basis of a wider vocabulary, of course, CD and Tiba will group in the same way that CD and CL do, despite the surveyor's intuitive impression that these languages are markedly different.

Given the sparseness of data on some crucial languages, we shall proceed here in two steps: we begin by presenting a list of nominal roots, drawn from the lists used by Meek. Our first set of 38 nominals will show that there is a considerable degree of lexical concordance between Tiba and SWAD. This connection strikes one as stronger than the link between CD and AD (involving almost exclusively AD2 CL). As usual, however, two conclusions are possible: 1) there is some kind of fairly distended genetic grouping involved; or 2) these are contact phenomena of fairly ancient date, in which case the arrival of CD on the scene would hypothetically be more recent and of a nature such as to engulf certain smaller groups, but with little effect on a wider geographical scale.

The second set of 16 nominals shows how close the relationship between Tiba and CD is. In many cases, the degree of resemblance and the absence of cognacy elsewhere suggest that borrowing in the near past is the only plausible way to account for the present situation. In other cases, however, the phonological divergence is such that, if borrowing is indeed involved, it cannot be so recent.

In the final list of 19 nominals, the individuality of Tiba comes to the fore. This set includes items which either have no apparent CD or AD cognacy, or require the assumption of considerable phonological change to account for any correspondences.

In a part II of this study, we state all the tentative conclusions which we were able to reach with regard to phonology, tonology, morphology, and grammatical marking in Tiba, compare the situations in Tiba and CD, and provide a full Tiba-English word list, with all additional putative AD cognates which we have been able to find in the sources cited.

LIST 1: ADAMAWA COGNATES FOR TIBA NOUNS WITH GLOSSES IN MEEK'S
WORDLISTS

Notation: In CD, we use the characters ξ , q to represent high mid vowels and e , o to represent low mid vowels; q represents a mid central vowel. For ease of typography and comparison, we have transposed material available in the other languages with four vowel heights cited here to this system whenever the distinction in mid vowel heights is clearly pertinent (the contrast is thus not marked for mid front vowels in Pere as it has no role in the native lexical stock). In the particularly complicated Dii system, both e , o and barred i , u are represented by ξ , q ; this is unlikely to cause confusion, given the almost total complementary distribution of the vowel heights concerned. The representation of nasal vowels is required in some languages (including Tiba); this is done by underscoring. Consonant notation is conventional; note only that vw represents a labial flap. In tonal notation, / represents downstep, while \ddot{v} represents any vowel bearing the infralow tone in the four-register Yendang system. (Given the provisional nature of the Momi data, these are noted without tones.)

Meek's data are given in his nonphonetic notation, with the exception that ng is noted η where necessary.

Tiba nouns are presented in citation form, i.e., with \grave{a} - or \acute{a} - prefix and final \acute{a} (the latter undergoing diverse alterations as described in part II). The retention of the prefix clarifies certain correspondences in Kam (AD8) where a similar element is apparently prefixed to many nouns.

Each set of items is arranged alphabetically by English gloss.

• (S)WAD cognates

\grave{a} - \acute{a} η - \acute{a} 'arm, hand'

CD $w\acute{a}\acute{a}$; the general root in AD2/5/7/8/9 is nasal + central or front vowel + nasal

\grave{a} - $t\acute{o}$ - \acute{a} 'bow'

CD $t\acute{q}\acute{a}m$, AD2 CL $t\acute{a}b$, AD4 Momi $taau$, Pere $t\acute{a}b\grave{o}$, AD5 Zing Mumuye (hereafter ZM) $t\acute{a}(k)\acute{a}$, Yendang $t\acute{a}t$, Meek AD8 Kam ace, cf. AD9 Jen kanto, Munga kantau; also PP *ta

\grave{a} - $b\grave{a}k$ - \acute{a} 'bushcow'

AD5 ZM $b\grave{a}k\grave{a}$, Meek Yendang bak ($b\grave{a}t$)

\grave{a} - $k\grave{\eta}$ η $k\acute{i}l\acute{a}\acute{a}$ 'chicken'

AD5 ZM $k\grave{\eta}$, cf. Meek AD8 Kam kume; there is no nasal in AD2, thus CL $k\grave{o}\grave{o}$, cf. CD $k\grave{p}\acute{a}\acute{a}$, AD4 Momi kqz , AD6 Mbum $k\acute{a}k\acute{a}$ vs. Koh $k\acute{a}y$; the nasal reappears with a back vowel in AD4 Pere $k\acute{o}n\acute{i}$; the initial consonant is voiced in Meek's AD7 Yungur go; note a root in part of AD13, represented in Kulaal by $h\acute{a}l\acute{a}$, suggesting the Tiba term may involve two roots of similar meaning; also cf. terms for 'guinea-fowl'

à-nàmèn-á 'crocodile'

CD *nàmèn*, CL *nàbàn*, AD4 Pere *nàmànè*, Meek AD5 Yendang name

à-náksā 'cow'

AD4 Momi *nogs* and Pere *nàgò*, Meek AD5 Yendang naki (*nākī*), AD6 Koh *nākā*, cf. PP *niak; but CD, AD2 CL *nàà*, also in AD7; AD4 Dii has *ndàà*, AD5 ZM has *nàpə*

à-bý-ā 'dog'

Meek AD7 Yungur bwe, Mboi abwa; possible cognacy with the AD6 series Mbum *gòì*, Karang *gáy*, Kare *váà*; *bu is also PP

à-níŋ-á 'drum'

Meek AD2 Mumbake *ringima*

à-táē 'ear'

CD *tāā*, AD5 ZM *shəq* (derivation from an earlier *twa, or *tue as in Common Bantu, seems patent), Yendang *tōk*; the velar C₂ is widespread: AD2 CL *túng*, AD4 Momi *tok*, Pere *tógò*, Dii *tóg*, cf. AD6 Karang *súk*

à-éŋ-á 'egg'

ZM *wnaŋkaa*; note Meek AD5 Yendang ha (*hāt*), Kumba pa; the full AD5 set suggests cognacy with the widespread "*para*" form (cf. AD10 Longuda *fōla*, AD14 Niellim *hwáánī*)

à-ísā 'eye'

yir/l forms are widely attested in non-Bantu Bantoid (along with *si* and *li*) and in AD13; otherwise, we have PP *gis, to be compared with Fali (AD11) *nisi* and Bantu A.90 Kako *misi* (also, of course, Fulfulde *yeeso* 'face', *yiiitere* 'eye')

(à-)sē-é 'fingernail' (perhaps -sé-)

AD5 ZM *saari*, Yendang *sóó*, Meek AD8 Kam *aciri-*, AD9 Jen/Munga *cina-*

à-nè-á 'four'

AD4 Pere *nārō*, Dii *ndādó*, ZM *dneerə*, CL *nāārā*, Meek AD5 Yendang *nat* (*nàt*), AD8 Kam *nar*; compare AD6 Karang *nìŋ*, Kare *nèŋ*, Mbum *nyàŋ*

à-vún-ā 'goat'

CD *vūn*, AD2 CL *vā*, Meek Wom/Mumbake *vua*, AD4 Momi *buuz*, AD5 Yendang *bi* (*bī*), Kumba *wii*, Gengle/Kugama *ayi*, AD9 Munga *naŋbu*, AD6 Karang *gúy*, Koh *vúy*, AD13 Niellim *bwày*

à-kpàŋgúm-tā 'groundnut(s)'

CD *kpàán* 'groundnut', *gúūm* 'bambara groundnut', Meek AD2 Chamba (Leko) *kpaŋ[-]wara*

à-gérá 'guinea-corn'

Meek AD2 Wom *ghera*, cf. CL *yēd*, CD *yírí*; also see -*hátŋ*- 'guinea-corn' below

à-sóksá '(body) hair'

AD4 Momi *suuk* 'hair', AD5 ZM *sòò*; a term noted *sūri* by Meek (Yandang *sūūrī*) 'hair (of head)' (Meek does not record 'body hair') is widespread in AD5 outside Mumuye, cf. Dong suk 'hair' (Blench 1997), AD6 Koh *sūy* 'hair'; a comparable root appears in some A13 languages

à-gbōm-á (*gbōóm*) 'heart'

AD5 ZM *gbqoti*

à-nyān-á 'horse'

CD *nyān*, CL *yān*, Meek AD8 Kam *yeje*

à-lún-ā 'knee'

CD *lúūrī*, CL *lígàrá*, Meek AD2 Wom *liṅbera*; AD5 Teme *luṅ*, Kumba *niṅgi*, Gengle/Kugama *ruṅ*, also Yandang (*yá/-*)*rúnká*; AD8 Kam *alunu* (also A13 Bwa group *d/rul* vs. AD6 Kare (*nzá-túú*))

à-bák-á 'knife'

Meek AD8 Kam *abak*; cf. AD4 Dii *pāg*

yàásá 'leaf'

CL *yèsà*, cf. CD *yàà* and Meek AD5 Yandang *nyākahē* (*yánká*, with classifier *hě*), Waka *nyaja*, Teme *janja*, AD9 Jen/Munga *yangka*

à-bé-ā 'leg'

AD4 Momi *bi* 'paw'

à-bá-á 'leopard'

AD4 Pere *bàlām*, cf. CD *gbēē*, AD5 ZM *gbmee*, Meek Yandang *kpe* (*kpèè*); the relationships between these roots AD2 CL *gā*, AD4 Momi *gooz*, and Meek AD7 *fila*, *vila*, *ivula*, AD8 *impeli*, AD9 *hwi*, *vwi* is obscure

à-nyém-ā 'meat'

Meek AD9 Jen *hiā*, Munga *xiam*; other instances of this root in AD2, 7, 8 are not palatalized; this well-known NC root reappears in AD13 Kulaal *nyám*, Niellim *nyàm*

(à-)fén-ā 'moon'

AD6 Karang *fěw*, Meek AD7 Yungur -*fe*, -*fa*, AD9 Jen/Munga *fi*, *hwi* (Kleinewillinghöfer 1996 records cases of nasal vowels); also in AD13: Kulaal *fěè*, Niellim *pyāā*; PP **pyan* has reflexes in both initial *f* and *s*, cf. 'sun'

à-dók-ā 'mountain'

Meek AD8 Kam *adaj*

à-kāŋ-á 'neck'

Meek AD5 Gengle/Kugama kōaŋ, AD7 Libo kwēna; elsewhere in groups 5 and 7, the forms are kir, kwer, kor, cf. AD2 CL kòól, AD4 Pere kōlāŋ; also cf. 'shoulder'

à-jí-ā 'night'

AD4 Pere zègò 'darkness', AD5 ZM zii, Meek Kumba jim

à-bóŋ-á 'river'

Meek AD5 Yendang boŋko (bònkō), Waka baŋgo, etc. But the root is also apparently in "Mambiloid" Nizaa

à-yókúm-á 'salt'

Meek AD2 Mumbake nyuŋ, AD4 Pere yōŋ, Meek AD9 Jen jukwē; also cf. CD nyénúm 'kind of salt', AD2 CL nwūùm

à-yó-ā 'snake'

CD yéŋ; cf. Meek AD9 Jen dzo, Munga zaŋ, AD7 Mboi za, Libo i[-]zoŋya, and all apparent cognates with initial s in AD5 and 7; also cf. AD4 Dii yó 'slough off (old skin)'; while this root is best known in BC (cf. Bantu *-j/yókà), it is also found in languages presumably subjected to little BC influence such as AD11 Fali joo and Ubangi Gbaya gók

à-té-é 'stone'

AD5 ZM tara, Meek Yendang tari (tārī), AD8 Kam atal, AD9 Jen/Munga te (cf. AD6 Karang -sāw); PP *ta

à-lér-á 'tongue'

Meek AD2 Wom lela, AD5 ZM rèetè, Yendang léká, but CD lǎǎ

à-tár-á 'three'

CD tárā, ZM tat, CL tōŋrā, Meek AD5 Yendang tat (tāt), AD7 Yungur (fi)ta, Libo tar(in), AD8 Kam car, AD9 Jen (wa)ta

à-tí-á 'tree'

AD4 Momi te; the root is also clearly represented in Meek AD5 Yendang (téŋ), Waka, Teme and AD2 Mumbake, CL téŋ, cf. CD tím with final nasal (AD10 Longuda shows a plural form with final -m, Kleinewillinghöfer 1996); also cf. AD13 Kulaal téŋ, Niellim tēlā, but AD6 Kare dī

à-lém-ā 'war'

AD4 Dii lúú 'make war'; cf. AD6 Koh yúm, Mbum nyū

à-jíŋjīŋ-á 'water'

Meek AD2 Lekon (Chamba Leko) nyuŋuna, cf. Wom/Mumbake yila, CL wāl; also compare AD4 Dii zíŋ 'urine', zīŋ 'river'; possibly connected with the AD13 root represented in Kulaal by ím but elsewhere by rim forms

● Cognate in CD

à-wér-á (wée) 'arrow'

CD wári

à-'d(ū)ùm-á 'back, behind'

CD *dīm(áà)*: primarily a BC root (particularly Bantu and Cross River), represented regionally in Vute and Mambila; the best AD correlate is Dii *dān* 'beyond, on the other side'

à-ýsýn-á 'breast'

CD *nyésà*: cf. PP *basan; compare AD2 CL *vūm*, AD4 Momi *voom* 'milk'

à-gàŋ-á 'chief'

CD *gàng*: possibly an areal root, though plausible cognates all show unusual correspondences, cf. Mambila *gáng*, CL *gààd*, AD4 Pere *gènè*, Dii *gbāŋ*, PP *gwam, among others

à-kòŋlár-ā 'elephant'

CD *kōnglāā*; CD has an apparently derived verb *kōnglì* 'bend' from which this root may in turn derive (relating, for example, to the form of the tusks); note, however, the existence of Meek AD7 Roba lara and AD10 Longuda larawa, suggesting this root could also theoretically be an ancient compound (also cf. AD4 Pere *gòŋī*)

à-tōq̄ŋ-á 'five'

