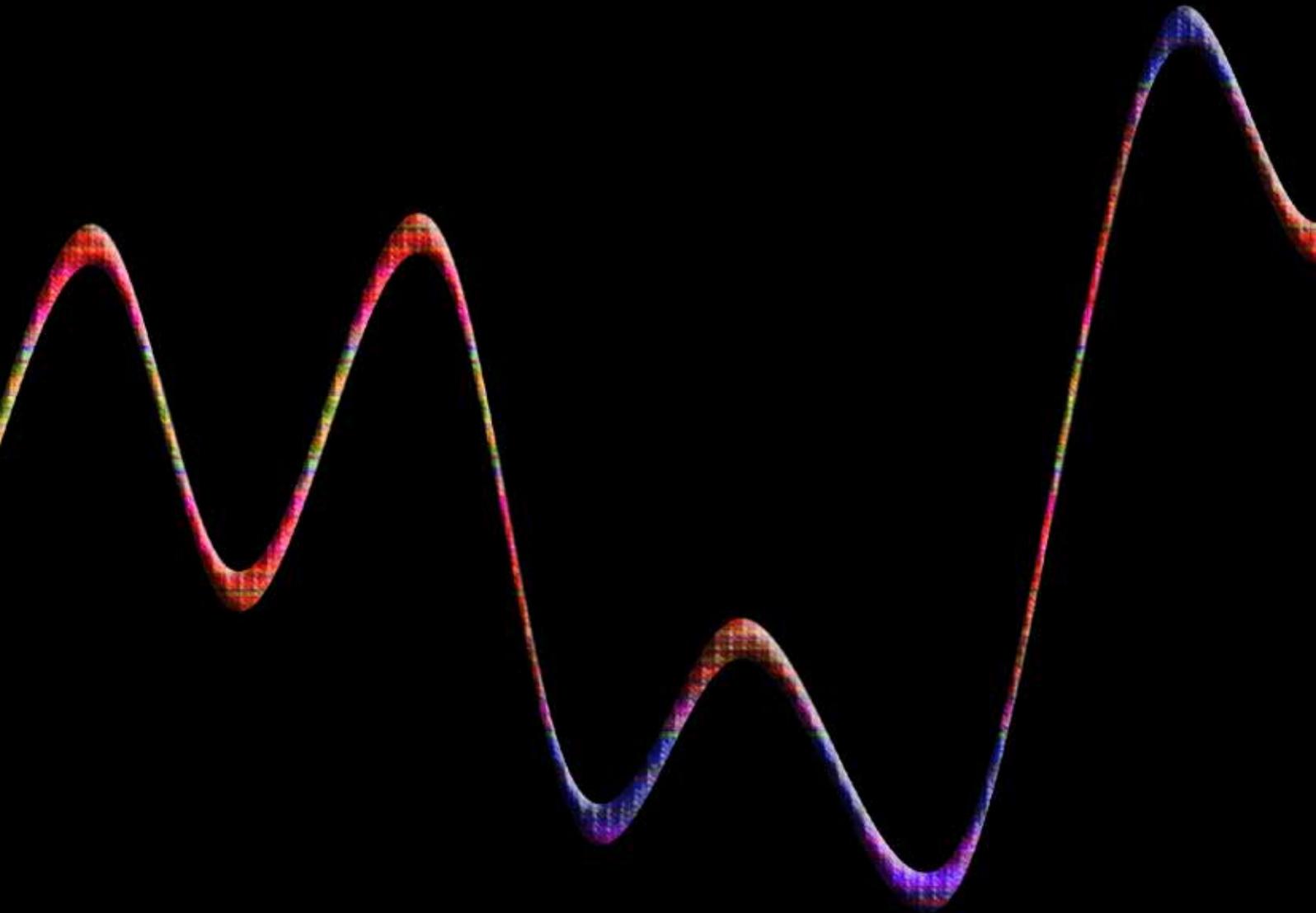


DATA FOR

# TENSE AND ASPECT SYSTEMS

## IN BANTU



**Derek Nurse**

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## COLOPHON

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## Introduction

The information and analyses here were intended to provide the database for my book *Tense and Aspect in Bantu* (2008, OUP). To ensure reasonably systematic geographical and typological coverage, one language was selected from each of Guthrie's 84 groups (A10, A20, etc.). To these were added another 16, giving a (more or less) round 100, to facilitate statistical statements and include languages typologically somewhat different from the chosen representatives for each group. These 100 are referred to in the text as the matrix languages and form Appendix 1. Most have one standard template, with tense along one axis and aspect along the other, and one page of accompanying notes, most following more or less the same format. Occasional languages have more than one template, and some sets of notes exceed one page. Aspects in some languages (e.g. D42, M14) are so numerous that the matrix perforce excludes some, which are taken up in the notes. Usually, tones indicated along the left and top of the matrix are what are known or assumed to be underlying values, while tones in the matrixes themselves are surface tones, which explains why they sometimes differ. A blank cell indicates the absence of the category or the absence of data. Appendix 2 contains templates for a further 45 Bantu (and two Grassfields) languages, with no accompanying notes. They were selected less systematically. The facts are only as good as the sources used, which range in quality and quantity from very good or good to inadequate. All sources are listed at the end of the book. Users should always refer to the sources in case of doubt. All this is discussed in more detail in the Introduction to the book, which also discusses its theoretical framework. More detailed - and diverse - discussion of this framework can be found in the online book: Nurse, D., Rose, S. & Hewson, J. *Tense and Aspect in Niger-Congo*. 2016.

[http://www.africamuseum.be/research/publications/rmca/online/index\\_html#humandoc](http://www.africamuseum.be/research/publications/rmca/online/index_html#humandoc)

A major purpose with these appendices was to assemble in one place as sizeable a collection of comparable data and analyses as possible. Most of the data was assembled during the decade 1995-2005, especially during a sabbatical year at Lyon 2 University, under the auspices of Prof. J-M. Hombert. With the increase in language coverage and the refinement of tools since then, I would hope a larger overview would emerge in the coming decade.



# Appendix 1

## Matrices and Notes for Matrix Languages

**Introduction** The matrices follow a standard format, in which tense and aspect intersect. The basis for this is discussed in Chapter 2. Tenses appear in rows, aspects are shown in columns. Occasionally, for reasons of space, this order is reversed. The number of tenses varies, as can be seen by comparing H10A or G42d with A44 or F21. This variability mostly reflects the linguistic facts. The number of aspects also varies, seen in A15c or A22 versus A93 or S30/40. Here the variation may reflect the language but mostly it reflects my ignorance, which in turn reflects the source(s), many of which do not treat aspect in detail. The aspects, seen along the top of most matrices, follow a conventional order: Perfective (PFV), Imperfective (IPFV), Anterior (ANT). Since most languages have more than one subdivision of Imperfective, these follow the general imperfective label (Progressive (PRG), Habitual (HAB), (or sometimes HAB, then PRG), Persistent (PER), etc). Aspects in some languages (e.g. D42, M14) are so numerous that the matrix perforce excludes some, which are taken up in the notes. Usually, tones indicated along the left and top of the matrix are what are known or assumed to be underlying values, while tones in the matrixes themselves are surface tones, which explains why they sometimes differ. A blank cell might indicate the absence of the category or the absence of data.

These notes for each language are intended to expand the content of the matrices, explain certain parts of them, and add other data. Generally, they are written in truncated form, to include as much information as possible. Many abbreviations are used (see Abbreviations). Most also follow a standard format, to make the reader's task easier. In most cases, they consist of seven or eight sections, now discussed. Section 2, 3, and 4 are considered as the centre of the notes, and the length of the other sections varies, depending on how much is said in these central sections. It cannot be emphasised enough that the matrices and these notes are only as good as the sources, which range in quality and quantity from very good or good to inadequate. Occasionally additional sections are added (e.g. on focus).

1 General (sometimes called 'Source, community') This always contains the source(s) on which the description is based, and basic information about the language community, such as location and size. Unless otherwise stated, the population figure comes from Gordon (2005). Readers should try to consult the source(s), as the details included here are never complete. An attempt is made to include the number of vowels and sometimes additional data. The number of vowels is expressed in the form, e.g. 5x2 (five vowels, with a length contrast), or 7x1 (seven vowels, all short, no contrastive length). Nearly all Bantu languages have 5 or 7 vowels, most exceptions being in Zone A, plus B85, D20-30, and S31. The data display in the notes and matrices usually fits with the number of vowels given but in some cases I have resorted to a simple five-vowel representation.

2 Structure This contains a one-line linear representation of the structure of the single verbal word, followed by a listing of the morphemes occurring in each position. Another analysis, a hierarchical structure, is discussed in Chapter 2. With a few exceptions, the structures are probably complete. However, the lists of morphemes may not always be complete, and I may sometimes have reduced to one slot what in fact should be a string of morphemes: Bennett

(1969) and Mutaka (1994) contain statements about such strings. Tones, if given, tend to be underlying, where the source is felt to be reliable.

3 Tense This tends to reflect fairly closely the content of the matrix. It may comment on whether tense reference is relative, which is more common, or fixed, less common. Matrices and notes use the labels P<sub>3</sub>, P<sub>2</sub>, P<sub>1</sub>, F<sub>1</sub>, F<sub>2</sub>, etc, rather than Remote, Middle, Near, although these terms may also be used in the discussion.

4 Aspect As terminology for aspectual values varies considerably, I have consciously tried to use a standardised set of terms, to emphasise the similarity of the systems rather than their differences. My general categorial labels do not necessarily have exactly the same value for one language as for another. This sometimes involved modifying the labels used in the source(s). In other cases I have retained the terms used by the source, either because they seemed satisfactory or because I was unsure what they meant. This is especially true for French terms. As mentioned above, the list of aspects in some languages may not be complete, often because of an analytical tradition in some sources that only takes into account those categories expressed by morphological inflections, while ignoring those carried by compound verbs. Most Bantu languages express at least some aspectual distinctions by such compounds.

5 Negation (NEG) There is much variation on a few basic themes in Bantu negation. One common pattern involves contrasting a primary and a secondary negative: primary is the negative that occurs in positive, main clause, absolutes, whereas secondary is the negative found in many subordinate clauses, relatives, and subjunctives. This section sketches as much detail as possible.

6 Relatives (RELS) Most sections on relativisation merely sketch positive and, where the source allows, negative patterns. Where space allows, examples are given. Few matrices show relatives.

7 Subjunctive (SBJ) A few of the notes deal with subjunctive and imperative separately, most combine them. My original intent was to try to illustrate the range of use of the subjunctive but space and available information conspired against that. Most cases describe the structure of the subjunctive and give a few examples. The subjunctive is defined as that structure which has a high-toned SM and a high-toned final -é.

8 Imperative (IMP) This section attempts at a minimum to exemplify singular and plural, positive and negative. Many Bantu languages use the subjunctive as a second, polite, imperative.

My original intention was that all matrices and notes be a single page long. Some exceptions emerged, for practical reasons. With five exceptions, all 100 matrices consist of a single page. The exceptions are: B52, G11, K42 (which all have divergent sources), F21 (data display too large for one page), and E51 (two analyses of the same data).

Twelve of the 100 sets of notes exceed one page (A72a, B52, D28, D42, F32, G23, L32, M14, M54, P311, R41, S42). In some cases there was simply a lot of data (e.g. D42), which would not

all fit in the matrix and needed discussion. In other cases there were points of particular interest (F32, G23, L32, M14, R41) and yet others contained matter of general interest (A72a, D28, L32, M54). It would have been possible to reduce them all to one page but I felt a need to balance economy and a reasonable discussion.

A15c Akɔɔse

	Perfective	Imperfective -áa / -éʔ / -èʔ
Past	/à-N-pim-H/ <i>he carried</i> N: /à-e-N-kê-N-pim-ʔé/	/à-pim-éʔ-áa/ <i>he was carrying, used to carry</i> N: /à-e-pim-éʔ-áa-H/
	/à-Ø-pim-é/ <i>he has carried</i>  /é-Ø-kín-é/ <i>it has dried, is dry</i> N: /à-e-pim-é-ʔé/	/à-Ø-pim-èʔ/ <i>he is carrying, carries</i> N: /à-e-pim-èʔ-ʔé/
Future -â-	/à-â-pim-H/ <i>he will carry</i> N: /HL-à-e-â-pim-ʔé/	/à-â-pim-éʔ(-H)/ N: /HL-à-e-â-pim-éʔ-ʔé/

## A15c Akɔɔsɛ

1 General Beside older and hard-to-access items, there are several recent works on A10 languages: Kuperus (1982, 1985), Friesen (2002), Hedinger (1985). Hedinger was chosen for several reasons: Kuperus and Friesen deal adequately with A11 varieties and are easily accessible, Akɔɔsɛ (but not A11) differs somewhat from A20 languages, and Hedinger has a diachronic component. 70,000 speak Akɔɔsɛ in Cameroon's SW and Littoral Provinces. 7x2 /i, e, ε, a, ɔ, o, u/. There are also nasalised vowels, whose phonemic status is unclear. Underlying tones appear to be H, L, rising, and falling. Highs may be downstepped and Hedinger's analysis includes floating tones.

2 Structure Pre-SM – SM – NEG – TA – LIM – root – EXT – Pre-FV – FV – Post-FV

Pre-SM: This is tonal only (H, HL).

SM: mè/N; wè/è; à; 1p excl sê; 1p incl dè; 2p excl nyê; 2/3p bé; classes 1 and 9 L, the rest H.

NEG: e (toneless).

TA: Low-toned N Past Perfective; â Future.

LIM: kê 'already'.

Pre-FV = aspect marker: ε Imperfective (various tones); é (Present) Perfective.

FV = tense marker: a NEU; áá Past Imperfective.

Post-FV: Two floating tones (H, L) and ?é. 'No unitary meaning or function is obvious for these' (Hedinger: 14–15). Up to two object pronouns occur after the verb, in the order IO DO.

3 Tense Hedinger shows three categories: one past, unmarked, one future. Future is marked at TA by -â- and apparently a final H. Past is marked by (low-toned) -N- at TA for the Perfective and apparently by a final H. Past Imperfective is unmarked at TA but is characterised by -áá at FV. Unmarked (present) is not marked at TA but has suffixal -é in the Perfective.

By contrast, Londo and Mbonge both have two degrees of past reference. Londo has a Non-Past (Present + Future), while Mbonge has a present and two degrees of future.

4 Aspect Hedinger (p. 32) says '... aspect has two terms, PERFECT (Perfective: DN) and IMPERFECT (Imperfective: DN). The latter is consistently marked by -ε? (with differing tones: DN)), the former is unmarked. However, where the unmarked tense intersects with the PERFECT aspect, the marker -é occurs.' Past Imperfective -ε? goes to -ag in a few short-stemmed verbs and to -aa in some other verbs. Synchronic processes link -ε?, -aa, and -ag: Hedinger thinks they are all variants of PB \*-ag(a). PFV is generally unmarked but where the unmarked (present) tense intersects with PFV aspect, -é appears. In all forms except one, PFV is accompanied by final H. The same few verbs showing -ag have not -é but -edé as their PFV. Hedinger relates -é and -edé to Proto-Bantu \*-ile.

Londo and Mbonge both have an Anterior (similar to A22).

The morpheme -kê- seems to be an aspect (Inceptive? Completive?) although Hedinger does not treat it as such: /à-e-N-kê-N-pém-?é/ 'He did not carry', /à-kê-kê-H/ 'He already went'.

5 Negation Marked everywhere by -e-, and, in the Future only, by initial floating HL.

6 Relatives Absolutes differ from relatives, if at all, by an initial H (in object relatives) and/or the presence or absence of -ʔe.

7 Subjunctive No segmental marker, an initial H replaces the tone of the SM: nyí-dy-ê 'Eat (pl)', nyí-dy-âg 'Continue to eat (pl, IPFV)', dé-k-ag 'Let's go', á-k-ag 'He should go', ñ-k-ag 'I should go', bé-ke 'They should go', mí-bɛl nsón 'Let me (do) work'.

8 Imperative Final underlying H: dyé 'Eat', pɪm 'Throw'; dy-ág has IMP and IPFV.

A22 (Mo-)kpwe

	Perfective	Imperfective -aa-	Anterior - <sup>1</sup> má-
P <sub>3</sub> -ma-	a- <b>ma</b> -zoz-á <i>she washed</i> a- <b>ma</b> -kók-á <i>he bit</i> N: a-zí-zoz-e		
P <sub>2</sub> -Ø- ... -eai	a-Ø-zoz-éai N: a-zá-zoz-eai		
P <sub>1</sub> -Ø- ... -i	a-Ø-zoz-î N: a-zá-zoz-i		
	a-Ø-zoz-a <i>he washes, will wash</i> N: a-zá-zoz-á	á-a-zoz-a <i>he is washing</i>	á-m <sup>1</sup> á-zoz-a <i>he has washed</i> N: a-zí-z'óz-í

## A22 (Mo)kpwe/Bakweri

1 General Beside older items, there are several more recent works on A20 languages (Ittmann 1939, Gensler 1980, Kagaya 1992). I chose A22, partly because it is like A11, which I passed over in A10, partly because Ittmann, the major, and excellent, work on Duala (A24) is easily available. Duala and Mokpwe are not particularly similar. Gensler is the major source, supplemented by Kagaya. Spoken by 32,000 in Cameroon's SW Province.

7x1 /i, e, ε, a, ɔ, o, u/, and five nasalised vowels. Vowel height harmony raises final -a to degree 3 after most preceding degree 3 stem vowels, and degree 2 vowels in SMs assimilate to following degree 1 or 3 vowels. An underlying tonal contrast between H and L, with surface H, L, rising, falling, and downstepped H.

2 Structure SM – NEG – TA – OM – REF – root – EXT – FV – Post-FV

SM: Persons nà; ò; à; i; è; vá. Class 9 also L, rest H. Reflexive: áá.

NEG: za with polar tone, zi H in some forms, L in others.

TA: Ø PRES and NARS; ma P<sub>3</sub>; má ANT; aa IPFV; éé 'before' (past); oo 'when' (future). Some tenses are also distinguished by a specific tone contour.

FV: a NEU; eai P<sub>2</sub>; e SBJ and some NEG; ε in some RELs; i/li P<sub>1</sub>. Considerable allomorphy with the P<sub>1</sub> suffix: when the stem is CVC- or longer, it is -i; when the stem is NC- or C-, the suffix often has the shape eli/oli (Kagaya also has some εi and ɔu/ɔɔ).

Post-FV: K has -té Conditional.

3 Tense Gensler has three pasts (P<sub>3</sub>, P<sub>2</sub>, P<sub>1</sub> = Far, Hodiernal, Immediate) and a non-past. Kagaya has two pasts, present, future. Both show several narratives, with pre-stem null, tonally distinct. Kagaya's Future is the form in -oo-, which Gensler refers to as 'When he will (not) verb'. Gensler also has a form in -éé-, referred to as 'Before he verbed'. I have not considered these independent tenses.

4 Aspect PFV, IPFV, ANT. IPFV is only given for the Present and may be a Progressive.

5 Negation All negatives are marked in the Post-SM slot. Some tenses (P<sub>2</sub>, P<sub>1</sub>, Non-Past) have -za-, others (P<sub>3</sub>, ANT, SBJ, IMP, NAR) have -zi-. In some tenses, positives and negatives are otherwise the same, in others, they are different. Several pairs are distinguished by tone and -zi- versus -za-: a-zí-kók-e 'He bit (P<sub>3</sub>)' vs a-zi-kók-é NAR, a-zi-kók-í ANT vs a-zá-k'ók-í P<sub>1</sub>, a-zi-kók-á SBJ vs a-zá-k'ók-á Non-Past. Kagaya has -ri/-ra- for Gensler's -zi/-za-.

6 Relatives Relatives and absolutes differ only tonally: 'A subject-relative clause pulls the tone contour (of the absolute) up to H on the last syllable (of the verb form); an object-relative clause forces a tone-drop on or about the last syllable.' (Gensler: 40).

