

# A Linguistic Sketch of Tiba (Gà)

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Voici réunies les deux parties de cette esquisse concernant la langue tiba ( $g\tilde{a}$ ) publiées dans deux fascicules successives du volume 82 de la revue *Afrika und Übersee*. Cette version comporte des corrections supplémentaires par rapport à la précédente qui avait subi quelques déformations lors du processus de conversion de polices. Le document actuel a été généré par Word 2007 à partir d'Unicode.

En outre, nous avons mis à jour les données concernant le yendang (Adamaoua 5) en introduisant les résultats d'une enquête plus détaillée effectuée en 1999 et concernant le tchamba-leko en tirant sur le lexique approfondi publié par Fabre (2003).

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 connu et utilisé en bilinguisme parfait par les Tiba. En effet, l'hypothèse contraire qui ferait du tiba une langue dont l'ancêtre le plus proche serait une « proto-tchamba » exigerait la supposition d'un temps historique assez long de contact avec une langue du groupe Adamaoua 5 de Greenberg dont le tiba aurait emprunté une grosse partie du vocabulaire. Or, nous n'avons aucun motif qui laisserait penser qu'une fois les Tiba auraient vécu isolés des Tchamba pendant une époque où leur langue aurait divergé du tchamba pour arriver à l'état où on le trouve aujourd'hui.

Par ailleurs nous continuons à penser que le classement du tchamba parmi les langues bantoïdes, hypothèse courante depuis Bendor-Samuel (1989), constitue une aberration malgré les influences manifestes d'une ou de plusieurs langues Benoué-Congo (Boyd 1997). Le reclassement étant fondé sur une étude lexicostatistique, d'ailleurs de portée limitée, il injecte un composant détonnant dans la méthode de Greenberg avec qui il faut continuer à affirmer : « Regarder, vous le verrez ».

Ces conclusions sont donc en contradiction avec la classification établie par *Ethnologue* : <a href="http://www.ethnologue.com/language/ttb">http://www.ethnologue.com/language/ttb</a>

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

by Raymond Boyd

#### 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 VwèkKààmì 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 (Tiba in CD) do not use this name for themselves. Rather, they call themselves a G a a in Tiba people') and their language a a a a in 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 derivate of the terms for 'forge', 'to forge', or some other notion associated with smithing, but rather from words meaning 'outsider, stranger' (cf. CD  $d \bar{o} \bar{o}$  '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 an unpublished paper by Blench and Williamson (1987), 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 groups<sup>1</sup>. 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 Yendang<sup>3</sup> (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 Kleinewillinghöfer 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 sîî '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 Kleinewillinghöfer 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, Kleinewillinghöfer 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  $\varrho$ ,  $\varrho$  to represent high mid vowels and e, o to represent low mid vowels;  $\varrho$  represents a mid central vowel. For ease of typography and comparison, we have transposed material available in other languages 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, e0 and barred e1, e2 are represented by e2, e3, this is unlikely to cause confusion, given the almost total complementary distribution of the vowel heights concerned. Consonant notation is conventional; note only that e4 represents a labial flap and e6 is used for glottal stop. In tonal notation, e6 represents downstep, while e6 represents any vowel bearing the suprahigh 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  $\eta$  where necessary.

In this part of the paper, Tiba nouns are presented in citation form, i.e., with  $\hat{a}$ - or  $\hat{a}$ /- prefix and final - $\hat{a}$  (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. The prefix is dropped in the list in Part II.

Each set of items is arranged alphabetically by English gloss.

### • (S)WAD cognates

à-áŋ-ā 'arm, hand'

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

*à-tó-ā* 'bow'

CD *tą́ą̄m*, AD2 CL *tāb*, AD4 Momi *taau*, Pere *tābò*, AD5 Zing Mumuye (hereafter ZM) *tá(k)à*, Yendang *tát*, Meek AD8 Kam *ace*, cf. AD9 Jen *kanto*, Munga *kantau*; also PP \**ta* 

à-6àk-á 'bushcow'

AD5 ZM bàkà, Meek Yendang bàt

à-kànkìláā 'chicken'

AD5 ZM *kìŋ*, cf. Meek AD8 Kam *kume*; there is no nasal in AD2, thus CL *kò*, cf. CD *kpàá*, AD4 Momi *kąz*, AD6 Mbum *káká* vs. Koh *kāy*; the nasal reappears with a back vowel in AD4 Pere *kōnī*, the initial consonant is voiced in Meek's AD7 Yungur *go*; note a root in part of AD13, represented in Kulaal by *hàlá*, suggesting the Tiba term may involve two roots of similar meaning; also cf. terms for 'guinea-fowl'

à-nàmèn-á 'crocodile'

CD nàmèn, CL nàbận, AD4 Pere nàmậnè, Meek AD5 Yendang name

à-náksā 'cow'

AD4 Momi *nogs* and Pere *nàgò*, Meek AD5 Yendang *nákí*, AD6 Koh *nākā*, cf. PP \**niak*; but CD, AD2 CL *nà*, also in AD7; AD4 Dii has *ndàà*, AD5 ZM has *nàpǫ* 

*à-6ý-ā* 'dog'

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

à-níη-á 'drum'

Meek AD2 Mumbake ringima

*à-tóō* 'ear'

CD  $t\acute{aa}$ , AD5 ZM shqq (derivation from an earlier \*twa, or \*tue as in Common Bantu, seems patent), Yendang  $t\acute{q}k$ ; the velar  $c_2$  is widespread: AD2 CL  $t\acute{u}ng$ , AD4 Momi tok, Pere  $t\acute{o}g\grave{o}$ , Dii  $t\acute{o}g$ , cf. AD6 Karang  $s\acute{u}k$ 

à-éŋ-á 'egg'

ZM wnaŋkaa; note Meek AD5 Yendang hàt, Kumba pa; the full AD5 set suggests cognacy with the widespread "para" form (cf. AD2 CL bōòd, AD10 Longuda fõla, AD14 Niellim hwááni)

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', *yiitere* 'eye')

(à-)sē-é 'fingernail' (perhaps -sé-)

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

à-nè-á 'four'

AD4 Pere *nārō*, Dii *ndādó*, ZM *dneerò*, CL *nāārā*, Meek AD5 Yendang *nāt*, AD8 Kam *nar*, compare AD6 Karang *nìŋ*, Kare *nèŋ*, Mbum *nyàŋ* 

à-vún-ā 'goat'

CD *víīn*, AD2 CL *vą*, Meek Wom/Mumbake *vua*, AD4 Momi *buuz*, AD5 Yendang *bíí*, Kumba *wii*, Gengle/Kugama *ayi*, AD9 Munga *naŋbu*, AD6 Karang *gúy*, Koh *vúŷ*, AD13 Niellim *6wày* 

à-kpàngúm-tā 'groundnut(s)'

CD *kpàáŋ* 'groundnut', *gúūm* 'bambara groundnut', Meek AD2 Chamba (Leko) *kpaŋ[-]wara* (now without the preposed term: *wád*)

à-gérá 'guinea-corn'

Meek AD2 Wom gbera, cf. CL yēd, CD yírí; also see -hán-'guinea-corn' below

à-sóksá '(body) hair'

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

à-gbōm-á (gbōóm) 'heart'

AD5 ZM *gbǫqti* 

à-nyān-á 'horse'

CD nyāān, CL yā, Meek AD8 Kam yeņe

à-lúŋ-ā 'knee'

CD *lúúrī*, CL *lígàd* 'articulation', Meek AD2 Wom *liŋbera*; AD5 Teme *luŋ*, Kumba *niŋgi*, Gengle/ Kugama *ruŋ*, also Yendang (*yắ-*)*rúnká*; AD8 Kam *alunu* (also A13 Bwa group *d/rul* vs. AD6 Kare (*nzá-*)*túù*)

à-6ák-á 'knife'

Meek AD8 Kam abak; cf. AD4 Dii pāg

*yàásá* 'leaf'

CL yēsą, cf. CD yáà and Meek AD5 Yendang nyãkahẽ (yánká, with classifier hệ), Waka nyaŋa, Teme jaŋga, AD9 Jen/Munga yangka

*à-6é-ā* 'leg'

AD4 Momi bi 'paw'

à-bá-á 'leopard'

AD4 Pere *bàlàm*, cf. CD *gbṣṣ*, AD5 ZM *gbmee*, Meek Yendang kpe (*kpṣṣṣ*); the relationships between these roots AD2 CL *gā*, AD4 Momi *gooz*, and Meek AD7 *fīla*, *vila*, *ivula*, AD8 *impeli*, AD9 *hwi*, *vwi* is obscure

à-nyém-ā 'meat'

Meek AD9 Jen *hią*, 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 *nyám* 

(à-)fén-ā 'moon'

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

à-dók-ā 'mountain'

Meek AD8 Kam adan

à-kāŋ-á 'neck'

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

à-jí-ā 'night'

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

à-6óŋ-á 'river'

Meek AD5 Yendang boŋko (*bōnkó*), Waka *baŋgo*, etc., AD2 CL *wūŋ*. But the root is also apparently in "Mambiloid" Nizaa

*à-yókúm-á* 'salt'

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

à-yó-ā 'snake'

CD  $y\xi\bar{\xi}$ ; cf. Meek AD9 Jen dzo, Munga zqu, AD7 Mboi za, Libo i[-]zonya, and all apparent cognates with initial s in AD5 and 7; also cf. AD4 Dii  $y\xi$  'slough off (old skin)'; while this root is best known in BC (cf. Bantu \*- $j/y\delta ka$ ), it is also found in languages presumably subjected to little BC influence such as AD11 Fali joo and Ubangi Gbaya  $g\delta k$ 

