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

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

Cette conclusion est en contradiction avec la classification fournie par L'Ethnologue : http://www.ethnologue.com/show_language.asp?code=ttb

A Linguistic Sketch of Tiba (*G<u>à</u>*), Part I

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

I.0. Introduction

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

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

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

The Tiba (*Tíbá* in CD) do not use this name for themselves. Rather, they call themselves *àG<u>à</u>á ní*a 'Tiba people') and their language *àg<u>à</u> <u>à</u>ŋá* ('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*ōō '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 *sìì* '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 *ẹ*, *ọ* to represent high mid vowels and *e*, *o* to represent low mid vowels; *ǫ* represents a mid central vowel. For ease of typography and comparison, we have transposed material available in the other languages with four vowel heights cited here to this system whenever the distinction in mid vowel heights is clearly pertinent (the contrast is thus not marked for mid front vowels in Pere as it has no role in the native lexical stock). In the particularly complicated Dii system, both *e*, *o* and barred *i*, *u* are represented by *ẹ*, *ọ*; this is unlikely to cause confusion, given the almost total complementary distribution of the vowel heights concerned. The representation of nasal vowels is required in some languages (including Tiba); this is done by <u>underscoring</u>. Consonant notation is conventional; note only that *vw* represents a labial flap. In tonal notation, / represents downstep, while *v̈* represents any vowel bearing the infralow tone in the four-register Yendang system. (Given the provisional nature of the Momi data, these are noted without tones.)

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

Tiba nouns are presented in citation form, i.e., with *à-* or *á/-* 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.

Each set of items is arranged alphabetically by English gloss.

● (S)WAD cognates

à-ǵŋ-ā 'arm, hand'
CD *wáā*; the general root in AD2/5/7/8/9 is nasal + central or front vowel + nasal

à-tǫ́-ā 'bow'
CD *tǫ́ǭm*, AD2 CL *tāb*, AD4 Momi *taau*, Pere *tābò*, AD5 Zing Mumuye (hereafter ZM) *tá(k)à*, Yendang *tāt*, Meek AD8 Kam ace, cf. AD9 Jen kanto, Munga kantau; also PP *ta

à-ɓàk-á 'bushcow'
AD5 ZM *ɓàkà*, Meek Yendang bak (*ɓät*)

à-kàŋkìláā 'chicken'
AD5 ZM *kìŋ*, cf. Meek AD8 Kam kume; there is no nasal in AD2, thus CL *kò̱ò̱*, cf. CD *kpàá*, AD4 Momi *kǫz*, AD6 Mbum *káká* vs. Koh *kā̱y*; 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 *nàbàn*, AD4 Pere *nàmànè*, Meek AD5 Yendang name

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

*à-ɓý-*ā 'dog'
Meek AD7 Yungur bwe, Mboi abwa; possible cognacy with the AD6 series Mbum *góì*, Karang *gáy*, Kare *váà*; *bu is also PP

à-níŋ-á 'drum'
Meek AD2 Mumbake riŋgima

à-tǿ ǣ 'ear'
CD *táā*, AD5 ZM *shoo* (derivation from an earlier *twa, or *tue as in Common Bantu, seems patent), Yendang *tok*; the velar C_2 is widespread: AD2 CL *túng*, AD4 Momi *tok*, Pere *tógò*, Dii *tóg*, cf. AD6 Karang *súk*

à-éŋ-á 'egg'
ZM *wnaŋkaa*; note Meek AD5 Yendang ha (*hät*), Kumba pa; the full AD5 set suggests cognacy with the widespread "*para*" form (cf. AD10 Longuda fõla, AD14 Niellim *hwáánī*)

*à-ís*ā '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-)s*ē-*é* 'fingernail' (perhaps *-sé-*)
AD5 ZM *saari*, Yendang *sóó*, Meek AD8 Kam aciri-, AD9 Jen/Munga cina-

à-nè-á 'four'
AD4 Pere *nārō*, Dii *ndādó*, ZM *dneerò*, CL *nāārā*, Meek AD5 Yendang nat (*nàt*), AD8 Kam nar; compare AD6 Karang *nìŋ*, Kare *nèŋ*, Mbum *nyàŋ*

*à-vún-*ā 'goat'
CD *vĩn*, AD2 CL *vā*, Meek Wom/Mumbake vua, AD4 Momi *buuz*, AD5 Yendang bi (*ɓī*), Kumba wii, Gengle/Kugama ayi, AD9 Munga naŋbu, AD6 Karang *gúy*, Koh *vúỳ*, AD13 Niellim *ɓwàŷ*

*à-kpàŋgúm-t*ā 'groundnut(s)'
CD *kpàáŋ* 'groundnut', *gúūm* 'bambara groundnut', Meek AD2 Chamba (Leko) kpaŋ[-]wara

à-gérá 'guinea-corn'
Meek AD2 Wom gbera, cf. CL *yēd*, CD *yírí*; also see *-háŋ-* 'guinea-corn' below

à-sóksá '(body) hair'
AD4 Momi *suuk* 'hair', AD5 ZM *sòò*; a term noted sūri by Meek (Yendang *sūūrī*) '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 *gbǫǫti*

à-nȳn-á 'horse'
CD *ny*āā*n*, CL *y*āā, Meek AD8 Kam yeŋe

à-lúŋ-ā 'knee'
CD *lúúr*ī, CL *lígὰrá*, Meek AD2 Wom liŋbera; AD5 Teme luŋ, Kumba niŋgi, Gengle/Kugama ruŋ, also Yendang (*yá/-*)*rúnká*; AD8 Kam alunu (also A13 Bwa group d/rul vs. AD6 Kare (*nzá-*)*túừ*)

à-ɓák-á 'knife'
Meek AD8 Kam abak; cf. AD4 Dii *p*āg

yàásá 'leaf'
CL *yὲsà*, cf. CD *yáà* and Meek AD5 Yendang nyākahē (*yánká*, with classifier *ḧ*), Waka nyaŋa, Teme jaŋga, AD9 Jen/Munga yangka

à-ɓέ-ā 'leg'
AD4 Momi *bi* 'paw'

à-b̲á̲-á̲ 'leopard'
AD4 Pere *bàlὰm*, cf. CD *gb*ē̲ē̲, AD5 ZM *gbmee*, Meek Yendang kpe (*kpὲὲ*); the relationships between these roots AD2 CL *g*ā̲, AD4 Momi *gooz*, and Meek AD7 fila, vila, ivula, AD8 impeli, AD9 hwi, vwi is obscure

à-nyém-ā 'meat'
Meek AD9 Jen hiã, 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 *fὲὲ*, Niellim *py*āā; PP *pyan has reflexes in both initial f and s, cf. 'sun'

à-dók-ā 'mountain'
Meek AD8 Kam adaŋ

à-kā̰ŋ-á 'neck'
Meek AD5 Gengle/Kugama kõaŋ, AD7 Libo kwẹena; elsewhere in groups 5 and 7, the forms are kir, kwer, kor, cf. AD2 CL *kòól*, AD4 Pere *kōlà̰ŋ*; also cf. 'shoulder'

*à-jí-*ā 'night'
AD4 Pere *zègò* 'darkness', AD5 ZM *zii*, Meek Kumba jim

à-ɓóŋ-á 'river'
Meek AD5 Yendang boŋko (*bònkō*), Waka baŋgo, etc. But the root is also apparently in "Mambiloid" Nizaa

à-yókúm-á 'salt'
Meek AD2 Mumbake nyuŋ, AD4 Pere *yō̰ŋ*, Meek AD9 Jen jukwẽ; also cf. CD *nyénúm* 'kind of salt', AD2 CL *nwūùm*

*à-yǫ́-*ā 'snake'
CD *yę́ę̄*; cf. Meek AD9 Jen dzo, Munga zǫu, AD7 Mboi za, Libo i[-]zoŋya, and all apparent cognates with initial s in AD5 and 7; also cf. AD4 Dii *yǫ́* '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 j<u>oo</u> and Ubangi Gbaya *gók*

à-té-é 'stone'
AD5 ZM *tara*, Meek Yendang tari (*tā̰rī*), AD8 Kam atal, AD9 Jen/Munga te (cf. AD6 Karang *-sàw*); PP *ta

à-lér-á 'tongue'
Meek AD2 Wom lela, AD5 ZM *rèetè*, Yendang *léká*, but CD *lą́ą̀*

à-tár-á 'three'
CD *tárā*, ZM *tat*, CL *tǭǭrā*, Meek AD5 Yendang tat (*tàt*), AD7 Yungur (fi)ta, Libo tar(in), AD8 Kam car, AD9 Jen (wa)ta

à-tí-á 'tree'
AD4 Momi *te*; the root is also clearly represented in Meek AD5 Yendang (*tę́ę́*), Waka, Teme and AD2 Mumbake, CL *tę́ę́*, cf. CD *tím* with final nasal (AD10 Longuda shows a plural form with final -m, Kleinewillinghöfer 1996); also cf. AD13 Kulaal *tę́ǫ́*, Niellim *tę́lā*, but AD6 Kare *dì*

*à-lǽm-*ā 'war'
AD4 Dii *lúú* 'make war'; cf. AD6 Koh *yúm̀*, Mbum *nyíì*

à-jíŋjíŋ-á 'water'
Meek AD2 Lekon (Chamba Leko) nyuŋuna, cf. Wom/Mumbake yila, CL *wā̰l*; also compare AD4 Dii *zḭ́ŋ* 'urine', *zìŋ* '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 *wa̰rí*