7 Subjunctive Most positive subjunctives have final -e, where the tone of the SM is H, of the suffix is L, and the lexical tone is kept: á-kók-e 'He should bite'. Some short-stemmed verbs and a few others have -ε, -ɔ, or -a. Negative subjunctives have final -á: a-zi-kók-á. Plural imperatives are expressed by the subjunctive: é-kók-e 'Bite (pl)', e-zi-kók-á 'Don't bite'. Final -a

is replaced by subjunctive -e if an OM is present. As far as can be judged from the meagre data, the subjunctive has a standard functional range.

8      Imperative      All IMPs have a surface final falling tone: óngâ ‘Build’, ongâ ‘Grow’.

A34 Benga

	Perfective	Imperfective <b>-ak-</b>	'Strengthened' <b>-ndi</b>	(?)
P <sub>2</sub> <b>-ma-</b>	mbi- <b>ma</b> -kal-a <i>I talked</i> N: mb-u-kal-a	mbi- <b>ma</b> -kal- <b>ak</b> -a <i>I talked, was talking, used to talk</i> N: mb-u-kal- <b>ak</b> -a	mbi- <b>ma</b> -kal-a- <b>ndi</b>  mbi- <b>ma</b> -kal- <b>ak</b> -a- <b>ndi</b>	
P <sub>1</sub> <b>-i</b>	mbi- <b>Ø</b> -kal- <b>i</b> <i>I talked, have talked</i>	mbi- <b>Ø</b> -kal- <b>ak</b> - <b>i</b> <i>I was talking, talked</i>	mbi-kal- <b>i</b> - <b>ndi</b>  mbi-kal- <b>ak</b> - <b>i</b> - <b>ndi</b>	
<b>-Ø- / -a-</b>	mb- <b>a</b> -kal-a <i>I talk</i>	mbi- <b>Ø</b> -kal- <b>ak</b> -a <i>I am talking</i> N: mb- <b>a</b> -kal- <b>ak</b> -a	mbi-kal- <b>ak</b> -a- <b>ndi</b>	
Future <b>-ka-</b>	mbi- <b>ka</b> -kal-a <i>I will talk</i> N: mb-a-kal- <b>e</b>	mbi- <b>ka</b> -kal- <b>ak</b> -a <i>I will talk, be talking</i> N: mb-a-kal- <b>ak</b> -e	mbi- <b>ka</b> -kal-a- <b>ndi</b>  mbi- <b>ka</b> -kal- <b>ak</b> -a- <b>ndi</b>	

## A34 Benga

1 General Documentation for A30 is unsatisfactory, most being old or inaccessible (in Spain). Adams 1907 (A32), Bot 1998 (A33a), Meinhof 1899–1900 (A34) were consulted. Meinhof chosen because, though not perfect, it has more detail than the others. Meinhof never heard Benga and is a reworking of Mackey (Nassau (1892), not seen)). So matrix and sketch are two times removed from the original speakers and should be treated with care. Meinhof has no texts and sketchy examples, so probably the basic outline is correct (similar to A32, A24, less similar to A33a) but detail needs to be added. Tones are not marked here, as Meinhof's tonal marking appears incomplete. 7x1.

2 Structure SM – NEG – TA – root – EXT – ak – FV – Post-FV – 2p – OM

SM: Persons mbi; o; a; hu; o...ni; ba.

NEG: a, i, ha, o/u.

TA: Ø in Present IPFV, at least; Present (differs tonally from -a- NEG); ma P<sub>2</sub>; ka Future.

ak: IPFV, which can occur also with infinitives and is obligatory with imperatives.

FV: a NEU; e<sub>1</sub> SBJ; e<sub>2</sub> REL; i P<sub>1</sub>.

Post-FV: ndi 'Verstärkung', (i)nge 'although', ngo 'participial'.

2p: ni (also with 1p, unclear when).

OM: Usually here but pre-root in relatives and with -ngo. Clitic or independent pronoun?

3 Tense The four categories are clear. Meinhof refers to P<sub>2</sub> as Preterite (Mackey 'Past') and calls P<sub>1</sub> a Perfektum. He says Future expresses wish, intention, and obligation, beside future reference, and also suggests inchoative status, 'begin to do'. The status of the 'present' is unclear. Meinhof calls it both Aorist and Subjunctive ('Konjunktiv'), saying it 'usually' occurs in subordinate clauses. In A33a the -ndi seems to occur only in the Present (na-Ø-já-ndí 'I eat, am eating').

4 Aspect The formal contrast between PFV and IPFV is clear. Meaning of -ak- less clear: for some forms it expresses a 'dauernde Handlung', but for others Meinhof has no interpretation.

5 Negation Meinhof shows several negative markers. Non-Past has -a-, tonally different from the positive (probably from \*ka, via regular k-loss). Meinhof marks it with an acute which apparently does not represent a H. In the Past and Imperative -u/-o- is used: -ha- appears in relatives and in a 'not yet' form: mbi-ha-kal-e 'I have not heard yet': traces of -i-, also in A32, function unclear.

6 Relatives All relativised verbs have final -e, as in: a-bin-ak-e mba a-bin-ak-a tepe paia 'He who hates me, he hates also (my) father' (lit. he-hate-IPFV-REL me he-hate-IPFV-FV also father); ndaga j-a-me I kal-ak-e n'-inyeni 'The words which I speak to you' (lit. words they-of-me them speak-IPFV-REL to-you). The subject of the relative clause in the second example, involving an object relative, is in the possessive form (-a-me 'of me, my').

7 Subjunctive Marked by -e, occurs in 'future, subjunctive, conditional, and imperative'.

8 Imperative Obligatory -ak-: kal-ak-a ‘Talk, sg’, kal-ak-a-ni ‘pl’, ho-kal-ak-a-ni ‘Let’s talk’. NEGs: o-kal-ak-e, o-kal-ak-e-ni/o-kal-ak-i, ho-kal-ak-e-ni. Also ka-ndaki-e ‘Go to call’.

9 Other categories The question mark on the right of the matrix is deliberate. There are other aspectual and modal possibilities, e.g.: mbi-kala-ngo ‘I am/was talking’; mbi-di-kala-ngo ‘I who am talking’ (di ‘be’); mbi-kala-nge or mbi-kal-inge ‘although I talk’; mbi-di-aka mb-a-kala ‘I had talked’ (di ‘be’); mb-u-di-a mb-a-kala ‘I had not talked’; mbi-di-aka mbi-kal-aka ‘if I talk’; mbi-te mbi-kal-aka ‘I can talk’ (te ‘be’); mbi-te mbi-kala-ngo ‘I am talking of course’; mbi-b-ek-i kala-ngo ‘after I had talked’ (b(e) ‘be’); mb-a-na-nang-aka ‘I have taken (na ‘and, with, have’)’.

A43 Basaá

	Perfective	Imperfective -(v)k	Habitual <b>béna</b>	Progressive COPULA	Persistentive <b>ngí'-k</b>	Anterior <b>má à-</b>
P <sub>3</sub> -'	a jé <i>he ate</i> a lóó <i>he came</i> N: a jé 'bé	a béel-ék <i>he was planting,</i> <i>used to plant</i>	a bé <b>béna</b> jé <i>he used to eat</i> N: a bé <b>béna</b> béé jé	a <b>á</b> jé <i>he was eating</i> a <b>á</b> ló <i>he was coming</i> N: a <b>á á</b> jé		
P <sub>2</sub> pí`	a bí jé a bí ló N: a bí jé 'bé			a <b>é</b> jé a <b>é</b> ló N: a <b>é é</b> jé		
P <sub>1</sub> N-'	a n-jé a n-ló N: a n-jé 'bé					
N-`	a <b>ń</b> -jé <i>he eats</i> a <b>ń</b> -ló <i>he will come</i> N: a <b>ń</b> -jé 'bé N: a <b>ń</b> -ló 'bé	a <b>m</b> -béel-ék <i>he will be planting</i> <i>(today)</i>	a <b>m</b> - <b>béna</b> jé <i>he often eats</i> N: a <b>m</b> - <b>béna</b> bé jé	a <b>yé</b> jé a <b>yé</b> ló <i>he is eating / coming</i> N: a ye <b>é</b> ló	a <b>ngí</b> jék a <b>ngí</b> lók <i>he is still eating /</i> <i>coming</i>	a <b>má</b> jé a <b>má</b> ló <i>he has already eaten /</i> <i>come</i>
F <sub>1</sub> (k)á`-	a <b>gá</b> jé <i>he will eat</i> a <b>gá</b> lóó <i>he will come</i> N: a <b>gá</b> jé 'bé	a <b>gá</b> béel-ék <i>he will be planting</i>				
F <sub>2</sub> -a-	a a jé a a ló N: a-a-jé 'bé					

## A43 Basaá

1 General A40 languages (A42, 43, 44, 46) are fairly well described. I include A43 and A44 because they are well described, interesting, and different from one another. Sources for Basaá are Bitjaa Kody (1990) and Hyman (2003), who relies partly on Bitjaa Kody. Basaá has over 300,000 speakers in the Centre, Littoral, and Southern Provinces of SW Cameroon.

All 22 consonants occur in C1 position, fewer in C2, fewer again in C3, and only /k, s, n/ in C4. 7x1, /i, e, ε, a, ɔ, o, u/. Open and closed syllables. Contrastive H and L, with surface falling and rising.

2 Structure H – subject ## TA ## N – root – EXT – ak – H – ná ## NEG ## object

Extensions, N- ('present' H, and P<sub>1</sub> L), -(a)k IPFV, and -ná 2p are affixes. Otherwise 'most tense, aspect, mood, and polarity distinctions are expressed by clitics and particles, as well as newly grammaticalised auxiliaries', as are subjects and objects, nominal or pronominal. NEG and object follow the verb: the rest precede. Some forms have an initial H, others a final H.

Subject pronouns: me; u; a; di; ni; fá. Participants and classes 1 and 9 are L, the rest H.

TA: Ø P<sub>3</sub>; pi P<sub>2</sub>; N P<sub>1</sub>, some presents; (k)á F<sub>1</sub>; a F<sub>2</sub>; ngí PER; má ANT.

3 Tense Bitjaa Kody has three pasts and three futures, nicely symmetrical. But his F<sub>1</sub> is the Present used as a Near Future ('we read, are reading, will read today, even tomorrow'). I include his F<sub>1</sub> in my Present, his F<sub>2</sub> = my F<sub>1</sub>, his F<sub>3</sub> = my F<sub>2</sub>, so I have only two futures. So Present includes Hodiernal Future and a little beyond, F<sub>1</sub> refers to tomorrow and some time beyond, F<sub>2</sub> to more distant time. Futurity correlates with certainty, the present future being pretty certain, while F<sub>2</sub> events are much less likely, such as having money to buy a car. Similarly, but one step removed, P<sub>1</sub> is Hodiernal, P<sub>2</sub> Hesternal, and P<sub>3</sub> Remote. Bitjaa Kody points out that the time reference of the tenses can be manipulated by the speaker: if a speaker used F<sub>1</sub>, which normally starts with events of tomorrow, to refer to something today, that would be a warning to the listener to be sceptical.

There are two Narratives, past and future, with as main uses 'consecutive or unspecified past/future'. The first verb in a sequence establishes the time, thereafter the Narratives are used. So they are dependent tenses. Both are segmentally unmarked, thus similar to each other and to P<sub>3</sub>: however, tonally there are three patterns (e.g. Past Narrative a jè vs P<sub>3</sub> a jé) (Bitjaa Kody: 439–44).

4 Aspect The aspects are fairly well described, semantically and structurally, though the labels may need adjusting and the exemplification is incomplete. Thus, for example, Hyman (280) says that an Imperfective can be formed by suffixing -(a)k to the verb base in any tense (with certain phonological restrictions), but shows no forms, while Bitjaa Kody (414–15) shows just the three forms in the second column of the matrix. It co-occurs most frequently with Persistent -ngi-.

5 Negation bé appears after the copula fá/bé and before the lexical verb in the Progressive. Otherwise almost universal post verbal bé (bán in Imperative and Subjunctive).

6     Relatives     The only examples I find of relativization involve nouns and are in H: 267: di – nuní dí bí kwɔ 13 – bird 13 P<sub>2</sub> fall ‘The birds fell’; dí – nuní dí bí kwɔ ‘The birds which fell’; dí – nuní li – wándá lí bí<sup>1</sup>téhê 13 – bird 5 – friend 5 – P<sub>2</sub> – see ‘The birds (that) the friend saw’. The only difference between the absolutive form is that it has no H on the noun prefix, whereas the two relativised forms do. The verbs are structurally and tonally identical.

7     Subjunctive     Subjunctive is marked by a H on both subject pronoun and final vowel.

8     Imperative     Lɔ́ ‘Come (sg)’, lɔ-ná ‘Come (pl)’. NEG: u lɔ́ bǎ<sup>1</sup>ŋ, ni lɔ́ bǎ<sup>1</sup>ŋ.

## A44 Nen

	Perfective	Progressive (‘be’ +) ... <b>ndo(-)</b> ...
P <sub>4</sub> ‘Far’ <b>le</b>	mèkò <b>lè</b> òn <i>the leopard killed</i>	me <b>lè bá</b> mé <b>ndò</b> kólóm
P <sub>3</sub> ‘General’ <b>ka</b>	ò <b>kà</b> sièkin <i>did you see?</i>	mè <b>kà bá</b> mé <b>ndò</b> kólóm <i>I was (being) afraid</i>
P <sub>2</sub> ‘Hodiernal’ <b>ná H</b>	mè <b>ná</b> sámbé <i>I have put</i>	mè <b>ná bá</b> mé <b>ndò</b> kólóm
P <sub>1</sub> ‘Immediate’ <b>nó</b>	mè <b>nó</b> nòk <i>I just broke</i>	me <b>nò bà</b> mé <b>ndò</b> kólóm
	à bál <i>he climbs</i>  à kènd-àk <i>he walks</i>  mèsè lè nè <i>chimpanzees do not eat</i>	mé <b>ndò</b> kólóm <i>I am (being) afraid</i>  N: mè <b>lé ndò</b> -bàl <i>I am not climbing</i>
F <sub>1</sub> ‘Immediate’ <b>étàse</b>	<b>étàse</b> mé lò <i>I will go down</i>	
F <sub>2</sub> ‘Hodiernal’ <b>ndo ... -ak</b>	mé <b>ndò</b> sábon-àk <i>I will pay</i>	
F <sub>3</sub> ‘General’ <b>H ño</b>	mé <b>ño</b> ndá-sá <i>I will hither-come</i>	mé <b>ño bá</b> mé <b>ndò</b> kólóm <i>I will be (being) afraid</i>
F <sub>4</sub> ‘Indefinite’ <b>nă</b>	mbà bá <b>nă</b> nyè <i>and they will bury</i>	à <b>nă ba</b> á <b>ndò</b> -k <i>she will be grinding</i>

## A44 Nen

1 General The source is Mous (2003), who relies on his own work and that of Dugast (1971, not consulted). Nen has some 40,000 speakers in Cameroon's Centre and Littoral Provinces. The variety described here is spoken in and near the town of Niikinimeki in Cameroon.

7x1, divided into two vowel harmony sets, mutually exclusive within the word. The dominant (+ATR) set is /i, ə, o, u/; the corresponding recessive (-ATR) set is /ɛ, a, ɔ, o/. Word final vowels are reduced. Contrastive H and L, with downstep, sentence final lowering, and H tone perseveration.

2 Structure H – subject ## NEG ## TA ## deixis ## object ## root – EXT – ak – H

Subject and object are independent items, consisting of noun or pronoun. Mous assumes a floating H before some forms and a final H on others. For NEG and -ak-, see 5 and 4, respectively.

Subject pronouns: me; o; a; tú; nú; bá. All class prefixes except 1 and 9 are H.

TA: Ø Present; le P<sub>4</sub>; ka P<sub>3</sub>; ná P<sub>2</sub>; nó P<sub>1</sub>; 'ndo F<sub>2</sub>; ŋo F<sub>3</sub>; nə F<sub>4</sub>; ndo PRG.

Deixis: ka thither, nda hither.

3 Tense There are four pasts (Immediate, Hodiernal, General Past, Far). There may be four futures (Immediate, Hodiernal, General, Indefinite), but there are also at least three auxiliary assisted ways of referring to 'imminence'. For all there are less negatives than affirmatives. The imminence of P<sub>1</sub> can be highlighted by reduplicating the verb root.

4 Aspect Forms on the left, unmarked for aspect, labelled PFV, contrast clearly with those on the right, for all the pasts, present, and at least two futures, which are two-word forms, with tense-marked *ba* 'be' and aspect-marked main verb. These are called PRG by Mous but given the lack of further systemic contrasts, and the lack of contexts, they might well be IPFVs.

F<sub>2</sub> always has suffixal -ak, for all verbs. Otherwise there is a contrast between what Dugast calls 'durative' and 'instantaneous' verbs. In the latter the action takes place quickly ('break, fall, throw, say'), while in the former it takes longer to achieve ('go, talk, sing'). With durative verbs the forms in the left column occur with suffixal -ak, while instantaneous verbs do not, thus à-bál 'He climbs' but à-kènd-àk 'He walks'. The same is true for imperatives: somb 'Cut' but kènd-àk 'Walk'; -ak never occurs with negatives. There are other forms referring to categories such as imminence, present punctual, habitual and involving *le* 'be' or *ba* 'be'. Thus à-bá-kà mi-lí 'I work habitually' (literally 'he is I work', where baka is the -ak form of -ba 'be'). This particular habitual only occurs in this timeless or present variant. The place of these be-based forms in the overall system is unclear.

Suffixal -ak has other uses, leading Mous to label it Pluractional. Thus it may express intensity ('you always love a lot') or a plurality of subjects, objects, or actions (Dugast 1971: 174).

5 Negation *Sa*, tonally various, replaces the positive marker at TA in P<sub>2</sub> (H), P<sub>4</sub> (L), and F<sub>2</sub> (R). In F<sub>4</sub> -só- appears at NEG. In all other forms, including subjunctive, -le- occurs at NEG.

6      Subjunctive    The subjunctive (Mous ‘optative’) is segmentally unmarked. It has initial and final H in the affirmative, and may occur with -ak. Functional range is not clear.

7      Imperative     The imperative consists of the stem and a final H, and, for durative verbs, of stem plus -ak: kond ‘Add’, kend-ák ‘Go’. Plural addressees are indicated by the addition of a reciprocal extension. Orders may also be expressed by subjunctive forms.