à-té-é 'stone'

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

à-lér-á 'tongue'

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

à-tár-á 'three'

CD *tárā*, ZM *tat*, CL *tōōrā*, Meek AD5 Yendang tat (*tāt*), AD7 Yungur (*fī)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 ( $t\acute{e}\acute{e}$ ), Waka, Teme and AD2 Mumbake, CL  $t\acute{e}$ , cf. CD  $t\acute{e}m$  with final nasal (AD10 Longuda shows a plural form with final -m, Kleinewillinghöfer 1996); also cf. AD13 Kulaal  $t\acute{e}\acute{o}$ , Niellim  $t\acute{e}l\ddot{a}$ , but AD6 Kare  $d\grave{i}$ 

à-lớm-ā 'war'

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

à-jíŋjíŋ-á 'water'

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

• Cognate in CD

à-wér-á (wéé) 'arrow'

CD wárí

à-d(ū)ùm-á 'back, behind'

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

à-ýsỳn-á 'breast'

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

à-gàŋ-á 'chief'

CD *gàng*: possibly an areal root, though plausible cognates all show unusual correspondences, cf. Mambila *gáng*, AD2 CL *gààd*, AD4 Pere *gènè*, Dii *gbāŋ*, PP \**gwam*, among others

à-kòŋlár-ā 'elephant'

CD  $k \hat{o} ng l \hat{a} \bar{a}$ ; CD has an apparently derived verb  $k \bar{o} ng l \hat{i}$  '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  $g \hat{o} \eta \hat{i}$ )

à-tūùŋ-á 'five'

CD  $t\hat{u}\hat{u}n\hat{a}$ : initial t- is characteristic of BC (AD has mostly n-); back  $v_1$  can be found, for example, in Jukunoid

à-tú-ā 'head'

CD  $ti\bar{i}$ : a NC root; but SWAD (including AD5) has mostly initial y-, j- (or  $\emptyset$  as in Yendang uk), cf. nevertheless AD4 Dii tun 'face'; AD6 (excluding Mbum) has tul

*à-j<u>ī</u>ntá* 'pot'

CD jīī; see -wàláŋ- below

à-nyìk-á 'lion'

CD nyìk, AD2 CL (gbàál-)nìg

à-kémjí-ā 'monkey'

CD kéém jíī, lit. 'red monkey': CB \*-kímà (9/10)

 $\hat{a}$ - $(y)\acute{\phi}n$ - $\bar{a}$  '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 *níd*, AD4 Pere áā, AD6 Mbum hóàk, Karang hókō but Koh mýỳ, 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 "*mumê*", according to Joly (1935); cf. Meek AD8 Kam *man* 

à-kìsēn-á 'slave'

CD  $k \hat{q} s \bar{e} n$ ; AD2 CL Meek kwasa (now found without the -s- suffix:  $k \hat{o}'$ ), apparently from a verb  $k \hat{o}$  'catch'

à-sām-á 'spear'

CD *są̃ą̃m*; cf. ZM *shàlàŋ*, suggestive of Chadic; also compare AD2 CL *sííd* 'arrow', AD4 Dii *sę̃ę̃* 'war', *sę́ę̃* 'arrow', AD5 ZM *shòn*, Yendang *sòn*, both 'arrow', and AD13 Kulaal *sòl*, Niellim *sàl*, both 'combat'

à-ín-ā 'tooth'

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

à-bēēr-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-óŋ-á 'bee'

Closest neighboring AD roots are AD5 ZM *wara* (cf. Meek AD5 Yendang főri (*vórī*), Waka/Kumba vőri, Teme *vobe*), AD2 CL *núúd* (cf. Meek Wom ŋora); 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  $n \hat{a} \hat{a}$  'in, inside'

á/-gbáŋ-á 'bird'

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

à-lēká 'blacksmith'

AD2 CL *lām*; cognacy is hypothetical given that every AD group has a different characteristic root; also compare AD4 Dii *nān*; cf. however 'forge' in list 2

*à-gbām-á* (*gbāám*) 'blood'

*à-mí-á* 'door' (< *mîi* 'close'?)

à-gáηsā 'fly'

All matches unsatisfactory: CD  $g\hat{\varphi}\hat{\varphi}$ , AD4 Momi gumkqz, Pere  $g\hat{u}\hat{i}$ ; cf. Meek AD5 Yendang group  $k\tilde{u}$  ( $k\bar{u}n$ )

à-nyáà-á 'friend'

AD6 Karang  $y\tilde{a}h$ , Meek AD8 Kam  $a\eta wa$ , but cognacy is hypothetical given that practically every language has its own root for this gloss; CD m an a is a derivate of m an-'peer', often used as a prefix

à-hán-á 'guinea-corn'

Cf. Meek AD5 Yendang kon (kón), Teme kom, AD7 Yungur/Roba koma

à-jý-ā 'house'

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

à-pígèē 'maize' (but curiously CD pīī-gōō 'cassava')

à-ísá 'mat'

Cf. AD6 Karang híh

à-kīn-á 'one'

Meek AD5 Yendang *bindi* (*bíntí*), 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 to AD4 Pere *kīnè* 'compact, dense'

à-wàláη-á 'pot'

(à-)hánmā 'rain'

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

 $\hat{a}$ - $g\bar{g}\hat{g}\left(g\bar{g}\hat{g}\right)$  'road'

à-sé-é 'sun, God'

CD  $s u \bar{u}$ ; the semantic equivalence is very widespread in SWAD languages; also AD6 Karang s e h; note AD2 CL s q, AD4 Momi s e e, Pere  $s \bar{u}$ , Dii  $s \bar{e} \bar{e}$ , Meek AD5 Yendang s i, s e (n e q e q e), all meaning 'moon'

à-wóób-ā 'ten'

Cf. AD4 Pere *fób*; a widespread AD root is *kop* (cf. AD5 ZM *kop*, Yendang *kóp*, AD2 CL *kób* 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 temporally, to the individual languages to learn what they have to teach us.

#### **NOTES**

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- 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 yéndáŋ* 'Yendang language', *wèé yéndāŋ-ù bīntī* 'one Yendang person (child)'.

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Afrika und Übersee, Band 82 (1999):213-249 contains corrections not in the published version

# 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:

(The notation vw 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/b 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 is a small number of terms having the structure: Initial aspirate velar ( $[k^h, g^h, h]$ ) + High central vowel +  $\mathfrak{y}$ . (In fact, the relative weight of stop and aspiration is such that the phonetic notation might as well be  $[^k h, {}^g h]$ .) Now it turns out that, while we have at least one initial kun, we nowhere have terms of the form kin, gin, hin, or in. The latter are therefore reasonable phonological representations for these sequences; nevertheless, in our lists, they appear with vowel a for easy identification of their peculiar nature. (Note that Shimizu 1983:13 also remarks central vowels before a in ZM, and assigns them to phonological a, perhaps less convincingly insofar as his dictionary shows the preceding consonants to be arbitrary. Note a similar case in Tiba involving a as a0, a1, a2, a1, a2, a2, a3, a3, a4, a5, a4, a5, a5, a5, a6, a7, a8, a8, a9, a
- 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<sup>w</sup>]. 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 intervocalically, however ([sùm<sup>w</sup>ée] '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:

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

- i) Is there, as in CD, a I/r noninitial contrast? On the basis of the data collected, it would seem this contrast does not exist intervocalically, where [I] and [r] seem to be allophones (r is used in our notation except between high back vowels, where [I] is perhaps exclusively preferred). There may, however, be a contrast after consonant, 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 IC groups, although CVrVCV may be such that  $V_1$  and  $V_2$  must be identical (or at least  $V_2$  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, g, e, a, o, g, u) together with two rounded front vowels, y (distinguished from the palatal semivowel

elsewhere in this paper by tone marking or context) and  $\emptyset$ . 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. There are probably only three distinctive heights for nasal vowels (only  $\underline{i}$ ,  $\underline{y}$ ,  $\underline{e}$ ,  $\underline{a}$ ,  $\underline{o}$ ,  $\underline{u}$  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) V<sub>1</sub> in CV<sub>1</sub>C<sub>2</sub>(CV) (where C<sub>2</sub> is either a front or a back stop, e.g., tap 'sew'/gap 'count', dek 'forget'/sek '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 smivowel. Furthermore, there being no NV/NY 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  $C_1$  in  $C_1V(V)N$  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 CVC<sub>2</sub>) for any C<sub>2</sub> other than n also holds in Tiba. The rule requiring that  $\varphi$ ,  $\varphi$  be long in CD (except in C\_CCV) does not, however, seem to hold. Tiba has cases of at least C $\varphi$ C, C $\varphi$ CV, and C $\varphi$ C, though in the

case of the latter, the length contrast is much clearer to the ear when a vowel suffix is added. Long  $\varphi$  and  $\varphi$  in C\_C and C\_CV contexts are, however, limited to cases in which C<sub>2</sub> 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<sub>2</sub>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 CVn 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 CV $\eta$ CV. (This situation involving a loss of the  $n/\eta$  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  $\acute{a}$ . (In the lists provided here, such nouns are written with final  $-\acute{a}$ , 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 -/Ci (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  $-\hat{a}\hat{a}$  (cited here with final  $-\hat{a}$ ), hence nonfinal  $-\hat{i}$ ; and 2) nominals with final  $-\hat{a}\bar{a}$ , hence nonfinal  $-\hat{i}$ , itself followed by downstep.