CD *túúná*: initial t- is characteristic of BC (AD has mostly n-); back V₁ can be found, for example, in Jukunoid

à-tú-ā 'head'

CD *tī*: a NC root; but SWAD (including AD5) has mostly initial y-, j- (or ∅ as in Yendang *ūk*), cf. nevertheless AD4 Dii *tún* 'face'; AD6 (excluding Mbum) has *túl*

à-j̄ntá 'pot'

CD *jī*; see -wàlāŋ- below

à-nyik-á 'lion'

CD *nyik*

à-kémjī-ā 'monkey'

CD *kém jī*, lit. 'red monkey': CB *-kímà (9/10)

à-(y)áén-ā 'nose'

CD *núùn*: a well-represented NC root with many probable cognates in AD, though the correspondences are too complex for certainty, cf. for example AD2 CL *nyíd*, AD4 Pere *áā*, AD6 Mbum *hòòk*, Karang *hókō* but Koh *múù*, AD13 Niellim *hùny*

à-wóm-á 'oil'

CD *múm*, but Mapeo Chamba 'úm; this need not be the well-represented *no(m)* root (cf. AD6 Karang *núm*), as CD also has *nòò* 'be fat' and derivates from it; but in AD13 where *num* is the common root, we also find Fanyan "mumé", according to Joly (1935); cf. Meek AD8 Kam man

à-kisēn-á 'slave'

CD *kàsēn*, CL cf. *kò(')sá* (Meek kwasa), apparently from a verb *kq'* 'catch'

à-sām-á 'spear'

CD *sāṃ*; cf. ZM *shàlàn*, suggestive of Chadic; also compare AD2 CL *síid* 'arrow', AD4 Dii *sēḡ* 'war', *sḡḡ* 'arrow', AD5 ZM *shòn*, Yendang *sḡn*, both 'arrow', and AD13 Kulaal *sòl*, Niellim *sàl*, both 'combat'

à-in-ā 'tooth'

CD *nîn*: a NC root not well represented in AD unless cognacy can ultimately be established with AD2 CL *nágál*, AD4 Momi *nuur*, Pere *nuúlè*; cf. PP *niu

à-bḡḡr-á 'two'

CD *bààrá*: a very general root in BC; *rop* forms in Adawawa 1, 7 are likely metatheses of the consonant components of this root.

- No SWAD cognates

à-óṅ-á 'bee'

Closest neighboring AD roots are AD5 ZM *wara* (cf. Meek AD5 Yendang *fōri* (*vōri*), Waka/Kumba *vōri*, Teme *vobe*), AD2 CL *núúd* (cf. Meek Wom *ḡora*); also compare AD4 Pere *ólè* 'honey'

à-lá-ā 'belly'

n/la is well represented in Bantoid and presumably related to a PB *-*dà* (9); it is also present in Mambila; note that CD has *nàà* 'in, inside'

á/-gbáṅ-á 'bird'

Related to AD4 Pere *gáái* 'bat' and/or *gbḡgò* 'pigeon'?

à-lēká 'blacksmith'

CL *lān* (Meek *lama*); cognacy is hypothetical given that every AD group has a different characteristic root; also compare AD4 Dii *nāṅ*

à-gbām-á (gbāám) 'blood'

à-mí-á 'door' (< *mù* 'close'?)

à-gǎṅsā 'fly'

All matches unsatisfactory: CD gèè, AD4 Momi *gumkqz*, Pere *gúī*; cf. Meek AD5 Yendang group *kū* (*kùn*)

à-nyáà-á 'friend'

AD6 Karang *yáḥ*, Meek AD8 Kam *aṅwa*, but cognacy is hypothetical given that practically every language has its own root for this gloss; CD *mánaà* is a derivate of *màn-* 'peer', often used as a prefix

à-hǎṅ-á 'guinea-corn'

Cf. Meek AD5 Yendang *koṅ* (*kōn*), Teme *kom*, AD7 Yungur/Roba *koma*

à-jý-ā 'house'

Cf. AD5 ZM *zhà(k)a*; also Meek AD7 Mboi *shu'do*, Libo *ishiria*, Yungur *hito*; there are apparent AD13 cognates: Kwa Perim *jòō*: 'house', Kwa Cini *jùurá* 'woman's house'; cf. PP **di*, a root also represented in Voltaic

à-pígèè 'maize' (but curiously CD *pī-gōō* 'cassava')

à-ísá 'mat'

Cf. AD6 Karang *hih*

à-kīn-á 'one'

Meek AD5 Yendang *bindi* (*bīnī*), AD9 Jen *bing*; compare Kleinewillinghöfer (1996:95-6), who gives the initial consonant in the Jen group as *ts*, while the Bikwin group has either *kw* or *cw*; this root is more widespread in NWAD (see Jungraithmayr 1968/9 ; also see Boyd 1989b); note the curious resemblance of AD4 Pere *kīnè* 'compact, dense'

à-wàláṅ-á 'pot'

(à-)hǎnmā 'rain'

Also means 'saliva'; cf. AD2 CL *nwān* 'rain', also AD5 ZM *sná* 'rain (vb)', *snáári* 'saliva', AD6 Karang *sám* 'saliva'

à-gāá (*gāá*) 'road'

à-sé-é 'sun, God'

CD *súū*; the semantic equivalence is very widespread in SWAD languages; also AD6 Karang *séh*; note AD2 CL *sqò*, AD4 Momi *see*, Pere *sī*, Dii *sē*, Meek AD5 Yendang *si*, *se*, all meaning 'moon'

à-wóqób-ā 'ten'

Cf. AD4 Pere *fób*; a widespread AD root is *kop* (cf. AD5 ZM *kqp*, Yendang *kōp*, AD2 CL *kōb* and Meek AD10 Hill Longuda *kwoo*); another is *bu* in AD7/8 and perhaps 9

(á/-)sáŋká 'toad, frog'

I.3. Conclusion

The author takes this opportunity to reaffirm his opinion that Greenberg's classification of African languages leaves little room for readjustment. By mass comparison, every language must find its place in a small number of inclusive groups. CD, for example, finds its place in AD on the basis of its lexical similarities with the languages of AD2 (morphology, even vestigial traces of morphology, count for little here). If, however, a closer look shows that AD2 languages are "rather like" AD4 languages but really "quite different" from CD, it does not then become helpful to leave AD2 in place and shunt CD around, particularly on the basis of a handful or less of putative "diagnostic" roots (cf. Bennett 1983; the same is valid for the treatment of Dong by Shimizu 1979). If we wish to exclude CD from AD (or better, from each of the parts of AD), our best solution is to "leave it nearby". By this is meant a nonclassificatory approach, seeking whatever lexical and morphological resemblances are to be found with languages in the immediate geographical neighborhood. We need not doubt that there will be many of these; but at the same time, there will be a small number of identities with more distant languages and groups, some of these quite surprising (for CD, Boyd 1994 cites, for example, a striking near-identity of the root for "wing" with the one found in Gurunsi, although Kleinewillinghöfer has now personally communicated similar forms in AD1 Waja and AD7 Yungur). Are such identities more significant than English/Farsi *bad*? We do not know, but unlike the case with English and Farsi, it is not at all easy for us to find out. This indeed is the crux of the matter: for many of the languages which interest us, we have no proper description; for most groups, we have no reliable reconstructions to any time depth; whatever the case, we have no documentary basis enabling us to check our historical hypotheses. Thanks to Greenberg, we can now say that the languages with which we are dealing in this paper are in the heart of a family called "Niger-Congo". This we need to know; but nothing whatsoever hangs on their subclassification. It is certainly a matter of the utmost indifference to know whether Platoid and CD had, several thousands or tens of thousands of years ago, a common ancestor that, say, AD2/4/5/8/9 did not, when we do not (and perhaps cannot) know anything about the intervening history of the two groups, prior at least to the 18th century. Language classification, indeed different kinds of language classification, have an important place in linguistics; but there is a time when classification, particularly of the "genealogical" (Manessy 1992) type has nothing further to offer, and we must rather turn, at least temporarily, to the individual languages to learn what they have to teach us.

NOTES

This research was funded by the Centre National de la Recherche Scientifique (CNRS) and conducted under the auspices of the Nigerian National Commission for Museums and Monuments, to whose officials I extend my sincerest thanks.

1. Where obviously pertinent similarities exist, we shall nevertheless cite items from regional languages classified as Benue-Congo (BC), e.g., the "northern Bantoid" languages and Platoid,

particularly Gerhardt's (1969) "Proto-Plateau" (PP) reconstructions. Common Bantu (CB) forms from Guthrie (1967/71) are also cited.

2. Numbers are those assigned by Greenberg (1963).

3. Ulrich Kleinewillinghöfer, who took a short list of around 100 terms in this language, recorded a name with harmonized vowels: Yandang. Our speaker, however, used the form as recorded by Meek (1931): *nā yéndánj* 'Yendang language', *wèé yéndāŋ-ù bīnī* 'one Yendang person'.

BIBLIOGRAPHICAL REFERENCES

Balkossa Literacy Center, n.d.: [Vocabulaires tchamba leko-français, written and computerized data].

Bennett, Patrick R., 1983: Adamawa-Eastern: Problems and Prospects, in Ivan R. Dihoff, ed., *Current Approaches to African Linguistics* (vol. 1), Dordrecht/Cinnaminson: Foris, 23-47.

Blench, Roger, 1993: New developments in the classification of Bantu languages and their historical implications, in Daniel Barreteau and Charlotte von Graffenried, eds., *Datation et chronologie dans le bassin du Lac Tchad*, Paris: ORSTOM, 147-60.

-----, 1997: The Dong language and its affinities [working paper].

Blench, Roger and Adrian Edwards, 1988: A Dictionary of the Momi Language/The Momi (Vere) language of Nigeria, Yadim dialect, [draft document].

Bohnhoff, Lee E., 1991: *Dictionnaire de la langue dii (duru)*, Ngaoundéré: Equipe de littérature dii.

Boyd, Raymond, 1989a: Adamawa-Ubangi, in John Bendor-Samuel, ed., *The Niger-Congo Languages*, Lanham: University Press of America, 178-215.

-----, 1989b: Number systems in Adamawa, in *African Languages and Cultures* 2, 2:149-173.

-----, 1994: Historical perspectives on Chamba Daka, Köln, Rüdiger Köppe.

Boyeldieu, Pascal, n.d.: [Bua group word list].

-----, 1985: *La langue lua ("niellim")*, Paris: CUP and Editions de la MSH for SELAF.

Carnochan, Jack, 1975: Bachama and Chadic, in James and Theodora Bynon, eds., *Hamito-Semitic*, 459-68.

- Gerhardt, Ludwig, 1969: Analytische und vergleichende Untersuchungen zu einigen zentralnigerianischen Klassensprachen, 3. Teil: Stammwörterverzeichnis, in *Afrika und Übersee* 53:44-65.
- Greenberg, Joseph H., 1963: *The Languages of Africa*, The Hague: Mouton.
- Guthrie, Malcolm, 1967/71: *Comparative Bantu*, Farnborough: Gregg International Publishers.
- Hedinger, Robert, 1989: Northern Bantoid, in John Bendor-Samuel, ed., *The Niger-Congo languages*, Lanham: University Press of America, 421-9.
- Hino, Shun'ya, 1978: *The classified vocabulary of the Mbum language in Mbang Mbum with ethnographical descriptions*, Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- Joly, A., 1935: *Le canton de Boli* [mimeographed archive report cited by Boyeldieu (n.d.)].
- Jungraithmayr, Herrmann, 1968/9: Class languages of Tangale-Waja district, in *Afrika und Übersee* 52:161-204.
- Kleinewillinghöfer, Ulrich, 1996: Die nordwestlichen Adamawa-Sprachen - Eine Übersicht, in Uwe Seibert, ed., *Afrikanische Sprachen zwischen Gestern und Morgen*, *Frankfurter Afrikanistische Blätter* 8, 80-103.
- Lim, François, 1997: *Description linguistique du karé (phonologie-syntaxe)*, dissertation, Université de Paris III.
- Manessy, Gabriel, 1992: *Généalogie et génétique*, *Linguistique africaine* 9:67-75.
- Meek, Charles Kingsley, 1931: *Tribal Studies in Northern Nigeria*, 2 vols., London: Kegan Paul.
- Pairault, Claude, 1969: *Documents du parler d'Iro, kùlál du Tchad*, Paris: Klincksiek.
- Raen, Konstanse, 1985: *Dictionnaire pere-français*, Ngaoundéré: Eglise évangélique luthérienne du Cameroun.
- Shimizu, Kiyoshi, 1979: *A comparative study of the Mumuye dialects (Nigeria)*, Berlin: Dietrich Reimer.
- , 1983, *The Zing Dialect of Mumuye: A descriptive grammar*, Hamburg: Helmut Buske Verlag.
- Sweetman, Gary, 1981: *Lexique français-fali-fulfulde*, Yaoundé: SIL.

Ubels, Edward H., n.d.: A comparative study of Koh and Karang, [Yaoundé: SIL].

Williamson, Kay, 1989: Benue-Congo overview, in John Bendor-Samuel, ed., *The Niger-Congo languages*, Lanham: University Press of America, 246-74.

A Linguistic Sketch of Tiba (*Gà*), Part II

by Raymond Boyd

II.0. Introduction

In this section, we present a set of observations, and the provisional conclusions reached concerning these observations, in the domains of phonology, morphology, and basic word order in simple constructions and predications.

II.1. Tiba phonology

a) CONSONANTS:

The initial consonant system of Tiba can be provisionally presented as follows:

m	n					
p	f	t	s	k	km	kp
b	v	d	j	g	gm	gb
β		•				
v _w	l	y	h			w

(The notation *v_w* is used here for the labial flap found in many languages of this region. In this chart, *y* represents a palatal semivowel.)