*à-'d(*ū*)ùm-á* 'back, behind'
CD *dìm(áà)*: primarily a BC root (particularly Bantu and Cross River), represented regionally in Vute and Mambila; the best AD correlate is Dii *dàn* 'beyond, on the other side'

à-ýsỳn-á 'breast'
CD *nyésà*: cf. PP *basan; compare AD2 CL *vūùm*, AD4 Momi *voom* 'milk'

à-gàŋ-á 'chief'
CD *gàng*: possibly an areal root, though plausible cognates all show unusual correspondences, cf. Mambila *gáng*, CL *gààd*, AD4 Pere *gènè*, Dii *gb*ā*ŋ*, PP *gwam, among others

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

*à-t*ō̰*ò̰ŋ-á* 'five'
CD *túùná*: initial t- is characteristic of BC (AD has mostly n-); back V_1 can be found, for example, in Jukunoid

*à-tú-*ā 'head'
CD *t*ī̃: a NC root; but SWAD (including AD5) has mostly initial y-, j- (or ⌀ as in Yendang ū*k*), cf. nevertheless AD4 Dii *tún* 'face'; AD6 (excluding Mbum) has *túl*

à-j̱̄ntá 'pot'
CD *j̱ī̃*; see -*wàláŋ*- below

à-nyìk-á 'lion'
CD *nyìk*

*à-kémjí-*ā 'monkey'
CD *kéém j*ī̃, lit. 'red monkey': CB *-*kímà* (9/10)

*à-(y)ǽn-*ā 'nose'
CD *núùn*: a well-represented NC root with many probable cognates in AD, though the correspondences are too complex for certainty, cf. for example AD2 CL *nyíd*, AD4 Pere *á̱ā̱*, AD6 Mbum *hóòk*, Karang *hók̲ō* but Koh *múù̲*, AD13 Niellim *hùny*

à-wóm-á 'oil'

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

à-kìsēn-á 'slave'

CD *kə̀sēn*, CL cf. *kò̜(')sá* (Meek kwasa), apparently from a verb *kǫ'* 'catch'

à-sām-á 'spear'

CD *sə̄ə̄m*; cf. ZM *shàlàŋ*, suggestive of Chadic; also compare AD2 CL *sííd* 'arrow', AD4 Dii *sę̄ę̄* 'war', *sę́ę̄* 'arrow', AD5 ZM *shòn*, Yendang *sö̜n*, 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 *nə́gə́l*, AD4 Momi *nuur*, Pere *núúlè*; cf. PP *niu

à-ɓę̄ę̄r-á 'two'

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

● No SWAD cognates

à-óŋ-á 'bee'

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

à-lá-ā 'belly'

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

á/-gbáŋ-á 'bird'

Related to AD4 Pere *gáá̄ī* 'bat' and/or *gbə́gò* 'pigeon'?

à-lēká 'blacksmith'

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

à-gbām-á (gbāám) 'blood'

à-mí-á 'door' (< *míì* 'close'?)

à-gáŋsā 'fly'
All matches unsatisfactory: CD *gèè̞*, AD4 Momi *gumka̞z*, Pere *gúī*; cf. Meek AD5 Yendang group kũ (*kùn*)

à-nyáà-á 'friend'
AD6 Karang *yá̞h*, Meek AD8 Kam aŋwa, 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-há̞ŋ-á 'guinea-corn'
Cf. Meek AD5 Yendang koŋ (*kōn*), Teme kom, AD7 Yungur/Roba koma

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

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

à-ísá 'mat'
Cf. AD6 Karang *híh*

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

à-wàlá̞ŋ-á 'pot'

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

à-gāá̞ (*gāá̞*) 'road'

à-sé-é 'sun, God'
CD *súū*; the semantic equivalence is very widespread in SWAD languages; also AD6 Karang *séh*; note AD2 CL *sò̞ò̞*, AD4 Momi *see*, Pere *sīī*, Dii *sēē*, Meek AD5 Yendang si, se, all meaning 'moon'

à-wó̞ó̞b-ā 'ten'
Cf. AD4 Pere *fób*; a widespread AD root is *kop* (cf. AD5 ZM *ko̞p*, Yendang *kō̞p*, AD2 CL *kō̞b* and Meek AD10 Hill Longuda kwoo); another is *bu* in AD7/8 and perhaps 9

(á/-)sáŋká 'toad, frog'

I.3. Conclusion

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

NOTES

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): *n*ā *yéndá*ŋ 'Yendang language', *wèè yénd*āŋ-*ù* b̄*īnt*ī 'one Yendang person'.

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

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

II.0. Introduction

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

II.1. Tiba phonology

a) CONSONANTS:

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

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

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

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

i) A voiced "injective/plosive" contrast in the labial and dental orders. It will be noticed that the lexical frequency is such that this contrast might equally be envisaged as "fortis" (= injective) vs. "lenis" (plosive). To the ear, the *b/ɓ* contrast is less perceptible than *d/ɗ*; however, *d* may be confused with *l*.

ii) Strangely, *f* seems to be followed by unrounded vowels and *a*, but *v* by rounded vowels and *a*. There is perhaps no *v/w* contrast before the high front rounded vowel.

iii) The voiced palatal is affricated only before high front vowels; elsewhere it is a palatal fricative. The corresponding unvoiced consonant is a clear palatal fricative only before a high rounded front vowel; elsewhere, it is apical.

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

v) There are a small number of terms having the structure: (Initial aspirate velar, [k^h, g^h, h]) + high central vowel + ŋ. (In fact, the relative weight of stop and aspiration is such that the phonetic notation might as well be [^{k}h, ^{g}h].) Now it turns out that, while we have at least one initial *kuŋ*, we nowhere have terms of the form *kiŋ*, *giŋ*, *hiŋ*, or *iŋ*. The latter are therefore reasonable phonological representations for these sequences; nevertheless, in our lists, they appear with vowel *ʉ* for easy identification of their peculiar nature. (Note that Shimizu 1983:13 also remarks central vowels before ŋ in ZM, and assigns them to phonological *i*, perhaps less convincingly insofar as his dictionary shows the preceding consonants to be arbitrary. Note a similar case in Tiba involving *ʉ* as V$_2$, *árʉ́ŋ* 'fry'; it is not clear why this vowel should not be realized *i*, but at the same time, this verb has an aberrant canonic structure.)

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

vii) There are cases of initial labialized *m* [m^w]. This realization is treated here as a *w* + nasal vowel, but could also conceivably be a nasal counterpart of the postnasalized velars (cf. Shimizu 1983:12). Since it also appears intervocalically, however ([sùm^{w}éē] '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:

$$
\begin{array}{llll}
m & n & & ŋ \\
P & T & S & K \\
& l & &
\end{array}
$$

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 [l] and [r] seem to be allophones (*r* is used in our notation except between high back vowels, where [l] is perhaps exclusively preferred). There may, however, be a contrast after C, though this may be the consequence of borrowing from CD. Unlike CD, Tiba cannot be shown (at least by these data) to have *r*C or *l*C groups, although CV*r*VCV may be such that V$_1$ and V$_2$ must be identical (or at least V$_2$ is neutral). In such case, these items could be reanalyzed as CV*r*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*, *ę*, *e*, *a*, *o*, *ǫ*, *u*) together with two rounded front vowels, *y* (distinguished from the palatal semivowel elsewhere in this paper by tone marking or context) and *œ*. There is apparently no need for the high central vowel found in CD. The presence of rounded front vowels is obviously unusual, but has been reported for Tikar at least (G. Guarisma, p.c.) in this general region.

NASALITY: There seems to be a clear contrast between nonnasal and nasal vowels (the latter symbolized here by <u>underscoring</u>). There are probably only three distinctive heights for nasal vowels (only <u>*i*</u>, <u>*y*</u>, <u>*e*</u>, <u>*a*</u>, <u>*o*</u>, <u>*u*</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'/*t<u>a</u>* 'be early'; and 2) V_1 in CV_1C_2(CV) (where C_2 is either a front or a back stop, e.g., *tap* 'sew'/*g<u>a</u>p* 'count', *ɗek* 'forget'/*s<u>e</u>k* '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 CV*n*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 NV/N<u>V</u> contrasts (just as in other Southwestern Adamawa, SWAD, languages, certainly Dii and probably Yendang), there is no justification for setting up *ny*/*y* and *nw*/*w* contrasts (unlike CD, where nasality can only be a consonantal feature). Thus, [w<u>aa</u>si] 'body' is, if the rules above are indeed the only ones operative, phonologically /*wansi*/.

We may note that there is a strong tendency in Tiba to apply the CD rule that, if C_1 in $C_1V(V)N$ is a semivowel, it must be nasalized; i.e., in Tiba terms, the vowel in this structure must be nasal. There are, however, apparent counterexamples in a sort of "adjective" class. Whether there is an explanation for these cases such as to render the rule absolute in Tiba remains to be seen.