- There are exceptions to the rule just stated: these include a small number of terms with final  $-\acute{a}$  or  $-\acute{a}\bar{a}$  which remain invariable in nonfinal position (i.e., their final vowel does not become  $-\acute{i}$ ). 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:  $p\grave{u}gl\grave{a}\acute{a}$  'armpit'. It may be that the term for 'sickle' alternates between invariance ( $b\grave{a}\acute{a}ms\grave{a}\acute{a}$ ) and variance (nonfinal  $b\grave{a}\acute{a}ms\grave{a}$ , final  $b\grave{a}\acute{a}ms\grave{a}\acute{a}$ , see 'Noun morphology' below).
- A small number of nouns have final  $-\underline{\hat{a}}\underline{\hat{a}}$ ; the one case of alternation  $(\underline{g}\underline{\hat{y}}\underline{\hat{a}}\underline{\hat{a}}, \underline{g}\underline{\hat{y}}\underline{\hat{s}}\underline{\hat{y}}\underline{\hat{n}})$  suggests this structure was originally  $-\hat{\mathbf{v}}\underline{n}-\hat{a}$ . The  $-\hat{a}$  marking final position has thus been incorporated into the root, the form in nonfinal position being  $(-)/C\underline{\hat{a}}$  (with downstepped mid tone).
- There are also CV(V)CV nominals with high  $V_1$  and final  $\partial \bar{e}$  ( $w\acute{e}s\grave{e}$  '(load of) firewood' with mid  $V_1$  being an apparent counterexample), which could conceivably be analyzed as deriving from -i- +  $-\acute{a}$  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, siiji, a variant of siii, 'civet cat', saati 'porcupine', and jeri 'whirlwind', which have root-final -i(-iy?), giving -i-ai in utterance-final position.

- Like CD, Tiba allows CVCum (also CyCym) and CVCV $\eta$  (with  $V_1 = V_2$ ). There are also terms with CVCen structure corresponding well to CD terms with identifiable -én or -éēn 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  $\eta$  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  $\varphi$  or  $\varphi$ . (It may be noted that Tiba does not seem to have the  $C\varphi C\varphi$  and  $C\varphi C\varphi$  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 ( $C\dot{v}\bar{v} > C\dot{v}/C(C)\bar{v} > C\dot{v}/C(C)\dot{v}$ ). 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 3sg 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,  $(/)\dot{V}C\dot{V}$  or  $\bar{V}C\dot{V}$ , in this context, the L component being perhaps attributable to the deleted  $\dot{a}$ - 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  $\dot{a}$ - 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 3sg 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  $-n\acute{e}\acute{a}$ , 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:  $H/n\acute{e}\acute{a}$  or  $Hn\acute{e}/\acute{a}$ . 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 (i) or definite (ni, a) 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  $V_1$  in a  $V_1$ - $V_2$  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 m 1PL subject m 2S subject a 2PL subject m a 3S subject a 3PL subject a a 3PL subject a

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  $\hat{a}$ - and the noun root), unlike CD where the possessives are all postposed. The system of these markers is:

1sg ( <i>à</i> -) <i>mēē</i> -	lpl ( <i>à-</i> ) <i>wété-</i>
2sg ( <i>à</i> -) <i>wēē</i> -	2pl ( <i>à-</i> ) <i>mété-</i>
3sg ( <i>à-</i> ) <i>gúú-</i>	3pl (à-)wóóntí-

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 2sg and/or the 3sg. These are:

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2sg suffixed -áāŋ
3sg prefixed ´ (i.e., the noun prefix becomes á/-)
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It is quite curious to note that the 1pl and 2pl forms above seem to be precisely the inverse of the 1sg and 2sg 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 1sg subject pronoun is essentially as in CD; its point of articulation is assimilated in subject position to that of any following consonant. The CD 1sg possessive is postposed  $m\grave{e}\grave{e}$ . (The CD independent 1sg pronoun, however, is  $n\grave{o}k$ , for which no Tiba correspondence has yet been observed.)

In CD, the 2sg pronoun is a M-tone nasal in subject position ( $\grave{a}$  is a variant in certain contexts and obligatory in imperative forms), but the object pronoun is  $-\grave{a}$ . The CD independent 2sg pronoun is  $w\bar{\imath}\bar{\imath}$ , related to the postposed possessive  $w\hat{\xi}\hat{\xi}$ . There is therefore a good correspondence here with Tiba, though the Tiba 2sg imperative seems to be  $y\hat{\imath}\hat{\imath}$ .

CD has no 3sg subject pronoun, but the 3sg independent forms are doubtless derived from  $*g\acute{u}$  'animate',  $*g\acute{t}$  'inanimate'. The object form is  $k\grave{u}$  ( $g\grave{u}$  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 3sg possessive is  $k\grave{\xi}\grave{\xi}$  ( $g\acute{\xi}\~{\xi}$  in Mapeo Chamba). There is thus again a fairly good correspondence between the two languages.

It may be noted that Tiba ki, 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  $\acute{a}$ , the independent form  $w\acute{o}\acute{o}$ , related to the possessive  $w\grave{o}\acute{o}$ . If the Tiba form is to be connected, the vowel change must be explained.

The CD 2pl and 3pl subject marker is  $\acute{\iota}$ . The object markers are likewise identical (- $b\acute{u}$ ). The independent 2pl form is in all likelihood derived from an earlier  $v\acute{u}$ , the possessive being  $v\grave{e}$ . The independent 3pl is likewise derived from  $b\acute{u}$ , with possessive  $b\grave{e}$ . 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 1sg pronoun as the logophoric singular, though this requires textual verification.

DEMONSTRATIVE: Only one demonstrative was repeatedly requested (CD  $d\acute{e}\acute{e}n$  'this, that (one in question)' as noun modifier). This is translated as a form  $-(i)nk(\acute{a}/i)$  (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  $-\grave{a}\acute{a}n$  demonstrative ('this (here and now)') in  $\grave{a}-m\acute{1}-y\acute{o}\acute{o}$  (prefix |day|this) 'today' (CD  $m\acute{o}r-\grave{a}\acute{a}n$ ).

### II.4. Tiba morphology

### a) NOUN MORPHOLOGY

CLASSIFICATORY INFLECTION: In general, nominals have a prefixed  $\hat{a}$ - when they are found in initial position. Some nominals, however, have a high-tone  $\hat{a}$ - prefix, followed by downstep, suggesting a structural  $\hat{a}\hat{a}$ -. 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,  $\hat{a}$ - 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  $\hat{a}/\hat{j}\hat{a}\hat{a}ns\bar{a}$  'tiger nut', confirming that the  $\hat{a}/$ - prefix is in fact  $\hat{a}-\hat{a}-$ .

Likewise,  $\hat{a}$ - and even  $\hat{a}$ /- 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  $-\acute{a}$  in final position. If, however, the nominal root ends in -V r, the nonfinal form ends in -V rather than -V r.

Nominals with canonic form CV suffix  $-\acute{a}$  in final position unless V is -e-, -e-, -o-, -o-, or -o-, 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 -*i*, 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-(a/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  $-t\hat{o}$  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.,  $l u \bar{u}$  'yam' + s o n 'staple food' >  $l u u / s \bar{o} n (a)$ ,  $s \bar{s}$  'eye' + s o k s a 'hair' > s o k s a '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  $-g\acute{u}r$ - which can be added to any (nominal or verbal) adjective to form an abstract nominal, e.g.,  $p\acute{e}\bar{e}k$  'new',  $-p\acute{e}k$ -/ $g\acute{u}r$ - $\acute{a}$  'newness'. In the case of verbal adjectives ending in  $n\bar{e}$ , this suffix may tend to be tonally assimilated ( $-g\bar{u}r$ -).

### 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  $-g\acute{u}-\acute{a}$ . (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 CVVsi or CVCsi. 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.  $s\acute{y}\acute{y}m$ - ' be dry',  $s\acute{y}ms\grave{i}$  'dry (tr)';  $w\~op$  'run, fear',  $w\acuteops\grave{i}$  'ride (horse, i.e., make it run)'. These are clearly causative-type derivates. Others are the same kind of "medial" causatives or benefactives found in CD and elsewhere, e.g.,  $d\~on \'o$  reathe',  $d\~ons\~i$  'rest (i.e., make oneself breathe, breathe for oneself)', while others have more complex agentive relationships:  $k\acute{y}\acute{y}$  'cut (down), clear

(a field)', *kýýsì* '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 CVsi with e or e as  $V_1$ . It may be remarked that verbs of this form in CD would be derived from CVt verbs; it is difficult to tell whether a similar phenomenon might exist in Tiba.

- ii) Other "suffixes": -ki, -li, -ti, -ti, -ti; The suffix -ki is represented by only three CVCki examples, two of them clear CD loans; -li appears in only two CVCli verbs, one a Fulfulde loan; -ti is used in four CVCti verbs, three of them clear loans from CD, where the corresponding suffix is -li; and -ri occurs in two CVCri verbs, one being an evident CD loan, and one CVVri 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 jánri '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 derivate in -kì of a different root, while the term for 'tickle' (Tiba dīglī) is also a CVClī verb. Only one CVCtī verb (a sort of "diminutive") and no CVVtī 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  $-\bar{m}$  and  $-d\hat{i}m$ : The verbal noun, or infinitive, is obtained by giving the verb root a M tone pattern and by suffixing  $-\bar{m}$ , unless the verb has the form CVm or CVm, in which case the suffix is  $-d\hat{i}m$ . Like any noun, the verbal noun can take an  $\hat{a}$ -prefix and an  $-\hat{a}$  suffix. If the noun suffix is  $-\bar{m}$  and  $-\hat{a}$  is added, the result is phonetically  $[\bar{V}\bar{m}\,\hat{m}\hat{a}]$ . 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  $\bar{m}$ .

