# A Linguistic Sketch of Tiba (Gà) 

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Voici réunies les deux parties de cette esquisse concernant la langue tiba (gã) 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 : http://www.ethnologue.com/language/ttb

## Version with corrections not in the published version

# 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 lángsí́, and in fact seemed unclear about its exact nature.

The Tiba (Tibá in CD) do not use this name for themselves. Rather, they call themselves àGàá níă 'Tiba people') and their language àgà ą̀pá ('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 ${ }^{1}$. Unfortunately, the published lexical data on a number of languages which might interest us, particularly AD groups $5^{2}$ (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 ${ }^{3}$ (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 sî̀ 'bury' and síb '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 ȩ, $\rho$ to represent high mid vowels and $e, o$ to represent low mid vowels; ą 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 $e, o$ and barred $i, u$ are represented by $e$, , $\varrho$; this is unlikely to cause confusion, given the almost total complementary distribution of the vowel heights concerned. Consonant notation is conventional; note only that $v W$ represents a labial flap and ' is used for glottal stop. In tonal notation, / represents downstep, while $\hat{V}$ 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 $n g$ is noted $\mathfrak{y}$ where necessary.

In this part of the paper, Tiba nouns are presented in citation form, i.e., with à- or $a^{\prime} /$ - prefix and final -á (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-ạ́n-ā'arm, hand'
CD wáā; the general root in $\mathrm{AD} 2 / 5 / 7 / 8 / 9$ is nasal + central or front vowel + nasal


## à-tó-ā 'bow'

CD tạ́ậm, 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-bàk-á 'bushcow'
AD5 ZM bàkà, Meek Yendang $6 a ̈ t$

## à-ką̀nkiláā 'chicken'

AD5 ZM kìj, cf. Meek AD8 Kam kume; there is no nasal in AD2, thus CL kọ, 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 nàbą̀n, AD 4 Pere nàmą̀nè, Meek AD 5 Yendang name

## à-náksā 'cow'

AD4 Momi nogs and Pere nàgò, Meek AD5 Yendang nắkí, AD6 Koh nākā, cf. PP *niak; but $\mathrm{CD}, \mathrm{AD} 2 \mathrm{CL}$ nà, also in AD 7 ; AD 4 Dii has ndàà, AD 5 ZM has nàpg

## à-fý-ā 'dog'

Meek AD7 Yungur bwe, Mboi abwa; possible cognacy with the AD6 series Mbum gói, Karang gáy, Kare váà; * bu is also PP
à-nín-á'drum'
Meek AD2 Mumbake ringima
à-tóø̄ 'ear'
CD táā, AD5 ZM sho̧ọ (derivation from an earlier *twa, or *tue as in Common Bantu, seems patent), Yendang tớk, the velar $\mathrm{c}_{2}$ is widespread: AD2 CL túng, AD4 Momi tok, Pere tógò, Dii tóg, cf. AD6 Karang súk
à-én-á 'egg'
ZM wnaŋkaa; note Meek AD5 Yendang hà̀t, Kumba pa; the full AD5 set suggests cognacy with the widespread "paraz" form (cf. AD2 CL bōòd, AD10 Longuda föla, AD14 Niellim hwáánī)
à-ísā 'eye'
yir/l forms are widely attested in non-Bantu Bantoid (along with si and li) and in AD13; otherwise, we have PP *gis, to be compared with Fali (AD11) nisi and Bantu A. 90 Kako misi (also, of course, Fulfulde yeeso 'face', yiitere 'eye')
(à-)sē-é 'fingernail' (perhaps -sé-)
AD5 ZM saari, Yendang sốó, Meek AD8 Kam aciri-, AD9 Jen/Munga cina-

## à-nè-á 'four'

AD4 Pere nārō, Dii ndādơ, ZM dneerọ, CL nāārā, Meek AD5 Yendang nāt, AD8 Kam nar, compare AD6 Karang nìn, Kare nè̀, Mbum nyàn

## à-vún-ā 'goat'

CD víñ, AD2 CL vā, Meek Wom/Mumbake vua, AD4 Momi buuz, AD5 Yendang bií, Kumba wii, Gengle/Kugama ayi, AD9 Munga naŋbu, AD6 Karang gúy, Koh vúỳ, AD13 Niellim 6wày

## à-kpàngúm-tā 'groundnut(s)'

CD kpàán 'groundnut', gúūm 'bambara groundnut', Meek AD2 Chamba (Leko) kpay[-]wara (now without the preposed term: wád)
à-gérá 'guinea-corn'
Meek AD2 Wom gbera, cf. CL yēd, CD yírí; also see -hạ́n- 'guinea-corn' below
à-sóksá '(body) hair'
AD4 Momi suuk 'hair', AD5 ZM sòò; a term noted sũri by Meek (Yendang súúlirí ) 'hair (of head)' (Meek does not record 'body hair') is widespread in AD5 outside Mumuye, cf. Dong suk 'hair' (Blench 1997), AD6 Koh sừy 'hair'; a comparable root appears in some A13 languages
à-gbōm-á (gbōóm) 'heart'
AD5 ZM gbogti
à-nyān-á'horse'
CD nyāān, CL yā, Meek AD8 Kam yeŋe

## à-lún-ā 'knee'

CD lúúrí̄, CL lígà̀d 'articulation', Meek AD2 Wom lipbera; AD5 Teme luy, Kumba ningi, Gengle/ Kugama ruı, also Yendang (yấ-)rúnká; AD8 Kam alunu (also A13 Bwa group d/rul vs. AD6 Kare (nzá-)túùì)
à-bák-á 'knife'
Meek AD8 Kam abak, cf. AD4 Dii pāg
yàásá 'leaf'
CL yēsą̀, cf. CD yáà and Meek AD 5 Yendang nyãkahẽ (yấnká, with classifier hę̃), Waka nyaŋa, Teme janga, AD9 Jen/Munga yangka
à-bę́-ā'leg'
AD4 Momi bi 'paw'
à-báa-ád 'leopard'
AD4 Pere bàlą̀m, cf. CD gbę̧ę, AD5 ZM gbmee, Meek Yendang kpe (kpę̧ê); the relationships between these roots AD2 CL $g \overline{9}, \mathrm{AD} 4$ Momi $g o o z$, and Meek AD7 fila, 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 nyàm
(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 fȩ̧è, Niellim pyāą̄; PP *pyan has reflexes in both initial $f$ and $s$, cf. 'sun'
à-dók-ā 'mountain'
Meek AD8 Kam aday
à-kạ̄p-á 'neck'
Meek AD5 Gengle/Kugama kõaך, AD7 Libo kwȩena; elsewhere in groups 5 and 7, the forms are kir, kwer, kor, cf. AD2 CL kòól, AD4 Pere kōlą̀y; also cf. 'shoulder'
à-jí-ā'night'
AD4 Pere zègò 'darkness', AD5 ZM zii, Meek Kumba jim

## à-6ón-á 'river'

Meek AD5 Yendang boyko (bōnkó), Waka bango, etc., AD2 CL wūp. But the root is also apparently in "Mambiloid" Nizaa
à-yókúm-á 'salt'
Meek AD2 Mumbake nyū, AD4 Pere yō̃̄, Meek AD9 Jen jukwẽ; also cf. CD nyénúm 'kind of salt', AD2 CL nwūùm

## à-yō-ā 'snake'

CD yę̧̧é; cf. Meek AD9 Jen dzo, Munga za̧u, AD7 Mboi za, Libo i[-]zonya, and all apparent cognates with initial $s$ in AD5 and 7; also cf. AD4 Dii yọ́ 'slough off (old skin)'; while this root is best known in BC (cf. Bantu *-j/yókà), it is also found in languages presumably subjected to little BC influence such as AD11 Fali jỡ and Ubangi Gbaya gók
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 AD 2 Wom lela, AD 5 ZM rèetè, Yendang lékấ, but CD lág̣̀
à-tár-á 'three'
CD tárā, ZM tat, CL tọōor $\begin{array}{r}\text { ă, Meek } \\ \mathrm{AD} 5 \text { Yendang tat (tāt), } \mathrm{AD} 7 \text { Yungur (fi)ta, Libo tar(in), }\end{array}$ AD8 Kam car, AD9 Jen (wa)ta
à-tí-á 'tree'
AD4 Momi te, the root is also clearly represented in Meek AD5 Yendang (tȩ̧eç), Waka, Teme and AD2 Mumbake, CL tȩ́, cf. CD tím with final nasal (AD10 Longuda shows a plural form with final -m, Kleinewillinghöfer 1996); also cf. AD13 Kulaal tȩ́ọ, Niellim tȩ̧lā, but AD6 Kare dì

## à-lǿm-ā 'war'

AD4 Dii lúú 'make war'; cf. AD6 Koh yứm̀, Mbum nyîı

## à-jínjín-á' water'

Meek AD2 Lekon (Chamba Leko) nyuŋuna, cf. Wom/Mumbake yila, CL wā̄; also compare AD4 Dii zí1́ 'urine', zì̀ 'river'; possibly connected with the AD13 root represented in Kulaal by ím but elsewhere by rim forms

- Cognate in CD
à-wér-á (wéé) 'arrow'
CD wạ́rí
à- $d(\bar{u})$ 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 dạ̀n 'beyond, on the other side'


## à-ýsỳn-á 'breast'

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

## à-gàn-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 gbāp, PP *gwam, among others

## à-kònlár-ā 'elephant'

CD kòngláá; CD has an apparently derived verb kōnglì 'bend' from which this root may in turn derive (relating, for example, to the form of the tusks); note, however, the existence of Meek AD7 Roba lara and AD10 Longuda larawa, suggesting this root could also theoretically be an ancient compound (also cf. AD4 Pere gòmī)
à-tūùp-á 'five'
CD túùná: initial $t$ - is characteristic of BC ( AD has mostly $n$-); back $\mathrm{v}_{1}$ can be found, for example, in Jukunoid