LENGTH: The question of the contexts in which vowel length is contrastive in Tiba requires further investigation. It would seem that the CD situation whereby lexical items cannot have the forms CV (only CV:), CV*n* (only CV:*n*), or CV:C (only CVC_2 for any C_2 other than *n*) also holds in Tiba. The rule requiring that *ę*, *ǫ* be long in CD (except in C_CCV) does not, however, seem to hold. Tiba has cases of at least C*ę*C, C*ę*CV, and C*ǫ*C, though in the case of the latter, the length contrast is much clearer to the ear when a vowel suffix is added. Long *ę* and *ǫ* in C_C and C_CV contexts are, however, limited to cases in which 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,

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

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

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

c) CANONIC FORM:

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

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

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

The final-vowel tonology of these nouns requires an additional remark: the majority end in -C*í* or -/C*í* (i.e., downstepped *í*) 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 -*ì*; 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 -*i*). There is also one attested case of a CVCCV noun behaving like a CVV nominal in both having a final contour tone and being invariant in final and nonfinal positions: *pùglàá* 'armpit'. It may

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

● A small number of nouns have final *-àā*; the one case of alternation (*gýsàā̱*, *gýsỳn*) suggests this structure was originally *-ùn-á*. The *-á* marking final position has thus been incorporated into the root, the form in nonfinal position being (-)/Cā̱ (with downstepped mid tone).

● There are also CV(V)CV nominals with high V_1 and final *èē* (*wésèē* '(load of) firewood' with mid V_1 being an apparent counterexample), which could conceivably be analyzed as deriving from *-i-* + *-á* in final position; however, these terms do not change their vowel in nonfinal position (their tone pattern becomes HM). This analysis is therefore better seen as diachronic than as synchronic.

● There are a further three CV(V)CV nouns, *sìíjì*, a variant of *sìîì*, 'civet cat', *sáátí* 'porcupine', and *jèrí* 'whirlwind', which have root-final *-i* (*-iy*?), giving *-i-á* in utterance-final position.

● Like CD, Tiba allows CVC*um* (also C*y*C*ym*) and CVCV*ŋ* (with $V_1 = V_2$). There are also terms with CVC*en* structure corresponding well to CD terms with identifiable *-én* or *-éēn* suffixes, and others which correspond to nothing in CD. (See "Derivational affixes" under II.4.a below.)

● Tiba also has a variety of V_1-V_2 combinations in CVC(C)VC terms with final ŋ and *k* (and even in one case, final *n*) which are unfamiliar in CD. The possibility that at least some of these terms are original compounds (or even synchronic compounds involving items not yet recorded individually) should be considered.

From the above, it should be clear that the V_2 position does not provide a full set of vowel contrasts. Indeed, final *-i*, whether for nominals or for verbs, is a lax, slightly lower variant of this sound than appears in V_1 (root) position, doubtless owing to this neutralization of contrasts. There is furthermore some tendency to total assimilation when V_1 is either *ę* or *y*. (It may be noted that Tiba does not seem to have the C*ę*C*ę* and C*ǫ*C*ǫ* 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)v̄ > Cv́/C(C)v́). This situation, resulting from the abundance of such tones and patterns in nominal lexical units (see below), is largely identical to the one in CD.

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

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

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

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

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

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

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

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

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

A fourth context for determination of verb tone classes may be as the first verb V_1 in a V_1-V_2 sequence. H-, M-, and L-tone verbs may be discernible here, as well as HL.

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

II.3. The pronominal system

The following system of *subject pronouns* was obtained:

1S subject *m̀*	1PL subject *wíí*
2S subject *à*	2PL subject *míí*
3S subject *kí*	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 *à-* and the noun root), unlike CD where the possessives are all postposed. The system of these markers is:

1S (*à-*)*mēē-*	1PL (*à-*)*wę́tę́-*
2S (*à-*)*wēē-*	2PL (*à-*)*mę́tę́-*
3S (*à-*)*gúú-*	3PL (*à-*)*wóóntí-*

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

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

2S suffixed -*ɟ́ā̰ŋ*
3S prefixed ´ (i.e., the noun prefix becomes *á/-*)

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

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

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

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

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

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

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

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

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

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

DEMONSTRATIVE: Only one demonstrative was repeatedly requested (CD *déèn* 'this, that (one in question)' as noun modifier). This is translated as a form *-(í)nk(á/í)* (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-yǽcè* (prefix|day|this) 'today' (CD *mór-àán*).

II.4. Tiba morphology

a) NOUN MORPHOLOGY

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

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

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

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

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

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

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

PLURAL: the plural is regularly formed by suffixing *-t-(á/í)* 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 *nē*, this suffix may tend to be tonally assimilated (*-gūr-*).

b) VERB MORPHOLOGY

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

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

i) The *-si* suffix: Many verbs have the form CVV*si* or CVC*si*. The majority of these are not identifiable as derived from CVV or CVC verbs, respectively, perhaps simply because no possible sources appear in the data. A few are, however, so identifiable, cf. *sɤ̰̀ɤ̀m-* ' be dry', *sɤ́msì* '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., *dɔ̄n* ɓreathe', *dɔ̄nsī* 'rest (i.e., make oneself breathe, breathe for oneself)', while others have more complex agentive relationships: *kɤ́ỳ* 'cut (down), clear (a field)', *kɤ́ɤ́sì* 'chop (into pieces)'. Others still are evident *calques* of CD, e.g., *ɓéksì* ɓreak, smash', cf. CD *vwēksì*, "frequentative" of *vwék* 'split'.

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

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

There are nevertheless a certain number of CVV verbs which, for an undetermined reason, are given with suffix *-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 SV(O)(C), where C represents predicate and utterance modifiers in general. The preposition of the syntactic object to the verbal noun, attested in CD, has not been observed. Nevertheless, as in CD, Tiba word order in noun phrases is such that a modifying noun precedes the "head" noun, while a modifying "adjective" follows it.

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

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

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

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

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

INTERROGATIVE: There is an utterance-final interrogative marker *-è*, identical with CD. (In CD, this marker is used in verbal 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 *q* = Tiba *ę̣*) and uncertainty regarding verb tonology, or display only minor tonal variations. Corresponding CD items and comparative remarks on a wider scale appear after a bar (|). The conventions of language notation are as in part I, but Tiba nominals are presented without their affixes, except where they prefix *á-*. (Consequently, since, in Tiba as in CD, the intervocalic labial plosive is phonetically [b], the dental plosive is [r], but the velar plosive is [k], while in final position all plosives are unvoiced [p, t, k], noun roots with final plosive will appear below with final *b*, *r*, *k* after deletion of the *-á* suffix; while verbs will have final *p*, *t*, *k*, corresponding to the citation form.)

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LIST 2: A TIBA-ENGLISH GLOSSARY WITH ADAMAWA COGNATES

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

á̱, gather, scoop up

árá̧ŋ, fry | CD *nyā̱nglì* (possible metathesis)

án, open (wide), yawn (+ *ǽǽrá*) | a widespread ideophonic root: CD *yáá yá*ā, AD4 Momi *agą̧n-*, Pere *àà-*, Dii *áá*, AD5 Yendang *hánk-*, AD6 Kare *'á*

áp, seek

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

á̧ŋkpà̱ā̱, mouth (also *à̧ŋ*, language, speech) | AD4 Pere *yāgò*, Dii *yā̱g*, AD5 Yendang *yā̱k*, AD6 Karang *nzák* are conceivably cognate with this (probably compounded) root

á̧ā̱ŋ, arm, adj. *á̧ŋnèē*, relating to the arm (see list 1)

á̧ā̱ŋ, name | AD5 Yendang *ī̱k*

ā̱ŋ, know | cf. AD13 Kulaal *ò̧n*, Niellim *'ùnà*

é, dry (something in the sun) | CD *yē̱rì*, AD4 Momi *yend-*, Pere *yìi̱̱r-*, Dii *yè̱'*, AD5 Zing Mumuye (ZM) *yà*, AD6 Kare *yé̱* 'dry'

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

éŋ, egg (see list 1)

**ȩ́k*, burp | CD *yá̧k*

ȩ́sì (HH?), cough | CD *wū̱sì*, cf. AD6 Kare *hèl*

íì, lie, lie down, sleep | AD4 Dii *ī̱ī*

ī̱n, tooth (see list 1)

ísá, mat (MH?) (see list 1)

*ís*ā (*ȩ́s*ā?), eye (see list 1)

*ísèn, broom | CD *yìsèn*

óŋ, bee (see list 1)

órē̱n, cold | CD *wárē̱n*

ónsì, lick

ó̧ó̧ìnà, who? | AD5 ZM *wò̧*

ǽ, wash (oneself) | AD4 Dii *yòō* 'wash something', AD5 ZM *welè*, *wolè*, Yendang *hū*-, AD6
      Karang *wòk*, Kare *'òi*
(y)ǽǣn, nose (see list 1)
ǽǽrá (or *ǽr*), yawn (n)

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

ý, knead | cf. AD4 Dii *vù* 'pound (flour)'
ȳ(nē)-, cool (as shade) | AD2 Chamba Leko (CL) *nwūùm*
ýp, crush (under foot)
ỳrýȳm, ancestor spirit | CD *wùrú(ū)m*; cf. AD4 Dii *yòōb*
ýsì (HH?), suck
ýsì, twist, wring (perhaps identical with the preceding term) | cf. AD4 Pere *vì-*
ýsỳn, breast (see list 1)

ɓá, leopard (see list 1)
*bàk, follow | CD *bàk*, also AD2 CL *bàg*
*bàk, stick, block | CD *bàk*
bám, big (be) | CD *gbóóm*, AD5 Yendang *gbān* 'heavy, old'
bàámsà(r), sickle | CD *gbòómsà*, AD4 Momi *gamsɑz*, but Pere *gbànè*
bāŋkùlúūŋ, elbow
*bàr(ù)b, twin | CD *bàrùp*
*béēb, money | CD *béēp*
bén, granary | AD4 Pere *binè*, cf. CD *bóón*, AD2 CL *bóón*, AD5 ZM *ɓɔ́ɔ̀*; AD4 Dii *váŋ*
*bèréèŋ, gazelle (kind of) | CD *bérèng*
*bì, seed, kind (*bí* as N2) | CD *bìì*
bìì, quiver (for arrows) | CD *bɛ̀ɛ̀n*
*bōksī, accompany | CD *bōksì*
bòr, big | CD *wàrí*, pl. *wòpsá*, AD4 Pere *bògɑ̀rè*, AD5 ZM *bòrò* are all likely cognates
búmlá, round
búŋ, kill | cf. CD *bùt*, AD4 Momi *but-s-* 'kill a sleeping animal'
býýrì, draw, decorate with drawing | AD4 Momi *bii-*, AD5 ZM *bii* but Yendang *vēē-*; cf. CL *bād*