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

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 ni preceding utterance-final modifiers (CD e(n)); a marker a or ha seems to alternate freely with ni 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 tranlating both the "real" marker (-i) and the perfective  $(g\grave{o})$  in CD: this is  $n\not\in \acute{a}$  (presumably  $n\not\in + -\acute{a}$ ) after L tone,  $n\not\in \acute{a}$  or  $/n\not\in \acute{a}$  after H tone.

There are some tonal exceptions: some where the preceding H is itself downstepped or not subject to tone lowering (...p\(\vec{e}\)\(\vec{e}\) t\(\text{om}\)  $n\(\vec{e}\)\(\vec{a}\)'...\(\vec{work}'\), and a number of thus far unexplained cases in which the downstep is treated as M and followed by another H (<math>n\(\vec{e}\)\)\(\vec{a}\)\(\vec{a}\)).$ 

There is an utterance-final marker translating the CD durative  $(t\bar{e}\bar{e})$ : this is  $j\bar{a}$ - $\acute{a}$ . It may be preceded by the definite  $n\acute{t}$  (CD  $\acute{e}$   $t\bar{e}\dot{\bar{e}}$ ).

NEGATIVE: There is an utterance-final negative marker:  $d\acute{a}$ . Its compatibility with aspect markers was not tested.

INTERROGATIVE: There is an utterance-final interrogative marker  $-\grave{e}$ , identical with CD. (In CD, this marker is used in verbal propostions 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.

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## LIST 2: A TIBA-ENGLISH GLOSSARY WITH ADAMAWA COGNATES

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á, exceed, surpass | cf. AD4 Momi ar-, Pere yór- 'pass'
á, gather, scoop up
áráη, fry | CD nyānglì (possible metathesis)
án, open (wide), yawn (+ \phi \delta r \hat{a}) | a widespread ideophonic root: CD yáá yáā, AD2 Chamba
       Leko (CL) yā, AD4 Momi agan-, Pere àà-, Dii áá, AD5 Yendang hánk-, AD6 Kare 'á
áp, seek
ápsì, feel, touch (prob. < áp 'seek')
ánkpàā, mouth (also àn, language, speech) | AD4 Pere yāgò, Dii yāg, AD5 Yendang yák,
       AD6 Karang nzák are conceivably cognate with this (probably compounded) root
4\bar{q}\eta, arm, adj. 4\eta n \dot{e}\bar{e}, relating to the arm (see list 1)
\hat{a}\bar{a}\eta, name | AD5 Yendang \hat{i}k
āη, know | cf. AD13 Kulaal γn, Niellim 'ùnà
é, dry (something in the sun) | CD yērì, AD4 Momi yend-, Pere yììr-, Dii yè', AD5 Zing
       Mumuye (ZM) yà, AD6 Kare yé 'dry'
ék, tear, rip, pluck | AD4 Dii yè''split'
éη, egg (see list 1)
*ék, burp | CD yák
ésì (HH?), cough | CD wūsì, cf. AD6 Kare hèl
î, lie, lie down, sleep | AD4 Dii ii
îīn, tooth (see list 1)
ísá, mat (MH?) (see list 1)
ísā (ésā?), eye (see list 1)
*ísèn, broom | CD yìsèn
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óŋ, bee (see list 1)
*órēn, cold | CD wárēn
ónsì, lick
óóinà, who? | AD5 ZM wò
ớ, wash (oneself) | AD4 Dii yòō 'wash something', AD5 ZM welè, wolè, Yendang hù-
       'bathe', AD6 Karang wòk, Kare 'òì
(y) \delta \bar{\phi} n, nose (see list 1)
óórá (or ór), yawn (n)
*úk, hear, feel | CD wúk, cf. the reflexes of Proto-Plateau (PP) *fwak
ý, knead | cf. AD4 Dii vù 'pound (flour)'
\bar{y} (n\bar{e})-, cool (as shade) | AD2 CL wùm
ýp, crush (under foot)
*ŷrýȳm, ancestor spirit | CD wùrú(ū)m; cf. AD4 Dii yòੁō̄b
ýsì (HH?), suck
ýsì, twist, wring (perhaps identical with the preceding term) | cf. AD4 Pere vì-
ýsỳn, breast (see list 1)
bá, leopard (see list 1)
*bàk, follow | CD bàk, also AD2 CL bàg AD2 CL gbá''move away'
*bàk, stick, block | CD bàk
bám, big (be) | CD gbóóm, AD5 Yendang gbán- 'be heavy', AD2 CL gbàá
*bàámsà(r), sickle | CD gbòómsà, AD2 CL gbòómsà, AD4 Momi gamsaz, but Pere gbànè
bāŋkùlúūη, elbow
*bàr(ù)b, twin | CD bàrùp, AD2 CL bàdàp
*béēb, money | CD béēp
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bén, granary | AD4 Pere binè, cf. CD bóón, AD2 CL bón, AD5 ZM bóò; AD4 Dii ván

\*bèréèn, gazelle (kind of) | CD bérèng, AD2 CL bédèn

\*bi, seed, kind (bi as N2) | CD bii

\*bìì, quiver (for arrows) | CD bệện

\*bōksī, accompany | CD bōksì

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

búŋ, 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

\*6á (6à with subject mè '1sg'), come | CD báá, rarely with sense 'come' in AD, but cf. AD4 Pere bá-'come forward'; however, AD2 CL gbá''move away'

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

*6ák*, knife (see list 1)

*6àk*, bushcow (see list 1)

 $6\acute{a}ks\dot{i}$  (+  $t\acute{u}\bar{u}$  '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 pài, AD13 Kulaal ùààl, Niellim wáál

*bé-síbá*, (down on) ground | cf. perhaps CD *bēn* for the initial element

*béē*, bushbuck | cf. CD *bày*, AD4 Momi *bayamz* 'duiker', Dii *bál* 'kob'

*bēk*, (clay) dish

\*béksì, break, smash | ideophonic root: CD vwēksì, cf. AD6 Karang vwēh 'cut' and even AD13 Niellim bậgrì

 $\delta \acute{e}$ , leg (see list 1)

\*6ēn, bring | CD bēnì; cf. AD13 Kulaal wèn

 $6\bar{e}\bar{e}r$ , two (see list 1)

 $\delta i$ , lie, tell lies (+  $l\dot{e}\bar{e}m$ ) | cf. AD4 Pere mii- + 'tongue'