## à-túu-ā 'head'

CD tíi: a NC root; but SWAD (including AD5) has mostly initial $y$-, $j$ - (or $\varnothing$ as in Yendang úk), cf. nevertheless AD4 Dii túń 'face'; AD6 (excluding Mbum) has túl
à-jīnttá 'pot'
CD jīī; see -wàlán- below
à-nyik-á 'lion'
CD nyìk, AD2 CL (gbàál-)nìg
à-kémjí-ā'monkey'
CD kéém jíl, lit. 'red monkey': CB *-kímà (9/10)
à-(y)ǿn-ā 'nose'
CD núùn: a well-represented NC root with many probable cognates in AD , though the correspondences are too complex for certainty, cf. for example AD2 CL níd, AD4 Pere $\underset{\sim}{c} \bar{a}$, AD6 Mbum hơơok, Karang hớkō but Koh mưừ, AD13 Niellim hùny

## à-wớm-á 'oil'

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

## à-kìsēn-á'slave'

CD kạ̀sēn; AD2 CL Meek kwasa (now found without the $-s$ - suffix: $k o^{\prime}$ ), apparently from a verb kọ̀ 'catch'
à-sām-á 'spear'
CD sąąąm; cf. ZM shàlày, suggestive of Chadic; also compare AD2 CL sííd 'arrow', AD4 Dii sȩ̧̧e 'war', sęęe 'arrow', AD5 ZM shòn, Yendang sọn, both 'arrow', and AD13 Kulaal sòl, Niellim sàl, both 'combat'

## à-ín-ā 'tooth'

CD nîin: a NC root not well represented in AD unless cognacy can ultimately be established with AD2 CL nắgą́l, AD 4 Momi nuur, Pere núúlè̀̀ cf. PP *niu
à- 6 ęęer-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-ón-á 'bee'
Closest neighboring AD roots are $\mathrm{AD5} \mathrm{ZM}$ wara (cf. Meek AD5 Yendang fõri (Vórrī ), Waka/Kumba võri, Teme vobe), AD2 CL núúd (cf. Meek Wom yora); also compare AD4 Pere ólè 'honey'
à-lá-ā 'belly'
$n / l a$ is well represented in Bantoid and presumably related to a PB *-dà (9); it is also present in Mambila; note that CD has nàà 'in, inside'
á/-gbáy-á 'bird'
Related to AD4 Pere gááái 'bat' and/or gbą́gò 'pigeon'?


## à-lēká 'blacksmith'

AD 2 CL lām; cognacy is hypothetical given that every AD group has a different characteristic root; also compare AD4 Dii nā $;$; cf. however 'forge' in list 2
à-gbām-á (gbāám) 'blood'
à-mí-á 'door' (< mî̀ 'close'?)
à-gạ́nsā 'fly'
All matches unsatisfactory: CD gȩ̧ę, AD4 Momi gumkaģz, Pere gúí; cf. Meek AD5 Yendang group $k \tilde{u}(k \bar{u} n)$

## à-nyáà-á 'friend'

AD6 Karang yắh, Meek AD8 Kam anwa, but cognacy is hypothetical given that practically every language has its own root for this gloss; CD mànáà is a derivate of màn- 'peer', often used as a prefix
à-hą́n-á' 'guinea-corn'
Cf. Meek AD5 Yendang koy (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-pígèè 'maize' (but curiously CD pī̄-g $\overline{\mathrm{s}}$ 'cassava')
à-Ísá 'mat'
Cf. AD6 Karang hîh
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 $t$, while the Bikwin group has either $k w$ or $c w$, this root is more widespread in NWAD (see Jungraithmayr 1968/9 ; also see Boyd 1989b); note the curious resemblance to AD4 Pere kinè 'compact, dense'
à-wàlán-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'
à-gāáa (gāá $)$ 'road'
à-sé-é 'sun, God'
CD súū; the semantic equivalence is very widespread in SWAD languages; also AD6 Karang séh; note AD2 CL sò, AD4 Momi see, Pere s̄ㅡㄴ, Dii sēē, Meek AD5 Yendang si, se (nóó-sī), all meaning 'moon'
à-wóģob-ā'ten'
Cf. AD4 Pere fób, a widespread AD root is kop (cf. AD5 ZM ko̧p, Yendang kọ́p, AD2 CL $k o b b$ and Meek AD10 Hill Longuda kwoo); another is $b u$ in AD7/8 and perhaps 9
(á/-)sánká '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 AD 2 (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, $\mathrm{AD} 2 / 4 / 5 / 8 / 9$ 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 temporaily, 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 yéndán 'Yendang language', wèè́ yéndāŋ-ù bīntī 'one Yendang person (child)'.

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# A Linguistic Sketch of Tiba (Gä), 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:

$$
\begin{array}{lllllll}
m & & n & & & & \\
p & f & t & s & k & k m & k p \\
b & v & d & j & g & g m & g b \\
b & & d & & & & \\
v W l & y & h & & W &
\end{array}
$$

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

Major differences with respect to Nnakenyaare Chamba Daka (CD) are:
i) A voiced "injective/plosive" contrast in the labial and dental orders. It will be noticed that the lexical frequency is such that this contrast might equally be envisaged as "fortis" (= injective) vs. "lenis" (plosive). To the ear, the $b / 6$ contrast is less perceptible than $d / d$; however, $d$ may be confused with $I$.
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 $\left(\left[k^{h}, g^{h}, h\right]\right)+$ High central vowel $+\eta$. (In fact, the relative weight of stop and aspiration is such that the phonetic notation might as well be $\left[{ }^{k} h,{ }^{\mathrm{g}} \mathrm{h}\right]$.) Now it turns out that, while we have at least one initial kuy, we nowhere have terms of the form kij, gij, hij, or ip. The latter are therefore reasonable phonological representations for these sequences; nevertheless, in our lists, they appear with vowel ą for easy identification of their peculiar nature. (Note that Shimizu 1983:13 also remarks central vowels before $\eta$ in ZM, and assigns them to phonological $i$, perhaps less convincingly insofar as his dictionary shows the preceding consonants to be arbitrary. Note a similar case in Tiba involving a̧ as $\mathrm{v}_{2}$, árą̣ク 'fry'; it is not clear why this vowel should not be realized $i$, but at the same time, this verb has an aberrant canonic structure.)
vi) As in Mapeo Chamba (but not Nnakenyaare CD), lexical items may have an initial vowel preceded by glottal stop. Glottal stop is nevertheless not represented here, as there seems to be no useful phonological role for it.
vii) There are cases of initial labialized $m\left[\mathrm{~m}^{\mathrm{w}}\right]$. 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 wéē̃] 'worm'), this solution is questionable, aside from any phonetic implausibility. Its position in the system must be left undecided for the time being.

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

| $m$ | $n$ |  | $\eta$ |
| :--- | :--- | :--- | :--- |
| $P$ | $T$ | $S$ | $K$ |
|  | 1 |  |  |

There are, however, two important questions to be resolved:
i) Is there, as in CD, a $l / r$ noninitial contrast? On the basis of the data collected, it would seem this contrast does not exist intervocalically, where [1] and [r] seem to be allophones ( $r$ is used in our notation except between high back vowels, where [1] 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 $r \mathrm{C}$ or $l \mathrm{C}$ groups, although $\mathrm{CV} r \mathrm{VCV}$ may be such that $\mathrm{V}_{1}$ and $\mathrm{V}_{2}$ must be identical (or at least $\mathrm{V}_{2}$ is neutral). In such case, these items could be reanalyzed as $\mathrm{CV} r \mathrm{CV}$. (Given general scarcity of data together with difficulties in distinguishing compound terms, nothing will be said here about possible consonant sequences, which, as in CD, are likely to be severely restricted.)
ii) Do the semivowels $w$ and $y$ need to be represented intervocalically outside loan words? The data collected thus far suggest they do not, but the integration of loan words may be such that these phonemes should nevertheless appear in the intervocalic system.
b) Vowels:

Tiba has a nine-vowel system: the usual seven-vowel triangle (i, e, e, a, $o, \varrho, u$ ) together with two rounded front vowels, $y$ (distinguished from the palatal semivowel
elsewhere in this paper by tone marking or context) and $\varnothing$. 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 $\underset{\sim}{i}, \underset{\sim}{y}, \underset{\sim}{e}, \underset{\sim}{a}, \underset{\sim}{o}, \underset{\sim}{u}$ 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) $\mathrm{V}_{1}$ in $\mathrm{CV}_{1} \mathrm{C}_{2}(\mathrm{CV})$ (where $\mathrm{C}_{2}$ 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 $\mathrm{CV} n \mathrm{CV}$ 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 $\mathrm{NV} / \mathrm{NV}$ contrasts (just as in other Southwestern Adamawa, SWAD, languages, certainly Dii and probably Yendang), there is no justification for setting up $n y / y$ and $n w / W$ 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 $\mathrm{C}_{1}$ in $\mathrm{C}_{1} \mathrm{~V}(\mathrm{~V}) \mathrm{N}$ 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:), CV $n$ (only CV: $n$ ), or CV:C (only $\mathrm{CVC}_{2}$ ) for any $\mathrm{C}_{2}$ other than $n$ also holds in Tiba. The rule requiring that $e$, , $\varrho$ be long in CD (except in C_CCV) does not, however, seem to hold. Tiba has cases of at least $\mathrm{Cec}, \mathrm{Cȩcv}$, and $\mathrm{C} \varphi \mathrm{C}$, though in the
case of the latter, the length contrast is much clearer to the ear when a vowel suffix is added. Long $\rho_{\rho}$ and $\rho$ in C_C and C_CV contexts are, however, limited to cases in which $\mathrm{C}_{2}$ 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 $\mathrm{CV}(\mathrm{V}) \mathrm{CV}$ structure. For either phonological or morphological reasons, however, contrasts may be impossible to find before some $\mathrm{C}_{2} \mathrm{~s}$.