ɓá (*ɓà* with subject *m̀* '1S'), come | CD *ɓáá*, rarely with sense 'come' in AD, but cf. AD4 Pere *ɓá-*
      'come forward'
ɓák, hug, embrace, cradle | CD *kpɑ́k*, AD4 Pere *kpɑ̀-*, *kpàŋ-*
ɓák, knife (see list 1)
ɓàk, bushcow (see list 1)
ɓáksì (+ *túū* 'head'), think, worry about
ɓáámá, midst

ɓán, farm (vb) | CD *bààn*, AD4 Momi *baa-*, Pere *bàà-*, Dii *bàà*, but AD6 Karang *p*ā, AD13
        Kulaal *wáy*, Niellim *w*ā*y*

ɓ*ā*n, field, farm | CD *b*ā*ā*n, AD4 Momi *bant*, Dii *b*ā*b*, but AD6 Karang *pài*, AD13 Kulaal
        ùààl, Niellim *wáál*

ɓé-síbá, (down on) ground | cf. perhaps CD *b*ē*n* for the initial element

ɓé*ē*, bushbuck | cf. CD *b*ạ̀*y*, AD4 Momi *bayamz* 'duiker', Dii *bál* 'kob'

ɓ*ē*k, (clay) dish

ɓéksì, break, smash | ideophonic root: CD *vw*ē*ksì*, cf. AD6 Karang *vw*ē*h* 'cut' and even AD13
        Niellim ɓ*ạ̀grì*

ɓ*ẹ́*, leg (see list 1)

ɓ*ẹ̄n*, bring | CD *b*ē*nì*; cf. AD13 Kulaal *w*ẹ̀*n*

ɓ*ẹ̄ẹ̄r*, two (see list 1)

ɓí, lie, tell lies (+ *lé*ē*m*) | cf. AD4 Pere *mìì-* + 'tongue'

ɓíŋsì, refuse | AD5 ZM *bèn*

ɓíp, ask, ask for | cf. AD4 Dii *vì*, AD5 Yendang ɓī-, AD6 Karang *vw*ī

ɓó*ō*m, wound, sore

ɓóòn, ɓòn, cut, slash; split (intr); break (as day)

ɓóŋ, river (see list 1)

ɓ*ọ́*, bean

ɓ*ọ́*, throw | AD4 Dii *gbò*, AD6 Karang *vw*ū

*ɓ*ọ̀*b*, blind(ness) | CD *b*ọ̀*ọ̀p*

ɓ*ọ̀ọ́b*, dance (n)

ɓ*ọ́p*, dance (vb) | possible cognate in AD13 Niellim ɓ*ōn*

ɓœ̀rùm, thunder, lightning | CD *b*ọ́*ǭ*, AD4 Dii *b*ọ́*ọ́*, cf. AD6 Karang *p*ọ́*mn*ā; but also CD *bélùm*,
        AD4 Momi *bulmi* 'flame' (see *yér(í)má* 'flame')

ɓùmkì (intr), resound, be noisy

ɓú*ū*ŋ, ash, dust | CD *b*ū*n*ā 'dust'; *buŋ is PP and Proto-Jukun

ɓúŋs*ā*, (harmattan) wind

ɓ*ý*ȳ, dog (see list 1)

ɓýms*ā*, brain(s) | CD *bólòmsí*, AD4 Pere *bórè*; note AD6 Karang *l*ī*-pám*

ɓ*ȳr*, white | CD *b*ū*rkí*, AD2 CL *b*ī*íd*, AD4 Momi *bu(ni)* 'white', *bur-* 'be white', Pere *bú*ī, Dii *bú*
        'be white', AD6 Karang *búí*, but also *pùkí*, cf. AD5 ZM *puru*

dá, copulate | CD *léén*, AD5 ZM *laa*

dá, take out, remove

*dábrì, wrap (in leaves to cook) | CD *d*ā*brì*

*dáŋdáŋ, bitter | CD *dángdáng*

dáásì, choose, select (< *dáà* 'remove')

dén, cloth, clothing

d*ē*n, vagina

dí, press

dī*(nē)*-, heavy, prob. < *dí* 'press' | CD *dìngdìng*, but initial continuant elsewhere: AD4 Dii
        zìì, AD6 Kare *zì*, Karang *yì*

d*ī̠*, long | CD *dẹ̀ẹ̀rí* 'long, far', AD4 Dii *dìì*, AD6 Karang *dî* 'far'

dīgĺī, tickle | AD6 Kare *díkìlì*, cf. CD *gēnglì*

dìŋ (perhaps *dĩ̄ŋ*), eyebrow

dìpsá, cloud

*dók, plant (vb) | CD *dòk*, also AD4 Momi *dokw-*

*dóm, greet | CD *dóóm*

dón, sing

dóōŋ, misery, poverty | related to AD5 ZM *ráń*?

dù (or *dỳ*), ridge (in farm)

dúūk, mountain (see list 1)

*dùk (intr), finish, come to an end | CD *dùk*, cf. *tý* 'finish' below

dùk- stomach (but syntactically adjectival) | cf. ZM *dùku* 'skin bag'

*dúksì, finish, be used up | CD *dūksì* < *dùk*

dùm (intr), collapse, fall off, down

dùm, short, shallow

*(á/)dúmá gàŋ, vulture | CD *dúmá gàng*

*dùŋgbàl, hippopotamus | CD *dùngkpàlì*

*dúŋtì (HH?), deceive | CD *dūnglì*

dý, wet, moisten, soak | cf. AD4 Momi *yii-*; perhaps ultimately connected with CD *dùrí* 'rain'

dỳn (intr), go (in) | AD5 Yendang *tìn-*; Pere *dó-*, Dii *dó*, but AD4 Momi *tor-*; also AD6 Karang *rìh*

dȳr, deep | AD4 Pere *lùù-* 'be deep'

dà̃ (intr), break, shatter (from falling) | AD5 ZM *daasè* 'break (a piece) off', AD6 Karang *dòr*, Kare *dǫ̀rǫ̀*

dé, taste | AD5 Yendang *lék-*, AD6 Karang *lēh*; cf. AD4 Momi *doo'*

dẽ, testicles

dè, granary

dè, put, place | AD4 Momi *de'(s-)*, Dii *'yé*

dèk, forget | AD6 Karang *yèkrē*

dẽ̀, other

dí, burn (tr), light (fire) | CD *dìì* but AD2 CL *dúú*; according to Kleinewillinghöfer (pers. comm.), Bambuka in the Bikwin group has *lii*

dĩŋ, navel

dōb, in-law

dōbēn, cowife

dóōk, mouse | AD5 Yendang *rök* 'kind of (domestic) rat'

dón, breathe | AD4 Momi *doŋ* 'groan', Pere *dù̱-* 'blow, snore'; however, CD *gòng*, AD4 Momi *yoŋs-* 'snore', AD5 ZM *gnǫ* 'snore'

dónsì (< *dón* 'breathe'), rest | same derivation in CD *gōngsì*; but AD5 ZM *wnǫkè*; cf. AD6 Karang *òk*

dóōŋ, hip (joint); thigh | cf. AD2 CL *dūn*, A4 Pere *dōrè*, Dii *dōō*, all 'leg'

dǭǭ ká̧ą̄ŋ, matriclan (compound with N2 'face'?)

dūk, penis | AD4 Dii *ndǫ̀g*, but Momi *deek*; AD6 Karang *ndi̱w*

dūùm, perhaps also *dúmà*, back (> *dùm* 'behind') (see list 1)

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*dúms*ā, urine | cf. AD2 CL *nwóòm*, AD6 Karang *tǫ́m*

*d*ūŋ, hole | CD *dǭǭ*, AD4 Momi *duur*, but CL *déél*, Pere *dạ̄lè*; also AD5 ZM *tǫǫ*; AD6 Karang *lók*ō

fâktì (intr), tasteless, insipid

fé, burn (tr/intr) | CD *píí*, AD2 CL *pí'* 'heat', AD4 Dii *pì* 'be hot', AD6 Kare *pìù* 'singe'

fé, twenty

féē̄n, moon, also *fén /w*ī 'stars' (see list 1)

fésì, full, complete (be)

fị́, take (staple food with fingers)

fún(n)ì, begin (< Fulfulde *fuɗa*?)