Major differences with respect to Nnakenyaare Chamba Daka (CD) are:

- i) A voiced "injective/plosive" contrast in the labial and dental orders. It will be noticed that the lexical frequency is such that this contrast might equally be envisaged as "fortis" (= injective) vs. "lenis" (plosive). To the ear, the *b/β* contrast is less perceptible than *d/d'*; however, *d* may be confused with *l*.
- ii) Strangely, *f* seems to be followed by unrounded vowels and *a*, but *v* by rounded vowels and *a*. There is perhaps no *v/w* contrast before the high front rounded vowel.
- iii) The voiced palatal is affricated only before high front vowels; elsewhere it is a palatal fricative. The corresponding unvoiced consonant is a clear palatal fricative only before a high rounded front vowel; elsewhere, it is apical.

iv) There are postnasalized velar consonants (note that postnasals are also present in Mumuye, Shimizu 1983, but there duplicate almost the entire initial consonant system). The articulation of these consonants is such that they might just as well be described as postnasalized labiovelars.

v) There are a small number of terms having the structure: (Initial aspirate velar, [k^h, g^h, h]) + high central vowel + ŋ. (In fact, the relative weight of stop and aspiration is such that the phonetic notation might as well be [k^h, ^ʰh].) Now it turns out that, while we have at least one initial *kuŋ*, we nowhere have terms of the form *kiŋ*, *giŋ*, *hiŋ*, or *iŋ*. The latter are therefore reasonable phonological representations for these sequences; nevertheless, in our lists, they appear with vowel *q* for easy identification of their peculiar nature. (Note that Shimizu 1983:13 also remarks central vowels before ŋ in ZM, and assigns them to phonological *i*, perhaps less convincingly insofar as his dictionary shows the preceding consonants to be arbitrary. Note a similar case in Tiba involving *q* as V₂, *árǵŋ* 'fry'; it is not clear why this vowel should not be realized *i*, but at the same time, this verb has an aberrant canonic structure.)

vi) As in Mapeo Chamba (but not Nnakenyaare CD), lexical items may have an initial vowel preceded by glottal stop. Glottal stop is nevertheless not represented here, as there seems to be no useful phonological role for it.

vii) There are cases of initial labialized *m* [m^w]. This realization is treated here as a *w* + nasal vowel, but could also conceivably be a nasal counterpart of the postnasalized velars (cf. Shimizu 1983:12). Since it also appears intervocally, however ([sùm^wéē] 'worm'), this solution is questionable, aside from any phonetic implausibility. Its position in the system must be left undecided for the time being.

Tiba resembles the majority of Adamawa languages in having a sharply reduced noninitial consonant inventory. This seems to be:

m	n	ŋ
P	T	S K
	l	

There are, however, two important questions to be resolved:

i) Is there, as in CD, a *l/r* noninitial contrast? On the basis of the data collected, it would seem this contrast does not exist intervocally, where [l] and [r] seem to be allophones (*r* is used in our notation except between high back vowels, where [l] is perhaps exclusively preferred). There may, however, be a contrast after C, though this may be the consequence of borrowing from CD. Unlike CD, Tiba cannot be shown (at least by these data) to have *rC* or *lC* groups, although *CVrVCV* may be such that V₁ and V₂ must be identical (or at least V₂ is neutral). In such case, these items could be reanalyzed as *CVrCV*. (Given general scarcity of data together with difficulties in distinguishing compound terms, nothing will be said here about possible consonant sequences, which, as in CD, are likely to be severely restricted.)

ii) Do the semivowels *w* and *y* need to be represented intervocalically outside loan words? The data collected thus far suggest they do not, but the integration of loan words may be such that these phonemes should nevertheless appear in the intervocalic system.

b) VOWELS:

Tiba has a nine-vowel system: the usual seven-vowel triangle (*i, e, a, o, ɔ, u*) together with two rounded front vowels, *y* (distinguished from the palatal semivowel elsewhere in this paper by tone marking or context) and *æ*. There is apparently no need for the high central vowel found in CD. The presence of rounded front vowels is obviously unusual, but has been reported for Tikar at least (G. Guarisma, p.c.) in this general region.

NASALITY: There seems to be a clear contrast between nonnasal and nasal vowels (the latter symbolized here by underscoring). There are probably only three distinctive heights for nasal vowels (only *ĩ, ỹ, ẽ, ą, ɔ̃, ɹ̃* are thus far attested).

Furthermore, the nasal contrast can only appear in a limited number of positions: 1) V in CV# (e.g., *ta* 'pluck'/'ta 'be early'; and 2) V₁ in CV₁C₂(CV) (where C₂ is either a front or a back stop, e.g., *tap* 'sew'/'gap 'count', *dɛk* 'forget'/'sɛk 'go down', are attested).

There is also nonphonological nasalisation in Tiba. Firstly, both nasal and postnasalized consonants transmit their nasal feature to the following vowel. Furthermore, unlike CD, Tiba lengthens vowels before *-n-* in CVnCV structures (also a feature of Yendang); *-n-* then tends to drop (in accordance with a CD-like exclusion of CVVCCV), leaving a long nasal vowel. At the same time, in Tiba as in most if not all neighboring languages, vowel nasality spreads to a preceding semivowel. Furthermore, there being no NV/NV̄ contrasts (just as in other Southwestern Adamawa, SWAD, languages, certainly Dii and probably Yendang), there is no justification for setting up *ny/y* and *nw/w* contrasts (unlike CD, where nasality can only be a consonantal feature). Thus, [waasi] 'body' is, if the rules above are indeed the only ones operative, phonologically /wansi/.

We may note that there is a strong tendency in Tiba to apply the CD rule that, if C₁ in C₁V(V)N is a semivowel, it must be nasalized; i.e., in Tiba terms, the vowel in this structure must be nasal. There are, however, apparent counterexamples in a sort of "adjective" class. Whether there is an explanation for these cases such as to render the rule absolute in Tiba remains to be seen.

LENGTH: The question of the contexts in which vowel length is contrastive in Tiba requires further investigation. It would seem that the CD situation whereby lexical items cannot have the forms CV (only CV:), CVn (only CV:n), or CV:C (only CVC₂ for any C₂ other than *n*) also holds in Tiba. The rule requiring that *ɛ, ɔ* be long in CD (except in C₁CCV) does not, however, seem to hold. Tiba has cases of at least CɛC, Cɛ̃CV, and Cɔ̃C, though in the case of the latter, the length contrast is much clearer to the ear when a vowel suffix is added. Long *ɛ* and *ɔ* in C₁C and C₁CV contexts are, however, limited to cases in which C₂ is *r* or *s*, and there are no suitable pairs for establishing a long/short contrast. It may thus well be that Tiba, like CD,

ultimately has the bulk of its vowel length contrasts in the CV(V)CV structure. For either phonological or morphological reasons, however, contrasts may be impossible to find before some C_2 's.

There are two more important differences between CD and Tiba in this respect, namely 1) that, when a -V suffix is added to a CV:*n* term, the vowel is shortened (the notation CV*n* is therefore used in the word lists presented here); 2) though less frequent, vowel lengthening and nasalization followed by loss of the nasal consonant can also be observed in the case of CVŋCV. (This situation involving a loss of the *n/ŋ* contrast has been generalized in Zing Mumuye and Yendang.)

Vowel length is independent of tone, i.e., vowels are either short or long, whether they bear a simple or a contour tone. Contour tones are represented below by two vowels, but these vowels are only (phonetically) long in the environments specified above. Naturally, a sequence of identical vowels with identical tone represents a (phonological) long vowel in the appropriate (CVVCV) context. There is no clear case of a vowel length contrast under a contour tone; this is also true in CD, where a few apparent contrasts can be given a morphological explanation.

c) CANONIC FORM:

The canonic forms CV(V), CV(V)C, CV(V)CV, and CVCCV, are attested for nouns and verbs, with some longer forms, particularly CVC(C)VC, for nouns. (As indicated above, the C_1 position may be occupied by glottal stop.)

The restrictions on V_2 are very strong, in Tiba as in CD, but will certainly have slightly different formulations in each language. Unlike CD, these restrictions are bound up, at least where nominals are concerned, with morphological phenomena. We may therefore anticipate on noun morphology in order to summarize the Tiba data as follows:

- CV(V)CV and CVCCV nominals have *i* as V_2 when the term is in nonfinal position; in final position, this vowel becomes *á*. (In the lists provided here, such nouns are written with final -*á*, making them easily distinguishable from CV(V)CV and CVCCV verbs, which have final -*i*.) Nouns with these forms in CD end in either *i* or *a* and are invariable.

The final-vowel tonology of these nouns requires an additional remark: the majority end in -*Ci* or -*Cí* (i.e., downstepped *i*) in nonfinal position; some, however, do not. These will display -*a* bearing a contour tone in final position, and -*i* bearing the first component of that contour in nonfinal position. Actually, only two such possibilities seem to exist: 1) nominals with final -*áá* (cited here with final -*à*), hence nonfinal -*i*; and 2) nominals with final -*áā*, hence nonfinal -*i*, itself followed by downstep.

- There are exceptions to the rule just stated: these include a small number of terms with final -*á* or -*áā* which remain invariable in nonfinal position (i.e., their final vowel does not become -*i*). There is also one attested case of a CVCCV noun behaving like a CVV nominal in both having a final contour tone and being invariant in final and nonfinal positions: *pùglàá* 'armpit'. It may

be that the term for 'sickle' alternates between invariance (*bàámsàá*) and variance (nonfinal *bàámsà*, final *bàámsàrà*, see 'Noun morphology' below).

- A small number of nouns have final *-àā*; the one case of alternation (*gýsàā*, *gýsýn*) suggests this structure was originally *-vñ-á*. The *-á* marking final position has thus been incorporated into the root, the form in nonfinal position being *(-)/Cā* (with downstepped mid tone).
- There are also CV(V)CV nominals with high V_1 and final *èē* (*wésèē* 'load of) firewood' with mid V_1 being an apparent counterexample), which could conceivably be analyzed as deriving from *-i- + -á* in final position; however, these terms do not change their vowel in nonfinal position (their tone pattern becomes HM). This analysis is therefore better seen as diachronic than as synchronic.
- There are a further three CV(V)CV nouns, *sìjì*, a variant of *sìi*, 'civet cat', *sáátí* 'porcupine', and *jèrí* 'whirlwind', which have root-final *-i* (*-iy?*), giving *-i-á* in utterance-final position.
- Like CD, Tiba allows CVCum (also CyCym) and CVCVη (with $V_1 = V_2$). There are also terms with CVCen structure corresponding well to CD terms with identifiable *-én* or *-ēēn* suffixes, and others which correspond to nothing in CD. (See "Derivational affixes" under II.4.a below.)
- Tiba also has a variety of V_1 - V_2 combinations in CVC(C)VC terms with final η and *k* (and even in one case, final *n*) which are unfamiliar in CD. The possibility that at least some of these terms are original compounds (or even synchronic compounds involving items not yet recorded individually) should be considered.

From the above, it should be clear that the V_2 position does not provide a full set of vowel contrasts. Indeed, final *-i*, whether for nominals or for verbs, is a lax, slightly lower variant of this sound than appears in V_1 (root) position, doubtless owing to this neutralization of contrasts. There is furthermore some tendency to total assimilation when V_1 is either *ε* or *γ*. (It may be noted that Tiba does not seem to have the *CεCε* and *CγCγ* structures found in CD.)

d) TONES

Tiba has a three-level tone system, complicated by downstep and grammatical tone alternation.

Downstep occurs automatically (as a mere phonetic realization) after a rising (LH) contour tone. It also occurs syntactically (i.e., as a mark of certain syntactic relationships without necessarily requiring postulation of any "underlying" (deleted) L tone), and as a "surface" phenomenon, i.e., where the deletion of an underlying tone may be supposed. Within lexical units, this underlying tone may be structurally L; but the most frequent deletion affects HM contour tones and patterns (*C'v̄ > C'v̄/*, *C'v̄C(C)v̄ > C'v̄/C(C)v̄*). This situation, resulting from the abundance of such tones and patterns in nominal lexical units (see below), is largely identical to the one in CD.

Tonal alternation in some nouns in associative constructions is described below (noun morphology).

NOUN TONE CLASSES: Note that about one half of all nominals have a HM or H tone pattern; another quarter has MH or M. Other fairly well represented nominal root tone patterns are LH, LHM, HL(M), and L. The others are marginal and perhaps derivable in some way from the above.

Such a situation is historically interpretable in terms of an original two-register system, increased to three by addition of a third infralow level. There is, however, no evident comparative evidence of such a phenomenon (with the exception of the four-level Yendang system, which may have suffered Chadic influence, the languages compared here all have three tones as well). Tiba is, however, rather unusual in displaying unexpected tonal correspondences for very well-attested roots (see, for example, 'louse'; the fact that CD has *láká* for this gloss may help to account for this particular irregularity).

VERB TONE CLASSES: In the material presented here, the majority of transitive verbs appear in simple predications with 3S subject *ki(/)* and nominal object. It appears that this construction is unfortunately not suited to revealing verb tone-class distinctions. Indeed, most transitive CV(C) verbs have a falling tone, (/)́v̀v̀ or v̀v̀, in this context, the L component being perhaps attributable to the deleted *à-* prefix of the object (although such verbs in elicitation also seem to have a HL tone). This L component disappears when verbs are followed by a nominal object with *á-* prefix or a nonnominal term. These verbs are therefore given in the glossary with H tone. A few transitive CV(C) verbs seem, however, to have L tone in the same context and are so marked, although this may not reflect any real difference in lexical tone. Indeed, some of the verbs which appear several times in the data have either the H/ML contour tone or L tone according to some as yet unidentified feature of the context (perhaps subject tone, object tone, or both).

In the same way, transitive CVCCV verbs have a HL or ML pattern, apparently in (free?) variation. When, in careful speech, the *à-* prefix of the following noun is retained, this pattern becomes MM. Two unexplained cases of HH and five of HM were, however, observed and are cited in the glossary.