A53 Rɪ-kpaʔ

	Perfective	Habitual -ga	Progressive RED of ROOT	Iterative RED of HAB ʔ	Inceptive (?) -mɔ́-	'Eventually' -kí-	'First' -ká-
P <sub>3</sub> -ga	a-Ø-kan-ga <i>she wrote</i> N: a-Ø-kan-ga-bɪ	a-Ø-kan-ga-ka <i>she used to write</i>	a-Ø-kaŋ-kan-ga <i>she was writing</i>	a-Ø-kangaʔkangaka <i>she wrote repeatedly</i>	a-mɔ́-wél-ya <i>he tried to kill</i>	a-kí-rén-ya <i>he eventually cut</i>	a-ká-ken-gá <i>he first went</i>
P <sub>2</sub> -ŋ- ... -ɪ	a-ŋ-kan-ɪ	a-ŋ-kan-gaʔ	a-ŋ-kaŋ-kān-ɪ	aŋkangāakangaʔ			
P <sub>1</sub> -á- ... -ɪ	a-á-kan-ɪ	a-á-kan-gaʔ	a-á-kaŋ-kān-ɪ	aákangāakangaʔ			
-Ø-	a-Ø-kan NARR a-Ø-kan-í <i>she has written</i> N: a-kan-í-bí	a-Ø-kan-gaʔ NARR á-Ø-kan-gaʔ <i>she writes</i>	a-Ø-kaŋ-kan NARR á-Ø-kaŋ-kan (M) <i>she is writing</i>	a-Ø-kangaʔkangaʔ NARR á-Ø-kangāʔkāngaʔ <i>she writes repeatedly</i>	dɪ-mɔ́-tóren (M) <i>it starts to ...</i>	a-kí-tum (M) <i>he eventually abducts</i>	bɔ́-ká-káá <i>they first seek</i> N: a-ká-lèksí-bí <i>he has not finished yet</i>
F <sub>1</sub> -bii- ... -í	a-bii-kan-ɪ <i>she will write</i>	a-bii-kan-gāa	a-bii-kaŋ-kān-ɪ	abii-kangāakangaʔ			
F <sub>2</sub> -rí-	a-rí-kan (M)	a-rí-kan-gaʔ	a-rí-kaŋ-kan	arí-kangāʔkāngaʔ			
F <sub>3</sub> -(i)gā	a-Ø-kan-ígā	a-kan-gāa-gā	a-Ø-kaŋ-kān-ígā	akangāakangāgā			

## A53 Ri-kpa? (Bafia)

1 General The two sources (Aroga Bessong and Mel'čuk 1983 (ABM) and Guarisma 2003) agree on some facts, interpretations, and data, and disagree on others. They have different theoretical stances. The matrix and these notes present a general view based on both. It is often hard to judge between them because their data often consists mainly of one-liners with a translation, rather than a context, making it hard to reinterpret accurately. Readers should consult the sources for details. Spoken in Cameroon's Centre Province by some 25,000 (Guarisma) to 60,000 (Gordon 2005) people. 'Bafia' refers both to Kpa and to all A50. This is the far northwest of the Bantu area, near or adjacent to Nilo-Saharan and Afroasiatic communities.

Word-final consonants are fewer than stem-initial. Most lexemes are monosyllabic. 11x2 (Guarisma), 10x2 (ABM). Vowel harmony associated with -i: it becomes a lengthened version of the stem vowel in most cases. Metatony – whereby a H associates to post-root syllables (extension or reduplicated material) as well as to a following non-accented L syllable, if and only if the verb is not phrase-final – characterizes several verb forms, those designated with a M in the matrix.

2 Structure SM – TA – root – EXT – suffix<sub>1</sub> – suffix<sub>2</sub> ## object

SM: 1s ma/N; u; a; tɪ; ʃɪ; ʃɔ. Guarisma says participants and classes 1 and 9 are L, the rest H.

TA: Ø Present and with suffixal ɪ, ga, SBJ, etc; á P<sub>1</sub>; N (H) P<sub>2</sub>; ê PRG (Guarisma); rí F<sub>2</sub>, F<sub>3</sub>; bii F<sub>1</sub> (ABM); ma Inceptive/'already'; ká 'first' and in 'not yet'; kí 'eventually'; mée 'almost'.

Suffix<sub>1</sub>: Ø NEU; -í present, P<sub>1</sub>, P<sub>2</sub>, F<sub>1</sub>, F<sub>3</sub>: metatony (Imperfective, with some forms: abbreviated M); -ya HAB: probably -ná 2p IMP fits here.

Suffix<sub>2</sub> = -yí 'directional'; -gá P<sub>3</sub>, F<sub>3</sub> (with metatony); -ʃí NEG.

Metatony plays a considerable role in Guarisma's analysis but is not mentioned by ABM. Reduplication is hardly mentioned by Guarisma but plays a large role in ABM (whole or partial): a reduplicated PFV gives a PRG, a reduplicated HAB gives an Iterative.

3 Tense Three degrees of past and future reference (Guarisma begs to differ, treating futures as modals, reflecting speaker attitude to the degree of certainty of the action): P<sub>1</sub>/F<sub>1</sub> (Hodiernal), P<sub>2</sub>/F<sub>2</sub> (next several day(s)), P<sub>3</sub>/F<sub>3</sub> (beyond P<sub>2</sub>/F<sub>2</sub>).

The first, general, unmarked form in the present row is what ABM call a relative, that is, a subordinate Narrative that follows the main verb in the string. ABM (p. 486–7) call the second form a 'présent ponctuel', translated in French or English by a past: 'un événement dépourvu d'étendue temporelle même s'il est vu du présent, introduit par le français comme un événement passé'.

4 Aspect and other categories Data and categories in the first four columns (PFV, HAB, PRG (reduplication of PFV), and ITR (reduplication of HAB)) are from ABM. Remaining data, categories, and labels are from Guarisma: with more data the labels might be improved. The metatony (M) characterising some forms is from Guarisma. She also shows other forms, too infrequent to include, e.g. ê 'progressive' and also in some focus constructions; mée 'almost'. ABM hint at the possibility of a pluractional, apparently encoded by an extension -gi (p. 478, 498).

- 5     Negation     In SBJs (incl. IMP) negation is expressed by post-initial κεε, otherwise by verb-final -βί.
- 6     Relatives     The few examples all involve use of a nominal and demonstrative.
- 7     Subjunctive   Structurally unmarked, all SMs are H, as is the stem-initial (?) vowel.
- 8     Imperative    Formed with a suffix -ά (pl -ίνα): γέν-ά ‘Look’, γέν-ίνα ‘Look (pl)’.

A62 Nu-gunu

	Perfective	Imperfective 'be' + MAIN VERB	Progressive na ('do') + 'be at'	Persistentive -gá-	Anterior -báa- + INF
P <sub>3</sub> -mba-	a- <b>mba</b> -f-á <i>he gave</i> N: a-de- <b>mbá</b> -f-ã	a- <b>mba</b> -lé a-núun-ə <i>he was watching</i> N: a-de- <b>mbá</b> -le a-núun-ə	a <b>mba</b> <b>ŋá</b> a <b>ná</b> <b>lé</b> <b>go</b> dúe-nene <i>he was selling</i>	a- <b>mba</b> -ŋá a- <b>gá</b> -dúe-nene <i>he was still selling</i> N: a- <b>mba</b> -ŋá a- <b>ga</b> -lé a de dúé <i>he had not sold yet</i>	a- <b>mba</b> -ŋá a- <b>báa</b> -go-dúe <i>he had sold</i>
P <sub>2</sub> -á-	a- <b>á</b> -f-á <i>he gave</i> N: a-dy-aagá-f-á	a- <b>á</b> -le a-núun-ə N: a-dy-aagá-le a-núun-ə			
P <sub>1</sub> -ô- / -báa-	o- <b>ô</b> -f-â N: a-dy-o- <b>ô</b> -f-â a- <b>báa</b> -f-â N: a-de- <b>báa</b> -f-â	o- <b>ô</b> -gw-aa-lé a-núun-ə N: a-dy-o- <b>ô</b> -gw-aá-le ... a- <b>bá</b> -le a-núun-ə N: a-de- <b>bá</b> -le ...			
-Ø-	a-Ø-f-â <i>he gives, is giving, will give</i> N: a-de-f-á a-Ø-dúe-nene <i>he sells, etc.</i>	a-lé a-núun-ə <i>he is watching</i> N: a-de-bá ... a-ná-lé gu-núun-ə	a <b>ná</b> <b>lé</b> <b>go</b> dúe-nene <i>he is selling</i>	a- <b>gá</b> -f-â <i>he still gives, is still giving</i> N: a-de- <b>gá</b> -f-â a- <b>gá</b> -dúe-nene <i>he still sells, etc.</i>	a- <b>báa</b> -go-f-a <i>he has given</i> N: a-de- <b>báa</b> -go-f-â a- <b>báa</b> -go-dúe <i>he has (already) sold</i>
F <sub>1</sub> -gaá-	a- <b>gaá</b> -f-á <i>he will give</i> N: a-de- <b>gaá</b> -f-á	a- <b>gaá</b> -bémbá a-núun-ə <i>he will be watching</i> N: a-de- <b>gaá</b> -bémbá ...			
F <sub>2</sub> -ná-	a- <b>ná</b> -f-â N: a-de- <b>ná</b> -f-â	a- <b>ná</b> -bémba ... N: a-de- <b>ná</b> -bémba ...	a <b>ná</b> <b>ŋá</b> a <b>ná</b> <b>lé</b> <b>go</b> dúe-nene <i>he will be selling</i>		
F <sub>3</sub> -nga-	a- <b>nga</b> -f-a N: a-de- <b>ngá</b> -f-a	a- <b>nga</b> -bémbá ... N: a-de- <b>ngá</b> -bémba ...			

## A62 Nu-gunu (Yambasa)

1 General Sources are Orwig (1991), Yukawa (1992). The matrix mostly reflects Yukawa. Orwig and Yukawa disagree on some details: Orwig writes most verbal morphemes as independent, Yukawa writes them as inflections; Orwig has *le* ‘be’, Yukawa has *le*; they mostly but not always agree on tones; Orwig mentions an imperfective suffix -nana, Yukawa does not; they sometimes disagree on vowel length in TA morphemes, etc. These details are outweighed by overwhelming similarity.

Some 35,000 speakers in Cameroon’s Centre Province. 7x2, occurring in two vowel harmony sets, radiating left and right from the stem vowel: i, e, u, o (close) versus ε, a, ɔ, o (open). Contrastive H and L, phonetically also rising, falling, and mid.

2 Structure SM – NEG – TA – OM – root – EXT – mɔ

SM: N; ɔ; a; de; nɔ; ba. Participants and classes 1 and 9 are tonally L, the others H.

TA: mba P<sub>3</sub>; á P<sub>2</sub>; ô P<sub>1</sub>; bá(a) P<sub>1</sub>/ANT?; Ø Present; gaá F<sub>1</sub>; ná F<sub>2</sub>; nga F<sub>3</sub>; gá PER. Orwig has additional post-TA morphemes: ná (‘dependent’) and ba (translated ‘of’ but that seems unlikely). mɔ: Appears in the positive imperative singular as an extra marker when an object pronoun precedes the verb (L), and in some positive relative tenses (H).

3 Tense Three pasts (‘today, yesterday, two or more days ago’), one present, three futures (‘today/tomorrow, tomorrow, beyond tomorrow’). For Yukawa -báa- is an Anterior. Orwig mentions a Narrative, which differs only tonally from P<sub>1</sub> and Anterior. Orwig says the difference between F<sub>2</sub> (more certain) and F<sub>3</sub> (less certain) is also one of degree of likelihood.

4 Aspect Perfective is unmarked. Both authors have Imperfective encoded by a two word form, consisting of an auxiliary and a main verb. The main verb has the structure in 2, above. The auxiliary has the structure SM – (NEG –) TA – ‘be’. ‘Be’ is represented in most cases by -bémba in the futures but *le* in the non-futures. Orwig says that some, but not all, verbs may have suffixal -nana (with vowel harmony) as an additional marker of Imperfective. Also Persistent -gá- ‘be still’, Anterior -báa-, and Orwig has a Progressive, which preposes inflected ‘do’ to Imperfective and seems to involve a derivation from ‘be + locative’.

5 Negation Yukawa shows a single NEG -de- in all regular, relative, and imperative verbs (1s ce- in all non-futures: c < ns). It becomes -do- after [o]. A-gaá-f-á ‘He will give’, NEG a-de-gaá-fá; mɔtɔ mɔɔyɔ a-mba-á-núún-á ‘The person who watched’, NEG mɔtɔ mɔɔyɔ a-mba-á-le a-de-núúná; gɔbá ‘Beat’, NEG ɔ-dɔ-gɔb-á. A few negatives are three-word forms: a mba nɔ́ a gá lé a de dúé ‘He had not sold yet’ (3s P<sub>3</sub> do 3s PER be 3s NEG sell).

6 Relatives The most obvious difference between relatives, both subject and object, and absolutes is the use of a demonstrative: mɔtɔ a-mba-gɔbá ‘The person beat (P<sub>3</sub>)’, but mɔtɔ mɔɔyɔ a-mba-á-cɔ-gɔba ‘The person who beat us’; mɔtɔ mɔɔyɔ de-mba-á-gɔba ‘The person we beat’. In most cases relative and absolute forms are structurally identical, in a few cases not.

7 Subjunctive A mystery – while Orwig has no form identifiable as a subjunctive, Yukawa (p. 43) gives a description of the ‘subjunctive’ and says it is ‘structurally and tonally the

same' as the Present (Perfective). His few examples bear this out. This needs further examination!

8     Imperative     Singular is marked by a final H (góbá 'Beat', bələ́ 'Deceive'), NEG ɔ-dɔ-gób-á. Plural á-nɔ-gób-â, á-nu-bələ́, NEG nɔ-dɔ-gób-á.

## A72a Ewondo

	Perfective	Imperfective <b>-bó-</b>	Persistentive	Inceptive <b>-nga-</b>	Anterior <b>-ya</b>
P <sub>3</sub> <b>-ngá-</b>	mə- <b>ngá</b> -dí <i>I ate</i> mə- <b>ngá</b> -lot <i>I went by</i> N: maa-ndzí ki dí	mə- <b>ngá-bó</b> -dí <i>I was eating</i> N: mə- <b>ngá-bó</b> ki dí			mə- <b>ngá</b> -dí- <b>ya</b> <i>I have eaten</i> N: ma-bó ki dí
P <sub>2</sub> <b>-á-</b>	ma- <b>á</b> -dí ma- <b>á</b> -lot N: maa-ndzí ki dí	mə-m- <b>bó</b> -dí N: məó-m- <b>bó</b> ki dí			ma- <b>á</b> -dí- <b>ya</b> N: ma-bó ki dí
P <sub>1</sub> <b>-Ø-</b>	mə- <b>Ø</b> -dí mǎ- <b>Ø</b> -lot N: maa-ndzí ki dí	ma- <b>bó</b> -dí N: məó- <b>bó</b> kī dí			mə-dí- <b>ya</b> mǎ-lotə- <b>yǎ</b> N: ma-bó ki dí
<b>-a-</b>	m- <b>a</b> -dí m- <b>a</b> -lot N: maá-dī ki mǎa-lot ki		mə- <b>ngóló</b> (mó-)dz- <b>áa(g)</b> <i>I am still eating</i> N <sub>1</sub> : mə- <b>ngóló</b> ki (mə-)dz- <b>áa(g)</b> <i>I still have not eaten</i> N <sub>2</sub> : mə- <b>ngóló</b> tə dí <i>I have never eaten</i>	məə- <b>nga</b> -dí(- <b>ya</b> ) <i>I just started to eat, am just starting to eat, am about to eat</i>	
F <sub>1</sub> <b>-ayi-</b>	m- <b>ayi</b> -dí <i>I will eat</i> N: máa-yii ki dí				
F <sub>2</sub> <b>-n-</b>	mə- <b>n</b> -dí <i>I will probably eat</i> mə- <b>n</b> -lót N: məó- <b>n</b> -dī ki				
F <sub>3</sub> <b>-ngá-</b>	mə- <b>ngá</b> -dí <i>I may eat</i> mə- <b>ngá</b> -lót N: məó- <b>ngá</b> -dī ki				

## A72a Ewondo

1     General     Quite a lot, old and recent, has been written on A70, to much of which we had no access. We chose Redden (1979), a good structural analysis and some short texts. All Redden's work was done in America. It was supplemented with Piper (1989), which, while treating a different variety of Ewondo, has the advantage of fitting Ewondo into a comparative and diachronic view of most A70 varieties. Piper had his own informant for each language and was also aware of the major earlier sources. We follow Redden fairly carefully below as it is not good methodology to mix varieties: 'the dialect diversity in Ewondo is rather large' (Redden: 2). In the matrix the examples involving -dí 'eat' (H) are from Redden, those with -lot 'pass by, go' (L) from Piper.

577,000+ speakers in Cameroon's Centre and Southern Provinces, in and around Yaoundé. Used as a trade language. Unclear whether 577,000 includes second language speakers.

Nearly all consonants occur word and stem initially, fewer occur medially, only a small set occurs word finally. Redden shows eight phonetic vowels [u, o, ɔ, a, ə, ε, e, i] but says only seven are phonemic. Piper says [ε] not phonemic. No length contrast. Redden says three contrastive tones (H, M, L), Piper says two (H, L). Surface tones intermediate between H and L result from a variety of processes. Floating tones are involved in the underlying characterization of at least 'Perfect', P<sub>1</sub>, P<sub>2</sub>, all three Futures, and Subjunctive. Certain forms have metatony: the final vowel of some verb forms is H when followed by object (or adverbial), but non-H when standing alone (Piper: 136, 144).

2     Structure     SM – NEG – TA – root – EXT – Pre-FV? – FV – Post-FV? ## object

Piper (p. 42) assumes this structure for all A70 languages. It excludes the post-verbal 'negative strengthener' ki(k) and the pre-verbal negative marker tə (see 6). For the final three categories, see after 'post-final', below.

SM: mə; o; a; bií; mií; bó. Piper says singular participants and classes 1 and 9 are L, the rest H; Redden says all participants are L.

NEG: á.

TA: High tone (P<sub>1</sub>, 'Perfect', SBJ); a Present; á P<sub>2</sub>; ngá P<sub>3</sub>; ayi F<sub>1</sub>; N F<sub>2</sub>; ngáa F<sub>3</sub>; nga Inceptive. All past markers underlyingly H. IPFV marked by -bó-, which, strictly speaking, follows the TA. Pre-FV? ag: In the Imperative singular (-ág) and in a range of IPFV functions. Various allomorphs.

Post-FV?: án Imperative plural; and ya 'Perfect' occur here.

FV: Viewing A70 comparatively and historically, Piper wants to have a three-way distinction of Pre-FV, FV, and Post-FV. But the morphemes in the three slots do not co-occur in Ewondo, so could be collapsed into one, maybe called FV, consisting of ag, vowel harmony as described, án, and ya, and associated with different tonal patterns, including a floating H after the FV.

3     Tense     The matrix shows the system of contrasts for active verbs (stative verbs behaving slightly differently): three pasts, a present, three futures. While P<sub>1</sub> refers predominantly to events of today, P<sub>2</sub> to intermediate events, and P<sub>3</sub> to remote events, a month or more ago, in practice these precise boundaries often blur, the three being used to sequence events into near,

middle, and far. Redden also gives a form based on an ‘auxiliary’ ndem ‘recently’: mə-ndəm-dí ‘I have just eaten’. For reasons not given he does not see it as a part of the system of past contrasts.

Redden identifies three futures but not characterised primarily in terms of time. F<sub>1</sub> is ‘definite’, implying ‘soon’, F<sub>2</sub> is ‘probable’, implying ‘not-too-distant future’, and F<sub>3</sub> is ‘indefinite, low probability’, implying distant future. This modally based approach is also that of most other analysts of A70 languages (other degrees of probability involving auxiliaries also occur).

The ‘present’ has a wide range, translating ‘going on at the time of speech’ (‘he is eating’), or ‘in general’ (‘he eats’).

4 Aspect The display of aspects is less reliable. Redden and Piper disagree on data, categories, and labels. Aspects are encoded in different ways: some are merely tonal, some are defined by a combination of tone and segmental material, some involve the grammaticalization of independent verbs, others involve verbs, which, while transparent, are no longer independent. Finally, aspects are numerous. Our approach is to have the matrix show Redden’s main aspects, those which appear surest. Those which are less sure are dealt with summarily below.

Perfective (unmarked), Inceptive, and Anterior are clear enough, and marked segmentally and/or tonally. Imperfective (bó) and Persistent (ngələ) are visibly based on forms of auxiliaries (‘be, be still’, respectively). Piper (122–34) shows Imperfectives (Progressive, Habitual, Simultaneous) but formed differently, by compound verbs where the first element is an auxiliary, usually ‘be’, and the main verb has suffixed -ak. He refers to this latter as ‘durative’. Redden (p. 127–36) shows this but calls it ‘Subsecutive’. Thus the Imperfectives in the matrix might be expanded.

Piper (p. 163-6) shows a reduplicated form, which he labels Insistive: ma-kusákusó bikon ‘I will (definitely) buy bananas’.