bínsì, refuse | AD5 ZM bèn

*δίρ*, ask, ask for | cf. AD4 Dii *vì*, AD5 Yendang *δί*-, AD6 Karang *vwī* 

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bóōm, wound, sore
bóòn, bòn, cut, slash; split (intr); break (as day)
βόη, river (see list 1)
bó, bean
δφ, throw | AD4 Dii gbδ, AD6 Karang vwū
*\delta \partial b, blind(ness) | CD \delta \partial p
\delta \partial \phi b, dance (n)
\delta \phi p, dance (vb) | possible cognate in AD13 Niellim \delta \bar{o}n
δότὺm, thunder, lightning | CD bǭο̄, AD4 Dii bǫ́ο̄, cf. AD6 Karang pǫ́mnā; but also CD
        bélùm, AD4 Momi bulmi 'flame' (see vér(i)má 'flame')
bùmkì (intr), resound, be noisy
δúūη, ash, dust | CD būnā 'dust'; *buŋ is PP and Proto-Jukun
βúηsā, (harmattan) wind
\delta \hat{y} \bar{y}, dog (see list 1)
býmsā, brain(s) | CD bólòmsí, AD4 Pere bórè; note AD6 Karang lī-pám
byr, white CD būrkí, AD2 CL bīíd, AD4 Momi bu(ni) 'white', bur- 'be white', Pere búī, Dii
        bú 'be white', AD6 Karang búí, but also pùkí, cf. AD5 ZM puru
dá, copulate | CD léén, AD5 ZM laa
dá, take out, remove
*dábrì, wrap (in leaves to cook) | CD dābrì, AD2 CL dàp
*dándán, bitter | CD dángdáng
dáásì, choose, select (< dáà 'remove')
dén, cloth, clothing
dēn, vagina
dí, press
d\bar{\imath}(n\bar{e})-, heavy, prob. < d\acute{\imath} 'press' | CD d\hat{\imath}ngd\hat{\imath}ng, but initial continuant elsewhere: AD4 Dii
                                                                                                       zìì, AD6 Ka
díi, long | CD dèèrí 'long, far', AD4 Dii dìì, AD6 Karang dì 'far'
dīglī, tickle | AD6 Kare díkìlì, cf. CD gēnglì
dìŋ (perhaps díīŋ), eyebrow
dìpsá, cloud
*dók, plant (vb) | CD dòk, also AD4 Momi dokw- but AD2 CL dóp
*dóm, greet | CD dóóm, AD2 CL dóm
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dón, sing
dóōη, misery, poverty | related to AD5 ZM rán?
d\hat{u} (or d\hat{y}), ridge (in farm)
dúūk, mountain (see list 1)
*dùk (intr), finish, come to an end | CD dùk, cf. tý 'finish' below, AD2 CL dùg
dùk- stomach (but syntactically adjectival) | cf. ZM dùku 'skin bag'
*d\hat{u}ks\hat{i}, finish, be used up | CD d\bar{u}ks\hat{i} < d\hat{u}k
dùm (intr), collapse, fall off, down
dùm, short, shallow
*(á/)dúmá gàn, vulture | CD dúmá gàng, AD2 CL dúmá
*dùngbàl, hippopotamus | CD dùngkpàli, AD2 CL dùngbàl
*dúntì (HH?), deceive | CD dūnglì
dý, wet, moisten, soak | cf. AD4 Momi yii-; perhaps ultimately connected with CD dùrí
'rain'
dŷn (intr), go (in) | AD4 Pere dó-, Dii dó, but Momi tor-; also AD6 Karang rìh
d\bar{y}r, deep | AD4 Pere luu-, AD5 Yendang tīn- 'be deep'
dà (intr), break, shatter (from falling) | AD5 ZM daasè 'break (a piece) off', AD6 Karang
       dôr, Kare dôrò
dé, taste | AD5 Yendang lék-, AD6 Karang lēh; cf. AD4 Momi doo'
de, testicles
dè, granary
de, put, place AD4 Momi de'(s-), Dii 'yé
dèk, forget | AD6 Karang yèkrē
dę̃, other
*di, burn (tr), light (fire) | CD diì but AD2 CL dú; according to Kleinewillinghöfer (pers.
       comm.), Bambuka in the Bikwin group has lii
dīŋ, navel
d\bar{o}b, in-law
dōbēn, cowife
dóōk, mouse | AD5 Yendang ròk 'kind of (domestic) rat'
dón, breathe AD4 Momi don 'groan', Pere dù-'blow, snore'; however, CD gòng, AD2 CL
       gòn, AD4 Momi yons-, AD5 ZM gno 'snore', these last three 'snore'
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dónsì (< dón 'breathe'), rest | same derivation in CD gōngsì; but AD5 ZM wnokè; cf. AD6
       Karang òk
dốoŋ, hip (joint); thigh | cf. AD2 CL dūn, A4 Pere dōrè, Dii dōō, all 'leg'
d̄ο̄ο̄ ká̄āη, matriclan (compound with N2 'face'?)
dūk, penis | AD4 Dii ndòg, but Momi deek; AD6 Karang ndìw
dūùm, perhaps also dúmà, back (> dûm 'behind') (see list 1)
dúmsā, urine | cf. AD2 CL wóòm, AD6 Karang tóm
dūn, hole | CD dōō, AD4 Momi duur, but CL déél, Pere dālè; also AD5 ZM too; AD6
       Karang lókō
fàktì (intr), tasteless, insipid
fé, burn (tr/intr) | CD píí, AD2 CL pè, AD4 Dii pì 'be hot', AD6 Kare pìù 'singe'
fé, twenty
féēn, moon, also fén /wī 'stars' (see list 1)
fésì, full, complete (be)
ff, take (staple food with fingers)
fún(n)ì, begin (< Fulfulde fuda?)
gá, illness
gá, get, receive | CD gààn
gáā, strainer (for beer), sifter (for flour); also fishtrap | AD4 Pere gáŋ 'fishtrap', cf. CD gệệ
gāá, road (see list 1)
gàá, Tiba
*gām, horn | CD gāām
*gàn, chief (see list 1)
* gàān-túnén, donkey | CD gàng-pén-túnén
gàán (sātáā, i.e., 'sour'), pepper | AD5 ZM gáń zin where the meanings of zin are 'clot of
       blood' and 'fish'
gàngár, drum (kind of) | < Hausa gàngá
gáp, count | AD5 ZM gna, Yendang gān-, AD6 Kare ngệ (also ké), but non-nasal
       elsewhere: AD2 CL gád, AD4 Momi ga'-, Pere gáár-(do)
*gápsì (HM?), divide, distribute (adj. gāpsé(nē)- 'forked') | CD gāpsì
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gāāsá, (dry) season | AD4 Pere gāā, Dii gāāg, but AD6 Karang káy, Kare kệộ
gásì (HM?), think (about), recall | AD4 Pere gèl-, cf. AD6 Karang kèr
*gánsì (HM?), strain, sift | CD gāāsì
gánsā, fly (n) (see list 1)
gán, hunch (on back) | cf. AD5 Yendang kúkī; also CD gāy, AD2 CL gād
gāη, large potsherd | CD gìí
géē, sorrel
gé, cross (river)
géēk, (bambara) groundnut
gēk, grave | CD gāká, AD4 Pere gāgò
gém, scream, dream, nightmare (also a verb, 'affect (as a bad dream)')
gén, break, snap (tr) | AD4 Pere g\hat{q}- 'break (tr)' with derivative g\hat{q}l- 'break into pieces (tr)'
gēn, medicine | CD gāān, AD2 CL gān, AD5 ZM gnān, but AD4 Momi genbaz, Pere gaabò,
       Dii gām
*gèn (intr), flow | CD gèèn
gérá, guinea-corn (see list 1)
gésén, scorpion
gíik, chest | cf. AD2 CD gìiîl, AD5 ZM gìn, but CD gàngà, AD4 Pere gògi, gàgsàlè, AD6
       Kare gòn
gìm, smelly (be) | cf. CD gúún, AD6 Kare gùnè 'smelly'
*gít, abstain | CD gìt
gītáámá, green
gó, pay (back)
gón, answer
*gònsá, breath | CD gòngsí, see the doublet gbànsá 'snoring' below
g\bar{\varrho}, catch, seize | CD gùt, AD4 Pere gùù-, AD5 Yendang g\hat{\varrho}- but AD2 CL k\hat{\varrho}
gù (intr), fall
*g\bar{u}b, thorn | CD g\bar{u}p (cf. AD4 Momi kapt)
(á/)gýs<u>à</u>ā, also gýsỳn, 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
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gbák, slip
gbāám, blood (see list 1)
gbāntīlóór, (earth)worm
(á/)gbáŋ, bird (see list 1)
gbànsá, snoring | CD gbāngsì 'groan' (compare dón 'breathe', gònsá 'breath')
gbànsì (intr), finish, run out | AD4 Momi gbams-, Pere bàm-, AD5 Yendang gōós-
gbéē, forest
gb<u>é</u>r, dassie
gbōóm, heart (see list 1)
gmésì, move, shift (tr) | CD gbāsì; cf. AD2 CL gbá''move away', AD4 Dii 'mè''move near'
gmòp (intr), crawl
hám, salt
háp, bind, wrap (up)
hárā, headpad | cf. AD2 CL kālà (with a wider sense 'rolled thing, rolling thing', AD4 Pere
        kàarè, Dii kāā, AD5 Yendang kántán; however, CD yérī
hán, guinea-corn (see list 1)
hánmā (or kánmā?), rain, saliva (see list 1)
já (or jáā or já), laziness | CD jààlén 'lazy person', AD6 Kare zòzò
já, smear, anoint; step (in something sticky)
ják, cook, brew AD6 Karang nzē but CD sākì
* j \hat{a} m (intr), stand (up), swell (adj j \bar{a} m (n \bar{e})-) | CD j \hat{a} \hat{a} m
(á/)jàánsá, tiger nut | CD jáān but AD5 ZM sán, Yendang tánká
j\acute{a}nri, dry (meat) (< j\bar{a}\eta-?)
jān(nē)-, hot, feverish (be) | AD4 Dii zágā 'sun', AD6 Karang zánnā 'fever', Kare zàn
* jáāy, tendon | CD jáāy, AD2 CL zèéè
ję̃ę́, scabies | AD5 ZM znàkn
jēmká, stranger, outsider | cf. AD4 Momi genz, AD5 ZM zanti, Yendang zántá, cf. sènèn
jērá, locust | cf. AD5 ZM zòro
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jèrí, whirlwind
ję́, see | AD5 ZM zè
jîī, night (see list 1)
jîī, theft, thief | CD yîlēn < yîî 'steal'
jīībàr, pocket | < Fulfulde jiiba
jīntá, (cooking) pot (apparently singular though plural in form) (see list 1)
jíŋjíŋ, also jíŋà (in compounds, e.g., óŋ jíŋà 'bee water', i.e., honey), jíijín, water (see list 1)
* jīŋláār, hyena | CD jīngláā
j\bar{o}, on, upon | CD j\bar{u}m
jóōb, poison | AD5 ZM znópo, Yendang zōn
jóm, squat | CD jòòm
* jón, laugh (vb) | CD jòòn
jòōn, jòná, red | AD5 Yendang yōntí
jờ (?), laughter | CD jòná, AD4 Pere zònè, Dii zōm
*j\bar{u}, up(wards) | CD j\bar{u}\bar{u}
jūm, flour | CD jōōm, AD2 CL zāām, AD5 ZM zuman, but AD6 Karang sóm, AD13
        Niellim hùm
júŋ, mortar | AD5 ZM dun
júη, pound
jý, pour
j \dot{y} \dot{y} (j \dot{y}, j \bar{y} \dot{y}) after i'locative' or as DO without modifier), house, room (see list 1)
*k\acute{a}mk\grave{i}, gather (tr) | CD k\bar{a}mk\grave{i} (frequentative of k\bar{a}m\grave{i})
kán, anklet
kán, find, meet | AD4 Dii kàn, cf. AD5 ZM kosè
kán, tie (prob. another sense of the preceding verb) | cf. AD2 CL kāasá 'corde', AD6 Karang
        ngāh
káāη, cobra
kàntá or kāntá, calabash
kántá, tortoise | cf. AD4 Dii kpārgád
káárá, wing, feather
kánsi, join, meet (< kán)
káān, face, forehead
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kān, neck (see list 1)
kànkìláā (invariable?), chicken (see list 1)
*kásí, strainer (for flour) | CD kāsí
kéè, cough (n) | AD5 Yendang kól- (vb)
ké, say, speak
*kèlùm (also attested -kēlùm-, -kèlūm-, pl. kèlùmtá), baobab | CD kèlūùm
*kémjíī, monkey (see list 1)
*kéé, refuse | CD káá
*kệ¢r, mad(man) | CD kệ¢, AD2 CL kệ¢d
*kệèkèē, hedgehog | CD káákáā, AD2 CL káagá
*kénsì, bother, disturb | CD kānsì
késā, (rainy) season | cf. PP *kwas
kēsá, side (of body), rib cage
*kìlèn, loan | CD kìlēèn
kīn, one (see list 1)
*kìnéēn, leper, leprosy | CD kìnéēn
*kìsēn, slave, captive (see list 1)
(á/)kíyàā, (in) front, before
kố or kón, carry (a child on the back) | CD kōlì, AD4 Pere kúú-, AD5 ZM kpmáá
k\grave{o}, put on (clothes)
*kók, rub | CD kók, cf. AD5 Yendang kpòs-
kóm, urinate
*kóm, arrive | CD kóóm
*kònàr, smallpox | CD kònà
*kònláār, elephant (see list 1)
*kóntì, gather, pile up | CD kōnglì; also AD5 Yendang gòò-
*kóp, draw, fetch (water) | CD kóp, AD2 CL kòp 'puiser partiellement'; also note AD5 Dii
        kò
k\bar{\varrho}, guinea-fowl | CD k\bar{a}\bar{a}, AD4 Pere k\hat{u}\bar{i}, Dii k\hat{\varrho}\hat{\varrho}, AD6 Karang kp\hat{e}h but Kare k\hat{o}r\hat{e} 'perdrix',
        cf. 'chicken'
*k\bar{\varrho}, (enclosure) mat | CD k\bar{\varrho}\bar{\varrho}
k \partial \hat{q} r (intr), thin (be)
kónsì, untie
kú, sweep | CD kūrì, AD4 Momi koor-s-, AD5 ZM kòò
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 $k\dot{u}$  (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 kwáāːr, pl. kórgē, but may spread as far as Ubangi Zande kùrúngbà; also note Fulfulde koombowal