A more helpful context for distinguishing transitive verb tone classes seems to be the use of a 3S pronominal object, *ki*. Indeed, this seems to yield at least three classes, H (H /*ki*), M, and again a very small number of L (M is perhaps sometimes realized H with no following downstep). Very few CVC(C)V verbs were recorded in this context, and no tone class distinctions were observable (all seem to be M). Verbs cited with M tone in the glossary were observed in this context. It may be noted that, in CD, this context *neutralizes* verb tone-class distinctions.

Another context in which tone classes can be distinguished is that of the perfective suffix *-nǎá*, which can be used with intransitive verbs (which never take an object) as well as with objectless transitive verbs. Again, three classes can be distinguished: HL, H(/), and L (verbs with

HL tone in the glossary were observed in this context; verbs observed with L tone in this context are marked "intr"). The position of downstep after H in this form varies: H/néá or Hné/á. It has been impossible to determine whether or not this variation is conditioned.

A third context in which a number of verbs have been observed is with following locative (ī) or definite (ní, á) markers. There are insufficient examples, but a first impression is that this context may disturb the lexical tone patterns of verbs. Tone patterns do, however, contrast there.

A fourth context for determination of verb tone classes may be as the first verb V₁ in a V₁-V₂ sequence. H-, M-, and L-tone verbs may be discernible here, as well as HL.

One final feature requires mention: some verbs have been found to take HL pattern in transitive constructions and L in intransitive ones (these are so marked in the glossary). This precise tone alternation, which may be an inflectional or a derivational phenomenon, is well attested in AD4; it may even be said that the unmarked intransitive form is L, and the unmarked transitive form H, although there are apparently exceptions to this rule.

II.3. The pronominal system

The following system of *subject pronouns* was obtained:

1S subject <i>m̄</i>	1PL subject <i>wíí</i>
2S subject <i>à</i>	2PL subject <i>míí</i>
3S subject <i>kí</i>	3PL subject <i>wá</i>

These pronouns are apparently obligatory markers, at least for the first verb in a series. In subject function, no other morpheme has been observed to intervene between them and the verb, wherefore they may be considered part of morphology.

The *possessive markers* are directly preposed to the noun they modify (i.e., between the prefix *à-* and the noun root), unlike CD where the possessives are all postposed. The system of these markers is:

1S (<i>à-</i>) <i>mēē-</i>	1PL (<i>à-</i>) <i>wété-</i>
2S (<i>à-</i>) <i>wēē-</i>	2PL (<i>à-</i>) <i>mété-</i>
3S (<i>à-</i>) <i>gúú-</i>	3PL (<i>à-</i>) <i>wóóntí-</i>

It would seem, then, that the plural possessives in fact bear the non-final form of the plural suffix. Similar nominalizations seem to provide the "independent" forms of the personal pronouns (i.e., pronouns used in functions other than that of subject marker, e.g., in topicalizations).

These possessives may be used both for nouns which would generally be classified as "alienable" (e.g., 'pot') and for those which would be "inalienable" (e.g., 'head'), in languages which make such distinctions. Some kinship and relational terms (e.g., 'father', 'mother', 'husband'), however, have different forms for the 2S and/or the 3S. These are:

2S suffixed -*ǎ̄āŋ*

3S prefixed ' (i.e., the noun prefix becomes *á/-*)

It is quite curious to note that the 1PL and 2PL forms above seem to be precisely the inverse of the 1S and 2S forms. Knowing that informants accustomed to only oral use of language will encounter a certain difficulty in providing "translations" of pronominals, we therefore questioned Awdi insistently about this, but were in the end satisfied that he was indeed giving us the forms we were requesting.

We must now proceed to examine the differences and similarities in the Tiba and CD pronominal systems.

The Tiba 1S subject pronoun is essentially as in CD; its point of articulation is assimilated in subject position to that of any following consonant. The CD 1S possessive is postposed *mèè*. (The CD independent 1S pronoun, however, is *nòk*, for which no Tiba correspondence has yet been observed.)

In CD, the 2S pronoun is a M-tone nasal in subject position (*à* is a variant in certain contexts and obligatory in imperative forms), but the object pronoun is *-à*. The CD independent 2S pronoun is *wā*, related to the postposed possessive *wèè*. There is therefore a good correspondence here with Tiba, though the Tiba 2S imperative seems to be *yì*.

CD has no 3S subject pronoun, but the 3S independent forms are doubtless derived from **gú* 'animate', **gí* 'inanimate'. The object form is *kù* (*gù* in Mapeo Chamba); this is also the subject form used in indirect discourse, though it undergoes diverse changes in S-V tone patterns. The CD 3S possessive is *kèè* (*gèè* in Mapeo Chamba). There is thus again a fairly good correspondence between the two languages.

It may be noted that Tiba *kí*, whether in subject or object position, is apparently followed by downstep. In CD, this feature would normally be associated with a raised L tone.

Furthermore, a usage of this pronoun with a possessive sense has been observed before a following noun, corresponding to a similar usage of the independent pronouns in CD.

The CD 1PL subject pronoun is *á*, the independent form *wóó*, related to the possessive *wòò*. If the Tiba form is to be connected, the vowel change must be explained.

The CD 2PL and 3PL subject marker is *í*. The object markers are likewise identical (*-bú*). The independent 2PL form is in all likelihood derived from an earlier *vú*, the possessive being *vèè*. The independent 3PL is likewise derived from *bú*, with possessive *bèè*. This distinction among the independent pronouns is not, however, invariably maintained, and it is probable that these two forms are in fact doublets of some original form. Tiba thus differs clearly from CD, both in the form of the 2PL and 3PL elements and in avoiding their confusion.

The Tiba pronominal system thus has points of agreement and of disagreement with the CD system. The agreements may extend to the use of a variant of the 1S pronoun as the logophoric singular, though this requires textual verification.

DEMONSTRATIVE: Only one demonstrative was repeatedly requested (CD *déèn* 'this, that (one in question)' as noun modifier). This is translated as a form *-(i)nk(á/i)* (perhaps involving some unexplained tonal phenomena). Specific questioning yielded no indication of a near/far distinction or other complication making it possible to contrast the Tiba and CD systems. There was also a single instance representing the CD *-àán* demonstrative ('this (here and now)') in *à-mi-yáè* (prefix|day|this) 'today' (CD *mór-àán*).

II.4. Tiba morphology

a) NOUN MORPHOLOGY

CLASSIFICATORY INFLECTION: In general, nominals have a prefixed *à-* when they are found in initial position. Some nominals, however, have a high-tone *á-* prefix, followed by downstep, suggesting a structural *áà-*. The nominals with this prefix mostly designate animate beings, although one plant is included (see below). The case of common or cultivated plants being classed grammatically as animate is known from Zande.

Nominal prefixes are segmentally unstable, but their tones may persist. Thus, in more rapid speech, *à-* may drop before a nominal in initial position, particularly when the latter has a (phonetically or phonologically) long, H-tone first vowel, with the L tone of the prefix shifting to the root. An interesting case in this regard is *á/jàánsā* 'tiger nut', confirming that the *á/-* prefix is in fact *á-à-*.

Likewise, *à-* and even *á/-* may drop when the noun follows a verb as its object, but the tone patterns of verbs suggest that the prefix tones shift to them.

Nominals with a canonic form ending in a C suffix *-á* in final position. If, however, the nominal root ends in *-Vr*, the nonfinal form ends in *-V* rather than *-Vr*.

Nominals with canonic form CV suffix *-á* in final position unless V is *-e-*, *-e-*, *-o-*, *-o-*, or *-æ-*, in which case the vowel is lengthened with an added H tone. Final-vowel alternation in longer canonic forms with final V has been described above in the course of the phonological discussion.

Note that this requirement that utterances (in this case, utterances with a final nominal) end in a vowel is a well-known regional feature. CD (or at least certain dialects such as the Mapeo form) distinguish themselves by requiring final *-í*, while CL, for example, resembles Tiba in taking final *-á*.

Reduplication is observed in some Tiba nominals. No specific semantic feature can be assigned to it, unless it be a particular association with mass nouns.

PLURAL: the plural is regularly formed by suffixing *-t-(á/i)* to the root. A small number of plurals (involving human beings in the data thus far) are irregular.

It will be noted that in AD4 Pere the plural suffix is *-tò* and that there is a plural suffix *-t* in AD4 Momi.

SYNTACTIC INFLECTION: Tiba has one rule of noun tone alternation which is not present in CD: H and HM nouns undergo a tone change when they are modified by a preceding H or HM noun: they become M (e.g., *líú* 'yam' + *són* 'staple food' > *líú/sōn(á)*, *ísī* 'eye' + *sóksá* 'hair' > *í/sí sōksá* 'eyelash').

LOCATIVE: There are two locative noun suffixes, *-né* and *-mé*, similar to the ones found in AD4. More examples are required to determine the conditions of their appearance; a first impression suggests that *-né* is used for position ('at, in, within') and *-mé* is used for movement ('from, to'), although this would be typologically unusual for an African language in this region.

DERIVATIONAL AFFIXES:

ADJECTIVIZER: The suffix *-èn* can be added to some nouns to produce a derived adjective. This suffix is doubtless ultimately related to the adjectivizing verb suffix (b.iv below), but the tonological behavior of both requires further clarification.

NOMINALIZER: There is a suffix *-gúr-* which can be added to any (nominal or verbal) adjective to form an abstract nominal, e.g., *péék* 'new', *-pék-/gúr-á* 'newness'. In the case of verbal adjectives ending in *nē*, this suffix may tend to be tonally assimilated (*-gūr-*).

b) VERB MORPHOLOGY

INFLECTION: There is undoubtedly tonal inflection of verbs (such inflection has been noted in association with an imperative form, but the data are not sufficient for any conclusions to be drawn). Segmental inflection in the strict sense is not attested, although it is possible to cite a focalizing particle, construed exactly as in CD by suffixation to the verb + object pronoun group: this is *-gú-á*. (It is also used to translate the CD "durative" when it has an emphatic or adversative sense, "definitely, contrary to expectations", indicating that the Tiba durative does not have the same range of meaning.)

DERIVATION: A certain number of likely derivational suffixes are attested in these data. It is not, however, possible to decide whether Tiba must be thought to have a highly developed and productive system like that of CD which is not apparent for reasons of chance distribution, or whether on the contrary it has, as seems to be the case, a more vestigial system like the one found in AD5 ZM. The "suffixes" observed are as follows:

i) The *-si* suffix: Many verbs have the form CVV*si* or CVC*si*. The majority of these are not identifiable as derived from CVV or CVC verbs, respectively, perhaps simply because no possible sources appear in the data. A few are, however, so identifiable, cf. *sýym-* 'be dry', *sýmsì* 'dry (tr)'; *wōp* 'run, fear', *wópsì* 'ride (horse, i.e., make it run)'. These are clearly causative-type derivatives. Others are the same kind of "medial" causatives or benefactives found in CD and elsewhere, e.g., *dōn* 'breathe', *dōnsì* 'rest (i.e., make oneself breathe, breathe for oneself)', while others have more complex agentive relationships: *kýy* 'cut (down), clear (a field)', *kýysì* 'chop (into pieces)'. Others still are evident *calques* of CD, e.g., *béksì* 'break, smash', cf. CD *vwēksì*, "frequentative" of *vwék* 'split'.

There are a few verbs of the form CV*sì* with *ɛ* or *e* as V₁. It may be remarked that verbs of this form in CD would be derived from CV*t* verbs; it is difficult to tell whether a similar phenomenon might exist in Tiba.

ii) Other "suffixes": *-ki*, *-li*, *-ti*, *-ri*: The suffix *-ki* is represented by only three CV*Cki* examples, two of them clear CD loans; *-li* appears in only two CV*cli* verbs, one a Fulfulde loan; *-ti* is used in four CV*Cti* verbs, three of them clear loans from CD, where the corresponding suffix is *-li*; and *-ri* occurs in two CV*Cri* verbs, one being an evident CD loan, and one CVV*ri* verb. There are thus only one or two examples of each of these suffixes with a plausible Tiba origin; none of the verbs in question can be related to any corresponding base verb with the possible exception of *jánrì* 'dry (meat)' (< *jāŋ-* 'hot?'). Nothing, then, can be said about the semantic content of these "suffixes". Note, however, that, in CD, the term corresponding to Tiba *bùmki-* 'resound, be noisy' is a frequentative derivative in *-kì* of a different root, while the term for 'tickle' (Tiba *dīgī*) is also a CV*cli* verb. Only one CV*Cti* verb (a sort of "diminutive") and no CVV*ti* appear in CD. ZM does, however, have *-se* verbs with much the same meaning range as those in Tiba, as well as *-ke* and *-le* suffixes with "intensive" (essentially equivalent to "frequentative") sense, *-le* with "habitual" sense, and a small number of *-te* suffixes with no clear meaning content (see Shimizu 1983: 64-7).

iii) The *verbal noun* suffixes *-m̄* and *-dīm*: The verbal noun, or infinitive, is obtained by giving the verb root a M tone pattern and by suffixing *-m̄*, unless the verb has the form CV*m* or CV*n*, in which case the suffix is *-dīm*. Like any noun, the verbal noun can take an *à-* prefix and an *-á* suffix. If the noun suffix is *-m̄* and *-á* is added, the result is phonetically [v̄m̄m̄á]. The verb root in the infinitive may be followed by a pronominal object (as in CD) or by a nominal object (unlike CD). In such case, the verb's tones are only determined by its relation to its object, and the infinitive marking is limited to a phrase-final *m̄*.

There are nevertheless a certain number of CVV verbs which, for an undetermined reason, are given with suffix *-dīm*.

iv) The *adjectivizing suffix* *-nē*: some stative verbs have a derived adjective with this suffix; it may also be that some adjectives with this suffix derive from verbs no longer in the language. Roots with this suffix are attested with H, M, and LH tones.

II.5. Word order and proposition marking

Basic word order is SV(O)(C), where C represents predicate and utterance modifiers in general. The preposition of the syntactic object to the verbal noun, attested in CD, has not been observed. Nevertheless, as in CD, Tiba word order in noun phrases is such that a modifying noun precedes the "head" noun, while a modifying "adjective" follows it.