gá, illness

gá, get, receive | CD *gààn*

gáā̄, strainer (for beer), sifter (for flour); also fishtrap | AD4 Pere *gáŋ* 'fishtrap', cf. CD *gẹ̀ẹ̀*

gā̄á, road (see list 1)

gàá, Tiba

**g*ā*m*, horn | CD *g*ā̄*m*

**gà*ŋ, chief (see list 1)

**gàā̄ŋ-túnén*, donkey | CD *gàng-pén-túnén*

gàáŋ (*sātáā̄*, i.e., 'sour') , pepper | AD5 ZM *gáńzin* where the meanings of *zin* are 'clot of blood' and 'fish'

gàŋgár, drum (kind of) | < Hausa *gàngá*

gáp, count | AD5 ZM *gna*, Yendang *gàn-*, AD6 Kare *ngẹ̀* (also *kẹ́*), but non-nasal elsewhere: AD2 CL *gád*, AD4 Momi *ga'-*, Pere *gáár-(do)*

gápsì (HM?), divide, distribute (adj. *gā̄psé(nē)-* 'forked') | CD *g*ā̄*psì*

gā̄ásá, (dry) season | AD4 Pere *g*ā̄*ā*, Dii *g*ā̄*āg*, but AD6 Karang *káy*, Kare *kẹ́ǫ̀*

gásì (HM?), think (about), recall | AD4 Pere *gèl-*, cf. AD6 Karang *kèr*

gánsì (HM?), strain, sift | CD *g*ā̄ā*sì*

gáŋsā, fly (n) (see list 1)

gáŋ, hunch (on back) | cf. AD5 Yendang *kūkì*; also CD *g*ā*y*, AD2 CL *g*ā̄*d*

gạ̄ŋ, large potsherd | CD *gìí*

géē̄, sorrel

gé, cross (river)

géē̄k, (bambara) groundnut

gēk, grave | CD *g*ā*ká*, AD4 Pere *g*ā*gò*

gém, scream, dream, nightmare (also a verb, 'affect (as a bad dream)')

gén, break, snap (tr) | AD4 Pere *gạ̀-* 'break (tr)' with derivative *gạ̀l-* 'break into pieces (tr)'

gēn, medicine | CD *g*ạ̄*ạ̄n*, AD2 CL *g*ā̄*ān*, AD5 ZM *gn*ā*n*, but AD4 Momi *geŋbạz*, Pere *gaabò*, Dii *g*ā*m*

*gèn (intr), flow | CD *gèèn*

gérá, guinea-corn (see list 1)

géséŋ, scorpion

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gīīk, chest | cf. AD2 CD *gìíl*, AD5 ZM *gìn*, but CD *gàngà*, AD4 Pere *gògī*, *gàgsàlè*, AD6 Kare
    gɔ̀ŋ

gìm, smelly (be) | cf. CD *gúún*, AD6 Kare *gùnè* 'smelly'

*gít, abstain | CD *gìt*

gītáámá, green

gó, pay (back)

gón, answer

*gòŋsá, breath | CD *gòngsí*, see the doublet *gbàŋsá* 'snoring' below

gǭ, catch, seize | CD *gùt*, AD4 Pere *gùù-*, AD5 Yendang *gö̱-*

gù (intr), fall

*gūb, thorn | CD *gūp* (cf. AD4 Momi *kąpt*)

(á/)gýsà̱ā̱, also *gýsỳn*, pigeon

gbá, call, call out | AD5 ZM *ɓaa* (+ *nyaa* 'mouth')

gbá, vomit

gbá̱, dig, dig up | AD2 CL *gbą̀'*, AD5 ZM *gbmaa*

gbák, grind (dry grain) | CD *gòk*

gbák, slip

gbāám, blood (see list 1)

gbāntīlǽǽr, (earth)worm

(á/)gbáŋ, bird (see list 1)

gbàŋsá, snoring | CD *gbāngsì* 'groan' (compare *dón* 'breathe', *gòŋsá* 'breath')

gbàŋsì (intr), finish, run out | AD4 Momi *gbams-*, Pere *bàm-*, AD5 Yendang *gòòs-*

gbéē, forest

gbé̱r, dassie

gbō̱óm, heart (see list 1)

gmésì, move, shift (tr) | CD *gbāsì*; cf. AD2 CL *gbá'* 'advance', AD4 Dii *'mè̱'* 'move near'

gmòp (intr), crawl

hám, salt

háp, bind, wrap (up)

hár̄ā, headpad | cf. AD2 CL *kālà*, AD4 Pere *kàarè*, Dii *kāā*, AD5 Yendang *kāntān*

há̱ŋ, guinea-corn (see list 1)

há̱ŋmā (or *ká̱ŋmā*?), rain, saliva (see list 1)

já (or *já̄ā* or *já̱*), laziness | CD *jààlén* 'lazy person', AD6 Kare *zòzò*

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 *já̄ān* but AD5 ZM *sáǹ*, Yendang *tánká*

jánrì, dry (meat) (< *jāŋ*-?)

jāŋ(nē)-, hot, feverish (be) | AD4 Dii *zágā* 'sun', AD6 Karang *záŋnā* 'fever', Kare *zàŋ*

*jáāy, tendon | CD *jáāy*

jēé̱, scabies | AD5 ZM *znàkn*

jēmká, stranger, outsider | cf. AD4 Momi *genz*, AD5 ZM *zanti*, Yendang *zántá*

jērá, locust | cf. AD5 ZM *zòro*

jèrí, whirlwind

jé̱, see | AD5 ZM *zè*

jῑ̄, night (see list 1)

jῑ̄, theft, thief | CD *yílēn* < *yíí* 'steal'

jῑ̄bàr, pocket | < Fulfulde *jiiba*

jῑ̄ntá, (cooking) pot (apparently singular though plural in form) (see list 1)

jíŋjíŋ, also *jíŋà* (in compounds, e.g., *óŋ jíŋà* 'bee water', i.e., honey), *jííjín*, water (see list 1)

*jῑ̄ŋláār, hyena | CD *jῑ̄ngláā*

jō̄, on, upon | CD *jūm*

jóōb, poison | AD5 ZM *znópọ*, Yendang *zòn*

jóm, squat | CD *jọ̀ọ̀m*

*jón, laugh (vb) | CD *jòòn*

jòōŋ, jòŋá, red | AD5 Yendang *yòntī̄*

jæ̀ (?), laughter | CD *jòná*, AD4 Pere *zònè*, Dii *zǭm*

*jū, up(wards) | CD *jūū*

jūm, flour | CD *jǭǭm*, AD2 CL *zą̄ą̄m*, AD5 ZM *zuman*, but AD6 Karang *sǫ́m*, AD13 Niellim *hùm*

júŋ, mortar | AD5 ZM *dun*

júŋ, pound

jý, pour

jýȳ (*jỳ, jȳỳ* after ῑ or as DO without modifier), house, room (see list 1)

*kámkì, gather (tr) | CD *kāmkì* (frequentative of *kāmì*)

kán, anklet

kán, find, meet | AD4 Dii *kàn*, cf. AD5 ZM *kosè*

kán, tie (prob. a derivative sense of the preceding verb) | cf. AD2 CL *kāā'* 'rope', AD6 Karang *ngāh*

káāŋ, cobra

kàŋtá or *kāŋtá*, calabash

káŋtá, tortoise | cf. AD4 Dii *kpą̄rgą́d*

káàrá, wing, feather

kánsì, join, meet (< *kán*)

ká̱ą̄ŋ, face, forehead

kā̱ŋ, neck (see list 1)

kà̱ŋkìláā (invariable?), chicken (see list 1)

*kásí, strainer (for flour) | CD *kāsí*

kéè, cough (n) | AD5 Yendang *kól*- (vb)

ké̱, say, speak

*kèlùm (also attested -*kēlùm*-, -*kèlūm*-, pl. *kèlùmtá*), baobab | CD *kèlūùm*

*kémjíī, monkey (see list 1)

*kę́ę́, refuse | CD *ką́ą́*

*kę̀ę́r, mad(man) | CD *kę̀ę́*

*kę́ę́kę́ę̄, hedgehog | CD *ką́ą́ką́ą̄*

*kę́nsì, bother, disturb | CD *ką̄nsì*

*kés*ā, (rainy) season | cf. PP *kwas

*k*ē̠*sá*, side (of body), rib cage

*kìlèn, loan | CD *kìlē̄èn*

*k*ī*n*, one (see list 1)

*kìnéē̄n, leper, leprosy | CD *kìnéē̄n*

**kìs*ē̄*n*, slave, captive (see list 1)

(á/)kíyà̠ā, (in) front, before

kó̠ or *kóŋ*, carry (a child on the back) | CD *k*ō*lì*, AD4 Pere *kúú-*, AD5 ZM *kpmáá*

kò̠, put on (clothes)

*kók, rub | CD *kók*, cf. AD5 Yendang *kpös-*

kóm, urinate

*kóm, arrive | CD *kóóm*

*kònàr, smallpox | CD *kònà*

*kòŋláā̄r, elephant (see list 1)

*kóŋtì, gather, pile up | CD *k*ō*nglì*; also AD5 Yendang *kò̠ò̠-*

*kóp, draw, fetch (water) | CD *kóp*; also note AD5 Dii *kò*

*k*ō̠, guinea-fowl | CD *k*ā̄ā, AD4 Pere *kùī*, Dii *kò̠ò̠*, AD6 Karang *kpèh* but Kare *kòrè* '*perdrix*', cf. 'chicken'

**k*ō̠, (enclosure) mat | CD *k*ō̠ō̠

kò̠ò̠r (intr), thin (be)

kǽnsì, untie

kú, sweep | CD *k*ū*rì*, AD4 Momi *koor-s-*, AD5 ZM *kò̠ò̠*

kù (intr), old (be) (person)

*k*ū*k*, *k*ū*kú*, grandmother | compare CD *k*ā*k*, AD2 CL *kàá*; also AD13 Kulaal *káá*, Niellim *kàà*