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 $\mathrm{CV} n$ is therefore used in the word lists presented here); 2) though less frequent, vowel lengthening and nasalization followed by loss of the nasal consonant can also be observed in the case of $\mathrm{CV} \eta \mathrm{CV}$. (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 $\mathrm{CV}(\mathrm{v}), \mathrm{CV}(\mathrm{V}) \mathrm{C}, \mathrm{CV}(\mathrm{v}) \mathrm{CV}$, and CVCCV , are attested for nouns and verbs, with some longer forms, particularly $\mathrm{CVC}(\mathrm{C}) \mathrm{VC}$, for nouns. (As indicated above, the $\mathrm{C}_{1}$ position may be occupied by glottal stop.)

The restrictions on $\mathrm{V}_{2}$ 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:

- $\operatorname{CV}(\mathrm{V}) \mathrm{CV}$ and CVCCV nominals have $i$ as $\mathrm{V}_{2}$ when the term is in nonfinal position; in final position, this vowel becomes á. (In the lists provided here, such nouns are written with final -á, making them easily distinguishable from $\mathrm{CV}(\mathrm{V}) \mathrm{CV}$ 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 -Cí or -/Cí (i.e., downstepped $\hat{1}$ ) 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 -àá (cited here with final -à), hence nonfinal $-i$; and 2 ) nominals with final -áā, hence nonfinal -í, itself followed by downstep.

- There are exceptions to the rule just stated: these include a small number of terms with final -á or -áā which remain invariable in nonfinal position (i.e., their final vowel does not become - 1 ). There is also one attested case of a CVCCV noun behaving like a CVV nominal in both having a final contour tone and being invariant in final and nonfinal positions: pùglàá 'armpit'. It may be that the term for 'sickle' alternates between invariance (bàámsàà) and variance (nonfinal bàámsà, final bàámsàrá, see 'Noun morphology' below).
- A small number of nouns have final -à $\bar{\sim}$; the one case of alternation (gýsià $\bar{\sim}$, gýsỳn) suggests this structure was originally -v̀ $n-a$. The -á marking final position has thus been incorporated into the root, the form in nonfinal position being $(-) / \mathrm{C} \overline{\tilde{a}}$ (with downstepped mid tone).
- There are also $\mathrm{CV}(\mathrm{v}) \mathrm{CV}$ nominals with high $\mathrm{V}_{1}$ and final $\grave{e} \bar{e}$ (wésèè '(load of) firewood' with mid $\mathrm{V}_{1}$ being an apparent counterexample), which could conceivably be analyzed as deriving from $-i-+-a ́$ 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 $\mathrm{CV}(\mathrm{v}) \mathrm{CV}$ nouns, sìijìi, a variant of sì̂î, 'civet cat', sáátí 'porcupine', and jèrí 'whirlwind', which have root-final -i (-iy?), giving -i-á in utterance-final position.
- Like CD, Tiba allows CVCum (also cycym) and CVCV $\eta$ (with $\mathrm{V}_{1}=\mathrm{V}_{2}$ ). 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 $\mathrm{V}_{1}-\mathrm{V}_{2}$ 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 $\mathrm{V}_{2}$ 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 $\mathrm{V}_{1}$ (root) position, doubtless owing to this neutralization of contrasts. There is furthermore some tendency to total assimilation when $\mathrm{V}_{1}$ is either $\underset{e}{e}$ or y. (It may be noted that Tiba does not seem to have the $\mathrm{C} \rho \mathrm{c} \rho \boldsymbol{e}$ and $\mathrm{C} \rho \mathrm{C} \rho$ 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 (CV́v̄ >CV́/, CV́C(C) $\bar{V}>C V ́ / C(C) V ́)$. 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 3 sg subject $k i(/)$ and nominal object. It appears that this construction is unfortunately not suited to revealing verb tone-class distinctions. Indeed, most transitive $\mathrm{CV}(\mathrm{C})$ verbs have a falling tone, (/) $\mathrm{V} C \overline{\mathrm{~V}}$ or $\overline{\mathrm{V} C V}$, in this context, the L component being perhaps attributable to the deleted à- prefix of the object (although such verbs in elicitation also seem to have a HL tone). This L component disappears when verbs are followed by a nominal object with á- prefix or a nonnominal term. These verbs are therefore given in the glossary with H tone. A few transitive $\mathrm{CV}(\mathrm{C})$ 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 $\mathrm{H} / \mathrm{ML}$ 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, kí. Indeed, this seems to yield at least three classes, H (H $/ k i ̂), \mathrm{M}$, and again a very small number of L ( M is perhaps sometimes realized H with no
following downstep). Very few $\operatorname{CVC}(\mathrm{C}) \mathrm{V}$ 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 -nęá, 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: $\mathrm{H} /$ néá or Hnȩ/á. It has been impossible to determine whether or not this variation is conditioned.

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

A fourth context for determination of verb tone classes may be as the first verb $\mathrm{V}_{1}$ in a $\mathrm{V}_{1}-\mathrm{V}_{2}$ 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 ì | 1PL subject wíí |
| :--- | :--- |
| 2S subject à | 2PL subject míl |
| 3S subject $k i ́$ | 3PL subject wá |

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

| 1sg (à-)mēē- | 1 pl (à-)wȩţeç- |
| :---: | :---: |
| 2 sg (à-)wēe- | 2 pl (à-)métȩ́- |
| 3 sg (à-) gúú- | 3 pl (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 2 sg and/or the 3 sg . These are:

2sg suffixed -ąạ̧̣
3sg prefixed (i.e., the noun prefix becomes á/-)

It is quite curious to note that the 1 pl and 2 pl forms above seem to be precisely the inverse of the 1 sg and 2 sg 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 1 sg subject pronoun is essentially as in CD; its point of articulation is assimilated in subject position to that of any following consonant. The CD 1 sg possessive is postposed mèè. (The CD independent 1 sg pronoun, however, is nòk, for which no Tiba correspondence has yet been observed.)

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

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

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

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

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

The CD 2 pl and 3 pl subject marker is í. The object markers are likewise identical (-bû). The independent 2 pl form is in all likelihood derived from an earlier vú, the possessive being vę̣̀. The independent 3 pl is likewise derived from bú, with possessive bę̧̣̀. 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 2 pl and 3 pl 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 1 sg pronoun as the logophoric singular, though this requires textual verification.

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

## II.4. Tiba morphology

a) NOUN MORPHOLOGY

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

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

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

Nominals with a canonic form ending in a C suffix -á in final position. If, however, the nominal root ends in $-\mathrm{V} r$, the nonfinal form ends in -V rather than $-\mathrm{V} r$.

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

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

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

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

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

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

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

## DERIVATIONAL AFFIXES:

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

Nominalizer: There is a suffix -gúr- which can be added to any (nominal or verbal) adjective to form an abstract nominal, e.g., péēk 'new', -pék-/gúr-á '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 $-g u$-á. (It is also used to translate the CD "durative" when it has an emphatic or adversative sense, "definitely, contrary to expectations", indicating that the Tiba durative does not have the same range of meaning.)

Derivation: A certain number of likely derivational suffixes are attested in these data. It is not, however, possible to decide whether Tiba must be thought to have a highly developed and productive system like that of CD which is not apparent for reasons of chance distribution, or whether on the contrary it has, as seems to be the case, a more vestigial system like the one found in AD5 ZM. The "suffixes" observed are as follows:
i) The -si suffix: Many verbs have the form 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. sýỳm- ' be dry', sýmsì 'dry (tr)'; wōp 'run, fear', wópsì '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., dōn Greathe', dōnsī 'rest (i.e., make oneself breathe, breathe for oneself)', while others have more complex agentive relationships: kýy 'cut (down), clear
(a field)', kýýsì 'chop (into pieces)'. Others still are evident calques of CD, e.g., Géksì 'break, smash', cf. CD vwēksì, "frequentative" of vwék 'split'.

There are a few verbs of the form CVsì with $\underset{\text { cer }}{ }$ or as $\mathrm{V}_{1}$. It may be remarked that verbs of this form in CD would be derived from CV $t$ verbs; it is difficult to tell whether a similar phenomenon might exist in Tiba.
ii) Other "suffixes": $-k i$, $-l i,-t i,-r i$ : The suffix $-k i$ is represented by only three CVCki examples, two of them clear CD loans; -li appears in only two CVCli verbs, one a Fulfulde loan; $-t i$ is used in four CVC $t i$ verbs, three of them clear loans from CD, where the corresponding suffix is $-l i$; and $-r i$ 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 jánrì 'dry (meat)' (< jā̄- 'hot'?). Nothing, then, can be said about the semantic content of these "suffixes". Note, however, that, in CD, the term corresponding to Tiba Gùmkì- 'resound, be noisy' is a frequentative derivate in -kì of a different root, while the term for 'tickle' (Tiba diggli) is also a CVClì verb. Only one CVCtì verb (a sort of "diminutive") and no CVVti 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 $-\overline{\bar{m}}$ and -dim: 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 $\mathrm{CV} m$ orcv $n$, in which case the suffix is -dím. Like any noun, the verbal noun can take an àprefix and an -á suffix. If the noun suffix is $-\bar{m}$ and $-a$ is added, the result is phonetically [ $\overline{\mathrm{V}} \mathrm{m}$ máa]. 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 -dím.
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 $\mathrm{SV}(\mathrm{O})(\mathrm{C})$, where C represents predicate and utterance modifiers in general. The preposition of the syntactic object to the verbal noun, attested in CD, has not been observed. Nevertheless, as in CD, Tiba word order in noun phrases is such that a modifying noun precedes the "head" noun, while a modifying "adjective" follows it.