A number of prepositional markers characteristic of CD are also attested in Tiba:

- 1) the definite marker *ní* preceding utterance-final modifiers (CD *é(n)*); a marker *á* or *há* seems to alternate freely with *ní* and is conceivably a direct borrowing from CD;
- 2) the locative marker *(n)ī* preposed to noun phrases (perhaps related to the above);
- 3) the locative anaphoric *gáà* preposed to locative terms (also in CD);
- 4) the preadverbial marker *ji* (observed only utterance-finally with the sense "simply", also found in CD).

The following predicate and utterance markers have been observed:

ASPECT: There is an utterance-final marker translating both the "real" marker (-i) and the perfective (*gò*) in CD: this is *néá* (presumably *né* + *-á*) after L tone, *né/á* or */néá* after H tone.

There are some tonal exceptions: some where the preceding H is itself downstepped or not subject to tone lowering (...*péé tòm néá*'...work'), and a number of thus far unexplained cases in which the downstep is treated as M and followed by another H (*néāá*).

There is an utterance-final marker translating the CD durative (*tēē*): this is *jā-á*. It may be preceded by the definite *ní* (CD *é tēē*).

NEGATIVE: There is an utterance-final negative marker: *dá*. Its compatibility with aspect markers was not tested.

INTERROGATIVE: There is an utterance-final interrogative marker *-è*, identical with CD. (In CD, this marker is used in verbal propositions only if the verb is in the absolute affirmative form.)

II.6. Conclusion

We believe that the data presented here authorize us to conclude that our informant Awdi was indeed fully bilingual in Chamba Daka and Tiba, and that he maintained a clear separation between the two systems at almost all times (excepting perhaps only a small set of lexical items). We may stress that, while many features of the two language systems resemble each other, Tiba may be found in some cases to have a more complex system than CD. Furthermore, the lexical correspondences show precisely the irregularities we would expect for languages which have had a long period of contact involving borrowing at different historical stages.

The full set of lexical data recorded appears below. Terms marked by an asterisk (*) are those which are identical in Tiba and CD, allowing for regular correspondences (e.g., CD *q* = Tiba *ɛ*) and uncertainty regarding verb tonology, or display only minor tonal variations. Corresponding CD items and comparative remarks on a wider scale appear after a bar (|). The conventions of language notation are as in part I, but Tiba nominals are presented without their affixes, except where they prefix *á-*. (Consequently, since, in Tiba as in CD, the intervocalic labial plosive is phonetically [b], the dental plosive is [r], but the velar plosive is [k], while in final position all plosives are unvoiced [p, t, k], noun roots with final plosive will appear below with final *b, r, k* after deletion of the *-á* suffix; while verbs will have final *p, t, k*, corresponding to the citation form.)

BIBLIOGRAPHICAL REFERENCES

- Carnochan, Jack, 1975: Bachama and Chadic, in James and Theodora Bynon, eds., *Hamito-Semitic*, 459-68.
- Kleinewillinghöfer, Ulrich, 1996: Die nordwestlichen Adamawa-Sprachen - Eine Übersicht, in Uwe Seibert, ed., *Afrikanische Sprachen zwischen Gestern und Morgen*, *Frankfurter Afrikanistische Blätter* 8, 80-103.
- Shimizu, Kiyoshi, 1979: *A comparative study of the Mumuye dialects (Nigeria)*, Berlin: Dietrich Reimer.
- , 1983, *The Zing Dialect of Mumuye: A descriptive grammar*, Hamburg: Helmut Buske Verlag.

LIST 2: A TIBA-ENGLISH GLOSSARY WITH ADAMAWA COGNATES

á, exceed, surpass | cf. AD4 Momi *ar-*, Pere *yór-* 'pass'

á, gather, scoop up

árą̃, fry | CD *nyānglì* (possible metathesis)

án, open (wide), yawn (+ *áćrá*) | a widespread ideophonic root: CD *yáá yáā*, AD4 Momi *agq̃n-*, Pere *àà-*, Dii *áá*, AD5 Yendang *hánk-*, AD6 Kare *á*

áp, seek

ápsì, feel, touch (prob. < *áap* 'seek')

ą̃kpàā, mouth (also ą̃, language, speech) | AD4 Pere *yāgò*, Dii *yāg*, AD5 Yendang *yāk*, AD6 Karang *nzák* are conceivably cognate with this (probably compounded) root

ą̃ą̃, arm, adj. *ą̃nēē*, relating to the arm (see list 1)

ą̃ą̃, name | AD5 Yendang *īk*

ą̃, know | cf. AD13 Kulaal *ọ̃n*, Niellim *’ùnà*

é, dry (something in the sun) | CD *yēri*, AD4 Momi *yend-*, Pere *yìr-*, Dii *yè'*, AD5 Zing Mumuye (ZM) *yà*, AD6 Kare *yé* 'dry'

ék, tear, rip, pluck | AD4 Dii *yè'* 'split'

é̃, egg (see list 1)

*ék, burp | CD *yák*

ésì (HH?), cough | CD *wūsì*, cf. AD6 Kare *hèl*

ì, lie, lie down, sleep | AD4 Dii *ī*

īn, tooth (see list 1)

ísá, mat (MH?) (see list 1)

ísā (*ésā?*), eye (see list 1)

*ísèn, broom | CD *yìsèn*

ó̃, bee (see list 1)

órēn, cold | CD *wárēn*

ónsì, lick

óq̃inà, who? | AD5 ZM *wq̃*

á, wash (oneself) | AD4 Dii yòō 'wash something', AD5 ZM *welè, wolè*, Yendang *hū-*, AD6
Karang *wòk*, Kare 'òì

(y)áēn, nose (see list 1)

áárá (or ár), yawn (n)

*úk, hear, feel | CD *wúk*, cf. the reflexes of Proto-Plateau (PP) *fwak

ý, knead | cf. AD4 Dii *vù* 'pound (flour)'

ȳ(nē)-, cool (as shade) | AD2 Chamba Leko (CL) *nwūùm*

ýp, crush (under foot)

ýrýým, ancestor spirit | CD *wùrú(ū)m*; cf. AD4 Dii *yòōb*

ýsì (HH?), suck

ýsì, twist, wring (perhaps identical with the preceding term) | cf. AD4 Pere *vì-*

ýs̀yn, breast (see list 1)

bá, leopard (see list 1)

*bàk, follow | CD *bàk*, also AD2 CL *bàg*

*bàk, stick, block | CD *bàk*

bám, big (be) | CD *gbóóm*, AD5 Yendang *gbān* 'heavy, old'

bàámsà(r), sickle | CD *gbòómsà*, AD4 Momi *gamsqz*, but Pere *gbàné*

bāṅkùlúūṅ, elbow

*bàr(ù)b, twin | CD *bàrùp*

*béēb, money | CD *béēp*

bén, granary | AD4 Pere *binè*, cf. CD *bóón*, AD2 CL *bóón*, AD5 ZM *ḃóq̄*; AD4 Dii *ván*

*bèrèèṅ, gazelle (kind of) | CD *bérèng*

*bì, seed, kind (*bí* as N2) | CD *bì*

bì, quiver (for arrows) | CD *bèṅ*

*bōksī, accompany | CD *bōksì*

bòr, big | CD *wàrí*, pl. *wòpsá*, AD4 Pere *bògàrè*, AD5 ZM *bòrò* are all likely cognates

búmlá, round

bún, kill | cf. CD *bùt*, AD4 Momi *but-s-* 'kill a sleeping animal'

býýrì, draw, decorate with drawing | AD4 Momi *bii-*, AD5 ZM *bii* but Yendang *vēē-*; cf. CL *bād*

bá (*bà* with subject *m* '1S'), come | CD *báá*, rarely with sense 'come' in AD, but cf. AD4 Pere *bá-*
'come forward'

bák, hug, embrace, cradle | CD *kpák*, AD4 Pere *kpà-*, *kpàṅ-*

bák, knife (see list 1)

bàk, bushcow (see list 1)

báksì (+ *tíū* 'head'), think, worry about

báámá, midst

- bán*, farm (vb) | CD *bààn*, AD4 Momi *baa-*, Pere *bàà-*, Dii *bàà*, but AD6 Karang *pā*, AD13 Kulaal *wáy*, Niellim *wāy*
- bān*, field, farm | CD *bāān*, AD4 Momi *bant*, Dii *bāb*, but AD6 Karang *pàì*, AD13 Kulaal *ùààl*, Niellim *wáál*
- bé-sibá*, (down on) ground | cf. perhaps CD *bēn* for the initial element
- béē*, bushbuck | cf. CD *bəy*, AD4 Momi *bayamz* 'duiker', Dii *bál* 'kob'
- bēk*, (clay) dish
- béksi*, break, smash | ideophonic root: CD *vwēksi*, cf. AD6 Karang *vwēh* 'cut' and even AD13 Niellim *bəgrì*
- bé*, leg (see list 1)
- bēn*, bring | CD *bēnì*; cf. AD13 Kulaal *wèn*
- bēḗr*, two (see list 1)
- bí*, lie, tell lies (+ *léēm*) | cf. AD4 Pere *mù-* + 'tongue'
- bíḡsì*, refuse | AD5 ZM *bèn*
- bíp*, ask, ask for | cf. AD4 Dii *vì*, AD5 Yendang *bī-*, AD6 Karang *vwī*
- bóōm*, wound, sore
- bóòn*, *bòn*, cut, slash; split (intr); break (as day)
- bóḡ*, river (see list 1)
- bó*, bean
- bó*, throw | AD4 Dii *gbò*, AD6 Karang *vwū*
- **bòb*, blind(ness) | CD *bòḡp*
- bòḡb*, dance (n)
- bòp*, dance (vb) | possible cognate in AD13 Niellim *bōn*
- báerum*, thunder, lightning | CD *bóḡ*, AD4 Dii *bóó*, cf. AD6 Karang *pómḡnā*; but also CD *bélum*, AD4 Momi *bulmi* 'flame' (see *yér(i)má* 'flame')
- bùmki* (intr), resound, be noisy
- búḡḡ*, ash, dust | CD *būnā* 'dust'; **buḡ* is PP and Proto-Jukun
- búḡsā*, (harmattan) wind
- býy*, dog (see list 1)
- býmsā*, brain(s) | CD *bólòmsí*, AD4 Pere *bóre*; note AD6 Karang *lī-pám*
- býr*, white | CD *būrki*, AD2 CL *bīd*, AD4 Momi *bu(ni)* 'white', *bur-* 'be white', Pere *būi*, Dii *bú* 'be white', AD6 Karang *búi*, but also *púkí*, cf. AD5 ZM *puru*
- dá*, copulate | CD *léén*, AD5 ZM *laa*
- dá*, take out, remove
- **dábri*, wrap (in leaves to cook) | CD *dābri*
- **dáḡdāḡ*, bitter | CD *dáḡdāḡ*
- dáásì*, choose, select (< *dáà* 'remove')
- dén*, cloth, clothing
- dēn*, vagina
- dí*, press
- dī(nē)-*, heavy, prob. < *dí* 'press' | CD *dīḡdīḡ*, but initial continuant elsewhere: AD4 Dii *zì*, AD6 Kare *zì*, Karang *yì*
- dī*, long | CD *dèḡèrí* 'long, far', AD4 Dii *dūi*, AD6 Karang *dī* 'far'

- dīgī*, tickle | AD6 Kare *dīkīlī*, cf. CD *gēnglī*
dīŋ (perhaps *dīŋ*), eyebrow
dīpsá, cloud
**dók*, plant (vb) | CD *dòk*, also AD4 Momi *dokw-*
**dóm*, greet | CD *dóóm*
dón, sing
dóōŋ, misery, poverty | related to AD5 ZM *rán?*
dù (or *dỳ*), ridge (in farm)
dúūk, mountain (see list 1)
**dùk* (intr), finish, come to an end | CD *dùk*, cf. *tý* 'finish' below
dùk- stomach (but syntactically adjectival) | cf. ZM *dùku* 'skin bag'
**dúksi*, finish, be used up | CD *dúksi* < *dùk*
dùm (intr), collapse, fall off, down
dùm, short, shallow
**(á)/dú má gàn*, vulture | CD *dú má gàn*
**dùŋgbàl*, hippopotamus | CD *dùŋgkpàlī*
**dùŋtì* (HH?), deceive | CD *dūnglī*
dý, wet, moisten, soak | cf. AD4 Momi *yii-*; perhaps ultimately connected with CD *dùrī* 'rain'
dỳn (intr), go (in) | AD5 Yendang *tìn-*; Pere *dó-*, Dii *dó*, but AD4 Momi *tor-*; also AD6 Karang
rīh
dỳr, deep | AD4 Pere *lùù-* 'be deep'
- dâ* (intr), break, shatter (from falling) | AD5 ZM *daasè* 'break (a piece) off', AD6 Karang *dòr*,
Kare *dòrò*
dě, taste | AD5 Yendang *lék-*, AD6 Karang *lēh*; cf. AD4 Momi *doo'*
dē, testicles
dē, granary
dē, put, place | AD4 Momi *de'(s-)*, Dii *'yé*
dēk, forget | AD6 Karang *yèkrē*
dē, other
dī, burn (tr), light (fire) | CD *dī* but AD2 CL *dúú*; according to Kleinewillinghöfer (pers.
comm.), Bambuka in the Bikwin group has *lī*
dīŋ, navel
dōb, in-law
dōbēn, cowife
dōōk, mouse | AD5 Yendang *rōk* 'kind of (domestic) rat'
dón, breathe | AD4 Momi *doŋ* 'groan', Pere *dù-* 'blow, snore'; however, CD *gòng*, AD4 Momi
yōŋs- 'snore', AD5 ZM *gnq* 'snore'
dònsì (< *dón* 'breathe'), rest | same derivation in CD *gōngsì*; but AD5 ZM *wnqkè*; cf. AD6
Karang *òk*
dóōŋ, hip (joint); thigh | cf. AD2 CL *dūn*, A4 Pere *dōrè*, Dii *dōō*, all 'leg'
dōō káŋ, matriclan (compound with N2 'face?')
dūk, penis | AD4 Dii *ndòg*, but Momi *deek*; AD6 Karang *ndīw*
dūùm, perhaps also *dūmà*, back (> *dùm* 'behind') (see list 1)

dúmsā, urine | cf. AD2 CL *nwóòm*, AD6 Karang *tóm*
dūŋ, hole | CD *dōq̄*, AD4 Momi *duur*, but CL *déél*, Pere *dā̀lè*; also AD5 ZM *tq̄*; AD6 Karang
lókō

fàktì (intr), tasteless, insipid
fě, burn (tr/intr) | CD *píí*, AD2 CL *pí'* 'heat', AD4 Dii *pì* 'be hot', AD6 Kare *pìù* 'singe'
fě, twenty
fěēn, moon, also *fén* /*wī* 'stars' (see list 1)
fě̀sì, full, complete (be)
fì, take (staple food with fingers)
fún(n)ì, begin (< Fulfulde *fudà*?)