*k*ū*l/ū*ŋ, boat | root with an unusual distribution: apparent cognates exist in AD13, e.g., Niellim *kwá̠ā̠:r*, pl. *kó̠rg*ē̠, but may spread as far as Ubangi Zande *kùrúngbà*; also note Fulfulde *koombowal*

*kúmtì, make (a fist) | CD *k*ū*mlì*

*k*ū*ŋlú*ŋ, shoulder | cf. AD4 Pere *kò̠ò̠lè* and 'neck' (list 1)

ký, cut (down), clear (a field) | AD5 ZM *ko̠* 'cut (in two)', Yendang *gò̠ò̠-* 'cut (down)'

ký̠, bright, clear (be)

ký̠ýsì, chop (into pieces) (< *ký* 'cut (down)')

*k*ȳ*r*, (wrist-, ankle-)bone, joint

kỳ̠ý, hare | CD *kùt*

kméè̠, pull (up, out)

*km*ē*k*, squirrel

kpà, cut, break off (tr/intr) | AD4 Dii *kpạ̀n*, *kpạ̀ạ̄*

kpá̱, skin | AD5 ZM *kǫǫ*, cf. AD2 CL *kpágg̱l* 'bark'

kpām, joking partner | CD *kpōōm*

*kpàŋgúmt*ā groundnut(s) (see list 1)

*kpát, weed (a field) | CD *kpát*

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

kpìksímsá, chin

kpìŋ, nest

**kpìsáā*r, billy-goat | CD *pììsáā*

**kpōŋáā*r, deaf | CD *kpóngáā*

láā, belly (see list 1)

láā, sleep (n) | invariable final nasal: CD *láām*, AD2 CL *lạ̄ạ̄m*, AD4 Momi *rạm*, Pere *nạ̄m*, Dii *nạ̄m*, AD5 ZM *nú-rǫn*, AD6 Karang *nám*, except AD5 Yendang *nóó-rōō*

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

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

làk, forge (vb) | cf. AD4 Dii *làg*ā 'sharpen'

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

láàn, cry (vb) | cf. AD4 Dii *lég*, AD6 Kare *rę́-rę̀ǫ̀*

*láŋ, surround | CD *láng*

láŋsá, side of face | CD *lạ̄ngsí* 'temple'; also AD4 Pere *làráŋ*, AD6 Koh *lāākùn*

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

léēm, lie (in *ɓíì lém*ā 'tell lies', cf. *lér* 'tongue')

léēn, grinding stone | AD5 ZM *réé*; cf. CD *nààn*, also AD2 CL *n*āgg̱l, AD5 Yendang *(ú/-)ná*

léŋ, drip | AD4 Dii *lég* 'flow'

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

*lépsì, sell | CD *lēpsì*

lér, tongue (see list 1)

léérá, louse | AD2 CL *lạ̀ạ̀d* 'flea', AD4 Pere *lààrè*, Dii *lèèd*, AD5 ZM *rnèèti*, Yendang *rёёsí*

*léérá, flute | CD *léérá* (a regional root: AD2 CL *lééd*, AD4 Momi *liirqz*; also AD4 Dii *lèt̀ę̀ę̀d*)

léésì, *lèèsì*, spoil (tr), rot, spoil (intr) | CD *lę̄ę̄sì* 'moisten', AD4 Pere *líí-*, AD5 ZM *lèsè*

lę́ę̄, grass, bush (cf. *pę́ lé /p*ę̄ 'animal (thing-bush-thing)')

lę́, prepare, get ready | cf. AD2 CL *lēb*, AD4 Pere *lè*, Dii *lè*, AD5 Yendang *r*ē-, all 'produce, give birth'

**lę̄*, scar, blemish | CD *lę̄ę̄*

(á/)lí, when?

lí (+ *ɓáámá*), sky, above | AD2 CL *lēg*

lī, village | AD2 CL *līg*à 'compound, family', AD4 Pere *līg*ò, Dii *līg*, AD5 Yendang *lēk*, all 'house'; also AD13 Niellim *lī:*, Kwa *líē*, both 'house'; *di is PP for 'compound, house'

*līk (*lík*ā ?), dirt(y) | CD *lík*ā, cf. AD2 CL *lígád*, also AD4 Dii *lógǫ́d* 'be dirty'; *dik is PP

(á/)lín, (day after) tomorrow | cf. AD2 CL *līm* 'morning'

līŋ, between, through

*lí*ŋ*sì*, sell, hawk

līŋtá, gut, intestine | cf. CD *nàgrí*

*lípsì, turn, change | CD *līpsì*, but also AD5 ZM *rì*

líísā, smoke

lōk, take | AD5 Yendang *là-*, also AD4 Dii *lò*, but the root may be Chadic, cf. Bachama *lù*

lókā or *lōkā*, cry (n) | CD *lōkì* 'speak, tell'

lǽǣm, war (see list 1)

lúū, yam | AD2 CL *dūd*, AD5 ZM *lǫǫti*

lūk, lump (on body, head)

lūūmòr, market | < Fulfulde *luumo*

lùmsá, man

(á/)lūùmsá, husband (cf. 'man')

lúūŋ, 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 Bachama *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 *mā'* 'make, do', AD5 ZM *maa*,
    Yendang *màà-*, but AD4 Dii *mbōō̜*, AD6 Karang *mbō̜h*

*mák, show | CD *màk*

*máká díkār (*máká* invariable?), (red) millet | CD *máká* (meaning of second element in Tiba
    unknown)

*máksì, try, try on, out | CD *māksì*

mékā, green, unripe

mékā, paste

mę̄símsā, dew | CD *mēnsán*, AD2 CL *mīīsà*, AD4 Momi *met*, Pere *mērè*, Dii *mēd*, AD6 Karang
    mím, but AD5 Yendang *móó* (vs. *mēē* 'water')

mí, day

mí, door (< *mí* 'open, close') (see list 1)

mīī, excrement

mí, close, open

míŋ, shave

mí-wà, day before yesterday

mó, bear, give birth to | AD6 Karang *mbūŋ*; cf. AD4 Dii *mbóg* 'fix, get ready'

mó (*mò* with object *tí* 'tree'), climb

múná, earth

ná (*nà* with indirect object *wę́* 'child'), give | CD *nyáá*, AD5 ZM *an*; this form reappears in AD13:
    Kulaal *néé*, Niellim *nā*

ná (*nà* with object *pę́* 'thing'), do | CD *nàk*

*náks*ā, cow (see list 1)

*nàmèn, crocodile (see list 1)

*n*ā*n*, *n*ā*àn*, how?, how much? | CD *ny*ā*à*, *nyák*ā, AD2 CL *l*ā, *l*ę̀*ę̀*, AD4 Momi *na(ŋee)*, AD5 ZM *dnee* 'how much', AD6 Karang *án*ī, Mbum *nán*ì*í* 'how'

nè, four (see list 1)

nèé (pl. *n*ī*í*), person | CD *nèé*, AD2 CL *néd*, AD4 Pere *nán*

*n*ē*k*, owner | AD6 Kare *nàá*

*n*ē*ŋnéē*ŋ, axe

*n*ī, mother (but *n*ǫ̀*ǫ́ŋá* 'your mother'); cf. *n*ī-*w*ę́, sibling (mother's child) | AD5 ZM *yina*, Yendang *y*ē*n* (with prefix?)

*ní*ŋ, drum (see list 1)

**ní*ŋ*sì*, hurry | actually CD *n*ī*ngsèn* < *n*ī*ngsì* 'make tremble'

**n*ǫ̀, (oracle) poison | CD *n*ǫ̀*ǫ̀*

nóksì, enough, equal (be) | CD *n*ē*kèn*

*n*ō*m(n*ē*)-*, good, pleasant, tasty | AD2 CL *làm*, AD4 Dii *nèm* 'be salty'

*nòm, anger | CD *nòòm*

nòntà, root | cf. AD5 Yendang *n*ī*nkán*; *nan is PP

nóósì (HM?), shake

*(t*ǫ́*/)nùk*, (bow)string

*n*ū*ŋ*, locust bean tree

*n*ū*ŋg*ū*r*, locust bean (tablet)

*nú*ŋ*m*ā, wax

*p*ǫ́, put in, on (as hat, shoes) | CD *pàk*, AD2 CL *páàn*, AD4 Dii *pàg*

(*ɓó*ŋ) *p*ǫ̀, (river)bed, gulley

*pá*ā*n*, place

pát, all | a regional term attributable to Fulfulde

*péē*k, new | AD4 Momi *p*ǫ*(-ni)* but AD6 Mbum *féké*, Koh *f*ǐ*ę̄*

pé, go | cf. AD2 CL *p*ā*′* 'take, carry', AD4 Momi *pee-* 'take away'; also Dii *h*ę*′* 'go off, away'

pę́ę́, thing | CD *pén*; cf. AD2 CL *ī*n, AD4 Pere *ē*nè, Dii *h*ē̠*n*, AD5 Yendang *h*ë̠, AD6 Karang *fè*

pì (intr), return, go back, change (into) | CD *pèè* (compare *p*ī*rì* 'put back'), AD2 CL *p*ī*g*ǫ̀*l* 'return', AD4 Pere *pìn-* 'do again' but *fìl-* 'change into', AD6 Kare *f*ę̀*r*ę̀; cf. 'exchange': AD2 CL *péèn*, AD4 Dii *pí*

*pìí, Beni seed | CD *pìí*

*pígè*ē, maize (see list 1)