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

1) the definite marker ní preceding utterance-final modifiers (CDé(n)); a marker á or há seems to alternate freely with ní and is conceivably a direct borrowing from CD;
2) the locative marker (n)ī preposed to noun phrases (perhaps related to the above);
3) the locative anaphoric gáà preposed to locative terms (also in CD );
4) the preadverbial marker $j 1$ (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 (gò) in CD: this is nę́á (presumably nȩ́ + -á) after L tone, nȩ/á or /nȩ́áafter H tone.

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

There is an utterance-final marker translating the CD durative (tēe $)$ : this is $j \bar{a}-a ́ . ~ I t$ may be preceded by the definite $n i ́(C D$ é $t \bar{e} \bar{e})$.

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

Interrogative: There is an utterance-final interrogative marker -è, identical with CD. (In CD, this marker is used in verbal 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.

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

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-----, 1983, The Zing Dialect of Mumuye: A descriptive grammar, Hamburg: Helmut Buske Verlag.

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

á, exceed, surpass | cf. AD4 Momi ar-, Pere yór- 'pass'
á, gather, scoop up
árą̣ク, fry $\mid \mathrm{CD}$ nyānglì (possible metathesis)
án, open (wide), yawn (+ ǿǿrâ) | a widespread ideophonic root: CD yáá yáá, AD 2 Chamba
Leko (CL) yā, AD4 Momi aga̧n-, Pere àà-, Dii áá, AD5 Yendang hánk-, AD6 Kare 'á
áp, seek
ápsì, feel, touch (prob. < áp'seek')
ą́刀kpàā̆, mouth (also ą̣̆, language, speech) | AD4 Pere yāgò, Dii yăg, AD5 Yendang yák,
AD6 Karang nzák are conceivably cognate with this (probably compounded) root ąa̧̧̧, $\eta$, arm, adj. ą̣nnèe, relating to the arm (see list 1)
ąą̣̂, name | AD5 Yendang ík
$\bar{a} \eta \eta$, know | cf. AD13 Kulaal ọnn, Niellim 'ùnà
é, dry (something in the sun) | CD yērì, AD4 Momi yend-, Pere yì̀r-, Dii yè̀', AD5 Zing
Mumuye (ZM) yà, AD6 Kare yé 'dry'
ék, tear, rip, pluck \| AD4 Dii yè' 'split'
én, egg (see list 1)
*ék, burp | CD yą́k
ȩ́sì (HH?), cough | CD wūsì, cf. AD6 Kare hèl
̂̂l, lie, lie down, sleep \| AD4 Dii $\bar{i} \bar{i}$
înn, tooth (see list 1)
ísá, mat (MH?) (see list 1)
ísā (ếsâ?), eye (see list 1)
*ísèn, broom | CD yìsèn
ón, bee (see list 1)
*órēn, cold | CD wárēn
ónsì, lick

Ø̧óìnà, who? $\mid$ AD5 ZM wọ
ǿ, wash (oneself) | AD4 Dii yòō 'wash something', AD5 ZM welè, wolè, Yendang hù'bathe', AD6 Karang wòk, Kare 'òì
(y)ǿø̄n, nose (see list 1)
ǿǿrá (or ǿr), yawn (n)
*úk, hear, feel \| CD wúk, cf. the reflexes of Proto-Plateau (PP) *fwak
ý, knead \| cf. AD4 Dii vù 'pound (flour)'
$\bar{y}$ (nē)-, cool (as shade) | AD2 CL wùm
$\dot{y} p$, crush (under foot)
*ỳrýy $\bar{y} m$, ancestor spirit $\mid \mathrm{CD}$ wùrú(ū)m; cf. AD4 Dii yòō̄b
f́sì (HH?), suck
ýsì, twist, wring (perhaps identical with the preceding term) | cf. AD4 Pere vìýsỳn, 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 $\mid \mathrm{CD}$ gbòómsà, AD 2 CL gbòómsą̀, AD 4 Momi gamsa̧z, but Pere gbànè
bāŋkùlıúūn, elbow
* bàr(ù)b, twin | CD bàrùp, AD2 CL bàdạ̀p
* béēb, money $\mid \mathrm{CD}$ béēp
bén, granary $\mid \mathrm{AD} 4$ Pere binè̀, cf. CD bóón, AD 2 CL bón, AD 5 ZM bợọ̀, AD 4 Dii ván
* bèréèn, gazelle (kind of) \| CD bérèng, AD 2 CL bédèn
*bì, seed, kind (bí as N2) | CD bì̀
*bị̀, quiver (for arrows) | CD bę̣̂̀n
* bōksī, accompany | CD bōksì
bòr, big | CD wàrí, pl. wòpsá, AD 4 Pere bògą̀rè, AD 5 ZM bòrò are all likely cognates
búmlá, round
búp, kill | cf. CD bùt, AD4 Momi but-s- 'kill a sleeping animal'
býýri, draw, decorate with drawing | AD4 Momi bii-, AD5 ZM bii but Yendang vēeè-; cf. CL $b \bar{a} d$
*Gá ( $6 a ̀ ~ w i t h ~ s u b j e c t ~ \grave{m} ' 1 \mathrm{sg}$ '), come | CD báá, rarely with sense 'come' in AD, but cf. AD4 Pere bá- 'come forward'; however, AD2 CL gbá' 'move away'
Gák, hug, embrace, cradle | CD kpắk, AD4 Pere kpà̀-, kpà̀n-
Gák, knife (see list 1)
Gàk, bushcow (see list 1)
Gáksì (+ túū 'head'), think, worry about
Gáámá, midst
*Gán, farm (vb) | CD bààn, AD4 Momi baa-, Pere bàà-, Dii bàà, but AD6 Karang pā, AD13 Kulaal wáy, Niellim wāy
*Gān, field, farm | CD bāān, AD4 Momi bant, Dii bāb, but AD6 Karang pà̀, AD13 Kulaal ùààl, Niellim wáál
Gé-síbá, (down on) ground | cf. perhaps CD bēn for the initial element
Géé, bushbuck | cf. CD bą̀y, AD4 Momi bayamz'duiker', Dii bál 'kob'
$6 \bar{e} k$, (clay) dish
*Géksì, break, smash | ideophonic root: CD vwēksì, cf. AD6 Karang vwēh 'cut' and even AD13 Niellim 6ăgroì
Gę́, leg (see list 1)
*Gę̄n, bring | CD bēnì, cf. AD13 Kulaal wę̀n
bęęer, two (see list 1)
6í, lie, tell lies (+ léēm) | cf. AD4 Pere mì̀- + 'tongue'
bínsì, refuse | AD5 ZM bèǹ
Gíp, ask, ask for |cf. AD4 Dii vì, AD5 Yendang 6í-, AD6 Karang vwī

Góōm, wound, sore
Góòn, Gòn, cut, slash; split (intr); break (as day)
6ón, river (see list 1)
6ó, bean
6ó, throw | AD4 Dii gbò, AD6 Karang vwū