gá, illness
gá, get, receive | CD *gà̀n*
gā̀ā, strainer (for beer), sifter (for flour); also fishtrap | AD4 Pere *gáŋ* 'fishtrap', cf. CD *gè̀è*
gā̀á, road (see list 1)
gā̀á, Tiba
**gām*, horn | CD *gā̀ām*
**gà̀ŋ*, chief (see list 1)
**gā̀ŋ-túnén*, donkey | CD *gà̀ng-pén-túnén*
gā̀áŋ (*sātā̀ā*, i.e., 'sour'), pepper | AD5 ZM *gā̀nzin* where the meanings of *zin* are 'clot of blood'
and 'fish'
gā̀ŋgár, drum (kind of) | < Hausa *gā̀ngá*
gá̀p, count | AD5 ZM *gna*, Yandang *gā̀n-*, AD6 Kare *ngè̀* (also *ké̀*), but non-nasal elsewhere:
AD2 CL *gád*, AD4 Momi *ga'*-, Pere *gā̀ár-(do)*
gá̀psì (HM?), divide, distribute (adj. *gā̀psé(nē)*- 'forked') | CD *gā̀psì*
gā̀ásá, (dry) season | AD4 Pere *gā̀ā*, Dii *gā̀āg*, but AD6 Karang *káy*, Kare *ké̀q̄*
gá̀sì (HM?), think (about), recall | AD4 Pere *gè̀l-*, cf. AD6 Karang *kè̀r*
gā̀nsì (HM?), strain, sift | CD *gā̀āsì*
gā̀ŋsā, fly (n) (see list 1)
gā̀ŋ, hunch (on back) | cf. AD5 Yandang *kū̀kì*; also CD *gā̀y*, AD2 CL *gā̀ād*
gā̀ŋ, large potsherd | CD *gì*
gḕē, sorrel
gḕ, cross (river)
gḕēk, (bambara) groundnut
gḕk, grave | CD *gā̀ká*, AD4 Pere *gā̀gò*
gém, scream, dream, nightmare (also a verb, 'affect (as a bad dream)')
gén, break, snap (tr) | AD4 Pere *gā̀-* 'break (tr)' with derivative *gā̀l-* 'break into pieces (tr)'
gḕn, medicine | CD *gā̀ŋ*, AD2 CL *gā̀ān*, AD5 ZM *gnā̀n*, but AD4 Momi *geŋbqz*, Pere *gā̀abò*,
Dii *gām*
**gḕn* (intr), flow | CD *gḕn*
gérá, guinea-corn (see list 1)
gésé̀ŋ, scorpion

gūk, chest | cf. AD2 CD *giil*, AD5 ZM *gìn*, but CD *gàngà*, AD4 Pere *gògī*, *gàgsàlè*, AD6 Kare
gòŋ
gim, smelly (be) | cf. CD *giún*, AD6 Kare *gùnè* 'smelly'
**gít*, abstain | CD *gìt*
gīáámá, green
gó, pay (back)
gón, answer
**gòŋsá*, breath | CD *gòŋsí*, see the doublet *gbàŋsá* 'snoring' below
gō, catch, seize | CD *gùt*, AD4 Pere *gùù-*, AD5 Yendang *gō-*
gù (intr), fall
**gūb*, thorn | CD *gūp* (cf. AD4 Momi *kapt*)
(á/)*gýsàà*, also *gýsýn*, pigeon

gbá, call, call out | AD5 ZM *baa* (+ *nyaa* 'mouth')
gbá, vomit
gbá, dig, dig up | AD2 CL *gbà'*, AD5 ZM *gbmaa*
gbák, grind (dry grain) | CD *gòk*
gbák, slip
gbāám, blood (see list 1)
gbāñfíláér, (earth)worm
(á/)*gbáŋ*, bird (see list 1)
gbàŋsá, snoring | CD *gbāŋsí* 'groan' (compare *dón* 'breathe', *gòŋsá* 'breath')
gbàŋsí (intr), finish, run out | AD4 Momi *gbams-*, Pere *bám-*, AD5 Yendang *gòòs-*
gbéé, forest
gbér, dassie
gbōóm, heart (see list 1)

gmési, move, shift (tr) | CD *gbāsi*; cf. AD2 CL *gbá'* 'advance', AD4 Dii 'mè' 'move near'
gmòp (intr), crawl

hám, salt
háp, bind, wrap (up)
hárā, headpad | cf. AD2 CL *kālā*, AD4 Pere *kàarè*, Dii *kāā*, AD5 Yendang *kāntān*
hāŋ, guinea-corn (see list 1)
hāŋmā (or *kāŋmā?*), rain, saliva (see list 1)

já (or *jāā* or *já*), laziness | CD *jàalén* 'lazy person', AD6 Kare *zòzò*
já, smear, anoint; step (in something sticky)
ják, cook, brew | AD6 Karang *nzē* but CD *sāki*
**jām* (intr), stand (up), swell (adj *jām(nē)-*) | CD *jààm*
(á/)*jàánsá*, tiger nut | CD *jāān* but AD5 ZM *sàn*, Yendang *tánká*

- jánrì*, dry (meat) (< *jān*-?)
jān(*nē*)-, hot, feverish (be) | AD4 Dii *zágā* 'sun', AD6 Karang *záŋnā* 'fever', Kare *zàn*
 **jāāy*, tendon | CD *jāāy*
jēé, scabies | AD5 ZM *znàkn*
jēmka, stranger, outsider | cf. AD4 Momi *genz*, AD5 ZM *zanti*, Yendang *zántá*
jērá, locust | cf. AD5 ZM *zòro*
jèrí, whirlwind
jé, see | AD5 ZM *zè*
jī, night (see list 1)
jī, theft, thief | CD *yílēn* < *yí* 'steal'
jībàr, pocket | < Fulfulde *jiiba*
jīntá, (cooking) pot (apparently singular though plural in form) (see list 1)
jínjín, also *jínà* (in compounds, e.g., *ón jínà* 'bee water', i.e., honey), *jíjín*, water (see list 1)
 **jīŋláār*, hyena | CD *jīŋláā*
jō, on, upon | CD *jūm*
jóōb, poison | AD5 ZM *znópq*, Yendang *zòn*
jóm, squat | CD *jòòm*
 **jón*, laugh (vb) | CD *jòn*
jòōŋ, *jòná*, red | AD5 Yendang *yòntī*
jè (?), laughter | CD *jóná*, AD4 Pere *zònè*, Dii *zōm*
 **jū*, up(wards) | CD *jūū*
jūm, flour | CD *jōōm*, AD2 CL *zāām*, AD5 ZM *zuman*, but AD6 Karang *sóm*, AD13 Niellim *hùm*
júŋ, mortar | AD5 ZM *dun*
júŋ, pound
jý, pour
jýy (*jý*, *jýy* after *ī* or as DO without modifier), house, room (see list 1)
- **kámki*, gather (tr) | CD *kāmki* (frequentative of *kāmi*)
kán, anklet
kán, find, meet | AD4 Dii *kàn*, cf. AD5 ZM *kosè*
kán, tie (prob. a derivative sense of the preceding verb) | cf. AD2 CL *kāā* 'rope', AD6 Karang
ngāh
kāāŋ, cobra
kāntá or *kāntá*, calabash
kāntá, tortoise | cf. AD4 Dii *kpārgád*
káará, wing, feather
kánsì, join, meet (< *kán*)
kāāŋ, face, forehead
kāŋ, neck (see list 1)
kāŋkilāā (invariable?), chicken (see list 1)
 **kásí*, strainer (for flour) | CD *kāsí*
kéè, cough (n) | AD5 Yendang *kól*- (vb)
ké, say, speak
 **kèlùm* (also attested *-kèlùm*-, *-kèlùm*-, pl. *kèlùmtá*), baobab | CD *kèlùùm*

- **kémjī*, monkey (see list 1)
 **kéé*, refuse | CD *káá*
 **kèér*, mad(man) | CD *kèé*
 **kéékéé*, hedgehog | CD *káákáá*
 **kénsì*, bother, disturb | CD *kānsì*
késā, (rainy) season | cf. PP **kwas*
kēsá, side (of body), rib cage
 **kìlèn*, loan | CD *kìlèèn*
kān, one (see list 1)
 **kìnéèn*, leper, leprosy | CD *kìnéèn*
 **kìsēn*, slave, captive (see list 1)
 (*á*)/*kíyāā*, (in) front, before
kó or *kóŋ*, carry (a child on the back) | CD *kōlì*, AD4 Pere *kúú-*, AD5 ZM *kpmáá*
kò, put on (clothes)
 **kók*, rub | CD *kók*, cf. AD5 Yendang *kpös-*
kóm, urinate
 **kóm*, arrive | CD *kóóm*
 **kònàr*, smallpox | CD *kònà*
 **kòŋláār*, elephant (see list 1)
 **kóŋtì*, gather, pile up | CD *kōnglì*; also AD5 Yendang *kòò-*
 **kóp*, draw, fetch (water) | CD *kóp*; also note AD5 Dii *kò*
kō, guinea-fowl | CD *kāā*, AD4 Pere *kū*, Dii *kòò*, AD6 Karang *kpèh* but Kare *kòrè* 'perdrix', cf. 'chicken'
 **kō*, (enclosure) mat | CD *kōō*
kòòr (intr), thin (be)
kānsì, untie
kú, sweep | CD *kūri*, AD4 Momi *koor-s-*, AD5 ZM *kòò*
kù (intr), old (be) (person)
kūk, *kūkú*, grandmother | compare CD *kāk*, AD2 CL *kàá*; also AD13 Kulaal *káá*, Niellim *kàà*
kūlūŋ, boat | root with an unusual distribution: apparent cognates exist in AD13, e.g., Niellim *kṵāā:r*, pl. *kórgē*, but may spread as far as Ubangi Zande *kùrúŋbà*; also note Fulfulde *koombowal*
 **kúmtì*, make (a fist) | CD *kūmlì*
kūŋlūŋ, shoulder | cf. AD4 Pere *kòòlè* and 'neck' (list 1)
ký, cut (down), clear (a field) | AD5 ZM *kq* 'cut (in two)', Yendang *gòò-* 'cut (down)'
ký, bright, clear (be)
kýysì, chop (into pieces) (< *ký* 'cut (down)')
kȳr, (wrist-, ankle-)bone, joint
kýy, hare | CD *kùt*
- kméè*, pull (up, out)
kmēk, squirrel

kpà, cut, break off (tr/intr) | AD4 Dii *kpàn*, *kpà̄*
kpá, skin | AD5 ZM *kq̄q̄*, cf. AD2 CL *kpá̄gàl* 'bark'
kpām, joking partner | CD *kpō̄m*
kpà̄ngúmtā groundnut(s) (see list 1)
 **kpát*, weed (a field) | CD *kpát*
kpé, fish, go fishing | AD4 Momi *gbee-*, AD5 Yendang *kpē̄es-*, both 'fish by bailing'; cf. AD2 CL
kpē̄ 'fishhook'
kpìksímsá, chin
kpì̄̄, nest
 **kpìsáār*, billy-goat | CD *pìsáā*
 **kpō̄jāār*, deaf | CD *kpóngāā*

láā, belly (see list 1)
lāā, sleep (n) | invariable final nasal: CD *lāām*, AD2 CL *lāām*, AD4 Momi *rām*, Pere *nām*, Dii
nām, AD5 ZM *nú-rq̄n*, AD6 Karang *nám*, except AD5 Yendang *nóó-rō̄*
là (intr), fall (as rain) | always initial nasal elsewhere: CD *nàà*, AD2 CL *nā̄̄*, AD4 Dii *nā̄̄*, AD5
 Yendang *nā-*
 (á/) *lágòn*, chameleon | cf. AD5 Yendang *gònlí*
làk, forge (vb) | cf. AD4 Dii *làgā* 'sharpen'
là̄m, lost (be) | cf. AD4 Pere *lē̄ē*, AD5 ZM *rīn*
lāàn, cry (vb) | cf. AD4 Dii *lég*, AD6 Kare *r̄é-r̄è̄̄*
 **lāj̄̄*, surround | CD *láng*
lā̄̄sá, side of face | CD *lā̄̄ngsí* 'temple'; also AD4 Pere *là̄̄r̄̄̄̄*, AD6 Koh *lā̄̄kùn*
lē̄ká (pl. *lē̄kétá*), blacksmith (see list 1)
lē̄ēm, lie (in *bū̄̄ lēmā* 'tell lies', cf. *lér* 'tongue')
lē̄ēn, grinding stone | AD5 ZM *réē*; cf. CD *nà̄̄n*, also AD2 CL *nā̄̄gàl*, AD5 Yendang (ú/-) *ná*
lēj̄̄, drip | AD4 Dii *lēj̄̄* 'flow'
 **lép*, buy | CD *lép*, cf. AD4 Momi *yiip-*; **dyap* is PP
 **lē̄psì*, sell | CD *lē̄psì*
lér, tongue (see list 1)
lээрá, louse | AD2 CL *l̄̄àd* 'flea', AD4 Pere *là̄̄r̄̄è̄̄*, Dii *lè̄è̄d*, AD5 ZM *rnè̄è̄ti*, Yendang *rē̄ē̄sì*
 **lээрá*, flute | CD *lēj̄̄r̄̄á* (a regional root: AD2 CL *lēj̄̄d*, AD4 Momi *liirqz*; also AD4 Dii *lēt̄̄t̄̄d*)
léesì, *lèèsì*, spoil (tr), rot, spoil (intr) | CD *lē̄ē̄sì* 'moisten', AD4 Pere *lī̄-*, AD5 ZM *lèsè*
lēj̄̄, grass, bush (cf. *p̄é lé /p̄ē* 'animal (thing-bush-thing)')
l̄é, prepare, get ready | cf. AD2 CL *lē̄b*, AD4 Pere *lè*, Dii *lè*, AD5 Yendang *rē-*, all 'produce, give
 birth'
 **lē̄*, scar, blemish | CD *lē̄ē̄*
 (á/) *lí*, when?
lí (+ *báámá*), sky, above | AD2 CL *lē̄g*
lī̄, village | AD2 CL *līgà* 'compound, family', AD4 Pere *līgò*, Dii *līg*, AD5 Yendang *lē̄k*, all
 'house'; also AD13 Niellim *lī̄*; Kwa *līē*, both 'house'; **di* is PP for 'compound, house'
 **lī̄k* (*līkā* ?), dirt(y) | CD *līkā*, cf. AD2 CL *līgàd*, also AD4 Dii *lógód* 'be dirty'; **dik* is PP
 (á/) *līn*, (day after) tomorrow | cf. AD2 CL *līm* 'morning'
lī̄̄̄, between, through