**pìlà*ŋ, (large) basket | CD *pìlàng*, a regional root

*pí*ŋ*má*, charcoal | AD6 Karang *h*ę̠́*kr*ē

*p*ǫ́, butcher, cut open

*p*ū*glá*, flowering (of plants) | CD *p*ū*grì* 'flower (vb)'

pùglà, armpit

*pú*ū*k*, *púk*ū, (maternal) uncle | cf. CD *póp*, AD4 Dii *p*ā*ā*

*p*ū*k* (*p*ū*ká*?), bark (of tree), shell | CD *p*ǭ*k*ǭ

*pý*ȳ, viper | AD4 Dii *kpùù*

*p*ȳ*ȳg*ē, cassava | CD *p*ī̄-*g*ō*ō*

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pýn, tired (be) | CD *pút*
pȳn, fatigue

*sáà, (father's other) wife | CD *sáà*
*sā, net | CD *sāā*
sá̲, ooze, have diarrhea (+ *mī̃*) | CD *sáá*, AD4 Dii *sōō̲* 'leak', AD5 ZM *sǫǫ*, but *san* 'forge',
    Yendang *sā̲*- 'ooze; melt' (whence *sā̲kí* 'iron'), AD6 Karang *sà̲h* 'moisten'
sā̲, mud | AD5 Yendang *sō̲k*
sák, hang, carry (on shoulder)
*sàk, genet cat | CD *sàk*
sám, bark (vb)
sām, spear (see list 1)
(*á̲ŋ/*) *sámkā*, left (hand)
sán, carve
sān, hoe | cf. AD4 Dii *tō̲ŋ*
sānsá, muddy pool | cf. *sā̲*
sánsì, grind (flour) | AD4 Pere *sán*- 'grind (fresh, damp grain)', whence relationship with *sá̲*, *sā̲*
(*á/*)*sáŋká*, frog, toad (see list 1)
*sánkì (HM?), teach, learn | CD *sānkì*
*sáásì, do (repetitively) | CD *sāāsì* (auxiliary verb)
sàtáā or *sātáā*, sour
sááti, porcupine
sátō̲k, (beer) pot
sé (also *sééwá*), sun, God (see list 1)
sè (intr), lacking, scarce (be) | AD5 Yendang *sę̀*
sē, also *sésèē*, nightjar (?, translates CD *táàmáā*)
(*á̲ŋ*) *sē* (or *sé*), fingernail (see list 1)
*séb, witch | CD *sép* 'bewitch'; cf. AD4 Dii *sòb* 'use witchcraft', *sóōg* 'witch', *séy* 'witchcraft'
séēk, anklet | AD4 Pere *ségò* '*castagnette*'
sé̲k, go (down), also *sé̲ksì* | AD2 CL *síìm*, AD4 Dii *sí*, cf. AD4 Pere *sí*- 'sit'; also cf. *sí* 'down'
*sèm, (prepubescent) girl, female (animal) | CD *sèèm* 'girl' but -*sę̀* 'female animal'
sēmsémtá sand | cf. AD4 Pere *sì̲ī*, 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*
sènéēŋ, strong, healthy | cf. CD *sēnì* 'be too strong', AD4 Dii *sèn* 'make an effort' prob. < *sę̀ę̀* 'be
    potent, effective'
*sènì, difficult (be) | CD *sēnì*
séŋsì, pull (off, out)
sèér, pl. of *yá̲mīk*, young, small (child)
sèèrá, truth

sę́, scratch (itching) | cf. AD5 ZM *sneeté* 'itch'

sí, speech, matter

sí (intr), black, dark (be) | cf. AD5 ZM *tinri* 'dark'; also cf. *jī̃* 'night'

sí, bury

sí, plait (hair) | AD4 Momi *si-* 'make rope'; otherwise CD *tíí*, Pere *tìì-* 'weave', AD5 ZM *tisé*

sí, also *sī̃*, down(wards) | AD5 Yendang *sę̈ę̈*, cf. CD *t̄ī*, AD5 ZM *tí(p)ì*, AD6 Kare *tìà*, also cf.
  síb 'under', *sę́k* 'go down'

sì, wait for | CD *sìt*, AD2 CL *sìd*, both 'be patient'

sī̱, show

síb, under, below | CD *t̄m*, also AD5 ZM *típí*, AD6 Karang *sìba*, both 'earth'; cf. *sí* 'down'

sígáŋ(á), much, many

sìíjì, also *sìíì*, civet cat | CD *sìì*, AD2 CL *sììd*

*sím, beer | CD *sī̃m*; cf. AD4 Pere *fùm*, AD13 Kulaal *hạm*, Niellim *hám*

sī̃r, porridge | cf. AD4 Momi *sii-* 'cook porridge'

*sìr, boil, abcess | CD *sìt*

sísèē, switch, whip

*sììsá, insult (n) | CD *sììsí*

só, drink | CD *sǫ́ǫ́*; the general AU root is represented by AD4 Dii *zò*; **swa is PP

só, butt, ram (perhaps identical with the following term) | AD2 CL *sūd*

sóò, break (intr) | AD4 Dii *sóób*

sò, pierce, stab | AD5 ZM *suu*, Yendang *só-*, AD6 Karang *sū*, but AD2 CL *sàb* 'pierce', AD4 Pere
  sà-, *sàà-*, Dii *sà*; compare CD *sót*, AD2 CL *sód* 'plant (a stake)'

sók, wash (something) | CD *sūksì*, AD4 CL *sūg*, AD4 Pere *sòg-*, AD5 ZM *sòkè*, AD6 Karang *sǫ̀h*
  'wash oneself'

*sókàr, (land monitor) lizard | CD *sókà*

sóksá, hair (on body) (see list 1)

sóksá (used with *ɓǫ́* 'throw'), whistling

són, (staple) food | AD5 Yendang *sòò̱*, cf. CD *túm*, also AD13 Kulaal *hàà̱l*, Niellim *hàà:n*;
  cf. 'eat, chew'

*sóŋ, antelope (kind of) | CD *sóng*

sóp, blow (on)

sǫ́psì, lick (up)

sǫ́ǭ, also *sóórā*, wind | cf. AD13 Kulaal *hàà̱p*, Niellim *sàà̱b*

sǫ́n, carry (off, away) | cf. CD *tùùn*, AD5 Yendang *tǭǭ*, both 'carry on head'

sǣ, mucus | cf. AD2 CL *sāb* 'pus'

sǽǽnì, leave (a path), branch

sǽnsì, put out (fire)

sūksá, soup | AD5 Yendang *sōnkò*

súmsì, *sùmsì*, gather (something); gather (together) | CD *sòòm*, AD4 Pere *sùm-*, both 'gather up',
  AD5 Yendang *sòò* 'take out, remove'

sùwę́ē̱, (intestinal) worm | CD *sǫ̀ǫ̀mī̃*, AD2 CL *sǫ̀bę́ę̀*

súŋsì, swell, blister

súsìŋ, shade | AD5 ZM *sunrú*, cf. AD6 Karang *súŋ* 'night'

sɥ́ỳ, thirst | CD *súù*, AD2 CL *súùd*

sɥ́ỳm, dry (be) | CD *sùm*

*sýmà*ā, empty

sýmsì, dry (tr) | CD *sūmsì*

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

sýȳn, tail | AD2 CL *sūū*; also cf. AD13 Kulaal *hé̱é̱*, Niellim *hín*ā

sýnsì, resemble

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

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

tá (or *tá̱*), pick, pluck (fruit); excrete | AD4 Dii *tò̱'* 'pick'

*tá, butcher (vb) | CD *tàà*

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

**tá*āb, sandal | CD *tá*āp

*táà*m, *tàm*, jump (over), jump (intr)

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

*tárá, three (but cf. 'eight' *týn-/tárā*rā) | CD *tár*ā (see list 1)

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

té, stone (see list 1)

(*yé̱n/*) *tē* (< *té*?), anus

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

(*á/*)*ték*ā(/ĩ?), gecko

tém, pass (through) | CD *tē*lì 'pass by', AD2 CL *tāà*n, AD4 Pere *tàl-* 'pass', AD5 Yendang *tár-*, AD6 Kare *tá*

témsì, insult

**té̱*, push, sweep, carry along | CD *tą̀ą̀*

**té̱ksì*, begin | CD *tą̱ksì*

**tè̱é̱msà*, sheep | CD *tą̀ą̱msí*; also note AD4 Pere *tàm*ī, AD5 Yendang *d*ā̱ā̱

tí, tree, stick (see list 1)

ĩ, father (but *tè̱é̱ŋá* 'your father') | AD4 Pere *tá*ā, but *túnú* 'his father', cf. AD5 ZM *yera*, Yendang *yō*rì (with prefix *yV-*?)