5 Other categories: the ‘Subsecutive’ Although neither Redden nor Piper traces its history, the use of the term Subsecutive seems to have become a convention in A70 studies, maybe (?) dating back to Alexandre (1966). Comparing their presentations is confusing, as they use the term to refer to different things (for Redden’s use of Subsecutive, see just above, under Aspect). (Readers should also note that neither Redden nor Piper’s use of Subsecutive follows that which has become established in recent years, at least in English: in a string of events, once the time is established in the first verb, all subsequent actions are referred to by a special form, often minimally marked, and if the subject of the subsequent verbs differ from that of the initial verb, then such forms are referred to as Subcutives.) We follow Piper (p. 99) here, for whom Subsecutive refers to the second verb in constructions of the type ‘If (ngó) X, then Y’. Redden shows this too, but under Inceptive (p. 112–3). If Piper’s characterization is accurate, it is a dependent, subordinate form forming part of conditional constructions. Both authors have many Ewondo examples, and Piper shows it throughout A70. Structurally it is minimally marked: a post-radical vowel that is either -e or copies the vowel of the root, and a H tone post-radically, thus similar, but not identical to Subjunctive (see below).

6 Negation Most TA forms are negated by a combination of -á- in the Post-SM slot and post-verbal -ki(k). The -á- often assimilates to neighboring vowels. If there is only one verbal word, then -ki(k) follows that, but if the verb consists of auxiliary plus main verb (not

always obvious), -ki(k) follows the auxiliary. Subjunctives are negated by preposing tə, so ó-di ‘Eat, you should eat’ but tə w-a-di ‘Don’t eat, you shouldn’t eat’.

7 Relatives Relative verb forms, whether used of the subject or object of the relative clause, are formed in the same way. While data is not available for all tenses, it seems that relatives and absolutives are structurally identical, but the relative forms have a pre-root H tone, and the head noun of the relative phrase is preceded by a H-toned vowel, to make it definite. That said, Redden and Piper differ in detail. Piper shows only a present relative, Redden shows several tenses. Piper’s analysis has more detail. Redden shows the pre-noun vowel as [é], separate from the noun, while Piper shows it as an [é] augment on the verb. Thus: (Piper p. 73) é-mod aálot ‘A/the person who is passing...’; (Redden p. 169) é mod ongáyáan ‘The person who you paid...’

8 Subjunctive Monosyllables have no segmental marker of subjunctive. Polysyllables show a form of inherited, non-productive, vowel harmony with the root-initial vowel. All verbs have a H at pre- and post-root position and monosyllables show other tonal features (Piper: 89–95).

9 Imperative Positive imperative singulars are formed by suffixal -ág, with many allomorphs, and the plural by -án.

A83 Makaa

	Perfective ( <sup>⌘</sup> )	Habitual ( <sup>⌘</sup> ) <b>di</b>	Progressive ( <sup>⌘</sup> ) <b>ngə</b>	Anterior <b>mə</b> ( <sup>⌘</sup> )
P <sub>2</sub> <b>a</b>	mə <b>a'</b> wíing' òmpyâ <i>I chased the dogs away</i>	mə <b>a' di</b> wíing' òmpyâ <i>I used to chase dogs away</i>	mə <b>a' ngə</b> wíing' òmpyâ <i>I was chasing the dogs away</i>	
P <sub>1</sub> <b>ámə</b>	mə <b>ámə</b> wíing' òmpyâ	mə <b>ámə di</b> wíing' òmpyâ	mə <b>ámə ngə</b> wíing' òmpyâ	
( <sup>⌘</sup> ) <b>-Ø-</b>	mə <b>'</b> wíing' òmpyâ <i>I am about to chase the dogs away</i>	mə <b>di</b> wíing' òmpyâ <i>I (regularly) chase dogs away</i>	mə <b>ngə</b> wíing' òmpyâ <i>I am chasing the dogs away</i>	<b>mə mə</b> wòòs <i>I have arrived (and I am still here)</i>
F <sub>1</sub> <b>e</b>	mə <b>e'</b> wíing' òmpyâ <i>I will chase the dogs away</i>	mə <b>e' di</b> wíing' òmpyâ <i>I will chase the dogs away regularly</i>	mə <b>e' ngə</b> wíing' òmpyâ <i>I will be chasing the dogs away</i>	
F <sub>2</sub> <b>bá</b>	mə <b>bá'</b> wíing' òmpyâ	mə <b>bá' di</b> wíing' òmpyâ	mə <b>bá á ngə</b> wíing' òmpyâ	

## A83 Makaa

1 General Heath, D. (1991), Heath, T. (2003). Makaa is spoken in southeastern Cameroon by some 80,000 speakers and has considerable dialect phonological variation. The dialect described by the Heaths has nine oral vowels (four front /i, ɪ, e, ε/, three central /ɨ, ə, a/, two back /u, o/) and two nasalised vowels /ɛ̃, ɔ̃/. Length is distinctive. Two distinctive tones (H, L); floating H and L are part of the analysis; surface tones include rising, falling, downstepped H.

2 Structure The structure of the best described A80 languages (A83, 84) is complicated by the role of a number of floating tones and by the very loose structure of the verb. For Makaa there is the additional complication that the two Heath descriptions do not entirely overlap. In this structure only root – EXT – FV are attached, all other morphemes being independent:

[subject tense] [H<sub>1</sub> NEG CM HAB PRG ADV OM root – EXT – FV H<sub>2</sub>] REL object

Subject: mə; wo; a/nyə; só (excl), shé (incl), shwá (dual), bí; bwó. 1-2-3s and Cl. 9 are L, rest H.

Tense: a P<sub>2</sub>; ámə P<sub>1</sub>; é F<sub>1</sub>; Ø Present; bá F<sub>2</sub>. Most of these are followed by H<sub>1</sub>.

H<sub>1</sub> is a replacive/floating H. Realised on the preceding or the next syllable, depending on tonal context. Occurs in all constructions except the Present Progressive.

NEG: There are various negative markers, see 5, below.

C(lause)M(arker): A mixed bag including bá F<sub>2</sub>; shí counter-assertion; ká ‘therefore’; and others.

HAB: di, can co-occur with all tenses; PRG: ngə, can co-occur with all tenses and with HAB. The Anterior marker mə also follows CM and precedes ADV but unclear exactly where.

ADV: A mixed bag including morphemes for ‘still/yet, almost, quickly, inceptive, terminative, etc’.

OM: Only the 1s pronoun occurs here. All other object pronouns occur post-verbally.

EXT: Several. Not clear if -g (probably < \*-ag), occurring in the IMP, belongs here or before FV.

FV: a NEU; a IMP pl; -i IMP s; ε in some negatives.

H<sub>2</sub>: Follows the verb stem and precedes object, preposition, and other verbs. In all tenses it is associated with non-Progressives and replaces the tone to its right.

3 Tense Heath says: ‘Morning marks the beginning of a new day for the Makaa people: night belongs to the preceding day. A day starts, therefore, when a person gets up in the morning.’ P<sub>1</sub> represents events which occurred today or yesterday, P<sub>2</sub> to events prior to that. F<sub>1</sub> refers to events which will take place today including tonight, F<sub>2</sub> to subsequent events. The Present Perfective is unmarked segmentally. It refers to events presently taking place or which will occur in the immediate future. It is used in a narrative, as a historical present, with consecutive meaning, to carry along the main story line, and in conversation with inceptive meaning (‘be about to’).

4 Aspect PFV, HAB, PRG, ANT are clear. Others, only partly grammaticalised, are adumbrated. Form and meaning of Anterior are very similar to those of P<sub>1</sub>.

5 Negation Several negative markers occur at NEG and one, -ε, at FV; kú IMP, and other contexts?; -shígé- in some tenses, -a- in others. Details are not all mentioned.

6 Relatives Marked by a H on the subject marker, and a post-verbal relativising clitic.

7 Subjunctive and Imperative Subjunctives and Imperatives are marked by -g and a high tone (not in IMP pl). The H apparently docks on different vowels. Thus from -cal- (low-toned) 'Cut': cal-íg 'Cut', cal-ig-í málóndú 'Cut (sg) the palm trees', cal-íg-á málóndú 'Cut the palms (pl), wo cáI-ig 'You should cut (SBJ)'.

## A84 Kɔɔzime

	Perfective + <b>focus</b>	Imperfective <b>'be'</b> + INF	Habitual	Anterior <b>-Ø-</b> <b>(tones)</b>	Completive <b>si</b>
P <sub>2</sub> <b>á</b>	nye ó <b>á</b> fumo mí-mbër <i>he built houses</i>	bé <b>á</b> <b>be</b> ó <b>lí</b> e-fumo mí-mbër <i>they were building houses</i>  N: bé <b>á</b> bé a <b>be</b> <b>lí</b> e-fumo mí-mbër	bé <b>á</b> <b>bí</b> be ó <b>lí</b> e-fumo mí-mbër <i>they used to build</i>		bé <b>á</b> <b>si</b> fumo mí-mbër <i>they built houses</i>  N: bé <b>á</b> bé a fumo mí-mbër
P <sub>1</sub> <b>-Ø-</b> <b>(tones)</b>	bê fumó ó mí-mbër <i>they built houses</i>	bê <b>bé</b> ó <b>lí</b> e-fumo mí-mbër  N: bé bé a <b>be</b> <b>lí</b> e-fumo mí-mbër	bê <b>bí</b> bé ó <b>lí</b> e-fumo mí-mbër		bê <b>sí</b> fumo mí-mbër <i>they built houses</i>  N: bé bé a fumo mí-mbër
<b>-Ø-</b> <b>(tones)</b>	nyě fumó ó mbër <i>he is building,</i> <i>will build a house</i>  N: nyé a fumo mí-mbër	bé <b>lí</b> e-fumo mí-mbër <i>they are building houses</i>  N: bé a <b>be</b> <b>lí</b> e-fumo mí-mbër	bě <b>sí</b> sá ó fumo mí-mbër <i>they usually build houses</i>  N: bé á fúmó mí-mbër	<b>bí</b> fumo mí-mbër <i>they have built houses</i>	
Future <b>ó</b>	nye <b>ó</b> fumo mí-mbër  N: nye a <b>ɲá</b> fumo mí-mbër	bé <b>ó</b> <b>be</b> ó <b>lí</b> e-fumo mí-mbër <i>they will be building houses</i>  N: bé a <b>ɲá</b> <b>be</b> <b>lí</b> e-fumo mí-mbër	bé <b>ó</b> <b>dí</b> <b>lí</b> e-fumo mí-mbër		

A84 Koozime (Upriver Bajwe'e dialect)

1 General Beavon (1991) is the source. Spoken in Cameroon's Eastern Province, and adjacent parts of Congo by 45,000+ speakers. Nine vowels, written here /i, ɪ, e, ε, a, ɔ, o, u, u/. Contrastive H and L, with surface rising, falling, and downstep. Also floating (H, L, associate to the left with other tones) and replacive (H, they replace a L to their left or right) tones.

2 Structure Beavon is wise enough not to attempt a single statement about the verb structure of Koozime: it is complicated by the role of a number of floating tones and the loose structure of the verb. Also Beavon does not fully illustrate all structural possibilities.

subject – H<sub>1</sub> – TM – NEG – AM – X – root – EXT – k – FV – H<sub>2</sub> – gá – REL – object

Subject pronouns: me; go; nye; 1p excl bñh; ?; bé. 1-2-3s and Cl. 9 are probably L, rest H.

H<sub>1</sub>: Some tenses are marked by a floating tone which associates with the subject pronoun.

Tense: á P<sub>2</sub>; Ø P<sub>1</sub>; Ø Present; ó Future. Tonal melodies of P<sub>1</sub>, Present, (and Anterior) differ. It should be emphasised that these characterisations of the tense markers are incomplete because all tenses also have tonal melodies (in addition to H<sub>1</sub> and H<sub>2</sub>), which characterise the stem itself. Space does not allow further discussion of these.

Aspect: be + lɪ + infinitive IPFV: HAB largely reduplication (see 4); si CMP; Ø ANT.

X: Other material, such as adverbials and auxiliaries, may occur here, and more than one at a time.

k: Not clear if -k (probably < \*-ag) IMP, SBJ, belongs here or with EXT.

FV: A range of vowels, showing limited vowel harmony with stem vowel, all marking SBJ.

H<sub>2</sub>: Some tenses have a H which replaces the initial L of the word following it (metatony).

gá: IMP pl.

3 Tense Two pasts (Hodiernal, Pre-Hodiernal), one future, and a present which is translated variously as General Present ('She builds'), Progressive ('is building'), and Near Future.

4 Aspect PFV (segmentally unmarked), IPFV (or is it PRG? 'be (be) at (lɪ) verbal noun = be at verbing'), HAB (reduplication of the auxiliary used in the IPFV: in the Past this is the auxiliary 'be', and in the Present is a reduplicated form of -sâ- 'make, do'), CMP (-si-, from -síe- 'be done'), Anterior (segmentally unmarked). PFV with focus and CMP are mutually exclusive.

5 Negation Represented mainly by -a- (mostly L, H in the HAB) at NEG, but as a-ŋá in the Future, as -a- or -ayí- in the SBJ. Some positives differ tonally from their negatives, some do not.

6 Relatives Marked by a replacive H (which replaces the tone to its right) at the start of the relative clause, and a post-clausal relativising clitic (REL, in 2, above). See Beavon (1985).

7      Subjunctive and Imperative      With few exceptions, both marked by a suffix, consisting of -k, or vowel, or -kV. Their tonal melodies differ. The imperative melody is a floating H after the verb, which associates to its left, and a suffixal replacive H, which causes metatony on a L in a following complement. The subjunctive melody consists of a replacive H-L, whereby the H replaces the stem tone (so neutralising the lexical distinction between H and L verbs) and the L associating with the suffix. Also a Consecutive Imperative. Examples: fum-á ‘Build (s)’, fum-a-gá (pl); a-fum-o ‘Don’t build (s)’, a-fum-a-gá (pl); go-a fúm-o ‘and build’.

8      Focus      Assertive focus, marked by -ó-, is a recurrent feature of the verb. It may characterise several arguments of the verb (subject, object), and can be seen as a compulsory component, for example, of several aspectual forms in the matrix.

## A93 Kako

	Perfective	Progressive <b>ké</b>	Persistentive <b>ndi</b>	Inchoative <b>mé</b>	Anterior <b>ma</b>	Completive <b>si</b>	Priorative <b>pă</b>
Past <b>-má</b>	a wo- <b>má</b> nyámō <i>he killed an animal</i>  N: mi ti tól-é ná <i>I did not read</i>	a bǎ <b>ké</b> kel-ō <i>she was doing</i>	a bǎ <b>ndi</b> ké w-ó <i>he was still killing</i>		mi <b>mâ</b> tól-ō <i>I had read</i>  N: mi ti pa-tól-ó ná	mí <b>mă si</b> w-ó <i>I (have) finished killing</i>	mí <b>pa mă</b> sum-ō <i>first I built (then ...)</i>
	a dý-á-kí kámo <i>he eats couscous</i>  N: mi ti tól ná	a <b>ké</b> kel-ō <i>he is doing</i>  N: mi <b>ké</b> sán-a <i>I am not working</i>	wuse <b>ndi</b> ké bêt-ε <i>we are still throwing</i>  N: mi ti <b>ndi</b> ké tól-ō	mi <b>me</b> ké dý-é-na <i>"I begin to be eating"</i>	bó <b>mă</b> biy-e <i>they have seized</i>  N: mi ti pá tól-ó ná	a <b>si</b> ké dý-é kámo <i>"he finished to be eating couscous (then ...)"</i>	mi ké <b>pa</b> beŋ-e <i>first I see (then ...)</i>
Future <b>tă</b>	a <b>tă</b> nj-e <i>she will come</i>  N: mi <b>tá</b> tól-ō <i>I will not read</i>	a <b>tă</b> bέ <b>ké</b> sán-a <i>she will be working</i>	a <b>tă</b> bέ <b>ndi</b> ké pés-ó <i>he will/should still be cutting</i>			mí <b>tă si</b> dý-é <i>we will finish eating</i>	a <b>tă pa</b> sum-ō <i>first he will build (then ...)</i>

## A93 Kako

1 Source, community Sources are Ernst (1991), Yukawa (1992). Kako has 70,000 speakers in Cameroon's Eastern Province and neighbouring CAR and Congo. 7x1 oral vowels, five (?) nasalised, no distinctive length. Tonally, H, downstepped H, L, and unmarked are shown. Non-high tones in final position lower to low in pre-pause position. Metatony. Ernst and Yukawa agree on most data and analysis but differ in two relevant ways. While Ernst writes [root – EXT – FV – Post-FV] as adjoined, and the rest of the verb as consisting of clitics, particles, or independent words, Yukawa represents most of the verb as consisting of one inflected piece. Second, their descriptions of the verb have some discrepancies. In the matrix, the statement of verb structure, and these notes we follow Ernst: a little data is added to the matrix from Yukawa, and we explain his differences in these notes.

2 Structure subject – NEG<sub>1</sub> – TA – root – EXT – FV – Post-FV – object – NEG<sub>2</sub>

Subject pronouns: mi/N; wε; nyε/a; wuse; wune; ɓɔ. In a few tenses (e.g. Past) all pronouns are H, but in most TA forms, 1/2p are L while the tone of the others is that of the verb final tone.

NEG<sub>1</sub>: ti; NEG<sub>2</sub> na. Both L but *na* may receive a H by metatony from the preceding verb.

TA: má ANT; mâ Past ANT; tá Future; ké PRG; ndi ké Persistentive; me Inchoative; si Completive; pâ Priorative. Yukawa has ndi-ké HAB; sé-ndi-ké PRG.

FV: -V (with allomorphs) NEU, ε NAR.

Post-FV: ma Past; -(k)(V) (with allomorphs: H) Present; kó (with allomorphs) SBJ.

3 Tense One past, present, one future. In compounds pre-stem -ma- (ANT) is used for Past, not suffixal -ma- Past. The past form of ɓε 'be' is ɓa. Ernst also has a (Past) Narrative, in which the verb is preceded by -a- or -ε- and the suffix is -ε (a ngurú nj-é 'and the tortoise came').

4 Aspect Ernst and Yukawa agree on the categories (but not always the labels) PFV, PRG, PER, INCH, and ANT. CMP and Priorative are only in Ernst. Two or more aspects may exist (at TA): not all are shown in the matrix. Three aspects: mi mă pa si wó nyamɔ 'I first finished killing the animal'.

5 Negation Some forms (e.g. FUT and PER) only have post-verbal NEG<sub>2</sub> -na- but most, including RELs and IMPs, involve post-subject NEG<sub>1</sub> -ti- and NEG<sub>2</sub> -na-.

6 Relatives Subject or object, the relative consists of *té* at the start of the relative clause: mómó nyé nyă-mí búkú 'Person he gave-me book', mómó té nyé nyă-mí búkú 'Person who...?'

7 Subjunctive SBJ consists of suffixal -k and/or vowel, with several allomorphs, and tonally the first vowel of the verb is H; wuse and wune are L, the other subject pronouns H. For examples, see IMP pl in 8. From Yukawa's limited data it seems to have the typical syntactic range of the subjunctive. The SBJ and the Present Indicative are identical in structure but different tonally: Present mi tól 'I read', mi jóngwé 'I treat', SBJ tól, jóngwe. SBJ and IMP both occur at Post-FV and have initial -k (presumably from PB \*-ag) in many allomorphs. They differ

in their vocalism and tone, so (IMP sg first, then SBJ): tó-kó, nyé-kó, but mi tó-ki, mi nyé-ki, etc.

8 Imperative From tóló 'Read', tó 'Pinch', sómó 'Beat', sã (H) 'Seek', seble 'Deceive' we get (sg): tóló, tókó, sángó, séblá; (pl) wunε tól, wunε tóki, wunε sôm, wunε sâŋ, wunε sébla, wunε téja, also wunε nyé-ki 'Give', wunε j-áki 'Eat', wunε sána-ngwε 'Work'; (+ object) sómó mómó 'Beat someone', sómó nyé 'Beat him'. All vowels in the sg IMPs are H, and in the pl the first vowel of the verb is H.