- lípsì*, sell, hawk
líntá, gut, intestine | cf. CD *nàgri*
**lípsì*, turn, change | CD *lípsì*, but also AD5 ZM *ri*
líisā, smoke
lōk, take | AD5 Yendang *là-*, also AD4 Dii *lò*, but the root may be Chadic, cf. Bachama *lù*
lókā or *lóká*, cry (n) | CD *lōkì* 'speak, tell'
lōēem, war (see list 1)
lūū, yam | AD2 CL *dūd*, AD5 ZM *lq̄q̄ti*
lūk, lump (on body, head)
lūūm̄q̄r, market | < Fulfulde *luumo*
lūmsá, man
(á)lūūmsá, husband (cf. 'man')
lūūŋ, knee (see list 1)
lỳ, move (residence, *jýy*) | AD4 Dii *lúū* 'go away'
lỳm, male | CD *lúum*
lỳn (intr; also *lỳlỳn* for 'get, stand up?'), get up, fly | CD *dùm*, AD4 Momi *ruu-*, Pere *lú-*, Dii *lùū*
 'lift', AD5 ZM *dù*, AD6 Karang *zō*; also note Bachama *li* (apparently not a reconstructible
 Chadic root, Carnochan 1975)
lỳnsì, raise, throw up, make fly
- má*, knead, work (mud, clay), build (building) | CD *mākì*, AD2 CL *mā* 'make, do', AD5 ZM *maa*,
 Yendang *màà-*, but AD4 Dii *mbōq̄*, AD6 Karang *mbōh*
**mák*, show | CD *māk*
**máká dikār* (*máká* invariable?), (red) millet | CD *máká* (meaning of second element in Tiba
 unknown)
**máksì*, try, try on, out | CD *māksì*
mékā, green, unripe
mékā, paste
mēsimsā, dew | CD *mēnsán*, AD2 CL *mīsà*, AD4 Momi *met*, Pere *mērè*, Dii *mēd*, AD6 Karang
mím, but AD5 Yendang *móó* (vs. *mēē* 'water')
mí, day
mí, door (< *mí* 'open, close') (see list 1)
mī, excrement
mí, close, open
míŋ, shave
mí-wà, day before yesterday
mó, bear, give birth to | AD6 Karang *mbūŋ*; cf. AD4 Dii *mbóg* 'fix, get ready'
mó (*mò* with object *tí* 'tree'), climb
múná, earth
- ná* (*nà* with indirect object *wé* 'child'), give | CD *nyáá*, AD5 ZM *an*; this form reappears in AD13:
 Kulaal *néé*, Niellim *nā*
ná (*nà* with object *pé* 'thing'), do | CD *nàk*

- náksā*, cow (see list 1)
 **nàmèn*, crocodile (see list 1)
nān, *nā̀n*, how?, how much? | CD *nyāā*, *nyákā*, AD2 CL *lā*, *lẹ̀ẹ̀*, AD4 Momi *na(ŋee)*, AD5 ZM *dnee* 'how much', AD6 Karang *ánī*, Mbum *náníi* 'how'
nè, four (see list 1)
nèé (pl. *nī*), person | CD *nèé*, AD2 CL *ned*, AD4 Pere *nán*
nēk, owner | AD6 Kare *nàá*
nēŋnéēŋ, axe
nī, mother (but *nàáŋá* 'your mother'); cf. *nī-wé*, sibling (mother's child) | AD5 ZM *yina*, Yendang *yēn* (with prefix?)
níŋ, drum (see list 1)
 **níŋsì*, hurry | actually CD *nīngsèn* < *nīngsì* 'make tremble'
 **nò*, (oracle) poison | CD *nòò*
nóksì, enough, equal (be) | CD *nēkèn*
nōm(nē)-, good, pleasant, tasty | AD2 CL *lām*, AD4 Dii *nèm* 'be salty'
 **nòm*, anger | CD *nòòm*
nòntà, root | cf. AD5 Yendang *nīnkán*; *nan is PP
nóósì (HM?), shake
(tò)/nùk, (bow)string
nūŋ, locust bean tree
nūŋgūr, locust bean (tablet)
núŋmā, wax
- pá*, put in, on (as hat, shoes) | CD *pàk*, AD2 CL *páàn*, AD4 Dii *pàg*
(bóŋ) pà, (river)bed, gully
páàn, place
pát, all | a regional term attributable to Fulfulde
péék, new | AD4 Momi *pq(-ni)* but AD6 Mbum *féké*, Koh *fīē*
pé, go | cf. AD2 CL *pā* 'take, carry', AD4 Momi *pee* 'take away'; also Dii *hè* 'go off, away'
péé, thing | CD *pén*; cf. AD2 CL *īn*, AD4 Pere *ēnè*, Dii *hēn*, AD5 Yendang *hē*, AD6 Karang *fè*
pì (intr), return, go back, change (into) | CD *pèè* (compare *pīrì* 'put back'), AD2 CL *pīgàl* 'return', AD4 Pere *pìn* 'do again' but *fil* 'change into', AD6 Kare *fērè*; cf. 'exchange': AD2 CL *pèèn*, AD4 Dii *pí*
 **pìi*, Beni seed | CD *pìi*
pígèè, maize (see list 1)
 **pilàŋ*, (large) basket | CD *pilàŋ*, a regional root
píŋmá, charcoal | AD6 Karang *hékrē*
pó, butcher, cut open
pūglá, flowering (of plants) | CD *pūgrì* 'flower (vb)'
pùglà, armpit
púūk, *púkū*, (maternal) uncle | cf. CD *póp*, AD4 Dii *pāā*
pūk (*púká?*), bark (of tree), shell | CD *pōkō*
pýy, viper | AD4 Dii *kpùù*
pýyge, cassava | CD *pī-gōō*

p̄yn, tired (be) | CD *pút*
p̄yn, fatigue

**sàà*, (father's other) wife | CD *sàà*

**sā*, net | CD *sā*

sá, ooze, have diarrhea (+ *mī*) | CD *sáá*, AD4 Dii *sōō* 'leak', AD5 ZM *sqq*, but *san* 'forge',
 Yendang *sā-* 'ooze; melt' (whence *sākí* 'iron'), AD6 Karang *sàh* 'moisten'

sā, mud | AD5 Yendang *sōk*

sák, hang, carry (on shoulder)

**sàk*, genet cat | CD *sàk*

sám, bark (vb)

sām, spear (see list 1)

(*áŋ*) *sámkā*, left (hand)

sán, carve

sān, hoe | cf. AD4 Dii *tōŋ*

sānsá, muddy pool | cf. *sā*

sánsì, grind (flour) | AD4 Pere *sán-* 'grind (fresh, damp grain)', whence relationship with *sá*, *sā*
 (*á*)/*sáŋká*, frog, toad (see list 1)

**sánkì* (HM?), teach, learn | CD *sánkì*

**sáásì*, do (repetitively) | CD *sāásì* (auxiliary verb)

sàtāā or *sātāā*, sour

sáátí, porcupine

sátōk, (beer) pot

sé (also *sééwá*), sun, God (see list 1)

sè (intr), lacking, scarce (be) | AD5 Yendang *sè*

sē, also *sésēē*, nightjar (?), translates CD *tāmāā*)

(*áŋ*) *sē* (or *sé*), fingernail (see list 1)

**séb*, witch | CD *sép* 'bewitch'; cf. AD4 Dii *sòb* 'use witchcraft', *sōōg* 'witch', *séy* 'witchcraft'
séēk, anklet | AD4 Pere *ségò* 'castagnette'

sék, go (down), also *séksi* | AD2 CL *sùm*, AD4 Dii *sí*, cf. AD4 Pere *sí-* 'sit'; also cf. *sí* 'down'

**sèm*, (prepubescent) girl, female (animal) | CD *sèem* 'girl' but *-sè* 'female animal'

sēmsémtá sand | cf. AD4 Pere *sīī*, AD5 ZM *sneeli* (note particularly *sengsengli* from the Saawà
 dialect of Mumuye, Shimizu 1979:98); Kleinewillinghöfer 1996:97 also reports forms
 like *swaa* in Bikwin; cf. AD6 Kare *màsálá* and AD13 Niellim *hyāān* from an earlier form
 with initial *s*

sén, waist | AD4 Momi *seem*, AD5 ZM *sán*

sén, add (to), increase

**sènèn* (pl. *sènéen-t-*), guest | CD *sènéen*

sènéēŋ, strong, healthy | cf. CD *sēnì* 'be too strong', AD4 Dii *sèn* 'make an effort' prob. < *sèè* 'be
 potent, effective'

**sèni*, difficult (be) | CD *sēni*

séŋsì, pull (off, out)

sèér, pl. of *yāmīk*, young, small (child)

sèérá, truth

sé, scratch (itching) | cf. AD5 ZM *sneeté* 'itch'
sí, speech, matter
sí (intr), black, dark (be) | cf. AD5 ZM *tinri* 'dark'; also cf. *jñ* 'night'
sí, bury
sí, plait (hair) | AD4 Momi *si-* 'make rope'; otherwise CD *tí*, Pere *tì-* 'weave', AD5 ZM *tisé*
sí, also *sñ*, down(wards) | AD5 Yendang *sěě*, cf. CD *tī*, AD5 ZM *tí(p)i*, AD6 Kare *tà*, also cf.
sib 'under', *sék* 'go down'
sì, wait for | CD *sìt*, AD2 CL *sìd*, both 'be patient'
sī, show
sib, under, below | CD *tīm*, also AD5 ZM *típí*, AD6 Karang *siba*, both 'earth'; cf. *sí* 'down'
sígáj(á), much, many
sìjì, also *sìù*, civet cat | CD *sì*, AD2 CL *sìd*
**sím*, beer | CD *sīm*; cf. AD4 Pere *fùm*, AD13 Kulaal *ham*, Niellim *hám*
sñr, porridge | cf. AD4 Momi *sii-* 'cook porridge'
**sìr*, boil, abcess | CD *sìt*
sísēē, switch, whip
**sìsá*, insult (n) | CD *sìsì*
só, drink | CD *sóq*; the general AU root is represented by AD4 Dii *zò*; *swa is PP
só, butt, ram (perhaps identical with the following term) | AD2 CL *sūd*
sòd, break (intr) | AD4 Dii *sóób*
sò, pierce, stab | AD5 ZM *suu*, Yendang *só-*, AD6 Karang *sū*, but AD2 CL *sāb* 'pierce', AD4 Pere
sà-, *sàà-*, Dii *sà*; compare CD *sót*, AD2 CL *sód* 'plant (a stake)'
sók, wash (something) | CD *sūksì*, AD4 CL *sūg*, AD4 Pere *sòg-*, AD5 ZM *sòkè*, AD6 Karang *sòh*
'wash oneself'
**sókàr*, (land monitor) lizard | CD *sókà*
sóksá, hair (on body) (see list 1)
sóksá (used with *bó* 'throw'), whistling
són, (staple) food | AD5 Yendang *sòd*, cf. CD *túm*, also AD13 Kulaal *hààl*, Niellim *hàà:n*;
cf. 'eat, chew'
**són*, antelope (kind of) | CD *sóng*
sóp, blow (on)
sópsì, lick (up)
sóq̄, also *sóorā*, wind | cf. AD13 Kulaal *hààp*, Niellim *sààb*
són, carry (off, away) | cf. CD *tùùn*, AD5 Yendang *tōq̄*, both 'carry on head'
sē, mucus | cf. AD2 CL *sāb* 'pus'
sééèni, leave (a path), branch
séensi, put out (fire)
sūksá, soup | AD5 Yendang *sōnkò*
súmsì, *sùmsì*, gather (something); gather (together) | CD *sòòm*, AD4 Pere *sùm-*, both 'gather up',
AD5 Yendang *sòd* 'take out, remove'
sùwēē, (intestinal) worm | CD *sòq̄mñ*, AD2 CL *sòbégè*
súṅsì, swell, blister
súsùṅ, shade | AD5 ZM *sunrú*, cf. AD6 Karang *súṅ* 'night'
sýy, thirst | CD *súù*, AD2 CL *súùd*
sýym, dry (be) | CD *sùm*

sýmāā, empty

sýmsì, dry (tr) | CD *sūmsì*

sýn, grow, develop; go out | cf. CD *túún* 'develop, grow up' > *tūnèn* 'go out'; also AD6 Karang *ñh* 'go out'

sýyn, tail | AD2 CL *sūū*; also cf. AD13 Kulaal *héé*, Niellim *hínā*

sýnsì, resemble

sýtým, bright, shiny (be); smooth, slippery, mucilaginous (be) | AD5 Yendang *sòr*- 'be slippery'

tá, hit, kick, shoot | CD *tàt*, AD2 CL *tāàn*, AD4 Momi *taa-*, Dii *tà'*, AD5 ZM *ta*, Yendang *tā*, cf. *té* 'sting...'