* bọ̆b, blind(ness) | CD bọọp
bọọb, dance (n)
6ढ̧́p, dance (vb) | possible cognate in AD13 Niellim 6ōn
Górùm, thunder, lightning | CD bọọ, AD4 Dii bớó, cf. AD6 Karang pọ́mnā; but also CD bélùm, AD4 Momi bulmi 'flame' (see yér(î)má 'flame')
Gùmkì (intr), resound, be noisy
Gúūŋ̄, ash, dust | CD būnā'dust'; *buy is PP and Proto-Jukun
Gúpsā, (harmattan) wind
Gýy $\bar{y}, \operatorname{dog}$ (see list 1)
Gýmsā, brain(s) | CD bólòmsí, AD4 Pere bórè̀; note AD6 Karang lī-pám
$6 \bar{y} r$, white $\mid \mathrm{CD} b \bar{u} r k i ́, ~ \mathrm{AD} 2 \mathrm{CL}$ bī̃́d, AD4 Momi bu(ni) 'white', bur- 'be white', Pere búí, Dii bú 'be white', AD6 Karang búí, but also pùkí, cf. AD5 ZM puru
dá, copulate $\mid$ CD léén, AD 5 ZM laa
dá, take out, remove
* dábrì, wrap (in leaves to cook) $\mid \mathrm{CD}$ dābrì, AD 2 CL dàp
* dándán, bitter | CD dángdáng
dáásì, choose, select (< dáà 'remove')
dén, cloth, clothing
dēn, vagina
dí, press
dī(nē)-, heavy, prob. < dí'press' | CD dìngdìng, but initial continuant elsewhere: AD4 Dii zì̀, AD6 K
dî̃̂, long | CD dẹ̀èrí 'long, far', AD4 Dii dì̀, AD6 Karang dì 'far'
dīglī, tickle | AD6 Kare dîkilì, cf. CD gēnglì
dì̀ (perhaps díī), eyebrow
dìpsá, cloud
*dók, plant (vb) | CD dòk, also AD4 Momi dokw- but AD2 CL dóp
*dóm, greet | CD dóóm, AD 2 CL dóm
dón, sing
dóō $\eta$, misery, poverty $\mid$ related to AD 5 ZM rán?
$d u ̀$ (or $d y$ ), ridge (in farm)
dúūk, mountain (see list 1)
*dùk (intr), finish, come to an end | CD dùk, cf. tý'finish' below, AD 2 CL dùg
dùk- stomach (but syntactically adjectival) | cf. ZM dùku 'skin bag'
*dúksì, finish, be used up $\mid \mathrm{CD}$ dūksì < dùk
dùm (intr), collapse, fall off, down
dùm, short, shallow
*(á)dúmá gàn, vulture $\mid \mathrm{CD}$ dúmá gàng, AD 2 CL dúmá
* dùngbàl, hippopotamus $\mid \mathrm{CD}$ dùngkpà̀lì, AD 2 CL dù̀ggbàl
*dúptì (HH?), deceive | CD dūnglì
dý, wet, moisten, soak | cf. AD4 Momi yii-; perhaps ultimately connected with CD dùrí 'rain'
dỳn (intr), go (in) | AD4 Pere dó-, Dii dó, but Momi tor-; also AD6 Karang rìh $d \bar{y} r$, deep | AD4 Pere lùù-, AD5 Yendang tīn- 'be deep'
dà (intr), break, shatter (from falling) | AD5 ZM daasè 'break (a piece) off', AD6 Karang dôr, Kare dộrọ̀
dé, taste \| AD 5 Yendang lék-, AD6 Karang lēh; cf. AD 4 Momi Coo $^{\prime}$
dē, testicles
dê, granary
dê, put, place | AD4 Momi de'(s-), Dii 'yé
dêk, forget | AD6 Karang yè̀krē
dę, other
*dí, burn (tr), light (fire) | CD dì̀ but AD2 CL dú, according to Kleinewillinghöfer (pers. comm.), Bambuka in the Bikwin group has lii
din, navel
dōb, in-law
đōbēn, cowife
đóōk, mouse | AD5 Yendang rò̀k 'kind of (domestic) rat'
dón, breathe | AD4 Momi don 'groan', Pere dù̀- 'blow, snore'; however, CD gòng, AD2 CL gòn, AD 4 Momi yons-, AD 5 ZM gnọ 'snore', these last three 'snore'
dónsì ( < dón 'breathe'), rest | same derivation in CD gōngsì; but AD5 ZM wnọkè; cf. AD6 Karang $\grave{o k}$
đóōn, hip (joint); thigh | cf. AD2 CL dūn, A4 Pere dōrè, Dii dōō, all 'leg'
dọọ kaǵạ̄̄, matriclan (compound with N2 'face'?)
dūk, penis | AD4 Dii ndọg, but Momi deek, AD6 Karang ndīW
dū̆̀̀m, perhaps also dúmà, back ( $>$ dûm 'behind') (see list 1)
dúmsā, urine | cf. AD2 CL wơóm, AD6 Karang tọ́m
 Karang lókō
fâktì (intr), tasteless, insipid
fé, burn (tr/intr) | CD pí, AD2 CL pȩ̀, AD4 Dii pì 'be hot', AD6 Kare più 'singe'
fé, twenty
féēn, moon, also fén /w̄̄̃ 'stars' (see list 1)
fésì, full, complete (be)
$f_{\sim}^{\prime}$, take (staple food with fingers)
fün(n)ì, begin ( < Fulfulde fuda??)
gá, illness
gá, get, receive $\mid \mathrm{CD}$ gààn
gáâā, strainer (for beer), sifter (for flour); also fishtrap | AD4 Pere gán 'fishtrap', cf. CD gę̧è
$g$ gāá, road (see list 1)
gàá, Tiba
*gām, horn | CD gāām
* gàn, chief (see list 1)
* gàān-túnén, donkey | CD gàng-pén-túnén
gàáy (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 ngè̀ (also ké ), but non-nasal elsewhere: AD2 CL gád, AD4 Momi ga'-, Pere gáár-(do)
*gápsì̀ (HM?), divide, distribute (adj. gāpsé(nē)- 'forked') | CD gāpsì
gāāsá, (dry) season \| AD4 Pere gāā, Dii gāāg, but AD6 Karang káy, Kare kę̣ọ
gásì (HM?), think (about), recall \| AD4 Pere gèl-, cf. AD6 Karang kèr
*gánsì (HM?), strain, sift \| CD gāāsì
gáņsā, fly (n) (see list 1)
gą̣́y, hunch (on back) |cf. AD5 Yendang kúkī; also CD gāy, AD2 CL gād
$g$ ą̣ $\eta$, large potsherd | CD gì̀
géē, sorrel
gé, cross (river)
géēk, (bambara) groundnut
$g e ̄ k$, grave | CD gāká, AD4 Pere $g a \bar{a} g o ̀$
gém, scream, dream, nightmare (also a verb, 'affect (as a bad dream)')
gén, break, snap (tr) | AD4 Pere gą̀- 'break (tr)' with derivative gą̀l- 'break into pieces (tr)'
$g \bar{e} n$, medicine | CD gą̣ān, AD2 CL gān, AD5 ZM gnān, but AD4 Momi genbąz, Pere gaabò, Dii $g a \bar{m}$
*gèn (intr), flow | CD gè̀̀n
gérá, guinea-corn (see list 1)
gésén, scorpion
gíỉk, chest | cf. AD 2 CD gìîll, AD 5 ZM gìn, but CD gàngà, AD 4 Pere gògĩ, gàgsàlè, AD6 Kare gò̀
gìm, smelly (be) | cf. CD gúúun, AD6 Kare gùnè 'smelly'
*gít, abstain | CD gìt
gittáámá, green
gó, pay (back)
gón, answer
*gònsá, breath | CD gòngsí́, see the doublet gbàysá 'snoring' below

gù (intr), fall
*gūb, thorn | CD $g \bar{u} p$ (cf. AD4 Momi kąpt)
(á) gýśàā, also gýsỳn, pigeon
gbá, call, call out | AD5 ZM baa (+ nyaa 'mouth')
gbá, vomit
gbắ, dig, dig up | AD2 CL gbặ', AD5 ZM gbmaa
gbák, grind (dry grain) | CD gòk
gbák, slip
gbāám, blood (see list 1)
gbāntīlóǿr, (earth)worm
(á)gbán, bird (see list 1)
gbàysá, snoring | CD gbāngsì 'groan' (compare đón 'breathe', gònsá 'breath')
gbàysì (intr), finish, run out | AD4 Momi gbams-, Pere bàm-, AD5 Yendang gooós-
$g b e ́ e ̄$, forest
gbér, dassie
gbōóm, heart (see list 1)
gmésí, move, shift (tr) | CD gbāsì; cf. AD2 CL gbá' 'move away', AD4 Dii 'mẹ’'move near' gmòp (intr), crawl
hám, salt
háp, bind, wrap (up)
hárā, headpad | cf. AD2 CL kālą̀ (with a wider sense 'rolled thing, rolling thing', AD4 Pere kàarè, Dii kāā, AD5 Yendang kántán; however, CD yérī
hắn, guinea-corn (see list 1)
hą́pmā ( or ką́pmã?), rain, saliva (see list 1)
já (or jáā or jấ), laziness | CD jààlén 'lazy person', AD6 Kare zòzò
$j$ já, smear, anoint; step (in something sticky)
ják, cook, brew \| AD6 Karang nzē but CD sākì
*jàm (intr), stand (up), swell (adj jām(nē)-)| CD jààm
(á)jàánsá, tiger nut | CD jáān but AD 5 ZM sán, Yendang tánká
jánrı̀, dry (meat) ( < jā̄-?)
$j a ̄ \eta(n \bar{e})$-, hot, feverish (be) | AD4 Dii zắgā'sun', AD6 Karang záynā'fever', Kare zày
* jáāy, tendon | CD jáāy, AD2 CL zèéè
jēé, scabies | AD5 ZM znàkn
$j e ̄ m k a ́, ~ s t r a n g e r$, outsider | cf. AD4 Momi genz, AD5 ZM zanti, Yendang zántá, cf. sènèn jērá, locust | cf. AD5 ZM zòro
jèrí, whirlwind
jé, see | AD 5 ZM zè
jíl, night (see list 1)
jií, theft, thief | CD yílēn < yíí'steal'
jī̈bàr, pocket | < Fulfulde jiiiba
jīntá, (cooking) pot (apparently singular though plural in form) (see list 1)
jínjíl, also jílà (in compounds, e.g., ón jíqà 'bee water', i.e., honey), jíliin, water (see list 1)
*jīpláãr, hyena | CD jīngláā
$j \bar{o}$, on, upon | CD $j \bar{u} m$
jóōb, poison | AD5 ZM znọ́po, Yendang zōn
jóm, squat | CD jọ̀òm
* jón, laugh (vb) | CD jòòn
jòōn, jòná, red | AD5 Yendang yōntí
$j o ̛(?)$, laughter | CD jòná, AD4 Pere zònè, Dii zọ̄m
* jū, up(wards) | CD $j \bar{u} \bar{u}$
$j u ̄ m$, flour | CD jọ̣ōm, AD2 CL zặ̧̣̆m, AD5 ZM zuman, but AD6 Karang só̧m, AD13
Niellim hùm
júp, mortar | AD5 ZM dun
júly, pound
$j$ j́, pour

*kámkì, gather (tr) | CD kāmkì (frequentative of kāmì)
kán, anklet
kán, find, meet | AD4 Dii kàn, cf. AD5 ZM kosè
kán, tie (prob. another sense of the preceding verb) | cf. AD2 CL kāasą́ 'corde', AD6 Karang $n g a ̄ h$
káāŋ, cobra
kàytá or kāptá, calabash
káptá, tortoise | cf. AD4 Dii kpặrgą́d
káárá, wing, feather
kánsì, join, meet (< kán)
ką̣ặ $\eta$, face, forehead
$k$ ag̣ $\eta$, neck (see list 1)
kạ̀nkiláã (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. kèlùmtâ), baobab \| CD kèlūùm
* kémjíli, monkey (see list 1)
*kę̧é, refuse | CD ką́á
*kę̣ér, mad(man) | CD kę̣é, AD2 CL kę̣éd