B11a Myene (Mpongwee)

	Perfective	Imperfective -aŋ-	(Imperfective) 'be' + VERB	(Anterior) 'be' + VERB
P <sub>3</sub> a- ... -í	my <b>a-yen-í</b> <i>I saw</i> N: my <b>a-yen-e</b>	my <b>a-yen-áŋ-í</b> <i>I was seeing, etc.</i>	my <b>a-v-eg-aŋ-i</b> mi <b>dyen-a</b> my <b>a-luo</b> mi <b>dyen-a</b> my <b>a-luo</b> my <b>a-dyen-aŋ-a</b> <i>I was seeing, etc.</i>	my <b>a-v-eg-aŋ-i</b> mi <b>a-yen-i</b> my <b>a-v-eg-aŋ-i</b> mi <b>a-dyen-i</b> my <b>a-luo</b> my <b>a-yen-i</b> my <b>a-luo</b> my <b>a-dyen-i</b> <i>I had seen</i>
P <sub>2</sub> a- ... -i	my <b>a-dyên-î</b> N: mi <b>pa-dyen-a</b>	my <b>a-dyên-aŋ-i</b> N: mi <b>pa-dyen-aŋ-e</b>		my <b>a-p-eg-aŋ-a</b> my <b>a-dyen-i</b> my <b>a-duo</b> my <b>a-dyen-i</b>
P <sub>1</sub> a-	my <b>a-dyên-â</b> N: mi- <b>pa-dyen-a</b>	my <b>a-dyên-áŋ-a</b> N: mi <b>pa-dyen-aŋ-a</b>	my <b>a-p-eg-aŋ-a</b> mi <b>dyen-a</b> my <b>a-duo</b> mi <b>dyen-a</b> my <b>a-duo</b> mi <b>a-dyen-aŋ-a</b> <i>I was seeing, etc.</i>	my <b>a-p-eg-aŋ-a</b> my <b>a-dyen-a</b> my <b>a-duo</b> my <b>a-dyen-a</b>
	mi- <b>Ø-dyên-a</b> <i>I see, am seeing, will see, I seeing...</i> N: mi- <b>pa-dyen-a</b>			
Future -be-	mi <b>bé dyên-á</b> <i>I will see</i> N: <i>tone change</i>			

## B11a Myene (Mpongwee)

1 General Main source is Gautier (1912), who shows it as a 5-vowel language and marks no tones. As Myene has tones and 7(x1) vowels, the data is supplemented by that of Gautier. Philippson (p.c.), even though he worked on a slightly different dialect (Galwa, B11c). 35,000–70,000 people in Gabon, in, around, and south of Libreville speak Myene.

2 Structure SM – NEG – TM – root – EXT – ay – FV – 2p IMP ## object

SM: mi; w; a; zw; nw; wa. Unclear whether these are independent pronouns or affixes. Gautier writes them separately. Philippson suggests in Galwa only the 1s is an independent pronoun.

NEG: pa, the [p] deleting, leaving just [a], before the ‘weak’ consonants (see below under Root).

TM: a in all Pasts; Ø/e Present; bé Future; to/ato/aro CNDs; ga Itive; (pa PER).

Root: Most roots have two forms, differing in their initial consonant: weak (v, z, g, w, l, r, etc) vs strong (f, s, k, p/b, d, t, etc). This alternation plays a role in conjugation (e.g. P<sub>3</sub> vs P<sub>2</sub>/P<sub>1</sub>) and in other ways, such as conditioning the shape of the negative.

FV: ay IPFV is independent of, and prior to, FV. It reduplicates with monosyllabic verbs. FVs are: i P<sub>3</sub> and P<sub>2</sub>; e SBJ; a NEU. Gautier says that the IO precedes DO pronoun but has no examples.

3 Tense Three pasts, one future. The pasts may have absolute (last few hours, today, before today) or relative time reference. All may also have an anterior sense, by referring to an event started in the past but continuing into the present. The General Present may refer to the future. Philippson has P<sub>1</sub> and P<sub>2</sub> reversed.

4 Aspect All three pasts have an IPFV in -ay-. Philippson also has it in the Non-Past. Beside the PFV and IPFV columns, the matrix will be seen to have a second IPFV and an ANT column, both bracketed. They are compounds, consisting of ‘be’ and the general present and the pasts, respectively. They are bracketed because it is not clear from Gautier’s text how they differ semantically and pragmatically from non-compound forms.

5 Other categories The notion of ANT is carried in the PFV or can be brought out by the use of compounds (column 5 in matrix). PER only appears in ‘be’ (mi pa-re I still-be ‘I am still (here)’), but this may also form part of compounds with other lexical verbs (few examples given). Gautier presents other categories: (a) several conditionals (Present mi to dyena ‘I would see, if I see’), P<sub>1</sub> my ato dyena ‘I would have seen just now’, P<sub>3</sub> my aro dyen-i ‘I would have seen’ (b) Gautier discusses a subordinate indicative. As other pasts, it has the TA -a- but otherwise differs formally from the three pasts by its combination of root-initial consonant and FV (e.g. a-yena, not a-dyena, a-dyeni, or a-yeni). It occurs in various contexts, e.g. as ‘participle’ or NAR. The initial verb in a narrative indicates the agent and subsequent verbs have no SM (I came, a-saw, a-conquered). In ‘participial’ use, the subject appears post-verbally, so: ayena mye mbwa yi kenda, my akombiza yo ‘Seeing the dog running, I chased it’, lit. seeing I dog it running, I chased it.

6 Negation Two main kinds of formal negation occur. One (see matrix) involves -pa-. The other, not illustrated, involves a change of tone from the positive. The Galwa dialect differs.

7     Relatives     Gautier does not discuss RELs formally. Subject relatives appear to be structurally as absolutives (except in 3s): Philippson's analysis shows them to differ only tonally.

8     Subjunctive and Imperative   Yena (or ko-dyena) 'See', yena-ni (or yeneneni) 'See, pl'. o-ga-yen-e, SBJ used as polite IMP. Negative IMPs involve a negated AUX (-pila 'return', -tonda 'like', -tiga 'stop'): a-rond-e dyena/a-vil-e dyena/rig-e dyena/rig-e a-yena, all 'Don't see'.

## B25 Kota

	Perfective	Imperfective -ak-	Inceptive a- ... -été	Anterior -ángo-
P <sub>3</sub> -á- ... -á-sá	bj-á-lap-á-sá <i>they disappeared</i> N: mbu-bep-ε-sá <i>they did not carry</i>	[bá-jók-ák-á-sá] <i>they were listening</i>		
P <sub>2</sub> -a- ... -á-ná	[m-a-bep-é-ná] <i>I carried</i> N: angó mbu-bep-ε-ná <i>he did not carry</i>			
P <sub>1</sub> -amo-	j-ámo-lap-á <i>he disappeared</i> N: j-á-ká-lap-á			
-a-	bj-á-hut-á <i>they pay</i> N: [má-bep-é] <i>I do not carry</i>		bj-á-bep-été <i>they are carrying</i> <i>(for the first time)</i>	
F <sub>1</sub> -ě- ... -ak-	m-é-kón-ak-a <i>I will plant</i> N: m-ádi-kon-a			
F <sub>2</sub> -é- ... -ak-a-ná	min-é-lén-ak-a-ná <i>we will cut</i> N: bj-ádi-lén-an-á <i>they will not cut</i>			
F <sub>3</sub> -é- ... -ak-a-sá	m-é-dumj-εk-a-sá <i>I will hit</i> N: bj-ádi-jók-a-sá <i>they will not listen</i>			m-ángo-lén-á-sá <i>I will have cut</i>

## B25 Kota

1 General Source is Piron (1980). Kota is spoken mainly in western Gabon, also in adjacent NE Congo, by '28,000–60,000' people. 7x1.

2 Structure Pre-SM – SM – TA – root – EXT – ak – FV – Post-FV ## object

Pre-SM: mbu- NEG appears in P<sub>2</sub>/P<sub>3</sub>. SM and TA delete after mbu.

SM: m(a); o; a; míni; 2p ?; bé.

TA: a in all non-futures; amo P<sub>1</sub>; é futures; ádí FUT NEG; ángo FUT ANT; ká P<sub>1</sub> NEG.

ak: Occurs in futures, IMP, INF, and IPFV. In most cases it has the tone of the FV.

FV: a NEU; á Present, Pasts (positive); a Futures (positive); é Present NEG; été 'for the first time'.

Post-FV: ná 'yesterday/tomorrow'; sá 'beyond yesterday/tomorrow'; (a)ji IMP pl.

Objects, nominal and pronominal, are post verbal.

3 Tense P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> are described as Hodiernal, Hesternal, and Remote; F<sub>1</sub>, F<sub>2</sub>, F<sub>3</sub> as Hodiernal, Crastinal, and Remote.

4 Aspect PFV, IPFV, ANT, INCE? Only one IPFV (P<sub>3</sub>) is shown – is it IPFV or PRG? Only one ANT (F<sub>3</sub>) is shown. It is unclear how the 'Inceptive' should be labelled: Piron translates it as 'for the first time', translates it as a Present, but labels it a Past.

Finally Piron shows a 'timeless' ('intemporal'): imé bōdínónō 'I always like'. This is apparently uninflected, preceded by noun or pronoun, and only occurring in 1-2-3s and p.

5 Negation Negative is indicated variously. For futures, the TA -é- is replaced by -ádí-. For P<sub>2</sub>/P<sub>3</sub> the Pre-SM mbu- appears. For P<sub>1</sub> -ká- is used. In the Present, suffixal -é replaces the affirmative markers. In the IMP ndéka occurs: ndéka jóká 'Don't listen'. For relatives and subjunctives no negative data is shown.

6 Relatives The four examples given are all subject relatives. The thus limited data suggests they are structurally identical to the non-relatives and differ from them only in having a H (underlined) on the TA. Examples: moto á-bomá... '(The) man who-caught...', moto á-mó-bángá angó '(The) man who was calling him...'. In the first example the SM á is H, in the second the H appears on the SM and the TA (underlined), which is normally L.

7 Subjunctive The only two (affirmative) examples given suggest that the subjunctive differs from the absolutive by having a H (underlined) on the SM. Examples: mwaító amosó te á-ngwájebá... '(The) woman said that she-knew...', a-só te m-á-hombj-éke... 'He said that I must replace...', lit. he-said that 1s-a-replace-éke. Both these have a H where the absolutive would not (á-, (m)-á-). In the second form has a combination of TA and suffix which does not otherwise occur in the absolutive.

8 Imperative Sg jók-ák-á 'Listen', ndéka jók-á 'Don't listen'. Pl jok-ák-áji, ndéka jók-áj ebóka 'Don't listen to the song'. All IMPs have a H on the [á] following the [k].

9      Auxiliaries      Piron gives two verbs 'be': -di and -(a)ngú, difference unexplained. The first appears grammaticalised in the future negatives, the second may be the formative in the F<sub>3</sub> Anterior and the P<sub>2</sub> NEG.

B43 I-punu

	Perfective	Imperfective <b>-a:nga</b>	Anterior (?)
P <sub>2</sub> <b>-má-</b>	tu- <b>má</b> -díbig-a N: tu-sá- <b>ma</b> -díbig-a		
P <sub>1</sub> <b>-má-</b>	tu- <b>má</b> -díbig-a N: tú-ka:-díbig-a tu-ska:-díbig-a tú-sa-díbig-a		
	tú- <b>í</b> -díbig- <b>i</b> <i>we close</i> N: tu-gé-díbig- <b>i</b>		tú- <b>tsi</b> -díbig-a <i>we have closed</i> N: tu-ga:-díbig-a
F <sub>1</sub> <b>-ki-</b>	tu- <b>kí</b> -díbig-a <i>we will close</i> N: tu-gó-díbig-a		
F <sub>2</sub> <b>-u-</b>	tú- <b>ú</b> -díbig-a N: tu-gó-díbig-a		

## B43 I-punu

1 Source Analysis of tense-aspect rests mainly on Fontaney (1980), plus conversations with J. Blanchon (1999) and the sparse data in Manfoumbi (2001). Fontaney has over 60 pages but as the emphasis is on tones, details of tense/aspect are sketchy. Fontaney is largely based on Bonneau (1956); Bonneau could not be consulted, a pity, because his grammar apparently has more detail. Blanchon (1980) was the source for 5. Superhigh tones are represented merely as H. Metatony. In 2 I show underlying tones, but surface tones in other sections and in the matrices. 5x2. Spoken in southern Gabon, and in adjacent SW Congo, total population ca. 200,000.

2 Structure SM – NEG – TA – directional – OM – root – EXT – FV – Post-FV – 2p

SM: ni; u; a; tu; du; ba.

NEG: (a) ga (b) ya: (c) sa ‘not yet’ (d) sa: ‘no more’ (e) tsi. Each associated with different forms.

TA: í Present; ú Indefinite Future; ki Immediate Future; tsí Passé/Perfectif; ma ‘Imperfectif’; ma ‘Passé Lointain’ (both -ma- are H but behave different tonally); ka ‘Subsecutif’.

Directional: yé Itive (‘go to’); yí Venitive (‘come to’); bwé ‘again’; le (tone?) ‘first’.

FV: a NEU; i Present (positive and negative) and SBJ (so \*e > i); a:nga ‘duration, repetition’; Fontaney also has u passive here. Final [a] deletes after monosyllables (ji ‘eat’, nu ‘drink’).

Post-FV: a:ti ‘first, insistence’, followed by á:nu 1/2p IMP.

3 Tense and Aspect Fontaney shows a ‘present’ and two futures (Near, Indefinite). She shows three past forms, labelled ‘perfectif, passé proche or imperfectif, passé lointain’. I interpret the last two as degrees of past reference, as in the matrix. The second can hardly be an Imperfective in the sense of this book, as Punu also has -a:nga, which she says can combine with all tenses (‘except the perfective’?) and so is an Imperfective in our sense. I interpret the first as Anterior, partly because of its label (= ‘perfect?’), and partly because Fontaney thinks it may not be combinable with -a:nga. Neither Fontaney’s presentation nor any of the other chapters in the same book (Nsuka-Nkutsi 1980) shows any examples, so further investigation might reveal the Anterior (‘perfectif’) as an Immediate or Near Past. For other tenses/aspects, see 4.

Beside the main categories sketched in the matrix, Fontaney also has Subsécutif, Itive, Venitive, ‘de nouveau’, ‘first’, and the two unidentified negatives shown in 4.

4 Negation There are several negative formatives, each used with a specific range of forms. The infinitive is negated by preposed *tsi*, presumably the negative copula. For Subjunctive/ Imperative, see 8, below (ya:). For pasts and subsecutive *sa* is preposed to the TA. In two negatives with ‘no corresponding affirmative’, tu-sâ:-dibíg-a ‘ne...plus maintenant’, and tu-kê:-dibíg-a ‘in subordinate clauses’ are used. With present, the futures, and the ‘perfectif’ ga- appears (it assimilates to the following vowel, producing [go] and [ge]).

5 Relatives Blanchon (1980) treats relatives in some detail (14 pages). He describes three shapes, which can all be used as subject or object relatives:

tú-tsi-gúkig-a bâ:na ‘We have brought the children together’

- (a) ...bá:na ába tu-tsi-gukíga... ‘...the children who we have brought together...’
- (b) ...bá:na bó tu-tsi-gukíga... ‘ditto’
- (c) ...bá:na tú-tsi-gukíga... ‘ditto’

(a, b) involve ‘a sort of relative pronoun’, (c) is segmentally unmarked. All three are tonally different from the corresponding absolutive.

6      Subjunctive (-i) and Imperative      Tu-Ø-dibíg-i ‘Let us close’, tu-ya:-díbig-a ‘Let’s not close’, wénda ‘Go (s)’, wéndá:nu ‘Go (pl)’, tu-wend-i-á:nu ‘Let’s go’, u-ya:-díbiga ‘Don’t close’. Also á-tsi-wê:(ndə) mu (ye)uđibiγə ndágu ‘He went in order to close the door’.

B52 Nzɛbi (Guthrie)

	Perfective	Imperfective -ang-	Anterior (?) -ma-
P <sub>3</sub> -a-	l-á-sál-ó <i>we worked</i> N: ló-sá-sál-ó	l-á-sál- <b>óng</b> -ó <i>we need to work, were working</i> N: ló-sá-sál- <b>óng</b> -ó	
P <sub>2</sub> -a- ... -i	l-à-sél-í N: lè-sá-sél-í	l-à-sél- <b>íng</b> -í N: ló-sá-sél- <b>íng</b> -í	
P <sub>1</sub> -Ø- ... -i	ló-Ø-sél-í N: <i>as above</i>	ló-Ø-sél- <b>íng</b> -í N: <i>as above</i>	
	l-àà-sál-ó <i>we work, are working</i> N: lè-sá-sál-ó	l-àà-sál- <b>óng</b> -ó <i>we work (habitually, all the time, continuously)</i> N: lè-sá-sál- <b>óng</b> -ó	lè- <b>má</b> -sál-ó <i>we have worked</i>
F <sub>1</sub> -Ø-	lè-Ø-sál-ó <i>we will work</i>	lè-Ø-sál- <b>óng</b> -ó	
GF(i) -ká-	lè- <b>ká</b> -sál-ó N: lè-sá- <b>ká</b> -sál-ó	lè- <b>ká</b> -sál- <b>óng</b> -ó N: lè-sá- <b>ká</b> -sál- <b>áng</b> -ó	
GF(ii) ni-	nì-lè-Ø-sál-ó	nì-lè-Ø-sál- <b>óng</b> -ó	

B52 Nzebi (Marchal-Nasse)

	Perfective	Imperfective -ang-	Progressive -ka-a(a)-	Inceptive (?) REDUPLICATION	Anterior -má-
P <sub>3</sub> -Ø- ... -a	me-Ø-mɔn-ɔ <i>I saw</i> N: me-sa-mɔn-ɔ				
P <sub>2</sub> -á-	by-á-só:mbás-á <i>they sold</i> N: <i>as above</i>	by-á-só:mbás-ɔng-ɔ <i>they used to sell</i> N: bí-sa-so:mbəs-ɔng-a			
P <sub>1</sub> -Ø- ... -i	á-Ø-shimíí-í <i>she cried</i> N: me-sa-món-í <i>I have not seen</i>	bí-Ø-sú:mb-íng-i <i>they buy (HABITUAL)</i>		sú:mb-í ba-sú:mb-ísh-í <i>they (had) just sold</i>	
	by-â:-sómb-á ... <i>they buy</i> N: bisa: sómb-á vé	b-a-só:mb-ɔng-a <i>they always buy, often buy</i>	bá-ká-a-só:mb-á... <i>they are buying...</i> N: <i>as far left</i>	só:mbás-á by-â:-só:mbás-á <i>they are selling right now</i>	bi-má-sómbás-a <i>they have sold</i> N: bá-sa-ma-só:mb-á
F <sub>1</sub> -kí-	me-kí-só:mbás-á <i>they will sell</i>			yé:ndé lə-ki-yend-e <i>we are just about to go</i>	
F <sub>2</sub> -ká-	bá-ka-yé:nd-e <i>they will go</i> N: ba-sá-ká-só:mb-á ve <i>they will not buy</i>				
F <sub>3</sub> ni-	ni-ba-Ø-só:mb-a <i>they will buy</i>	we ni-yé:nd-ɔng-ɔ <i>you will go (often)</i>			

1 General There are two sources: Marchal-Nasse (1989), of which 140 detailed pages are devoted to the verb, and Guthrie (1968; <30 pages). While generally similar, they differ on three levels: the data presented is not identical, their analytical approaches to the verb (largely unstated) and to tone are different, and their semantic interpretations of some verb forms are at odds. Verb structure, polarity, relatives, subjunctive, and imperative are more or less the same so they are treated once (2–6) below. Nzɛbi is spoken by 40,000–150,000 (sic) people in SE Gabon and adjacent Congo. B50, B60, and B70 languages are rather similar. 7x2 (?).