\*kúmtì, make (a fist) | CD kūmlì

kūŋlúŋ, shoulder | cf. AD4 Pere kòòlè and 'neck' (list 1)

 $k\acute{y}$ , cut (down), clear (a field) | AD2 CL  $k\grave{\phi}$  'cut off (road)', AD5 ZM  $k\rlap/\phi$  'cut (in two)', Yendang  $g\~o$ - 'cut (down)'

ký, bright, clear (be)

 $k\acute{y}\acute{y}s\grave{\imath}$ , chop (into pieces) ( $< k\acute{y}$  'cut (down)')

*kyr*, (wrist-, ankle-)bone, joint

*kỳý*, hare | CD *kùt* 

kméè, pull (up, out)

kmēk, squirrel

kpà, cut, break off (tr/intr) | AD4 Dii kpàn, kpàā

kpá, skin | AD5 ZM kọọ

*kpām*, joking partner | CD *kpōōm* 

kpàngúmtā groundnut(s) (see list 1)

\*kpát, weed (a field) | CD kpát

kpé, fish, go fishing | AD4 Momi *gbee-*, AD5 Yendang *kpèès-*, both 'fish by bailing'; cf. AD2 CL *kpē*''fishhook'

kpìksímsá, chin

*kpìη*, nest

<sup>\*</sup>kpìsáār, billy-goat | CD pììsáā

<sup>\*</sup>kpōŋáār, deaf | CD kpóngáā, AD CL2 kpūùŋ ~ gbūùŋ

láā, belly (see list 1)

láā, sleep (n) | invariable final nasal: CD láām, AD2 CL lāām, AD4 Momi ram, Pere nām, Dii nām, AD5 ZM nú-ron, AD6 Karang nám, except AD5 Yendang (nőő-)róó

*là* (intr), fall (as rain) | always initial nasal elsewhere: CD *nàà*, AD2 CL *nāŋ*, AD4 Dii *nāŋ*, AD5 Yendang *ná*-

(á/)lágòn, chameleon | cf. AD5 Yendang gōnlí

làk, forge (vb) | AD2 CL là, cf. AD2 CL lèŋ, AD4 Dii làgā both 'sharpen'

làm, lost (be) | cf. AD4 Pere lēē, AD5 ZM ríń

láàn, cry (vb) | cf. AD4 Dii lég, AD6 Kare ré-rèò

\*láŋ, surround | CD láng

lánsá, side of face | CD lāngsí temple'; also AD4 Pere làrán, AD6 Koh lāākùn

*lēká* (pl. *lēkétá*), blacksmith (see list 1)

léēm, lie (in bîî lémā 'tell lies', cf. lér 'tongue')

*léēn*, grinding stone | AD5 ZM *réé*; cf. CD *nààn*, also AD2 CL *nāgàl*, AD5 Yendang (ű/-)nấ léŋ, drip | AD4 Dii lég 'flow'

\*lép, buy | CD lép, cf. AD4 Momi yiip-; \*dyap is PP

\*lépsì, sell | CD lēpsì

*lér*, tongue (see list 1)

léérá, louse | AD2 CL làd 'flea', AD4 Pere lààrè, Dii lèèd, AD5 ZM rnèèti, Yendang rèèsí

\**léérá*, flute | CD *léérá* (a regional root: AD2 CL *lééd*, AD4 Momi *liirąz*, also AD4 Dii *lệtệệd*)

*léésì*, *lèèsì*, spoil (tr), rot, spoil (intr) | CD *l̄ç̄ţsì* 'moisten', AD4 Pere *líí-*, AD5 ZM *lèsè l̄ç̄ţ*, grass, bush (cf. *pţ l̄z̄ /p̄ţ̄* 'animal (thing-bush-thing)')

*lé*, prepare, get ready | cf. AD2 CL *lèb*, AD4 Pere *lè*, Dii *lè*, AD5 Yendang *ré*-, all 'produce, give birth'

\**l*ē, scar, blemish | CD *l*ēe, AD2 CL *l*èm

(á/)lí, when?

lí (+ báámá), sky, above | AD2 CL lēg

líī, village | AD2 CL līgà 'compound, family', AD4 Pere līgò, Dii līg, AD5 Yendang léé, all 'house'; also AD13 Niellim líī:, Kwa líē, both 'house'; \*di is PP for 'compound, house'

\* líīk (líkā?), dirt(y) | CD líkā, cf. AD2 CL lígád, also AD4 Dii lógód 'be dirty'; \*dik is PP (á/)lín, (day after) tomorrow | cf. AD2 CL līmtá 'morning' līn, between, through