*tì(y)*ā*m*, afternoon

ĩk, gourd | AD4 Dii *tíg*

*tíksá, snail | CD *tíksá*ā

(*á/*)*tí/sá*ā (< *á/tísàá*?), owl | AD5 Yendang *túnsún*

*tís*ē*ŋ* (or *tísè*ŋ), ant

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

tón, eat, chew | CD *tàà*n, AD5 Yendang *tā*ā-; also AD13 Kulaal *tú* but Niellim *túy* 'eat (staple food)', compare *són* 'staple food', AD5 ZM *shaa* 'eat', and AD6 Kare *só̱* 'chew'

*tóŋ, play (+ *tǽǽ* 'ear') | CD *tòng tá*ā

tòóŋ(nē)- (also *tùŋnè*), good, effective, clean, beautiful | AD4 Dii *tō̱ō̱* and AD5 ZM *tnǫǫ*, Yendang *tän*, all 'good, tasty'; cf. AD6 Karang *sù*

*tóŋtóŋ, strong, healthy | CD *tóngtóng*

tǫ́, miss, err

tǫ́ǭ, bow (see list 1)

tǽǣ, ear (see list 1)

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

túá, here

túū, head (see list 1)

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

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

tūùŋ, five (but changes form in compound numbers: *túùŋ-kīn* 'six', *tóòŋ-sī-ɓę̄ę̄rá* 'seven', *týn-/tárārā* 'eight', *túùŋ-sí-nèá* 'nine', cf. *wúp-sę́ę̀-tūùŋá* 'fifteen') (see list 1)

túŋ, point (at) | CD *tǫ̀ǫ̀*, AD6 Kare *tò*

túŋ, push | CD *tùt*, Dii *tú'*, but AD4 Pere *tą̀ą̀r-*; also AD5 ZM *dnǫ́*

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

tỳrým, between, among | AD2 CL *tǫ̀ǫ̀d* 'half'; cf. AD4 Dii *tà̀g*

týn, spit | AD2 CL *tǫ́'*, AD4 Dii *tǫ̀'ǭ* but AD4 Momi *tą́n-*, AD5 Yendang *tēn-*; CD *tūsì*

(á/)và̰ā̰, (kind of) lizard

vállì, help | < Fulfulde *walla*

vǫ́, squat

vúm, roast

vúūn, goat (see list 1)

(á/)vúnsá, mosquito | CD *bǫ́ǫ́sí*, AD4 Momi *woos*, Pere *vórè*, Dii *vád*, Karang *vwǫ́rǭ*, Kare *wǫ́rǫ́*, cf. AD5 ZM *wara* 'bee', Yendang *vōrì* 'bee', *wę̄rę̄* 'honey'

vý, die | CD *wúú*, AD4 Momi *wąr-*, Pere *vò-*, AD5 ZM *vǫ*, Yendang *wę́s-*, AD6 Karang *hū*, AD13 Kulaal *úíí*, Niellim *'úy*; cf. AD2 CL *vād*

vȳȳsá, shadow | AD2 CL *nyìsà*; cf. PP **vu* 'shade'

vwę̄, beat, hit | clearly ideophonic: CD *vwàt*, AD6 *vwā̱*, elsewhere AD4 Momi *bee'*, Dii *và̰à̰*, cf. AD6 Karang *vwàr*, Kare *vwę̀rę̀* 'break'

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

wá, sharpen

wák, *wákú*, grandfather

wàláŋ, (cooking) pot (see list 1)

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

wánsá, body

wá, leave, let | CD *vét*

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

wę́ (pl. *wi̱*), child | CD *wéę́* 'small, child', AD2 CL *wāā*, AD4 Pere *wārwā*, Dii *wāā*, AD5 Yendang *vàà*; **van* is PP

wéjìm, morning

wéjìn, tomorrow

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

*wép, mix | CD *wèp*

wér, arrow (see list 1)

*wérùm-w*ē, (small) bird | cf. AD4 Momi *welm*ạ*z* 'nightjar'

*wésè*ē, firewood

wésì, hurt | CD *nw*ō*nì* (but Mapeo Chamba *w*ē*nì*), AD4 Pere *wòò-*

*w*ẹ*k*, hide (tr)

*w*ẹ̀*rá*, mushroom

wíī (*wīīn*?), female | AD6 Karang *wùúy*, Kare *wíì* 'woman' (also Koh *máy*)

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

wínsá, thatching grass

*wó, want | CD *wòò*

*w*ọ́, take off (clothes) | CD *w*ọ̄*ọ̄sì*

*w*ọ́, watch (over) | CD *nwáán*, AD2 CL *nwáàn*, AD4 Pere *w*ọ́*r-*

*w*ō*b*, baboon

*w*ō*gbí*ŋ, bat

*wóm(n*ē*)-*, cooperative, conjoint (labor)

*w*ọ́*m*, oil (see list 1)

*w*ọ́*ms*ā, elephant grass

*w*ọ́ŋ, fight (vb) | CD *nòng* but *nòòm* 'be angry', cf. AD4 Pere *gò-* 'fight' but *n*ọ̀*-* 'be angry', AD5 Yendang *yómán*

*w*ọ̄ŋ, fight (n) | CD *n*ō*ng*

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

wópsì, ride (horse)

*w*ō*psínsá*, sweat | cf. CD *w*ạ̀*t*, AD2 CL *w*ạ̀*ạ̀d*, but AD5 ZM *pm*ạ; *tiin is PP

**w*ọ́, hide (intr) | CD *w*ọ́*ọ́*, cf. AD5 Yendang *kúú*

*w*ọ́*b*, bone | cf. the well-represented NC root appearing, e.g., in PP as *kup (but AD5 Yendang *k*ū*n*)

*w*ọ́*ọ̄b*, ten (see list 1)

wú, drunk (be) | cf. CD *wìt*

*w*ụ̀, fat (be) | CD *nòò*, AD4 Momi *non-*, Pere *nùù-*, AD5 ZM *n*ọ́

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

wúptá, fear (n)

yá, go (and visit, + *sènén*) | AD2 CL *y*āà*n*, AD4 Dii *yà*, both 'arrive'

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

yà (intr), rot, spoil; be surprised | CD *nyāngì*, AD2 CL *nyā'*, also *yēèl* 'spoil, destroy', AD5 Yendang *yänsān-*

*yáā̠, what?, why? | CD *nyáā*

yáà̠, friend (see list 1)

yá̠, old, used

yà (intr), swallow | cf. AD4 Dii *yó'*

(á/)yà̠, where? | AD5 Yendang *īyāä*

yá̠mīk, pl. *sèér*, young, small (child) | cf. CD *míí* (pl. *méém*); also note the use of a *yá-* classificatory prefix in AD5 Yendang

yáān, bad

*ya̠n, horse (see list 1)

yáásá, leaf (see list 1)

yé, (at) home | CD *nyēm*, AD2 CL *yīìl* 'house, compound', AD4 Dii *yēē* 'courtyard', AD5 ZM *ye*

yé, ready, ripe, healed (be), adj. *yénèē* | AD4 Dii *yénná* 'true, good', cf. 'cook'

yéksì, light (fire from another fire) | AD4 Pere *yèg-*

yér(í)má, flame | AD2 CL *yèél* 'red, flame'; cf. *ɓǽrùm* 'thunder, lightening'

yéēm, meat (see list 1)

yēm, carry (to), present (something) with an obeisance | cf. CD *nyēnì*

*nyèmnyēm, yesterday | CD *nyèm*

yémsā, song | CD *nìmsí* but AD4 Dii *yéé*, AD5 Yendang *yẹk*

yéēn, buttocks

yéŋ, sow (by casting), scatter | CD *yèè*, AD4 Pere *yàm-* 'disperse'

*yéēŋ, bedbug | CD *nyéēng*

yéèŋ, cold (be) (as wind)

*yéŋlá, digging stick | CD *nyéŋlí*

yí, eat | CD *líí*, AD2 CL *líìn*, AD4 Momi *ree*, Pere *lé-*

*yí, steal | CD *yíí*

*yìk, lion (see list 1)

yírīk, black | CD *vírkī*, AD4 Momi *wii-*, *wiir-* 'be black', Pere *víí-* 'be black', Dii *vī̠ = ī̠* 'be black', AD5 ZM *viiki*, but also AD4 Pere *dírī̠*, AD5 Yendang *yītì*, AD6 Kare *yírí* (both having cognates in AD13 as well)

(á̠ŋ/)yīīmā (< *yíí* 'eat'), right (hand)

yó̠, pull, stretch | cf. CD *nwòt*, AD4 Dii *wòò*; also AD5 ZM *gnǫ* 'pull', *znǫ* 'pull out'

yógréēn, soft | AD4 Momi *yakw-*, Dii *yǭǭ* 'be soft' vs. CD *wógléēn*, AD2 CL *óg* 'be soft'

yóòk, cook (staple food) | AD4 Pere *yó-*, AD4 Dii *yó̠* 'be ripe, cooked' (cf. *yé* 'ready...(be)'); also cf. AD4 Momi *ruu'-*

yókúm, salt (see list 1)

yóm (*yōm(nē)-*), bite, be sharp | AD5 ZM *yon*; elsewhere, the usual initial *l/n* alternation: CD *lóóm*, AD2 CL *lùm*, AD4 Momi *rom(-d-)*, AD4 Dii *nòŋ*, AD5 Yendang *rūn-*, AD6 Karang *nūŋ*, Mbum *lóŋ*

yǫ́ǭ, snake (see list 1)

yǫ́, weave, plait

yǫ́ǫ́sá, rope | CD *yísí*, AD4 Momi *yokla*

yǫ́ǫ́sì, swim, cross a river by swimming | AD4 Pere *wó(g)-*; cf. CD *yá̠á̠* 'climb, cross a river (by any means)', AD4 Pere *yáá-* 'cross (a river by means other than swimming)'

yúū, death, dead body | cf. CD *wḗ*ḗ, AD5 ZM *vǫǫ*, Yendang *wȩrì*, AD6 Karang *húl*, AD13
       Kulaal *ùààl*, Niellim *ꞌúúl*ū, all probably related
yúú, hunger | CD *wúú*, AD5 ZM *wnǫkǫ*; cf. AD13 Niellim *nyún*ī 'thirst'
*yúks*ā, fish | CD *wúū*k, cf. AD4 Momi *duga*, *duukt*, Pere *dúrè*, AD6 Karang *nzúy*
yým (or *yǽm*), collide (with) | AD5 Yendang *yïn*