2 Structure

Pre-SM – SM – NEG – TM – root – EXT – ang – FV – Post-FV ##obj – NEG

Pre-SM: Subject REL (L, with H on SM); H in some tenses; ni FUT; `ná in Present/Past NAR.

SM: mɛ; u; a; lə l /2p; ba.

NEG: sá, sí, vé, yá:.

TM: aá Present; a (different tones) various non-immediate Pasts; má P<sub>1</sub> (Marchal-Nasse) or ANT (Guthrie); ká non-immediate Future; kí F<sub>1</sub> (Marchal-Nasse); Ø F<sub>1</sub> (Guthrie); mbé/mbéeyí Irréel (Marchal-Nasse); amá P<sub>4</sub> (Marchal-Nasse). Marchal-Nasse has also pá ‘first’ as a Limitative, occurring after certain TMs and before the root.

ang: IPFV, and Guthrie claims (I would judge, incorrectly) it also encodes a P<sub>2</sub>. ang > ing before i.

FV: i Past and/or ‘Perfect’ (dep. on author); a NEU (assimilates to ε and ɔ in the stem).

Post-FV: ni 1/2 IMP. Objects: pronouns occur in the order IO DO. NEG: see 3.

3 Negation Four Post-SM NEG markers are used; -sí- and -vé only occur in conditionals. The negative IMP = SBJ has -yá:. In all other contexts, the majority, -sá- is used. All are accompanied by phrase final -vé.

4 Relatives Subject relatives are marked by an underlying high prefix at Pre-SM, followed by a low SM. Object relatives have an underlying high on the SM, and a separate pronoun which occurs before the verb, even before a lexical subject (see example). So all relatives differ tonally and morphologically from absolutes:

ba:ta ba-ba-sa-mən-əng-ə bakä:só vé... ‘The people who did not see the women...’

people who-they-NEG-see-IMPV-FV women NEG...

bivo:ndə bí bāka:sa bá-sa-mən-əng-ə vé... ‘The old men, who the women did not see...’

elders who women they-NEG-see-IPFV-FV NEG...

5 Subjunctive The SBJ can be seen in ba-só:mbós-á... ‘Let them sell...’, NEG ba-yǎ:-só:mbós-á..., in the negative Imperatives and the 1p positive, following. That is, SBJ and IND differ tonally, not structurally.

6 Imperative Sg so:mbe-s-a mapó:nzi ‘Sell the baskets’, u-yǎ:-mát-a... ‘Don’t leave...(mat ‘Leave’). 2p so:mbe-s-a-ni mapó:nzi ‘Sell the baskets’, le-yǎ:-sál-ól-á-ní mútú wu

‘Don’t work for that man’. 1p yă:d-á-ní lə-vád-á-ní pí:tə ‘Let’s plant cassava’, NEG lə-yă:-vád-á-ní pī:ta (vad ‘plant’, ya:d apparently ‘come’).

7 Tense (Guthrie) Guthrie has three futures: Near Future (null) and two General Futures, of which one (ka) occurs in statements, the other (ni) in responses. Guthrie has three presents: one with no -anga, one with -anga (IPFV), and one Present Perfect (ma) (he also a tonally different -ma- as a Narrative). Guthrie has four pasts: the P<sub>3</sub> and P<sub>2</sub> of the matrix (which Guthrie calls P<sub>4</sub> and P<sub>3</sub>, respectively), the P<sub>1</sub> IPFV of the matrix (which Guthrie calls P<sub>2</sub>), and the P<sub>1</sub> non-IPFV of the matrix (which Guthrie calls P<sub>1</sub>). Guthrie says P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub> refer respectively to Immediate, Hodiernal, Hesternal, Remote Past.

8 Tense (Marchal-Nasse) Marchal-Nasse has three futures: Near Future (kí), Far Future (ká), General Future (ni). Three presents: one without -anga, one with -anga (my IPFV), one with ka-aá (my PRG). Four degrees of past: P<sub>1</sub> (Near Past, má), P<sub>2</sub> (Far Past, á), P<sub>3</sub> (Very Far Past, which Marchal-Nasse analyses as null but some examples have -a-, and tonally different from P<sub>2</sub>), P<sub>4</sub> (amá, semantically unspecified). Marchal-Nasse says she has but one example of this P<sub>4</sub> so it must be considered doubtful.

9 Aspect Guthrie only recognizes three aspects: PFV (unmarked), IPFV (anga), and a single (Present) Perfect (which Guthrie calls ‘aspect of completion’, ANT in the matrix).

Marchal-Nasse has more aspects: PFV (unmarked), IPFV (anga), three Perfects (‘parfait’ or ‘présent achevé’), a Present Progressive (ka), and a set of three forms formed by reduplication, meaning not clear but perhaps Intensive? Marchal-Nasse says the three Perfects, though structurally and tonally different, are in free or idiolectal variation. What she means by ‘Perfect’ is not clear, because she says all three refer to immediate or recent past – also true of her P<sub>1</sub> and P<sub>2</sub> – and could be described as referring to completed (‘achevé’) action – but this is also true of all her past tenses.

10 Guthrie vs Marchal-Nasse The treatment in (7–9) makes Guthrie’s and Marchal-Nasse’s treatments appear more similar than they are. Both recognize three futures: two are formally identical, but the two authors differ on the semantic interpretation of the two non-immediate futures. Ignoring Guthrie’s Present Perfect, both have a contrast between IPFV and non-IPFV, but Marchal-Nasse also has the Progressive.

The largest differences are in the interpretations of past and aspect. While both analysts appear to have four pasts, Marchal-Nasse’s fourth (P<sub>4</sub>) is unlikely, and Guthrie’s P<sub>1</sub> and P<sub>2</sub> fit well together as IPFV and non-IPFV variants of one past tense (my P<sub>1</sub>). So both their data sets point to three, rather than four, degrees of past. Further, their four (or three) pasts do not correspond. What for Guthrie is a Present Perfect (ma) is for Marchal-Nasse a P<sub>1</sub>, and two of Marchal-Nasse’s three ‘Perfect’ aspects are said to be in free or idiolectal variation – form the basis for Guthrie’s P<sub>1</sub> and P<sub>2</sub>. The only ‘past tense’ – far or lointain – on which they agree is the -á/-a- form!

I would not want to make judgements between these two systems or try to merge them. Therefore the Appendix presents two matrices for Nzebi, one for each author, both slightly modified in analysis and considerably modified in labels.

B63 Ndumu

	Perfective	Imperfective -ah- / -ig- / -eg-	Anterior (?) 'be' + PASTS
Indef. Past -i	bisi li-Ø-mən-i <i>we saw</i> N: li-(ka-)mən-i ηi	me sig-ig-i <i>I did</i> (HABITUAL) me mən-ig-i <i>I saw</i> (HABITUAL)	bisi a-li li-Ø-mən-i <i>we had seen</i> me a-li a-mən-i <i>I had seen</i>
P <sub>2</sub> -ma-	bisi li-ma-mən-ɔ N: <i>as above</i>		bisi a-li-ma-mən-ɔ <i>we had seen</i>
P <sub>1</sub> -mu-	bisi li-mu-mən-ɔ N: <i>as above</i>		bisi a-li-mu-mən-ɔ
-a- / -e-	bisi l-ee-mən-ɔ <i>we see, will see</i> m' a-mən-ɔ <i>I see, will see</i> N: bisi (ka-)li-mən-ɔ ηi <i>or</i> bisi gi-mən-ɔ ηi	me sah-ah-a <i>I do</i> (HABITUAL) me mən-ɔη-ɔ <i>I see</i> (HABITUAL)	

## B63 Ndumu

1     General       Source is Adam (1954), ca. 40 pages on the verb systems of B51, B61, B63. Adam gives a general overview but important detail, especially phonetic, is lacking. Biton (1907), Bwantsa-Kafungu (1966) were inaccessible. B60 is not well served. Ndumu is spoken in SE Gabon and SW Congo by 4,000–7,000 people. Mbede is spoken mainly in W Congo and also in SE Gabon by 45,000–60,000 people. B60 language speakers exceed 100,000. 7x2.

2     Structure     General verb structure is essentially as B50, except that there is no Post-FV -ni (li mɔn-ɔ ‘See (pl)’, NEG ka-li-mɔn-ɔ ŋi). There are some interesting differences of detail between B63 and the B50 languages. Clause-final NEG is *ŋi*, not *vɛ*. 1p is *li*, not *la*. The main pre-stem NEG marker is *ka*, not *sa*. The IPFV marker has several shapes, depending on context: basic -ah(a)- becomes -ɔhɔ-/-uhu- after stem [ɔ]/[u]; becomes -igi-/-εγε- after stem [i]/[ɛ]; is subject to nasal assimilation after stem-final nasals (me mɔn-ɔŋ-ɔ ‘I saw’).

3     Tense and Aspect     Adam shows three pasts, P<sub>1</sub>/Near Past, P<sub>2</sub>/Far Past, ‘Indefinite’ Past, said to be frequent, used in narration, translated by several French forms, co-occurring with stative verbs to give a present translation in French (we yug-i ‘Do you hear?’). This suggests it might be an ANT. No discrete future, future situations being referred to by present or by auxiliaries. For aspects Adam shows PFV, IPFV (ah), and ANT (be + the pasts). Other aspects are realised lexically.

## B73c Iyaa

	Perfective	Imperfective (?) 'be' + LOC
P <sub>4</sub> -à- ... -í	mè n-à-dùs-í nyámá <i>I killed the animal</i> N: mè à n-a-dus-i pé	mè n-à-bá-mù-sál-à <i>I was working</i>
P <sub>3</sub> -à- ... -v̂	mè n-à-dùs-ù nyàmà N: mè à n-dus-u pé	
P <sub>2</sub> -Ø- ... -í	mè n-Ø-dùs-í nyàmà N: mè à n-dus-i pé	
P <sub>1</sub> -mǎ:- ... -v̂	mè Ø-mǎ:-dùs-ù <i>I just killed ...</i> bìsì dì-mǎ:-dùs-ù <i>we just killed ...</i>	
		bìsì dì-li-mù-sál-à <i>we are working</i>
Future -Ø- ... -v̂	mè ní-Ø-dùs-ù <i>I will kill ...</i>	bìsì dì-kà-mù-sál-à <i>we are about to work</i>

## B73c Iyaa

1 General Mouandza (2002). Just 30 pages (362–94) treat the verb, so the data in the matrix is accurate but likely incomplete. 5x2. All stem vowels are copied into the FV (not into -i) but without apparent grammatical meaning. Tones are represented as by Mouandza. Iyaa is a variety of West Teke, the latter's population put at 92,000, in SC Congo and SE Gabon.

2 Structure (pronoun) NEG # SM – TM – root – EXT – FV # objects NEG

Pronoun: Apparently needed in most contexts (?): mè; wè; ndé; bisí; bèní; bó.

NEG: Encoded by pre-verbal à together with post-verbal pé.

SM: n/ni; Ø(L)/wú; Ø/wú (both H); di 1/2p; bá 2/3s; wú in Future, otherwise null. In the IMPs (see 7), the two *di* are tonally distinct.

TM: Only TMs visible are Ø Future, P<sub>2</sub>; à P<sub>3</sub>, P<sub>4</sub>; mă: 'have just'.

FV: There are two FV. In one form, labelled V in the matrix, the FV is a copy of the stem vowel (with a few exceptions). The other is -i (P<sub>2</sub>, P<sub>4</sub>) with variable tone, depending on the tense.

3 Tense Mouandza shows four past tenses ('have just', Hodiernal, Hesternal, Far) and one future. See comment also in 4, following.

4 Aspect The aspectual data in the matrix may not be complete. Mouandza shows three PRGs, nicely differentiated partly by TM, partly by form of 'be' (li, bá, ka). Although the matrix, following Mouandza, writes these each as one word, they are transparently forms of be + locative + infinitive, so not included in the single Structure in 2.

Mouandza also shows another form translated as P<sub>4</sub> (Far Past): me á-li n-a-dūs-u. It seems to me this may be aspectually different from the other P<sub>4</sub>, so it is included here rather than in the matrix.

5 Negation In the past tenses, at least, the negative is encoded by à ... pé, which bracket the verb and are written as separate morphemes by Mouandza.

6 Subjunctive Not explicitly discussed but possibly the first member (below) of the Imperative pairs is a Subjunctive?

7 Imperative Sg sálà 'Work', sòló 'Clear (ground)', bë: 'Bring'. Pl disálá/sáláni 'Work', dísálà/dísáláni 'Let's work', disòlò/sòlani 'Clear', dísólò/dísóláni 'Let's clear', dibè:/bèáni 'Bring'.

8 Auxiliaries Mouandza shows a number of compounds with auxiliary verbs, exemplified here: mē sá n-dūsū 'I will kill', mē áli n-ā-dūsū 'I had killed (P<sub>3</sub>)', me nībwe:se ú-dyá 'I will eat again', we vúlu uyóbo 'You often get washed', bisi di-kwí-sálá 'First we worked', dy-a-kwí-sálá 'First we had worked', we yí-γolo 'You came to take', ndé kó: uyóbo 'He often gets washed', tó:no bisí úsála 'We have to work', sá dí-kwâ sálá 'We will work first', áli dy-a-kwá sálá 'First we had worked', dy-a-fwá:n(a)usá 'We have to do'. Ali, bwe:se, vulu, kwa, ya, to:no, fwa:na derive from lexical verbs meaning, respectively 'be (or, rather, 'was'), add, surpass, die, come, want, suffice'.

B82 Boma

	Perfective	Imperfective	Habitual	'Inceptive' -Ø-´ ... -é	Anterior (?)
P <sub>3</sub> -Ø- ... -í	bɔ-Ø-túm-í <i>you sent</i> N: a-bɔ-Ø-túm-í kó				
P <sub>2</sub> -Ø-´ ... -i	bɔ-Ø-túm-i <i>you sent</i> bɔ-mu-túm-iN-i <i>you sent for him</i> N: a-bɔ-mu-túm-iN-i kó	bɔ-Ø-túm-é: <i>you need to send, were sending</i>	n-tu-n-tóm-a <i>I usually sent</i> na-mu-tu-túm-iN-e <i>I usually sent for him</i>		a-Ø-túm-ǎ <i>she has sent</i>
P <sub>1</sub> -Ø- ... ´-i	bɔ-Ø-túm-i <i>you just sent</i> bɔ-mu-túm-iN-i <i>you just sent for him</i> N: a-bɔ-mu-tum-iN-i kó			bɔ-Ø-túm-ě: <i>you have already sent</i>	
	bɔ-Ø-tóm-a <i>you are sending</i>  bɔ-Ø-cúm-a <i>you are buying</i> N: a-bɔ-cúm-a			n-da:Ra-n-tóm-á: <i>I send</i>	n-Ø-tóm-a: <i>I usually, often send</i>
Future -lɔ:Rɔ-	na-mu-lɔ:Rɔ-túm-iN-e <i>I will send for him</i>				n-ka:Rá-mp-á <i>I will have sent</i>

## B82 Boma

1 General Stappers (1986). 8,000+ people in Bandundu Province, DRC, speak Boma. R = voiced uvular fricative, N = retroflex nasal. 7x2 (maybe 8 long).

2 Structure Pre-SM – SM – OM – TA (– reduplication) – root – EXT – FV

Pre-SM: (a) object relative (b) NEG a- c) subsecutive bu/bɔ. All low-toned, H follows the NEG L.

SM: n (na with OM); ɔ; ɔ/a; ε (li with OM); 2p bɔ; 3p ba. 3rd persons are H, 2s is L, others are L in positives, H in negatives.

TA: lɔ: Rɔ Future; ka:Rá Future ANT; la:Ra one Present.

Reduplication: Past HAB is indicated by reduplication of the first syllable of the stem, viz. stem-initial consonant, followed by /u/ for all stems with a back vowel, otherwise /i/.

FV: a Non-Past (raises to ε and ɔ by assimilation with the same stem vowels); all pasts have i (with allomorph u); a: Present HAB; ε: Past IPFV and Past Inceptive.

3 Tense, Aspect, etc Stappers shows three degrees of past ('just now, today, before today') and one of future. For the Future he shows a second form, which translates as 'will have ...ed' (labelled ANT in the matrix). For the 'present' he shows three different, aspectual, forms: ongoing at time of speech, Habitual, and 'Dauer oder Wiederholung' (IPFV in the matrix). For the Past of regular verbs, beside the three degrees of past reference, he has two forms apparently different aspectually (HAB vs Dauer oder Wiederholung) but not in time: for the past of 'be', beside two forms indicating degrees of (Perfective) Past, he has two other forms apparently showing the same two degrees of Imperfective Past.

Besides these forms he also has an Inceptive Past ('action begun in the past and just finished' – is this an ANT?), a Subsecutive (one action following another: bɔ-n-tumí 'and I sent'), and a Presentative ('directs attention to a completion and emphasizes that. It could be conceived as description of the context'). It is hard to know what to make of the different Imperfectives described in the previous paragraph and of the Inceptive and Presentative, because they are simply presented as paradigms, with a short German gloss and no indication of their range of use. Stappers says of the Subsecutive and Presentative that they differ from the other forms by not encoding negation and/or time reference and/or relativization. It is noteworthy that Subsecutive and Presentative have no pre-stem TA marker but consist of a tone pattern and the FV -i, and in this way they are formally identical to the three pasts. I have treated the Presentative as an Anterior.

Readers should treat the matrix with care: the forms presented under IPFV, HAB, INCE, and ANT certainly exist but some may be in the wrong place in the matrix.

4 Negation Data on negatives is incomplete (IMP? SBJ?). Post verbal kɔ is used in relatives; in most absolutes Pre-SM a- and kɔ- appear; in a few tenses Pre-SM a- alone occurs.

5 Relatives Subject relatives are structurally similar to absolutes: they are L in classes 1 and 9, otherwise H. Object relatives (L) are marked at Pre-SM. So:

...bá-Ø-kab-á... '(People, Cl. 2) who share...'; ilâ: ε-n-Ø-cûm-i 'oranges which-I-buy-past'

6     Subjunctive   SBJ has suffixal -a, as does indicative, and differs only tonally from indicative, by having H on SM and the following vowel: é-káb-a ‘Let’s share, we should share’, bá-ké-p-á ‘They should give it’. The functional-syntactic range of the SBJ is not indicated.

7     Imperative    Sg pá ‘Give’, ní-pá ‘Give him’, tóma ‘Send’. Pl bó-pa, bə-tóma.

B85 Ke-yanzi

	Perfective	Pluractional -(n)à	Persistentive <b>pò</b>
P <sub>4</sub> Ø- ... -í`	(né) s-ĩ (you) put		
P <sub>3</sub> è- ... -í`	(né) e-s-ĩ (you) put	/è-fù:b-í-nà/ he cooked for a long time	
P <sub>2</sub> é- ... -ì	(né) e-s-í (you) put		
P <sub>1</sub> má`- ... -à	(né) mǎ-s-a (you) put	bá-má-dy-à-ná they ate constantly	monděl <b>pó</b> má-sál the European is still working
(à:-)	(né) a-s-á (you) are putting, will put (today)	/á:-y-à-nà/ she comes and goes constantly	
Future nà:´	/múur <b>naá</b> a-y-a/ a person will come		

## B85 Ke-yanzi

1 General The source is Rottland (1970). Yanzi is spoken in Bandundu Province, DRC, by a population estimated by Rottland (1970) at 200,000, by Gordon (2005) at '100,000 or more'. Nearly all those living in towns are bilingual in Kituba, smaller numbers in Lingala. As many final consonants and vowels have been lost, verb stems are short. The verb has more stem-initial than stem-final consonants. 11x2: four back, four unrounded front, three rounded front. Underlying final vowels regularly delete and most SM's are also realised as null. Two underlying tones, H and L, fixed and floating, and surface downstep, rising, and falling.