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líŋsì, sell, hawk
līntá, gut, intestine | cf. CD nàgrí
*lípsì, turn, change | CD līpsì, AD2 CL líp, lím but also AD5 ZM rì
líísā, smoke
lōk, take AD5 Yendang lā-, also AD4 Dii lò, but the root have a Chadic source, cf. Bata lù
       'take, get'
lókā or lōká, cry (n) | CD lōkì 'speak, tell'
lóōm, war (see list 1)
lúū, yam | AD2 CL dūd, AD5 ZM looti
lūk, lump (on body, head)
lūūmòr, market | < Fulfulde luumo
lùmsá, man
(á/)lūùmsá, husband (cf. 'man')
lúūη, knee (see list 1)
l\hat{y}, move (residence, j\hat{y}\bar{y}) | AD4 Dii l\hat{u}\bar{u} 'go away'
*lýv̄m, male | CD lúùm
l\dot{y}n (intr; also l\dot{y}l\dot{y}n for 'get, stand up'?), get up, fly | CD d\dot{u}m, AD4 Momi ruu-, Pere l\dot{u}-,
       Dii lùū 'lift', AD5 ZM dù, AD6 Karang zō; also note Bata lì (apparently not a
       reconstructible Chadic root, Carnochan 1975)
lýnsì, raise, throw up, make fly
má, knead, work (mud, clay), build (building) | CD mākì, AD2 CL mà 'make, do', AD5 ZM
       maa, Yendang māā-, but AD4 Dii mboo, AD6 Karang mboh
*mák, show | CD màk, AD2 CL màg 'imiter, désigner, mesurer'
*máká díkār (máká invariable?), (red) millet | CD máká (meaning of second element in Tiba
       unknown)
*máksì, try, try on, out | CD māksì < màk
mékā, green, unripe
mékā, paste
mēsímsā, dew | CD mēnsán, AD2 CL mīisà, AD4 Momi met, Pere mērè, Dii mēd, AD6
       Karang mím, but AD5 Yendang mőő (vs. méé 'water')
mí, day
mi, door (< mi'open, close') (see list 1)
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míi, excrement
mí, close, open
mín, shave
mí-wà, day before yesterday
mó, bear, give birth to AD6 Karang mbūn; 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 pệ 'thing'), do | CD nàk
náksā, cow (see list 1)
*nàmèn, crocodile (see list 1)
nān, nāàn, how?, how much? | CD nyāā, nyákā, AD2 CL lā, lēe, AD4 Momi na(nee), AD5
       ZM dnee 'how much', AD6 Karang ánī, Mbum nánìí 'how'
nè, four (see list 1)
nèé (pl. níi), person | CD nèé, AD2 CL néŋ, AD4 Pere nán
nēk, owner | AD6 Kare nàá
nēŋnéēŋ, axe
nī, mother (but nàáná 'your mother'); cf. nī-wé, sibling (mother's child) | AD5 ZM yina,
       Yendang yén (with prefix yV-?)
níŋ, drum (see list 1)
*níŋsì, hurry | actually CD nīngsèn < nīngsì 'make tremble', AD2 CL nìn 'tremble' >
       nīŋsə́ən 'hurry'
*n\dot{\phi}, (oracle) poison | CD n\dot{\phi}\dot{\phi}
nóksì, enough, equal (be) | CD nēkèn
nōm(nē)-, good, pleasant, tasty | AD2 CL làm, AD4 Dii nèm 'be salty'
*nòm, anger | CD nòòm, AD2 CL nòm
nòntà, root | cf. AD5 Yendang nínkán; *nan is PP
nóósì (HM?), shake
(tó/)nùk, (bow)string
nūŋ, locust bean tree
nūngūr, locust bean (tablet)
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núŋmā, wax
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pá, put in, on (as hat, shoes) | CD pàk, AD2 CL páàn, AD4 Dii pàg
(δόη) pà, (river)bed, gulley
páān, place
pát, all | a regional term attributable to Fulfulde
péēk, new AD4 Momi pa(-ni) but AD6 Mbum féké, Koh fíē
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 în, AD4 Pere ēnè, Dii hēn, AD5 Yendang hè, AD6 Karang
       fè
pì (intr), return, go back, change (into) | CD pèè (compare pīrì 'put back'), AD4 Pere pìn- 'do
       again' but fîl- 'change into', AD6 Kare fệrệ; cf. 'exchange': AD2 CL péèn, AD4 Dii pí
*pìí, Beni seed | CD pìí
*pígèē, maize (see list 1)
*pìlàn, (large) basket | CD pìlàng, a regional root (AD2 CL pìlàm)
pínmá, 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
p\bar{u}k (p\bar{u}k\acute{a}?), bark (of tree), shell | CD p\bar{q}k\bar{q}
pýȳ, viper | AD4 Dii kpùù
pyvgē, cassava | CD pii-gōō
pýn, tired (be) | CD pút
p\bar{y}n, fatigue
*sáà, (father's other) wife | CD sáà
*sā, net | CD sāā, AD2 CL sād
sá, ooze, have diarrhea (+ míi) | CD sáá, AD4 Dii sōō 'leak', AD5 ZM soo, but san 'forge',
       Yendang sá - 'ooze; melt', AD6 Karang sàh 'moisten'
sā, mud | AD5 Yendang sók
sák, hang, carry (on shoulder)
*sàk, genet cat | CD sàk, AD2 CL sàg "renard"
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sám, bark (vb)
sām, spear (see list 1)
(\acute{a}\eta) sámkā, left (hand)
sán, carve
sān, hoe | cf. AD4 Dii tōŋ
sānsá, muddy pool | cf. sā
sánsi, grind (flour) | AD4 Pere sán-'grind (fresh, damp grain)', whence relationship with sá,
(á/)sánká, frog, toad (see list 1)
*sánkì (HM?), teach, learn | CD sānkì, AD2 CL sán
*sáásì, do (repetitively) | CD sāāsì (auxiliary verb)
sàtáā or sātáā, sour
sáátí, porcupine
sátōk, (beer) pot
sé (also sééwá), sun, God (see list 1)
sè (intr), lacking, scarce (be) | AD5 Yendang sè
sē, also sésèē, nightjar (?, translates CD táàmáā)
(\acute{a}\eta) s\bar{e} (or s\acute{e}), fingernail (see list 1)
*séb, witch | CD sép 'bewitch'; cf. AD4 Dii sòb 'use witchcraft', sóōg 'witch', séy 'witchcraft'
séēk, anklet | AD4 Pere ségò "castagnette"
sék, go (down), also séksì | AD2 CL sím, AD4 Dii sí, cf. AD4 Pere sí-'sit'; also cf. sí'down'
*sèm, (prepubescent) girl, female (animal) | CD sèèm 'girl' but -sè 'female animal'
sēmsémtá sand | cf. AD4 Pere siìi, 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 sáń
sén, add (to), increase
*sènèn (pl. sènén-t-), guest | CD sènén, AD2 CL sèén, cf. jēmtá
sènéēn, strong, healthy | cf. CD sēnì 'be too strong', AD4 Dii sèn 'make an effort' prob. <
       sèè 'be potent, effective'
*sènì, difficult (be) | CD sēnì
séŋsì, pull (off, out)
sèér, pl. of yámīk, young, small (child)
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sèèrá, truth
sé, scratch (itching) | cf. AD5 ZM sneeté 'itch'
sí, speech, matter
sí (intr), black, dark (be) | cf. AD5 ZM tinri 'dark'; also cf. jíī 'night'
sí, bury
sí, plait (hair) AD4 Momi si- 'make rope'; otherwise CD tíí, Pere tìì- 'weave', AD5 ZM tisé
sí, also síī, down(wards) | AD5 Yendang sèè, cf. CD tīī, AD2 CL tē, AD5 ZM tí(p)ì, AD6
       Kare tìà, also cf. síb 'under', sék 'go down' for this correspondence
sì, wait for | CD sìt, AD2 CL sìd, both 'be patient', AD4 Pere sí-'sit'
sī, show
síb, under, below | CD tīm, also AD5 ZM típí, AD6 Karang sìba, both 'earth'; cf. sí 'down'
sígáη(á), much, many
sìíjì, also sìíì, civet cat | CD sìì, AD2 CL sìd
*sím, beer | CD síīm; cf. AD4 Pere fûm, AD13 Kulaal ham, Niellim hám
síīr, porridge | cf. AD4 Momi sii- 'cook porridge'
*sìr, boil, abcess | CD sìt, AD2 CL sìlà
sísèē, switch, whip
*sììsá, insult (n) | CD sììsí
só, drink | CD sóς; the general AU root is represented by AD4 Dii zò; *swa is PP; note
       however that Chadic Bata has sò6
só, butt, ram (perhaps identical with the following term) | AD2 CL sūd
sóò, break (intr) | AD4 Dii sóób
sò, pierce, stab | AD5 ZM suu, Yendang só-, AD6 Karang sū, but AD2 CL sàb 'pierce', AD4
       Pere sà-, sàà-, Dii sà; compare CD sót
sók, wash (something) | CD sūksì, AD4 CL sùg, AD4 Pere sòg-, AD5 ZM sòkè, AD6
       Karang sộh '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 soo, cf. CD túm, also AD13 Kulaal hààl, Niellim hàà:n;
       cf. 'eat, chew'
*són, antelope (kind of) | CD sóng
sóp, blow (on)
sópsi, lick (up)
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sóō, also sóórā, wind | cf. AD13 Kulaal hààp, Niellim sààb
són, carry (off, away) | cf. CD tùùn, AD5 Yendang tóó, both 'carry on head'
sø, mucus | cf. AD2 CL sāb 'pus'
sốớnì, leave (a path), branch off
sónsì, put out (fire)
sūksá, soup | AD5 Yendang sónkō
súmsì, sùmsì, gather (something); gather (together) | CD sòòm, AD4 Pere sùm-, both 'gather
       up', AD5 Yendang sốō 'take out, remove'
sùwéē, (intestinal) worm | CD sòòmíi, AD2 CL sòbéè
súnsì, swell, blister
súsùn, shade | AD5 ZM sunrú, cf. AD6 Karang sún 'night'
sýỳ, thirst | CD súù, AD2 CL súùd
sýỳm, dry (be) | CD sùm
sýmàā, empty
sýmsì, dry (tr) | CD sūmsì
s\acute{y}n, grow, develop; go out | cf. CD t\acute{u}\acute{u}n 'develop, grow up' > t\bar{u}n\grave{e}n 'go out'; also AD6
       Karang tīh 'go out'
sýyn, tail AD2 CL sū 'queue de oiseau'; also cf. AD13 Kulaal héé, Niellim hínā
sýnsì, resemble
s\bar{y}t\bar{y}m, bright, shiny (be); smooth, slippery, mucilaginous (be) AD5 Yendang s\bar{q}r-'be
slippery'
tá, hit, kick, shoot | CD tàt, AD2 CL tàl, AD4 Momi taa-, Dii tà', AD5 ZM ta, Yendang tá-,
       cf. té 'sting...'
tá (or tá), pick, pluck (fruit); excrete AD4 Dii tò''pick'
*tá, butcher (vb) | CD tàà
tá, early (be, get up) | AD4 Dii tá'ád
*táāb, sandal | CD táāp, AD2 CL tábá
táàm, tàm, jump (over), jump (intr)
táp, sew | AD2 CL tāb, AD4 Dii tā, both 'tie up'; compare CD tāāli, CL tál, a root also
       present in Chadic Gude
*tárá, three (but cf. 'eight' týn-/tárārā) | CD tárā (see list 1)
té, sting, prick, dazzle; appear | CD tàt, AD4 Momi taks-'reveal', cf. tá 'hit...'
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té, stone (see list 1)
(y \notin n /) t\bar{e} (< t \notin ?), anus
tébmá, luck(y) (translates CD jíī 'red' in ní/ín jíī 'luck(y person)', lit. 'red face')
(\acute{a}/)t\acute{e}k\bar{a}(/i?), gecko
tém, pass (through) | CD tēlì 'pass by', AD2 CL tāàn, AD4 Pere tàl- 'pass', AD5 Yendang
        tár-, AD6 Kare tá
témsì, insult
*té, push, sweep, carry along | CD tàà
*téksì, begin | CD tąksì
*tèémsà, sheep | CD tàámsí; also note AD4 Pere tàmī, AD5 Yendang dáá
tí, tree, stick (see list 1)
tī, father (but tệệná 'your father') | AD4 Pere táā, but túnú 'his father', cf. AD5 ZM yera,
        Yendang yórī (with prefix yV-?)
tì(y)ām, afternoon
tīk, gourd | AD4 Dii tíg
*tíksá, snail | CD tíksáā
(á/)tí/sáā (< á/tísàá?), owl | AD5 Yendang tűnsűn
tísēn (or tísèn), ant
*(péé) tóm, work (n) | CD pén tóóm
tón, eat, chew | CD tààn, AD5 Yendang táá-; also AD13 Kulaal tú but Niellim túy 'eat
        (staple food)', compare són 'staple food', AD5 ZM shaa 'eat', and AD6 Kare só 'chew'
*t\acute{o}\eta, play (+ t\acute{o}\bar{o} 'ear') | CD t\grave{o}ng t\acute{a}\bar{a}
tòóŋ(nē)- (also tùŋnè), good, effective, clean, beautiful | AD4 Dii tōō and AD5 ZM tnọo,
        Yendang tàn-, all 'be good, tasty'; cf. AD6 Karang sù
*tóntón, strong, healthy | CD tóngtóng
tó, miss, err
t \phi \bar{\phi}, bow (see list 1)
tóō, ear (see list 1)
tớōb, Shea butter tree | CD túūp; cognates in AD13: Kulaal tói, Niellim tāàm
túá, here
túū, head (see list 1)
*(péé) 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' and CD sásáā (also of course Fulfulde semt-)
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*tūùŋ, five (but changes form in compound numbers: túùŋ-kīn 'six', tóòŋ-sī-b̄ḍ̄rá 'seven',
       týn-/tárārā 'eight', túùŋ-sí-nèá 'nine', cf. wúp-séè-tūùŋá 'fifteen') (see list 1)
t\acute{u}\eta, point (at) | CD t\grave{o}\grave{o}, AD6 Kare t\grave{o}
tún, push | CD tùt, AD2 CL tì, AD4 Dii tú', but Pere tààr-; also AD5 ZM dnó
tý, finish, complete (tr) | AD4 Dii tú 'be completely destroyed'; cf. CD dùk, dūksì
tỳrým, between, among | cf. AD4 Dii tàg
týn, spit | AD2 CL tó, AD4 Dii tò'ō but AD4 Momi tán-, AD5 Yendang tēn-; CD tūsì
(á/)vàā, (kind of) lizard
vállì, help | < Fulfulde walla
vó, squat
vúm, roast | AD2 CL wùn 'faire frire'
vúūn, goat (see list 1)
(á/)vúnsá, mosquito | CD bóósí, AD4 Momi woos, Pere vórè, Dii vád, Karang vwórō, Kare
       wóró, cf. AD5 ZM wara 'bee', Yendang vórī 'bee', wērē 'honey'
vý, die CD wúú, AD4 Momi wér-, Pere vò-, AD5 ZM vò, Yendang wés-, AD6 Karang hū,
       AD13 Kulaal úíí, Niellim 'úy; cf. AD2 CL vàd
vyvšá, shadow | AD2 CL nyìsà; cf. PP *vu 'shade'
vwē, beat, hit | clearly ideophonic: CD vwàt, AD6 vwā, elsewhere AD4 Momi bee', Dii vàà,
       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
wàlán, (cooking) pot (see list 1)
wáásá, heat, hot (cf. 'fire') | also compare ZM wnaa 'hot'
wánsá, body
wá, leave, let | CD vét
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wé, year, time, season | AD4 Momi wiir, Pere vērè, Dii vē'