* kȩ́nsì, bother, disturb \| CD kặnsì
késā, (rainy) season \| cf. PP *kwas
kē̃sá, side (of body), rib cage
*kil̀̀̀n, loan | CD killēèn
kinn, one (see list 1)
*kìnéēn, leper, leprosy |CD kìnéēn
* kisēn, slave, captive (see list 1)
(á)kíyàà, (in) front, before
kợ or kón, carry (a child on the back) | CD kōli, AD4 Pere kúú-, AD5 ZM kpmáá
kò, put on (clothes)
*kók, rub | CD kók, cf. AD5 Yendang kpòs-
kóm, urinate
*kóm, arrive |CD kóóm
* kònàr, smallpox | CD kònà
* kòmláār, elephant (see list 1)
*kóntì, gather, pile up | CD kōnglì; also AD5 Yendang gòoò-
*kóp, draw, fetch (water) | CD kóp, AD2 CL kòp 'puiser partiellement'; also note AD5 Dii kò
$k \overline{\text { g , guinea-fowl } \mid \mathrm{CD} k a \bar{a}, \mathrm{AD} 4 \text { Pere kùī, Dii kọg̣, AD6 Karang kpèh but Kare kòrè 'perdrix', }}$ cf. 'chicken'
*kō, (enclosure) mat | CD kọ̄ō
kọ̀òr (intr), thin (be)
kónsì, untie
kú, sweep | CD kūrì, AD4 Momi koor-s-, AD5 ZM kọgọ
$k u ̀$ (intr), old (be) (person)
$k u ̄ k, k u \bar{u} u$ ú, grandmother | compare CD kāk, AD2 CL kàá; also AD13 Kulaal káá, Niellim kàà
kūlūp, boat | root with an unusual distribution: apparent cognates exist in AD13, e.g., Niellim kwáāā:r, pl. kórgę̧, but may spread as far as Ubangi Zande kùrúngbà; also note Fulfulde koombowal
*kúmtì, make (a fist) | CD kūmlì
kūplúp, shoulder | cf. AD4 Pere kòòlè and 'neck' (list 1)
$k y ́, ~ c u t ~(d o w n), ~ c l e a r ~(a ~ f i e l d) ~ \mid ~ A D 2 ~ C L ~ k o ̣ ~ ' c u t ~ o f f ~(r o a d) ', ~ A D 5 ~ Z M ~ k o ~ ' c u t ~(i n ~ t w o) ', ~$ Yendang $g \bar{o}$ - 'cut (down)'
ký, bright, clear (be)
kýýsì, chop (into pieces) (< ký'cut (down)')
$k \bar{y} r$, (wrist-, ankle-)bone, joint
kỳý, hare | CD kùt
kméè, pull (up, out)
kmēk, squirrel
kpà, cut, break off (tr/intr) | AD4 Dii kpà̀n, kpà̧̧̧̀
kpá, skin | AD5 ZM kọo
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 kpè̀èss-, both 'fish by bailing'; cf. AD2 CL kpeḡ"'fishhook'
kpiksímsá, chin
kpì̀, nest
*kpìsáār, billy-goat | CD pì̀sáá
*kpōnáār, deaf | CD kpóngáa, AD CL2 kpūùn ~ gbūùùn
láá, belly (see list 1)
láā, sleep (n) | invariable final nasal: CD láām, AD 2 CL lăąąm, AD 4 Momi rąm, Pere ną̣m, Dii nạ̀m, AD5 ZM nú-rọn, AD6 Karang nám, except AD5 Yendang (nơơó-)róó là (intr), fall (as rain) | always initial nasal elsewhere: CD nàà, AD 2 CL nān, AD 4 Dii nā $\eta$, AD5 Yendang ná-
(á)lágòn, chameleon | cf. AD5 Yendang gōnlí
làk, forge (vb) | AD 2 CL là, cf. AD 2 CL lè̀, AD 4 Dii làgā both 'sharpen'
làm, lost (be) | cf. AD4 Pere lēē, AD5 ZM rín
láàn, cry (vb) |cf. AD4 Dii lég, AD6 Kare rę̧-rę̣ọ̀
* lán, surround $\mid \mathrm{CD}$ láng
lánsá, side of face | CD lặngsí'temple'; also AD4 Pere làrạ̣́̆, AD 6 Koh lāākùn
lēká (pl. lēkétâ), blacksmith (see list 1)
léēm, lie (in bî̀ lémā 'tell lies', cf. lér 'tongue')
léēn, grinding stone $\mid \mathrm{AD} 5 \mathrm{ZM}$ réé; cf. CD nààn, also AD 2 CL nāgà̀l, AD 5 Yendang (ûl-)nã̉ lén, drip | AD4 Dii lȩǵ 'flow'
*lép, buy $\mid \mathrm{CD}$ lé $p$, cf. AD 4 Momi yiïp-; *dyap is PP
* lépsì, sell | CD lēpsì
lér, tongue (see list 1)
léérá, louse | AD 2 CL lą̀d 'flea', AD 4 Pere lààrè, Dii lèèd, AD 5 ZM rnèèti, Yendang rè̀èsí
*léérá, flute $\mid$ CD lȩȩérá (a regional root: AD2 CL lȩ̧ȩd, AD4 Momi liira̧z, also AD4 Dii lęttȩ̀èd)
léésì, lè̀̀sì, spoil (tr), rot, spoil (intr) | CD lę̧ęsì 'moisten', AD4 Pere líí, AD5 ZM lèsè lę̧̧e, grass, bush (cf. peś lȩ́ /pȩ 'animal (thing-bush-thing)')
lé, prepare, get ready | cf. AD2 CL lèb, AD4 Pere lè, Dii lè, AD5 Yendang ré-, all 'produce, give birth'
*lę, scar, blemish | CD lę̨̧ē, AD2 CL lèm
(á)lí, when?
lí (+ Gáámâ), sky, above | AD2 CL lēg
líl̃, village | AD2 CL līgą̀ 'compound, family', AD4 Pere līgò, Dii līg, AD5 Yendang léé, all 'house'; also AD13 Niellim líí; Kwa líe, both 'house'; *di is PP for 'compound, house'
* lîik (lîkā ?), dirt(y) | CD líkā, cf. AD2 CL lígą́d, also AD4 Dii lọ́gợd 'be dirty'; *dik is PP (á)lín, (day after) tomorrow | cf. AD2 CL līmtą́ 'morning'
līp, between, through
línsì, sell, hawk
līptá, gut, intestine | cf. CD nạ̀grí
* lípsì, turn, change | CD līpsì, AD2 CL líp, lím but also AD5 ZM rì
líísā, smoke
$l o ̄ k$, take | AD5 Yendang lā-, also AD4 Dii lọ, but the root have a Chadic source, cf. Bata lù 'take, get'
lókā or lōká, cry (n) | CD lōkì 'speak, tell'
ĺø̄m, war (see list 1)
lúū, yam | AD 2 CL dūd, AD 5 ZM lọo̧ti
lūk, lump (on body, head)
lūūmo̧r, market | < Fulfulde Iuumo
lùmsá, man
(á)lūùmsá, husband (cf. 'man')
lúūp̆, knee (see list 1)
lỳ, move (residence, jýȳ) | AD4 Dii lúū 'go away'
*lýȳm, male | CD lúùm
lỳn (intr; also lýlỳn for 'get, stand up'?), get up, fly | CD dùm, AD4 Momi ruu-, Pere lú-, Dii lùū 'lift', AD5 ZM dù, AD6 Karang zō; also note 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 mbo̧̧ō, AD6 Karang mbō h
* mák, show | CD màk, AD 2 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
mȩ̧símsā, dew | CD mēnsán, AD 2 CL mīisĭ̀, AD 4 Momi met, Pere mērè, Dii mēd, AD 6 Karang mím, but AD5 Yendang mơơó́(vs. méée 'water')
mí, day
mí, door (<mí'open, close') (see list 1)
míī, excrement
mí, close, open
mín, shave
mí-wà, day before yesterday
mó, bear, give birth to | AD6 Karang mbūp; cf. AD4 Dii mbóg 'fix, get ready'
mó (mò with object $t i ́ ' t r e e '), ~ c l i m b ~$
múná, earth
ná (nà with indirect object wé 'child'), give | CD nyáá, AD 5 ZM an; this form reappears in AD13: Kulaal néé, Niellim nā
ná (nà with object pȩ́ 'thing'), do | CD nàk
náksā, cow (see list 1)
* nàmèn, crocodile (see list 1)
nān, nāàn, how?, how much? | CD nyāā, nyákā, AD 2 CL lā, lȩ̧è, AD 4 Momi na(nee), AD 5 ZM dnee 'how much', AD6 Karang ánī, Mbum nánìi' 'how'
nè, four (see list 1)
nèé (pl. nî́), person | CD nèé, AD 2 CL nén, AD 4 Pere nán
nēk, owner | AD6 Kare nàá
nēgnéèl, axe
$n i ̄$, mother (but ną̀ģ́ná 'your mother'); cf. nī-wé, sibling (mother's child) | AD5 ZM yina, Yendang yén (with prefix $y V$-?)
nín, drum (see list 1)
*nínsì, hurry | actually CD ninggsèn < ninggsì 'make tremble', AD2 CL nìn 'tremble' > nīpsóàn 'hurry'
*nọ, (oracle) poison | CD nọọ̀
nóksì, enough, equal (be) | CD nēkèn
nōm(nē)-, good, pleasant, tasty | AD 2 CL làm, AD 4 Dii nèm 'be salty'
* nòm, anger | CD nòòm, AD2 CL nòm
nòntà, root \| cf. AD5 Yendang nínkánn; *nan is PP
nóósì (HM?), shake
(tó)nùk, (bow)string
$n \bar{u} \eta$, locust bean tree
nū̄gūur, locust bean (tablet)
núpmā, wax
pá, put in, on (as hat, shoes) | CD pàk, AD2 CL páàn, AD4 Dii pàg
(6ó口) pà (river)bed, gulley
páān, place
pát, all | a regional term attributable to Fulfulde
péēk, new | AD4 Momi pa̧(-ni) but AD6 Mbum féké, Koh fię̧
pȩ́, go \| cf. AD2 CL pā̄'take, carry', AD4 Momi pee- 'take away'; also Dii hę̀' 'go off, away' pę̧é, thing | CD pén; cf. AD2 CL īn, AD4 Pere ēnè, Dii hēn, AD5 Yendang hè, AD6 Karang fè
pì (intr), return, go back, change (into) | CD pè̀è (compare pīrì 'put back'), AD4 Pere pìn- 'do again' but fil- 'change into', AD6 Kare f̧̧erę̧̀; cf. 'exchange': AD2 CL péèn, AD4 Dii pí
*pì̀, Beni seed | CD pìi
* ${ }^{\text {píg}} \mathrm{gè}$ è, maize (see list 1)
*pìlàn, (large) basket | CD pìlàng, a regional root (AD2 CL pìlàm)
pípmá, charcoal | AD6 Karang hếkrē
pó, butcher, cut open
pūglá, flowering (of plants) | CD pūgrì 'flower (vb)'
pùglà, armpit
púūk, púkū, (maternal) uncle | cf. CD póp, AD4 Dii pāā
pūk (pūká?), bark (of tree), shell \| CD pō̧ $\bar{o}$
pýy , viper | AD4 Dii kpùù
$p \bar{y} \bar{y} g \bar{e}$, cassava $\mid \mathrm{CD} p \bar{i} \overline{1}-g \bar{o} \bar{o}$
pýn, tired (be) | CD pút
$p \bar{y} n$, fatigue
* sáà, (father's other) wife | CD sáà
*sā, net | CD sāā, AD 2 CL sād
sấ, ooze, have diarrhea (+ míí) | CD sáá, AD4 Dii sōō 'leak', AD5 ZM so̧o, but san 'forge', Yendang sá - 'ooze; melt', AD6 Karang sà̀h 'moisten'
sā, mud \| AD5 Yendang sók
sák, hang, carry (on shoulder)
*sàk, genet cat | CD sàk, AD2 CL sàg "renard"
sám, bark (vb)
$s a \bar{m}$, spear (see list 1)
(án刀) sámkā, left (hand)
sán, carve
sān, hoe | cf. AD4 Dii tō̃ $\eta$
sānsá, muddy pool | cf. $s \bar{a}$
sánsì, grind (flour) | AD4 Pere sán- 'grind (fresh, damp grain)', whence relationship with sá, $s \bar{a}$
(á)ságkká, frog, toad (see list 1)
* sánkì (HM?), teach, learn | CD sānkì, AD 2 CL sán
* sáásí, do (repetitively) | CD sāāsì (auxiliary verb)
sàtáā or sātáā, sour
sáátí, porcupine
sátōk, (beer) pot
sé (also sééwâ), sun, God (see list 1)
sè (intr), lacking, scarce (be) \| AD5 Yendang sè̀