2 Structure Mood, TA, root, FV are obligatory. Other components not obligatory.

subj ## Pre-SM – SM – mood – TA – OM – participant – root – FV – Post-FV ## NEG ## obj

Subject/SM: All finite forms have nominal or pronominal (1s *mɛ*; 2s *né*; 1p *bí*) subjects. Participants and 3s positive, and all negatives have no SM, SM's for classes 2 (ba) to 9 optional. Pre-SM (Rottland: 'proclitic'): *na*: FUT; *po* PER; *mbo* 'CNS, Dubitative'. All L, followed by H. Mood: Only tones. Positive participants and relatives are L, all classes H. Mostly realised on SM. TA: Ø (L) and *í* P<sub>4</sub>; *è* and *í* P<sub>3</sub>; *é* and *i* (L) P<sub>2</sub>; *má* and *a* (L) P<sub>1</sub>; *à*: and *à* Present; *è* and *à* Future. Present/Future NEG P<sub>3</sub> appears as Ø after a vowel, so is often only tonally distinct from P<sub>4</sub>. After these markers may appear members of a numerous second set, including *ka* Itive, *ya* Ventive, etc.

OM: Person/number morphemes (only) may occur here or post-verbally, apparently synonymously.

Participant (low-toned N) only co-occurs with 1st person participants.

Root: Rottland describes roots of various lengths. He thinks the few extensions are borrowed.

FV: *a* (is L, Present, P<sub>1</sub>); *i* Past or Subjunctive (when L = P<sub>2</sub>, when H = P<sub>3</sub> or P<sub>4</sub>).

Post-FV: (n)*à* Pluractional (reference to several subjects or places, actions repeated or long-lasting). Co-occurs with 'Present', P<sub>1</sub>, P<sub>3</sub>. Not clear whether NEG precedes object or vice versa.

3 Tense Pasts may be absolute (Far, Hesternal, Hodiernal, 'just') or relative: P<sub>4</sub> events are earlier than those of P<sub>3</sub>, which in turn precede those of P<sub>2</sub>. Future is formed with proclitic *na*:, which may also occur before the subject. Rottland's 'present' has progressive meaning, representing ongoing events or future events in the same day but I have included it under PFV, because it only occurs in the present, which would be the only entry in a Progressive column.

4 Aspect and other categories Some are proclitics at Pre-SM (PER, CNS/Dubitative, also FUT). Some appear at TA (Itive, Ventive, etc). Many others (Rottland: 50–76) appear in structures consisting of AUX + INF, or AUX + inflected verb (Irrealis, Inceptive, Repetitive, 'First...', etc).

5 Negation Present negative involves *-è-* and FV *à*. All tenses, including the Present, are negated with *-alé*, occurring verb- or phrase-finally. In the Imperative two auxiliaries are

used: káne and kámbó (plus infinitive), and the first of these also appears in the Subjunctive negative.

6 Relatives RELs and absolutes are distinguished tonally (at ‘mood’: muur ááwól mákwán... ‘Man is bringing bananas’, muur aawól makwan... ‘Man who is bringing bananas’).

7 Imperative and Subjunctive The simple Imperative consists of root and suffix. The suffix has a H for sg and -(n)á in the pl: sá ‘Put (sg)’, sá-ná ‘Put (pl)’. The stem may be preceded by morphemes familiar from other Bantu languages such as ka-fúúlá ‘Go (pl) and ask’, and less familiar ones such as maá-fúúlá ‘Ask (pl) first’.

Rottland: HOR for SBJ because it only appears in the 1s and 1p. It has the structure `x-`N-`x-root-i. The N also appears in the participant slot in the regular verb (see 2). Final -i is underlyingly L in sg and H in plural. Always preceded by the pronoun. Exs.: me n-s-í ‘Let me sit’, bí n-s-i ‘Let us sit’.

B302 Himba(ka)

	Perfective	Imperfective (?) -áγ-	'Precessive' -bé-	Anterior (?) -i-
P <sub>2</sub> -mâ-	a-má-γómbón-á <i>he swept</i> N: a-hí-γómbón-á	ómwán a-má-ib-áγ-á <i>child had closed</i> <i>(was closing?)</i>		a-má-i-bón-á <i>he had (already) opened</i>
P <sub>1</sub> -Ø- ... -í	ma-Ø-bók-í nyama <i>I killed an animal</i> N: ómwán a-hí-tóng-í <i>child did not lift</i>		/a-bé-ib-ón-á/ <i>first he opened</i>	ma-Ø-i-én-í <i>I have (already) seen</i>
Present -ndé-	ómwán a-ndé-mbám-e <i>the child sleeps, is sleeping</i> N: ómwán a-hí-ma-mbám-e	a-ndé-γam-áγ-é <i>she often wants, is often wanting</i>	me-ndé-bé-γend-á <i>first I leave</i>	
Future -ngâ-	ómwán á-nga-γend-á <i>child will depart</i> N: ómwán a-há-γend-é	dí-nga-ib-áγ-á <i>they will close</i>	mé-nga-bé-γend-á <i>first I will go...</i>	

## B302 Himba(ka)

1 General Rekanga (2000–2001) the main source, and Van der Veen's (2003) survey also consulted. Himba is used by several hundred people in a few villages 200 kilometres SE of Libreville in central Gabon. Few speak it well or as their only language. Van der Veen surveys seven B30 varieties, total some 15,000 (?), all in central Gabon. All except two are seriously endangered, including Himba, and even the two are not healthy. 7x1.

2 Structure SM – NEG – TM – AM – root – EXT – ay – FV – Post-FV

SM: ma/me/me (dialect, free variation); ó; a; to; no; wá (Van der Veen differs tonally for general B30).

NEG: hí in Pasts and Present, há in FUT/SBJ. (Van der Veen shows si and sa.)

T: Ø in P<sub>1</sub>; mâ P<sub>2</sub>; nde ([n] H) Present; ngâ Future.

A: í ANT ('accompli'); bé Antecessive; na NEG SBJ.

ay: Occurs in infinitive, 'conditionals' and certain relatives: may occur in IPFV P<sub>2</sub>, Present, Future, and Imperative. Apparently always H but this may be a copy of the tone of the FV.

FV: a NEU; í P<sub>1</sub>; é Present; á P<sub>2</sub> and Precessive; a SBJ; ó Infinitive.

Post-FV: yi 2p IMP. Van der Veen shows object pronouns between A and root for B30 in general.

3 Tense I have relabelled Rekanga's 'récent' and 'prétérit' ('hier'), respectively, P<sub>1</sub> (-i) and P<sub>2</sub> (-ma-) partly because of the translations, but mainly because of how they pattern with Precessive and Anterior. Van der Veen shows two tonally different -ma- and therefore three pasts elsewhere in B30.

4 Aspect While the matrix shows a contrast between PFV (unmarked) and IPFV (ay), Rekanga is less straightforward. He says the IPFV sometimes means repetitious or frequentative, but is sometimes semantically identical with the PFV. In his corpus it seems to have been infrequent. Rekanga calls the ANT 'accompli' ('J'ai déjà vu'). The 'Precessive' always refers to the first event in a series ('First I...') and patterns consistently with past, present, and future, semantically.

5 Negation Two negative markers are shown: -hí- (Pasts, Present) and -há- (Subjunctive, Future). The T-markers appearing in negatives are not always those of the corresponding positives.

6 Relatives Subject RELs are tonally different but structurally identical or similar to absolutes: ómwán a-má-ɣɛnd-áyá 'Child went' vs ómwána á-ma-ɣɛnd-áyá 'Child who went'. Object relatives involve postposing subject of the relative clause and agreement of verb with head noun: móɣɔdí ó-matsopi â:na 'La corde que les enfants ont tirée' (corde que-ont tirée enfants).

7 Subjunctive Rekanga shows two SBJs. One is 'regular' (me-Ø-ge:nda 'Que je parte', all L) and can occur with the Precessive, with ay, and with negative (me-há-na-ge:nd-a 'Que je ne parte pas', NEG há H, the rest L). The other is past in form (/ -má- /) and meaning: ndó

má-m-én-a máta:mbe... ‘Une fois que j-eusse vu les pieds...’ and Rekanga found no negative for it.

8 Imperative Sg ɖutá móγɔ:ɖi ‘Pull the string’, NEG o-há-ɖut-é... (= FUT) or o-há-na-ɖuta... (= SBJ) ‘Don’t pull...’. Pl yúnzáy ó:mwa:na ‘Beat the child’, NEGs as preceding but with no -yi. Rekanga says imperatives have an underlying final H and a floating H preceding the verb.

9 Infinitive Rekanga shows two positive and one negative infinitive. The latter is marked by ge- (HL)...-é (yé-γend-é ‘Not to go’). The minor positive infinitive – a bare stem and a final H (me-há-γend-é hómá ‘I won’t go to buy’) – occurs after motion verbs. The main infinitive (mo-...(-aγ)-ó) is used in most other expected infinitive contexts (mo-gend(-áγ)-ó ‘to walk’).

C14 Leke

	Perfective (-ak-)	Progressive (-bé- +) -mó- + INF	Anterior
P <sub>2</sub> -a-	bá-a-támbúd-ák-á <i>they walked</i>  N: tá a-támbúd-ák-á <i>they did not walk</i>	bá-a-bé-ak-á mó-bá-kang-é <i>they were tying them</i>	bá-a-támbúd-á <i>they walked</i>  N: tá a-támbúd-á
P <sub>1</sub> -í	bá-támbúd-ák-í  N: tá á-támbud-ak-i	o-bé-ak-í mô-támbud-é <i>you were walking</i>	bá-támbúz-í  N: tá á-támbuz-i
-Ø-	bá-Ø-támbúd-é <i>they walk</i>  N: tá á-támbud-é <i>or</i> a bo tambud-é ya	a-mó-(bo-)yé-n-é <i>he is seeing, looking at</i>	
Future -âamá-	bá-âamá-támbud-a <i>they will dance</i>	tw-âama-bé-a mô-bín-é <i>we will be dancing</i>	

## C14 Leke

1 Source, community Vanhoudt (1987). Spoken in northeastern Congo (RPC) in three villages, population unknown, but clearly small. 7x1. 2 tones, including a floating L. Many consonantal and vocalic elisions, so the matrix shows essentially underlying forms. Final -a and -e assimilate to preceding degree 3 vowels.

2 Structure Pre-SM – SM – (NEG –) TM – OM – root – EXT – ak – FV # OM # NEG

Pre-SM: NEG tá; object relative; tV, which is optional in classes 1, 7, 9 in Present.

SM: Two sets, absolutive vs relative: absolutives i (positive) or ' (negative); o; a; to; o; bá. Cl. 1, 7, 9 and participants are L, others H.

(NEG): In the relative negative -tá- may occur here or at pre-SM.

TM: a P<sub>2</sub>; á`má Future. (Ø accompanies FV -e and -i).

OM: Objects may be marked here at OM or more often at Post-FV. Only participant here is N-1s.

ak: Represents PFV, and appears in subjunctive-based imperatives. Reduplicated with yé 'come'.

FV: a NEU; á P<sub>2</sub>; a Future, one INF, and in positive SBJ and Injunctive; é in one INF, Injunctive NEG, and Present; e in positive Subjunctive; í in positive P<sub>1</sub>; i in negative P<sub>1</sub>.

NEG: yá occurs in the present and in the subject relative.

3 Tense P<sub>1</sub>, P<sub>2</sub>, General (non-progressive) Present, Future. The difference between P<sub>1</sub> and P<sub>2</sub> appears to be that of Hodiernal vs Pre-Hodiernal. The Present has final -é, as does the infinitive. The negative of the General Present also has pre-stem bo-, as does the infinitive.

4 Aspect One aspect in the past is PFV ('fait est entièrement terminée'). The meaning of the other is less clear: while the P<sub>2</sub> form refers to a 'fait passé général, habituel, ou qui s'est étendu sur une longue période', P<sub>1</sub> events are described as not 'entièrement terminée'. I interpret this as ANT in the matrix. While Vanhoudt's analysis (p. 194–7, 201) seems convincing, two facts give reason for pause. One, the PFV marker is -ak-, cognate with -a(n)g-, which elsewhere in Bantu marks IPFV. Two, an apparent discrepancy between the analysis and the usage in the story at the end of the book. In the story ak-forms do refer to completed far past events but also to habitual and imperfective events. So the semantic contrast between forms with and without -ak- is less clear.

PRG is marked by ('be') + mo + infinitive. This 'locative' -mo- only appears in these PRGs. Present locative/PRG is unmarked for time, while past and future insert 'be' (-ba).

Vanhoudt (p. 207–10) shows other compound aspects, based on AUX + infinitive. The auxiliaries are 'continue (= PER), begin (INCE), be finished (CMP), try, want = be hungry, be able'.

5 Negation With two exceptions, any positive form can be negated by adding pre-verbal tá. The general present takes post-verbal ya, and the object relative and the imperative both place the auxiliary *dε* 'leave' before the main verb. Tá may occur after the SM in relatives.

6 Relatives Structure of subject and object RELs is: (antecedent) (NEG –) relative SM – demonstrative – relative SM – verb. Object relative structures have the subject following the

verb. The verb, whether referring to subject or object of the relative clause, agrees with the head noun.

7 Imperative and Subjunctive Sg and pl IMP are identical: súk-á ‘Stop’, túd-á ‘Forge’, bín-á ‘Dance’. Final H. Vanhoudt distinguishes formally a SBJ, whose SMs are tonally H, and an Injunctive, with low-toned SMs and pre-FV *ak*. Functional and semantic difference is less clear.

8 Similarity to Lingala Nearly all Leke are bilingual in Lingala. Although the surface structures of Leke and Lingala are not identical, their basis TA systems are very similar so it must be relatively easy for Leke speakers to adapt to Lingala. This is true for many Zone C languages.

C25 Mboshi

	Perfective	Imperfective	Anterior
<p>P<sub>2</sub>                      ' ... -Ø-</p>	<p>wà á-Ø-φyém-b-á oyíí  <i>he walked a lot</i></p> <p>[ngíí-pé] /ngá í-Ø-p-á/  <i>I gave</i></p> <p>N: ngá í-dzáá wă o-yéφa ko  <i>I did not know him</i></p>	<p>wà á-Ø-dzáá lâ-sál-a  <i>he used to work</i></p>	
<p>P<sub>1</sub>                      ' ... -Ø- ... -i</p>	<p>ngá í-Ø-bonz-i ...  <i>I have broken ...</i></p> <p>nò ó-Ø-tsól-i ...  <i>you have fallen into ...</i></p> <p>N: wa á-Ø-dii eyiya ɔ-dzâ yó  <i>he has not eaten a thing</i></p>	<p>wà á-Ø-dii lâ-kwer-é  <i>he was cutting down ...</i></p>	<p>mwána wó a-si-yúl-a  <i>that child has grown</i></p>
<p>Non-Past                      ' ... -Ø- ... -a (M)</p>	<p>ngá l-î-bw-a                      ng-î-bw-a /ngá-î-bw-a/  <i>I fall, am falling, will fall</i></p> <p>N: ngá i-dí o-yéφa ko  <i>I do not know</i></p>	<p>wà á-φi lâ-yém-b-a ...  <i>she is beginning to sing</i></p>	

## C25 Mboshi

1 General Fontaney (1989: 91–127). Spoken by 70,000–100,000 people in Congo's Cuvette and Plateaux Regions. 7x1. Floating tones play a role in the verb.

2 Structure ka – SM – formative – root – EXT – FV # objects # NEG

ka, with various tones: 'Obligation' or 'expectation'.

SM: At SM there are morphemes of the shape V and the shape IV (associated with participants and 3s). The V shape occurs in all tenses, the CV shape may occur in the Present and Recent Past. Mboshi is not a pro-drop language so in most absolutes the full subject pronoun also occurs. RELs, both subject and object, occur at SM. Subject (also object) pronouns are: ngá; nɔ; wa; bísí; bíní; bā. SMs are (V-shape first) í, ó, á, ʔ, ʔ, á; lí, lô, lâ, lê, lê (3p bā).

Formative: si ANT; mɔ, indicating polite imperative. (Ø accompanies FV -e and -i).

FV: i (P<sub>1</sub>, Narrative, different tones); a (several categories, several tones). Final [a] assimilates to preceding degree 3 vowels in the stem. Some forms (e.g. the Non-Past, the o-infinitive) show metatony. Fontaney also shows an -aa (L) and another -í: both of these function in some cases like Subjunctives. Objects (IO, DO) occur immediately after the verb, negative particles sentence finally.

3 Tense Two pasts ('remote, recent'), no future but a general present/future. Future can be conveyed by various auxiliaries (e.g. -kɔŋga 'wait') + infinitive. Narrative (-i) also occurs.

4 Aspect The three aspects shown in the matrix (PFV, IPFV, ANT) are clear. The ANT (si) shown is the most fully grammaticalised of three, or maybe four formatives, deriving from -sía 'finish'. Fontaney shows no example of -si- with a non-stative verb. All IPFVs are compounds, consisting of a tensed form of 'be' plus the present form of the lexical verb.

Fontaney shows an extension (not a FV) in -Vng-, rendered as 'repetition'.

5 Negation Negative is expressed by any of three sentence-final particles, apparently interchangeable (kaa, ko, yó). An alternative strategy occurs in the IMP, which see. The particles may be added to affirmative verbs, the result being a marked form, expressing focus. In normal NEGs the particles are added to a construction consisting of AUX plus the o-infinitive, so: ngá i-dí o-yéɸa ko 'I don't know' (lit. I I-be to-know not), ngá í-di ɔ-dzâ yó 'I didn't eat', wá (a-dí) burá ɔ-dzwá yó 'He no longer travels', ngá sáa o-yúla kaa 'I haven't grown yet'.

6 Relatives In relatives subject and object SMs agree with the antecedent and the logical subject follows in object relatives. Tonal correlates not always clear but relatives and absolutes seem tonally similar. Exs: moro yé-wola 'Person who is talking' (lit. person who-talks), dzá nyama ye-pé ngá nɔ 'Eat the meat which I gave you' (lit. eat meat which-gave I you).

7 Subjunctive Fontaney refers to the FV -aa as a Subjunctive, and shows cases of FV -i in contexts reminiscent of those of the subjunctive (p. 89–92). However, since both also occur in contexts which are not subjunctive-like, this attribution is not totally convincing.

8      Imperative      Sg léá ‘Climb’, sundá ‘Descend’; 1p lésunda ‘Let’s descend’, lɛ-mɔ-dzâ ‘Let’s eat (polite)’; 2p lésundá ‘Descend’. Negative IMPs can be expressed either by the particles or by either of the two AUXs ‘Leave’ and ‘See/mind’, so: ɔ-dzwa...kaa ‘Don’t go’, ya o-bína ‘Don’t dance’, ɔ-táá lɔ-yémba ‘Don’t sing, mind you don’t sing’.