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wé (pl. wí), child | CD wéé 'small, child', AD2 CL wà, AD4 Pere wārwā, Dii wāā, AD5
       Yendang vāā; *van is PP
wéjìm, morning
wéjìn, tomorrow
(a/)wékkā, (his?) wife ('woman' with prefix à-) | (vestigial) compounding of terms for 'man'
       and 'woman', perhaps absent in Tiba, is a general feature of SWAD (and CD:
       lé[-]rùm 'man', né[-]nwù 'woman'); if Tiba 'woman' were of this type, it might be
       related to AD4 Dii wā(-)kéé, etc., cf. AD2 CL kéèn 'woman'; otherwise it may be
       connected with an eastern root: AD6 Kare wî, Karang wùúy, AD13 Kulaal wáá,
       Niellim wày, cf. wíī, female
* wép, mix | CD wèp
*wér, arrow (see list 1)
wérùm-wē, (small) bird | cf. AD4 Momi welmąz 'nightjar'
wésèē, firewood | AD2 CL wōgsà
wésì, hurt | CD nwōnì (but Mapeo Chamba wēni), AD4 Pere wòò-
wék, hide (tr)
wéèrá, mushroom
wíī (wíīn?), female | AD6 Karang wùúy, Kare wíi '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 wán, AD4 Pere wór-
wōb, baboon
wōgbíŋ, bat
w \acute{o} m (n \bar{e})-, cooperative, conjoint (labor)
wóm, oil (see list 1)
wómsā, elephant grass
wón, fight (vb) | CD nòng but nòòm 'be angry', cf. AD4 Pere gò- 'fight' but nò- 'be angry',
       AD5 Yendang yómán-
w\bar{o}\eta, fight (n) | CD n\bar{o}ng
wòp (intr), run | AD5 Yendang ó-, cf. CD nwòp 'avoid'; also see wúp 'fear'
wópsi, ride (horse)
wopsinsá, sweat | cf. CD wàt, AD2 CL wàd, but AD5 ZM pmo; *tiin is PP
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* wó, hide (intr) | CD wóó, cf. AD5 Yendang kúú
wób, bone | cf. the well-represented NC root appearing, e.g., in PP as *kup (but AD5
       Yendang kún)
w \phi \bar{\phi} b, ten (see list 1)
wú, drunk (be) | cf. CD wit, AD2 CL wid
wù, 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 root, cf.
       Bata gíb; also AD6 Kare wáù; see wòp 'run'
wúptá, fear (n)
yá, go (and visit, + sènén) | AD2 CL yā 'venir', AD4 Dii yà '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 yànsán-
*yáā, what?, why? | CD nyáā
yáà, friend (see list 1)
yá, old, used
yà (intr), swallow | cf. AD4 Dii yó'
(á/)yà, where? | AD5 Yendang yáà
yámik, pl. sèér, young, small (child) | cf. CD míí (pl. méém) and AD5 Yendang (vāā,) pl. yấ
yáān, bad
*yān, horse (see list 1)
yáásá, leaf (see list 1)
yé, (at) home | CD nyēm, AD2 CL yīll 'house, compound', AD4 Dii yēē 'courtyard', AD5
       ZM ve
yé, ready, ripe, healed (be), adj. yénèē | AD4 Dii yéń ná 'true, good', cf. 'cook', cf. AD2 CL
       wè
yéksì, light (fire from another fire) | AD4 Pere yèg-
yér(i)má, flame | AD2 CL yèél 'red, flame'; cf. bórùm 'thunder, lightening'
yéēm, meat (see list 1)
yēm, carry (to), present (something) with an obeisance | cf. CD nyēnì
*yèmyēm, yesterday | CD nyèm
yémsā, song | CD nìmsí but AD4 Dii yéé, AD5 Yendang yēk
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yéēn, buttocks
yéη, sow (by casting), scatter | CD yèè, AD4 Pere yàm-'disperse'
* yéēn, bedbug | CD nyéēng
yéèη, cold (be) (as wind)
*yénlá, digging stick | CD nyénlí
yí, eat | CD líí, AD2 CL lí, AD4 Momi ree, Pere lé-
* yí, steal | CD yíí
*yìk, lion (see list 1)
virit{i}k, black | CD virk{i}, AD4 Momi wii-, wiir- 'be black', Pere vii- 'be black', Dii vii = ii 'be
                black', AD5 ZM viiki, but also AD4 Pere dírī, AD5 Yendang vítī, AD6 Kare vírí
                (both having cognates in AD13 as well)
(\acute{a}\eta/)y\bar{\imath}\bar{\imath}m\bar{a} (< yii' eat'), right (hand)
yó, pull, stretch | cf. CD nwòt, AD4 Dii wòò; also AD5 ZM gno 'pull', zno 'pull out'
yógréēn, soft | AD4 Momi yakw-, Dii yōō 'be soft' vs. CD wógléēn, 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)
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                CD lóóm, AD2 CL lùm, AD4 Momi rom(-d-), AD4 Dii nòn, AD5 Yendang rún-,
                AD6 Karang nūŋ, Mbum lóŋ
y \phi \bar{\phi}, snake (see list 1)
yϕ, weave, plait
yóósá, rope | CD yísí, AD4 Momi yokla
y \acute{o} \acute{o} \acute{s} i, swim, cross a river by swimming | AD4 Pere w \acute{o} (g)-; cf. CD y \acute{a} \acute{a} 'climb, cross a river
                 (by any means)', AD4 Pere yáá- 'cross (a river by means other than swimming)'
yúū, death, dead body | cf. CD wéē, AD5 ZM vọo, Yendang wérē, AD6 Karang húl, AD13
                 Kulaal ùààl, Niellim 'úúlū, all probably related
yúú, hunger | CD wúú, AD5 ZM wnoko; cf. AD13 Niellim nyúnī 'thirst'
yúksā, fish | CD wúūk, cf. AD4 Momi duga, duukt, Pere dúrè, AD6 Karang nzúy
yým (or yóm), collide (with) | AD5 Yendang yìn-
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