(ạ́p) $s \bar{e}$ (or $s e ́$ ), fingernail (see list 1)
* séb, witch \| CD sép 'bewitch'; cf. AD4 Dii sòb 'use witchcraft', sóōg 'witch', séy 'witchcraft' séék, anklet | AD4 Pere ségò "castagnette"
sék, go (down), also séksì | AD 2 CL sím, AD4 Dii sí, cf. AD4 Pere sí- 'sit'; also cf. sí'down'
* sèm, (prepubescent) girl, female (animal) | CD sèèm 'girl' but -sȩè 'female animal'
sēmsémtá sand | cf. AD4 Pere sììi, 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, AD 2 CL sèén, cf. jēètá
sènéén, strong, healthy | cf. CD sēnì 'be too strong', AD4 Dii sèn 'make an effort' prob. < sęè 'be potent, effective'
*sèni, difficult (be) | CD sēnì
sépsì, pull (off, out)
sèér, pl. of yáámīk, young, small (child)
sè̀̀rá, truth
sé, scratch (itching) | cf. AD5 ZM sneeté 'itch'
sí, speech, matter
$s_{1}$ (intr), black, dark (be) | cf. AD5 ZM tinri 'dark'; also cf. jîí 'night'
sí, bury
sí, plait (hair) | AD4 Momi si-'make rope'; otherwise CD tî́, Pere tì̀-' 'weave', AD5 ZM tisé sí, also síī, down(wards) | AD5 Yendang sęȩ̀, cf. CD tīi, AD2 CL tȩ̧, 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'
$s \bar{\sim}$, show
síb, under, below | CD tīm, also AD5 ZM típí, AD6 Karang siba, both 'earth'; cf. sí'down' sígán(á), much, many
sìjìi, also siîl, civet cat | CD sì̀, AD2 CL sìd
*sím, beer | CD síīm; cf. AD4 Pere fùm, AD13 Kulaal ham, Niellim hám
sîir, porridge | cf. AD4 Momi sii-'cook porridge'
*sìr, boil, abcess | CD sìt, AD 2 CL silạ̀
sísèè, switch, whip
*sì̀śá, insult ( n ) | CD sìsí
só, drink | CD sóó́; the general AU root is represented by AD4 Dii zò; *swa is PP; note however that Chadic Bata has sòb
só, butt, ram (perhaps identical with the following term) $\mid \mathrm{AD} 2 \mathrm{CL} s \bar{u} d$
sóo, break (intr) | AD4 Dii sơóob
sò, pierce, stab | AD5 ZM suu, Yendang sớ-, AD6 Karang sū, but AD2 CL sàb 'pierce', AD4 Pere sà-, sì̀̀̀-, Dii sà̀; compare CD sót
sók, wash (something) | CD sūksì, AD 4 CL sùg, AD 4 Pere sòg-, AD 5 ZM sòkè, AD 6 Karang sọh 'wash oneself'