tá (or *tā*), pick, pluck (fruit); excrete | AD4 Dii *tò'* 'pick'

**tá*, butcher (vb) | CD *tàà*

tā, early (be, get up) | AD4 Dii *tá'ád*

**tāāb*, sandal | CD *tāāp*

tāām, *tām*, jump (over), jump (intr)

táp, sew | AD2 CL *tāb*, AD4 Dii *tā*, both 'tie'; compare CD *tāqāli*

**tará*, three (but cf. 'eight' *týn-/tárārā*) | CD *tārā* (see list 1)

té, sting, prick, dazzle; appear | CD *tàt*, AD4 Momi *tqks-* 'reveal', cf. *tá* 'hit...'

té, stone (see list 1)

(*yén*/) *tē* (< *té*?), anus

tébmá, luck(y) (translates CD *jñ* 'red' in *ní/in jñ* 'luck(y person)', lit. 'red face')

(*á*)/*tékā*(*ī*?), gecko

tém, pass (through) | CD *tēli* 'pass by', AD2 CL *tāàn*, AD4 Pere *tāl-* 'pass', AD5 Yendang *tár-*, AD6 Kare *tá*

témsì, insult

**té*, push, sweep, carry along | CD *tāqā*

**téksì*, begin | CD *tāksì*

**téqmsà*, sheep | CD *tāqmsì*; also note AD4 Pere *tāmī*, AD5 Yendang *dāā*

tí, tree, stick (see list 1)

ñ, father (but *téqñá* 'your father') | AD4 Pere *tāā*, but *túnú* 'his father', cf. AD5 ZM *yera*, Yendang *yōri* (with prefix *yV-*?)

tì(y)ām, afternoon

ñk, gourd | AD4 Dii *tíg*

**tíksá*, snail | CD *tíksāā*

(*á*)/*tí/sāā* (< *á/tísāā?*), owl | AD5 Yendang *túnsún*

tísēñ (or *tísēñ*), ant

*(*péq*) *tóm*, work (n) | CD *pén tóóm*

tón, eat, chew | CD *tāàn*, AD5 Yendang *tāā-*; also AD13 Kulaal *tú* but Niellim *túy* 'eat (staple food)', compare *són* 'staple food', AD5 ZM *shaa* 'eat', and AD6 Kare *só* 'chew'

**tóñ*, play (+ *téā* 'ear') | CD *tòng tāā*

tòóñ(nē)- (also *tùñnè*), good, effective, clean, beautiful | AD4 Dii *tōō* and AD5 ZM *tnoq*, Yendang *tān*, all 'good, tasty'; cf. AD6 Karang *sù*

**tóñtóñ*, strong, healthy | CD *tóngtóng*

tó, miss, err

tòḡ, bow (see list 1)

téḗ, ear (see list 1)

téḗb, Shea butter tree | CD *túūp*; cognates in AD13: Kulaal *tói*, Niellim *tāàm*

túá, here

túū, head (see list 1)

*(*péḡ*) *túnén*, baggage | CD *pén túnén* < *tùùn* 'carry'

tún/sým, shame | cf. AD2 CL *sám*, AD4 Pere *ségò*, Dii *sém*, AD5 ZM *yúú-sne* with *yú* 'head' (also of course Fulfulde *semt-*)

tùḡ, five (but changes form in compound numbers: *tùḡ-kīn* 'six', *tòḡ-sī-bḗḗrá* 'seven', *týn-tárārā* 'eight', *tùḡ-sí-nèá* 'nine', cf. *wúp-séḡ-tùḡá* 'fifteen') (see list 1)

túḡ, point (at) | CD *tòḡ*, AD6 Kare *tò*

túḡ, push | CD *tùt*, Dii *tú'*, but AD4 Pere *tḡḡr-*; also AD5 ZM *dnó*

tý, finish, complete (tr) | AD4 Dii *tú* 'be completely destroyed'; cf. CD *dùk*, *düksì*

týrym, between, among | AD2 CL *tòḡd* 'half'; cf. AD4 Dii *tḡg*

týn, spit | AD2 CL *tó'*, AD4 Dii *tó'ḡ* but AD4 Momi *tán-*, AD5 Yendang *tēn-*; CD *tūsì*

(*á*)/*vāā*, (kind of) lizard

vállì, help | < Fulfulde *walla*

vó, squat

vúm, roast

vúūn, goat (see list 1)

(*á*)/*vúnsá*, mosquito | CD *bóḡsí*, AD4 Momi *woos*, Pere *vórè*, Dii *vád*, Karang *vwórḡ*, Kare *wórḡ*, cf. AD5 ZM *wara* 'bee', Yendang *vōri* 'bee', *wḡrḡ* 'honey'

vý, die | CD *wúú*, AD4 Momi *wqr-*, Pere *vò-*, AD5 ZM *vḡ*, Yendang *wḡs-*, AD6 Karang *hū*, AD13 Kulaal *úú*, Niellim *'úy*; cf. AD2 CL *vād*

vḡyḡsá, shadow | AD2 CL *nyisà*; cf. PP **vu* 'shade'

vwḡ, beat, hit | clearly ideophonic: CD *vwàt*, AD6 *vwā*, elsewhere AD4 Momi *bee'*, Dii *vāà*, cf. AD6 Karang *vwàr*, Kare *vwèrè* 'break'

wá, fire | AD4 Pere *vēē*, Dii *vēē*; cf. AD5 ZM *yaa*, but *waa* in various other Mumuye dialects; this well-represented AD-Ubangi root is not found in CD, but is present in both Mambila and Vute

wá, sharpen

wák, *wákú*, grandfather

wàláj, (cooking) pot (see list 1)

wáásá, heat, hot (cf. 'fire') | also compare ZM *wnaa* 'hot'

wánsá, body

wá, leave, let | CD *vét*

wé, year, time, season | AD4 Momi *wiir*, Pere *vērè*, Dii *vē'*

wḡ (pl. *wḡ*), child | CD *wḡḡ* 'small, child', AD2 CL *wāā*, AD4 Pere *wār-wā*, Dii *wāā*, AD5 Yendang *vàà*; **van* is PP

*wéjì*m, morning

wéjìn, tomorrow

(*á*)/*wékkā*, (his?) wife ('woman' with prefix *à*-) | a general feature of SWAD (and CD: *lérùm* 'man', *né(-)nwù* 'woman'), perhaps absent in Tiba, is (vestigial) compounding of terms for 'man' and 'woman'; if Tiba 'woman' were of this type, it might be related to AD4 Dii *wā(-)kéé*, etc.; otherwise it may be connected with an eastern root: AD6 Kare *wíí*, Karang *wúúy*, AD13 Kulaal *wáá*, Niellim *wày*

**wép*, mix | CD *wèp*

wér, arrow (see list 1)

wérùm-wē, (small) bird | cf. AD4 Momi *welmqz* 'nightjar'

wésèè, firewood

wésì, hurt | CD *nwōnì* (but Mapeo Chamba *wēni*), AD4 Pere *wòò-*

wék, hide (tr)

wéjèrá, mushroom

wī (*wīn?*), female | AD6 Karang *wúúy*, Kare *wíí* 'woman' (also Koh *máy*)

wī, sit, stay, wait | AD4 Momi *wi'iisk-* 'set (as sun)'

wínsá, thatching grass

**wó*, want | CD *wòò*

wó, take off (clothes) | CD *wōōsì*

wó, watch (over) | CD *nwáán*, AD2 CL *nwáàn*, AD4 Pere *wór-*

wōb, baboon

wōgbíj, bat

wóm(nē)-, cooperative, conjoint (labor)

wóm, oil (see list 1)

wómsā, elephant grass

wōŋ, fight (vb) | CD *nòng* but *nòòm* 'be angry', cf. AD4 Pere *gò-* 'fight' but *nò-* 'be angry', AD5

Yendang *yómán*

wōŋ, fight (n) | CD *nōng*

wòp (intr), run | AD5 Yendang *ō-*, cf. CD *nwòp* 'avoid'; also see *wúp* 'fear'

wópsì, ride (horse)

wópsínsá, sweat | cf. CD *wàt*, AD2 CL *wààd*, but AD5 ZM *pmq*; *tiin is PP

**wó*, hide (intr) | CD *wóq*, cf. AD5 Yendang *kúú*

wób, bone | cf. the well-represented NC root appearing, e.g., in PP as **kup* (but AD5 Yendang *kūn*)

wóqōb, ten (see list 1)

wú, drunk (be) | cf. CD *wìt*

wú, fat (be) | CD *nòò*, AD4 Momi *non-*, Pere *nùù-*, AD5 ZM *nó*

wúp, fear | cf. CD *yíp*, AD5 ZM *yú*, both 'run', perhaps associated with a Chadic Bata root *gíp*; also AD6 Kare *wáù*; see *wòp* 'run'

wúptá, fear (n)

yá, go (and visit, + *sèné*n) | AD2 CL *yāàn*, AD4 Dii *yà*, both 'arrive'

yā, (over) there | cf. AD4 Dii *yā* 'place'

- yà* (intr), rot, spoil; be surprised | CD *nyāngì*, AD2 CL *nyā'*, also *yēèl* 'spoil, destroy', AD5 Yendang *yānsān-*
- **yāā*, what?, why? | CD *nyāā*
- yāà*, friend (see list 1)
- yá*, old, used
- yà* (intr), swallow | cf. AD4 Dii *yó'*
- (*á*)/*yà*, where? | AD5 Yendang *īyāā*
- yāmīk*, pl. *sèér*, young, small (child) | cf. CD *mí* (pl. *méém*); also note the use of a *yá-* classificatory prefix in AD5 Yendang
- yāān*, bad
- **yān*, horse (see list 1)
- yáásá*, leaf (see list 1)
- yé*, (at) home | CD *nyēm*, AD2 CL *yīl* 'house, compound', AD4 Dii *yēē* 'courtyard', AD5 ZM *ye*
- yé*, ready, ripe, healed (be), adj. *yénèē* | AD4 Dii *yénná* 'true, good', cf. 'cook'
- yéksi*, light (fire from another fire) | AD4 Pere *yèg-*
- yér(i)má*, flame | AD2 CL *yèl* 'red, flame'; cf. *óérùm* 'thunder, lightning'
- yéēm*, meat (see list 1)
- yēm*, carry (to), present (something) with an obeisance | cf. CD *nyēni*
- **nyēmnyēm*, yesterday | CD *nyèm*
- yémsā*, song | CD *nimsí* but AD4 Dii *yéé*, AD5 Yendang *yèk*
- yéēn*, buttocks
- yéŋ*, sow (by casting), scatter | CD *yèè*, AD4 Pere *yām-* 'disperse'
- **yéēŋ*, bedbug | CD *nyéēng*
- yéèŋ*, cold (be) (as wind)
- **yéŋlá*, digging stick | CD *nyéŋlí*
- yí*, eat | CD *líí*, AD2 CL *lìn*, AD4 Momi *ree*, Pere *lé-*
- **yí*, steal | CD *yíí*
- **yìk*, lion (see list 1)
- yírīk*, black | CD *virīkī*, AD4 Momi *wii-*, *wiir-* 'be black', Pere *víí-* 'be black', Dii *vī = ī* 'be black', AD5 ZM *viiki*, but also AD4 Pere *dírī*, AD5 Yendang *yītī*, AD6 Kare *yíri* (both having cognates in AD13 as well)
- (*ŋ*)/*yīīmā* (< *yíí* 'eat'), right (hand)
- yó*, pull, stretch | cf. CD *nwòt*, AD4 Dii *wòò*; also AD5 ZM *gnq* 'pull', *znq* 'pull out'
- yógrēēn*, soft | AD4 Momi *yakw-*, Dii *yōq* 'be soft' vs. CD *wóglēēn*, AD2 CL *óg* 'be soft'
- yóòk*, cook (staple food) | AD4 Pere *yó-*, AD4 Dii *yó* 'be ripe, cooked' (cf. *yé* 'ready...(be)'); also cf. AD4 Momi *ruu'*
- yókúm*, salt (see list 1)
- yóm* (*yōm(nē-)*), bite, be sharp | AD5 ZM *yon*; elsewhere, the usual initial *l/n* alternance: CD *lóm*, AD2 CL *lùm*, AD4 Momi *rom(-d-)*, AD4 Dii *nòŋ*, AD5 Yendang *rūn-*, AD6 Karang *nūŋ*, Mbum *lón*
- yóq̄*, snake (see list 1)
- yó*, weave, plait
- yóq̄sá*, rope | CD *yísí*, AD4 Momi *yokla*
- yóq̄sì*, swim, cross a river by swimming | AD4 Pere *wó(g)-*; cf. CD *yáq̄* 'climb, cross a river (by any means)', AD4 Pere *yáá-* 'cross (a river by means other than swimming)'

Tibalex, 30.11.99

yū, death, dead body | cf. CD *wē̄*, AD5 ZM *vəq*, Yendang *wē̄ri*, AD6 Karang *húl*, AD13

Kulaal *ùààl*, Niellim *'úúlū*, all probably related

yúú, hunger | CD *wúú*, AD5 ZM *wnəqə*; cf. AD13 Niellim *nyúnī* 'thirst'

yúksā, fish | CD *wúūk*, cf. AD4 Momi *duga*, *duukt*, Pere *dúre*, AD6 Karang *nzúy*

yým (or *yém*), collide (with) | AD5 Yendang *yīn*