* sókàr, (land monitor) lizard | CD sókà
sóksá, hair (on body) (see list 1)
sóksá (used with 6 ģ' 'throw'), whistling
són, (staple) food \| AD5 Yendang sōō, cf. CD túm, also AD13 Kulaal hààl, Niellim hàà:n; cf. 'eat, chew'
*sól, antelope (kind of) | CD sóng
sóp, blow (on)
sópsì, lick (up)
sóģ, also sóórā, wind | cf. AD13 Kulaal hààp, Niellim sààb
só̧n, carry (off, away) |cf. CD tùùn, AD5 Yendang tȩ̣́, both 'carry on head'
$s \bar{\varnothing}$, mucus | cf. AD2 CL $s \bar{a} b$ 'pus'
sǿǿnì, 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 soóo 'take out, remove'
sùwéé, (intestinal) worm | CD sọ̣̀̀míli, AD 2 CL sò̧bȩ́ȩ̀
súpsì, swell, blister
súsùn, shade | AD5 ZM sunrú, cf. AD6 Karang súp 'night'
súỳ, thirst \| CD súù, AD 2 CL súùùd
sýỳm, dry (be) | CD sùm
sýmàā, empty
sýmsì, dry (tr) | CD sūmsì
sýn, grow, develop; go out | cf. CD túún 'develop, grow up' > tūnèn 'go out'; also AD6 Karang tīh 'go out'
sýȳn, 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 $s \bar{\rho} r$-'be slippery'
tá, hit, kick, shoot \| CD tàt, AD 2 CL tàl, AD 4 Momi taa-, Dii tà̀, AD5 ZM ta, Yendang tá-, cf. té 'sting...'
tá (or tẫ), pick, pluck (fruit); excrete \| AD4 Dii tọ̀' 'pick'
*tá, butcher (vb) | CD tàà
táa, early (be, get up) | AD4 Dii tá'ád
* táāb, sandal| CD táāp, AD2 CL tábắ
táàm, tàm, jump (over), jump (intr)
táp, sew | AD2 CL tāb, AD4 Dii tā, both 'tie up'; compare CD tăā̧̧li, CL tắl, a root also present in Chadic Gude
* tárá, three (but cf. 'eight' týn-/tárārāa) | CD tárā (see list 1)
té, sting, prick, dazzle; appear | CD tàt, AD4 Momi tąks- 'reveal', cf. tá 'hit...'
té, stone (see list 1)
(yén) tē (<té?), anus
tébmá, luck(y) (translates CD jiî 'red' in nílín jîî 'luck(y person)', lit. 'red face')
(á)tékā(/i?), gecko
tém, pass (through) | CD tēlì 'pass by', AD2 CL tāàn, AD4 Pere tàl- 'pass', AD5 Yendang tár-, AD6 Kare tá
témsì, insult
*tȩ́, push, sweep, carry along | CD tą̀à
*ţ̧́ksì, begin | CD tā̧ksì
*tȩ̧ẹ́msà, sheep | CD tà̀ạ́msí; also note AD4 Pere tàmī, AD5 Yendang dâá
tí, tree, stick (see list 1)
tī, father (but tȩ̀éṕná 'your father') | AD4 Pere táā, but túnú 'his father', cf. AD5 ZM yera, Yendang yórī(with prefix y $V$-?)
tì(y)ām, afternoon
tîk, gourd | AD4 Dii tíg
*tiksá, snail|CD tíksáá
(á)tílsáā (<áltísàâ?), owl | AD5 Yendang túnsû́n
tísēg (or tísè̀), ant
* (pȩ̧é) 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'
* tón, play (+ tóō 'ear') | CD tòng táá
toón(nē)- (also tùpnè), good, effective, clean, beautiful \| AD4 Dii tōō and AD5 ZM tnọo̧, Yendang tàn-, all 'be good, tasty'; cf. AD6 Karang sù
* tóntón, strong, healthy | CD tóngtóng
tọ́, miss, err
tọ́g, bow (see list 1)
tóø̄, ear (see list 1)
tóø̄b, Shea butter tree \| CD túūp; cognates in AD13: Kulaal totí, Niellim tãàm
túá, here
túūu, head (see list 1)
*(pę̧é) túnén, baggage \| CD pén túnén < tùùn 'carry'
tún/sým, shame | cf. AD2 CL są́m, AD4 Pere ségò, Dii sém', AD 5 ZM yúú-sne with yú 'head' and CD sá̧są̧ą̧ (also of course Fulfulde semt-)
*tūùn, five (but changes form in compound numbers: túùn̄-kīn 'six', tóòm-sī-Gęȩ̧reá 'seven', týn-/tárārāā 'eight', túù̀ŋ-sí-nèá 'nine', cf. wúp-sę̧ȩ̣-tūùná 'fifteen') (see list 1)
túly, point (at) | CD tọọ, AD6 Kare tò
túlı, push \| CD tùt, AD2 CL tì, AD4 Dii tú', but Pere tą̣àr--; also AD5 ZM dnọ́
tý, finish, complete (tr) | AD4 Dii tú 'be completely destroyed'; cf. CD dùk, dūksì
tỳrým, between, among | cf. AD4 Dii tą̀g
týn, spit | AD 2 CL tớ, AD 4 Dii tọ̀’ọ but AD 4 Momi tá̧n-, AD 5 Yendang tēn-; CD tūsì
(á)vàā̆ , (kind of) lizard
vállì, help | < Fulfulde walla
vó, squat
vúm, roast | AD2 CL wù̀n'faire frire'
vúūn, goat (see list 1)
(á)vúnsá, mosquito | CD bọ̧ósí, AD4 Momi woos, Pere vórè, Dii vád, Karang vwôrọ̄, Kare wôrớ, cf. AD5 ZM wara 'bee', Yendang Vớrī 'bee', wę̧ēē 'honey'
$v y ́, ~ d i e \mid C D$ wúú, AD4 Momi wȩ́r-, Pere vò-, AD5 ZM vo̧, Yendang wȩ́s-, AD6 Karang hū, AD13 Kulaal úíí, Niellim 'úy, cf. AD2 CL vàd
vȳ̄̄sá, shadow | AD2 CL nyìsą̀; cf. PP *vu 'shade'
vwȩ, beat, hit | clearly ideophonic: CD vwàt, AD6 vwā, elsewhere AD4 Momi bee', Dii vą̣à, cf. AD6 Karang vwàr, Kare vwẹ̀rę̀ 'break'
wá, fire $\mid \mathrm{AD} 4$ Pere vēé, Dii vēè, 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
wàláy, (cooking) pot (see list 1)
wáásá, heat, hot (cf. 'fire') | also compare ZM wnaa 'hot'
wánsá, body
wá, leave, let $\mid \mathrm{CD}$ vét
wé, year, time, season $\mid \mathrm{AD} 4$ Momi wiir, Pere vērè, Dii vē'
wé (pl. wî), child | CD węȩ̧ 'small, child', AD2 CL wà, AD4 Pere wārwā, Dii wāā, AD5 Yendang v $\bar{a} \bar{a} ;$ * van is PP
wéjìm, morning
wéjìn, tomorrow
(á)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[-ךrùm 'man', né[-ךnwù '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 wùù́y, AD13 Kulaal wáá, Niellim wày, cf. wíl, female
* wép, mix | CD wèp
*wér, arrow (see list 1)
wérùm-wë, (small) bird | cf. AD4 Momi welmąz 'nightjar'
wésèè, firewood \| AD 2 CL wōgsą̀
wésì, hurt | CD nwōnì (but Mapeo Chamba wēnì), AD4 Pere wòò-
węk, hide (tr)
wȩ̧́èrá, mushroom
wîl (wîn?), female \| AD6 Karang wìùúy, Kare wî̀ 'woman' (also Koh máy)
wī, sit, stay, wait \| AD4 Momi wi'ïsk- 'set (as sun)'
wínsá, thatching grass
*wó, want | CD wòò
wó, take off (clothes) | CD wōōsì
wơ, watch (over) | CD nwáán, AD2 CL wán, AD4 Pere wớr-
$w \bar{b}$, baboon
wōgbín, bat
wóm(nē)-, cooperative, conjoint (labor)
wớm, oil (see list 1)
wómsāa, elephant grass
wớn, fight (vb) | CD nòng but nòòm 'be angry', cf. AD4 Pere gòo- 'fight' but nò- 'be angry', AD5 Yendang yọ́mán-
wōn, fight (n) | CD nōng
wòp (intr), run | AD5 Yendang ó-, cf. CD nwòp 'avoid'; also see wúp 'fear' wópsì, ride (horse)
wōpsínsá, sweat | cf. CD wằt, AD 2 CL wą̀d, but $\mathrm{AD} 5 \mathrm{ZM} p m \varrho$; *tiin is PP
*wó, hide (intr) | CD wớó, cf. AD5 Yendang kúú
wọ́b, bone \| cf. the well-represented NC root appearing, e.g., in PP as *kup (but AD5 Yendang kún)
wọọ̄b, ten (see list 1)
wú, drunk (be) | cf. CD witt, AD2 CL wìd
wù̀, fat (be) | CD nòo, AD4 Momi non-, Pere nùù-, AD5 ZM nọ́
wúp, fear \| cf. CD yíp, AD 5 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) | AD 2 CL yā'venir', AD 4 Dii yà 'arrive'
$y a \bar{a}$, (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-
* yááa, what?, why? | CD nyáá
yáàà, friend (see list 1)
yắ, old, used
yà (intr), swallow | cf. AD4 Dii yó'
(á)yà̀, where? | AD5 Yendang yáà
yáámīk, pl. sèér, young, small (child) | cf. CD míí (pl. méém) and AD5 Yendang (vā̄a,) pl. yá
yáān, bad
* yān, horse (see list 1)
yáásá, leaf (see list 1)
yé, (at) home | CD nyḕm, AD 2 CL yī̀l l'house, compound', AD4 Dii yēē 'courtyard', AD5 ZM ye
yé, ready, ripe, healed (be), adj. yénèè | AD4 Dii yéń ná 'true, good', cf. 'cook', cf. AD2 CL wè
yéksì, light (fire from another fire) | AD4 Pere yèg-
yér(î)má, flame \| AD 2 CL yèél 'red, flame'; cf. Бǿrùm 'thunder, lightening'
yéeèm, meat (see list 1)
$y \bar{\sim}-\bar{m}$, carry (to), present (something) with an obeisance | cf. CD nyēnì
* yè̀myē̃̄m, yesterday $\mid \mathrm{CD}$ nyèm
yếmsā, song | CD nìmsí but AD 4 Dii yéé, AD 5 Yendang yȩ̣k
yéén, buttocks
yé̃n, sow (by casting), scatter | CD yè̀̀, AD4 Pere yà̀m- 'disperse'
* yééñ, bedbug | CD nyéēng
yéèty, cold (be) (as wind)
* yén ${ }^{\prime}$ lá, digging stick $\mid \mathrm{CD}$ nyéplí
yí, eat \| CD lî́, AD2 CL lí, AD4 Momi ree, Pere lé-
*yí, steal | CD yíí
*yìk, lion (see list 1)
yíríik, black | CD vírkī, AD4 Momi wii-, wiir- 'be black', Pere vîí-'be black', Dii vîī = îi 'be black', AD5 ZM viiki, but also AD4 Pere díri, AD5 Yendang yítī, AD6 Kare yírí (both having cognates in AD13 as well)
(ắ刀) yī̄mā ( < yî́ 'eat'), right (hand)
yó, pull, stretch | cf. CD nwòt, AD4 Dii wòò; also AD5 ZM gnọ 'pull', znẹ 'pull out' yógréēn, soft | AD4 Momi yakw-, Dii yọ̄ọ 'be soft' vs. CD wógléēn, AD2 CL óg 'be soft' yóók, cook (staple food) | AD4 Pere yớ-, AD4 Dii yớ 'be ripe, cooked' (cf. yé 'ready...(be)'); also cf. AD4 Momi ruu'-
yókúm, salt (see list 1)
yóm (yōm(nē)-), bite, be sharp | AD5 ZM yon; elsewhere, the usual initial $/ / n$ alternance:
CD lóóm, AD 2 CL lùm, AD 4 Momi rom( $-d-$ ), AD 4 Dii nòn, AD 5 Yendang rún-, AD6 Karang nụ̄, Mbum lón
yóó, snake (see list 1)
yó, weave, plait
yợósá, rope | CD yísí, AD4 Momi yokla
yợósì, swim, cross a river by swimming | AD 4 Pere wó (g)-; cf. CD yą́ą' 'climb, cross a river (by any means)', AD4 Pere yááa 'cross (a river by means other than swimming)'
yúū, death, dead body | cf. CD wę̧é, AD5 ZM vo̧o, Yendang wę́rȩ̧, AD6 Karang húl, AD13 Kulaal ùààl, Niellim 'úúlū, all probably related
yứúń, hunger | CD wúú, AD5 ZM wnọko̧; cf. AD13 Niellim nyúní 'thirst' yúksā, fish \| CD wúūūk, cf. AD4 Momi duga, duukt, Pere dúrè, AD6 Karang nzúy
yým (or yóm), collide (with) | AD5 Yendang yìn-