C32 Bo-bangi

	Perfective	Imperfective <b>-ak-</b>	Progressive <b>-mó-</b>	Anterior
P <sub>2</sub> 'Past indefinite' <b>-i</b>	ná-kát- <b>i</b> <i>I held</i> N: ná-lik-i ndé o kata ka <i>or</i> ná-zal-i ndé o kata ka	ná-kát- <b>ák-i</b> <i>I was holding, used to hold</i>		ná-ó-kát-á <i>I have held</i>
P <sub>1</sub> 'Past definite' <b>-í</b>	ná-kát- <b>í</b> <i>I held</i> N: ná-lik-í ndé o kátá ká <i>or</i> ná-zal-í ndé o kátá ká	ná-kát- <b>ák-í</b> <i>I was holding</i>		ná-só-kát-á <i>I have (just) held</i>
<b>-ko-</b>	na- <b>ko</b> -kát-a <i>I hold</i> N: ná-ngá ndé o kátá ká <i>or</i> na- <b>ko</b> -zala ndé o kátá ké <i>or</i> ngái o kátá ká	na- <b>ko</b> -kát- <b>ak-a</b> <i>I am holding</i>	ná- <b>mó</b> -lúká <i>I am paddling</i>	
F <sub>1</sub> 'Definite future' <b>-i</b>	na-kát- <b>i</b> <i>I will hold (definite)</i> N: na-zal- <b>i</b> ndé o kátá ká			
F <sub>2</sub> 'Indefinite future' <b>-kó-</b>	na- <b>kó</b> -kát-á <i>I will hold</i> N: ná- <b>kó</b> -zal-á ndé o kátá ká	na- <b>kó</b> -kát- <b>ák-á</b> <i>I will be holding</i>		

## C32 Bangi, Bo-bangi, Lo-bo-bangi

1 General Source is Whitehead (1899), based partly on his own work, partly on that of missionary colleagues. The Bibliography has some twenty descriptions of C30 languages. They are all rather similar, C35 showing the most differences. It seemed important to include one of them to show the background to Lingala. Bobangi was chosen because its description is the oldest and it is the ultimate source of today's Lingala. 70,000+ people in Equateur Province in NW DRC and adjacent Congo and CAR speak it, as first or second language. 7x1.

2 Structure SM – TA – OM – root – EXT – ak – FV # object

SM: na; o; a; lo; bo; ba. All behave identically, tones depending on the particular verb form. Object agreement may occur here in relativised verbs (see 6, below).

TA: ko Present; kó F<sub>2</sub>; ó P<sub>2</sub> ANT; só P<sub>1</sub> ANT; mó PRG; ba CND and IMP; bisó Iterative.

OM: W says all can these render 'I give him it' but does not explain clearly the differences: nakopé yéyé yéngó, nakopé yéngó ómbé yéyé, nako-mo-pé yéngó, nako-i-pé ómbé yéyé, nako-i-mo-pé. Underlined parts represent 'him' (yéyé, -mo-) and 'it' (ómbé 'to').

-ak-: IPFV, occurs in all (most?) indicatives, imperative, subjunctive, infinitive.

FV: í P<sub>1</sub>; í P<sub>2</sub> and F<sub>1</sub>; a Present; á F<sub>2</sub>, SBJ, ANT. Vowel and tone assimilation as C36 and C41.

3 Tense Two pasts (Indefinite = 'past time', Definite = 'some particular point in the past', generally hodiernal) and two futures (Definite = 'at some specific future time', Indefinite = 'yet to be performed').

4 Aspect and other categories IPFV (ak), PFV (no ak), PRG (mo), ANT (depends on the tense), CND (*bá*, as in na-bá-káta 'I would have held'), Iterative (bisó, 'action is repeated', as in ná-bisó-káta 'Again I hold/held'). Matrix incorporates only the first four.

5 Negation What Whitehead calls a full negative consists of a conjugated form of 'be' (-nga Present, -liki Past, otherwise -zala) + ndé + o + stem # ka, as in na-nga ndé o kátá ka or na-ko-zala ndé o kátá ka, both 'I don't hold', ná-li-kí ndé o kátá ka or ná-zal-í ndé o kátá ka, both 'I didn't hold (P<sub>1</sub>)', etc. But it is possible to shorten this by omitting 'be' and ndé, and inserting the independent pronoun, as in ngai o yóka ka 'I don't hear', etc. W: 76–79.

6 Relatives Relatives follow an almost identical pattern to those in C10-20. At least some absolutes and object relatives differ tonally. Na-ko-káta 'I hold', elókó é-kó-kátá ngai 'The thing which I hold' (lit. thing which-hold I), ná-káti 'I held (P<sub>2</sub>)', elókó é-káti ngai 'The thing I held'. Subject relative: ba-tu bá-y-í lóbi mpé bakozala 'The people came yesterday and they are living...' but ba-tu bá-y-í lóbi mpé bakozala 'The people who came yesterday are living'.

7 Subjunctive Whitehead refers to several forms as 'subjunctives'. These are almost certainly subjunctives: ná-kát-(ák)-á 'that I may hold', characterised by H on SM and FV. These may be subjunctives: ló-kata 'Let us two save', bo-ló-kata 'Let us three (or more) hold'.

8 Imperative Sg kátá, ó-kátá, (ó-)kát-ák-á ('emphatic'), ba-kát-a all translate 'Hold',

differences not explained. The plurals all add bo- (bá-kátá, etc). Forms with pre-stem material are presumably subjunctives.

## C36d Lingala

	Perfective (-ak-)	Habitual -aka	Progressive 'be' + INF	Anterior
P <sub>2</sub> -á	a-Ø-pés-ák-á <i>he gave</i>	a-Ø-zal-ák-á ko-pés-a <i>he used to give, was giving</i>		a-Ø-pés-á <i>he gave, has given</i>
P <sub>1</sub> -i	a-Ø-pés-ák-í <i>as above</i>	a-Ø-zal-ák-í ko-pés-a <i>(he used to give,) he was giving</i>		a-Ø-pés-í <i>as above</i>
-Ø-		a-Ø-pés-aka <i>he gives</i>	a-Ø-zal-i ko-pés-a <i>he is giving</i>	
Future -ko-	a-ko-pés-a <i>he will give</i>	a-ko-pés-aka <i>he will give regularly</i>	a-ko-zal-a ko-pés-a <i>he will be giving</i>	

## C36d Lingala

1 General Lingala is spoken mainly in DRC but also in Congo and CAR. Known as Bangala in the NE, it is ‘the (or one of the) mother tongue(s) of eight million people, but at least an equal number of people in western Central Africa use it as a lingua franca’ regularly or occasionally (Meeuwis 2001). It arose as a highly simplified form of Bobangi (Meeuwis 2001) and comes in many varieties. An initial analysis was made of Dzokanga’s data (1992), based on a rural variety. However, the analysis in the matrix is based on Meeuwis’s (1995, itself based on Mufwene 1978 and Bwantsa-Kafungu 1970) analysis of the Lingala of Kinshasa, supplemented by Meeuwis 1997 and 1998. 7x1.

2 Structure SM – TA – (OM –) root – EXT – ak – FV # (object) NEG

SM: na; o; a; to; bo; ba. Tones vary, depending on particular verb form.

TM: ko Future (Ø accompanies FV -a and -i in most other forms).

ak: Occurs in PFV Pasts, HAB, Past PRG: this might be interpreted as saying it occurs in non-ANTs. Same range of function in subjunctives and infinitives. -ak- is toneless.

FV: á IMP, P<sub>2</sub>; otherwise a, including in the SBJ; í in P<sub>1</sub>, but P<sub>1</sub> forms the basis for a present state (see 3). [a] in -ak- or FV assimilates to degree 3 vowels in stem. High tone of FV moves left into -ak-, so -ák-í P<sub>2</sub> (< /-ak-í/). This vowel assimilation and tone movement also in C41.

NEG: té.

Objects: There is disagreement about the marking of pronominal objects, presumably reflecting variation within Lingala. Some sources show OM before the root, others have them Post-FV.

3 Tense One future, two pasts, which can have absolute but more often relative past reference (P<sub>1</sub> more recent, P<sub>2</sub> more remote, but they could be used of the same situation (Meeuwis 1995: 109–11)). Future time can also be referred to by the (Present) Habitual, so a-pés-aka ‘She gives (habitually)’ ‘allows for predictions concerning the future’ (Meeuwis 1995: 105). P<sub>1</sub> Anterior tends to encode the past action and its continuing relevance in dynamic verbs but the present state in stative verbs. Since ‘be’ (-zal-) is a stative verb, a-zal-í translates as ‘He is’ and azalí ko-pésa as ‘He is giving’.

4 Aspect The past contrasts ANT, PFV, and IPFV (= HAB and PRG). For the Non-Past, HAB and PRG contrast, also PFV in the Future. Contrary to many Bantu languages, Lingala has no general present. Contrary to most Bantu languages, -ak- does not encode IPFV.

Additional categories are expressed via AUX + INF (Meeuwis 1995, 1997): Imminent/FUT (‘want’), Just Past (‘come from’), HAB (‘arrive, become’), CMP (‘finish’), etc.

5 Negation All verb forms negate by postposing té. Nouns negate identically (moto té ‘No person’). IMPs negate the infinitive; ko-sála té ‘Don’t work, don’t do (sg and pl)’.

6 Relatives Dzokanga describes strategies like those in C10-20, exemplified in C25 (Lingala moto a-biangákí ngái akómí ‘person he-summoned me he-arrived = Person who I summoned has arrived’, or ‘Person who summoned me...’). Meeuwis says such strategies are not part of current Lingala, which uses an invariable and optional pronoun óyo and ‘regular’

word order: mobáli (óyo) a-mónákí ngái ‘Man (who) he-saw me’, mobáli (óyo) na-mónákí ‘Man (who) I-saw’.

7 Imperative IMP sg has final H: sál-á ‘Work’, li-á ‘Eat’, pés-ák-á yé mbóngo ‘Come on, give him the money (insistence, impatience)’. All other imperatives involve the SBJ.

8 Subjunctive SBJs have a H on the SM and final -a: á-sál-a ‘May he work’, tó-tun-(ak-)a ‘Let’s ask (repeatedly)’, bó-lob-a ‘Speak (pl)’, bá-kënd-ε/bá-kënd-a ‘Let them go’.

C41 Li-ngombe

	Anterior	Perfective (-ak-)	Progressive (Imperfective ?) -aka
P <sub>2</sub> -a(a)-	l-a-héléj-á <i>we (have) helped</i>	l-a-héléj-ák-á <i>we helped</i> N: l-a-í-hélej-a-bí (née)	
P <sub>1</sub> -Ø- ... -í	lo-Ø-héléj-á-í <i>we (have) helped</i> N: ló-héléj-á-si	lo-Ø-héléj-ák-í <i>we helped</i> N: l-a-í-hélej-a (née)	
		lo-Ø-hélej-aka <i>we help</i>	l-aá-hélej-aka <i>or</i> lo-Ø-hélej-aká deá <i>we are helping</i> N: ló-ta-hélej-aka l-á-ta-hélej-aka
F <sub>1</sub> -áa-	N: lo-tá-pet-á-hélej-a <i>we will not have helped</i>	l-aá-hélej-a <i>we will help</i> N: ló-ta-hélej-a	
F <sub>2</sub> (?) (-áa- ...) -bí	N: ló-ta-pet-áa-bí -hélej-a	l-(aa-)hélej-a-bí <i>we will help</i> (?) N: ló-ta-wá-hélej-a	

## C41 Li-ngombe

1 General Yukawa (1992). Price 1947 was not consulted. Spoken by 150,000+ people in NE DRC in Equateur Province, on both sides of the Congo River, near the town of Lisila. All or many are bilingual in Lingala. 7x1. Other C40 languages are more similar to each other and less similar to C41.

2. Structure SM – TA – NEG – (OM –) root – EXT – ak – FV – Post-FV (object)

SM: na; o; a/o; lo; 2p bo or o...-ni; ba. Participants, classes 1 and 9 are L, rest H.

TA: a(a) P<sub>2</sub>; áa Futures, PRG; aka ‘if’; ka Itive IMP, (Ø with poststem material in other forms). Pre-stem /a/ comes in two shapes, one always long (FUTs, one PRG), the other which can be long or short (P<sub>2</sub>). The length of this variable shape seems mostly to be tone-related, although there also appears to be some free variation. The -a/-aa- is simply optional in some cases, e.g. in F<sub>1</sub> NEG, and in F<sub>2</sub>, where possibly the suffix -abí is now coming to indicate the Remote Past.

NEG: ta (L ?).

ak: Occurs with PFV, HAB, PRG, and infinitives, but not ANT. Similar pattern to C36.

FV: é SBJ; í P<sub>1</sub>; á IMP and P<sub>2</sub>; otherwise a.

Post-FV: bí F<sub>2</sub>, P<sub>2</sub>; si P<sub>1</sub> NEG; née Past NEG; deá PRG; kíní NEG; ni IMP pl. Status (clitic, independent item) or order of most is unclear. Object pronouns can occur at OM or post-verbally.

3 Tense Yukawa shows three (positive) pasts, a perfect ‘denoting an action which has already taken place’, two futures, and a present. I have reinterpreted the pasts for two reasons, one systemic and one comparative. If the three ‘pasts’ and the ‘perfect’ are examined and rearranged as two pasts and two aspects as in the matrix, both the positive and the negative patterns make more sense. Furthermore, this is just the pattern seen in most other Zone C languages.

4 Aspect Despite data lacunae, ANT, PFV, PRG, HAB are clear. Unclear are: the semantic range of PRG (is it a general IPFV?); presence of other aspects such as PER; and the answer to whether there is a general null-present, which might be implied by the short exemplificatory sentence: adóí á-duka elómu ‘He came looking for work’, where *á-duka* is likely to be a null form (it might also be a Past ANT), but does it also occur as an independent form?

5 Negation A fragmented pattern. Absolutive and relative behave identically. In Non-Pasts -ta- (apparently L) appears. Past PFVs have -í- and an optional particle (verb or phrase final?) -née. The P<sub>2</sub> ANT contains additionally the suffix -abí, also seen in F<sub>2</sub>, but not just in the negative. P<sub>1</sub> ANT has suffixal -ísi. Negative IMP consists of -pé- and infinitive (see 7).

Various forms that are probably ANT negatives involve -peta or -peta-kini. Some occur in the future ANTs, others are: ná-petá-kíní-sómb-a ‘I haven’t bought yet but might’ (-sómba ‘buy’), ná-sómba-kíní ‘I didn’t buy, haven’t bought’, ná-pá-kíní-sómba ‘similar’ to the preceding form. These are clearly Present or Past ANTs. As P<sub>2</sub> in the matrix has no corresponding negative it is tempting to insert one or more of these. However, Yukawa provides only a short English gloss and no textual examples, so I have chosen to rather mention them here. Similarly, Yukawa shows a Far Future (positive), whose negative is called the Future Definite. Finally, the data has

two future ANT negatives but no corresponding positives. The negative picture needs more investigation.

6     Relatives     Relatives follow an almost identical pattern to those in C10-20-32.

7     Imperative and Subjunctive   IMP has final H on -á: sg enjá-bó or bá-enjá ‘Look at them’, kwáa ‘Fall’, pl héléj-á-ni ‘Help’, ká-mo-héléj-á-ni ‘Go (pl) and help’. A SBJ can be seen in ná-a-sómb-é ‘Let me buy’, with apparently a H on SM and -é. The final -é in l-á-héléj-á-é ‘Let’s help’ and ká-mo-héléj-á-é ‘Go and help him (one person)’ are presumably also Subjunctives, although added to, rather than replacing -a. NEG pé bo-lí-sómba ‘Don’t buy it (li)’.

C55 Lo-kele

	Perfective	Imperfective	Progressive	Persistent	Inceptive	Anterior <b>-sóo-</b>
P <sub>2</sub> <b>-á-</b>	tw- <b>á</b> -kol-á <i>we did</i>	tw- <b>á</b> -kol- <b>áká</b> <i>we were doing, used to do</i>  N: tó-c- <b>á</b> -kol- <b>áká</b>	y- <b>á-áká</b> ndó-kol-á <i>I was working</i>		y- <b>á-si-áká</b> -o-kol-á <i>I was about to do</i>	
P <sub>1</sub> <b>-Ø- ... -í</b>	to- <b>Ø</b> -kol-í  N: tó-ti-kol-é	to- <b>Ø</b> -kol- <b>íkí</b>  N: tó-ti-kol- <b>éké</b>			i- <b>sí-kí</b> -o-kol-á <i>I was about to do</i>	
	to- <b>Ø</b> -kol-a <i>we always do, will do</i>  N: to-tí-kol-á		to- <b>ko</b> -kol-í to- <b>ko-ta</b> -kol-í tó- <b>kó</b> -kol-a to-le ndó-kol-á <i>we are doing</i>  N: tó-ti-kol-é <i>or</i> tó-ti ndó-kol-á	to- <b>kó</b> -kol-a <i>we will still work</i>		to- <b>sóo</b> -kol-á  tó-ti-kol-é <i>or</i> tó-ká-kol-í <i>we have not done yet</i>
F <sub>1</sub> <b>(-á-)</b>	tó- <b>Ø</b> -kol- <b>aka</b> tw- <b>a</b> -kol- <b>aka</b> <i>we will do</i>  N: to-c- <b>á</b> -kol- <b>éke</b>					
F <sub>2</sub> <b>-la-</b>	tó- <b>la</b> -kol- <b>aka</b>  N: to-tí- <b>la</b> -kol- <b>éke</b>					

## C55 Lo-kele (also Li-kele?)

1 Source, community It was hard to choose between C53 (Li-gesógo, Harries (1955)) and C55. We chose C55 because it contains more data but readers should also consult Harries, because C53 differs in interesting ways. C55 sources are two anonymous manuscripts, one 18 pages (7 pages on the verb), the other 54 pages (25 pages on verb) by ‘Missionaries of Yakusu’, both kindly provided by MRAC in Tervuren. Similar in content and analysis, they differ mainly (but not only) in length and detail. Spoken by 160,000+ people in DRC’s Orientale Province, Isangi Territory, on the Lomami and Congo Rivers. 7x1. Many grammatical tonal pairs.

2 Structure Pre-SM – SM – NEG – TA – LIM – root – EXT – FV – Post-FV # object

Pre-SM: Subject and object REL; a ‘when’; ta “‘first”, urgency’.

SM: i; o; a; to; bo; bá.

NEG: ti (c before vowel), ka?.

TA: Ø General Present, (Ø with FV a, i and iki in other forms); á in P<sub>2</sub>, F<sub>1</sub>; la F<sub>2</sub>; kó(ta) PRG, PER; síkío ‘was about to (P<sub>1</sub>)’; ásiáká ‘was about to (P<sub>2</sub>)’; ká in ‘not yet’.

Limitative: oyá ‘come to’; oká ‘go to’; tá ‘first’.

FV: a NEU; í P<sub>1</sub>; é P<sub>1</sub> NEG; íkí P<sub>2</sub>; áká IMP, P<sub>2</sub>; aka Future; éké Future/P<sub>1</sub> NEG; eke SBJ; éke SBJ NEG. Final vowel assimilation and tone movement as in C10-20-30-40.

Post-FV: i 2p IMP. Object pronouns (also subjects in e.g. relatives) occur post-verbally.

3 Tense Sources do not entirely agree on tenses and it is hard to judge between them because examples are few. Our interpretation produces two degrees of Past (Recent, Remote) and two Futures (Remote, Non-Remote). P<sub>1</sub> used with stative verbs refers to the end result: i-lúw-í ‘I know’. Similarly the Anterior i-sóo-ké, lit. ‘I have gone’ translates as ‘I’m going, am about to leave’. A compound future with no specific time reference also occurs: to-tó-kol-á < /to-ta-o-kolá/.

4 Aspect Both manuscripts have PFV and IPFV (ak). The authors of the longer manuscript show several PRG forms (see matrix), Inceptive (?), PER, and ANT.

5 Other categories

‘Narratives’: isó lo-kol-á ‘and we did’; isó ko-kol-á ‘and we will do’; NEG for both isó angokolá.

Limitative: to-tó-oká-kol-á ‘We will (come to) do’ (-to- see 3), to-tó-oyá-kol-á ‘We will (go to) do’.

‘Dependent’ Future: ...tw-á-kol-aka ‘(If..., then) we will do’.

Hypotheticals: tó-kol-a ‘If we do’ (cf to-kol-a ‘we do’); tw-á-kol-á ‘If we had done’.

‘When’: á-ká-kol-éké-so likuwa ‘When we will have worked...’ (lit. when-ka-work-future-we).

6 Negation The main negative involves -ti- (see matrix). SBJ NEGs differ from absolutes only tonally (í-kol-eke ‘I might do’ vs íkoléke ‘I might not do’). No data on relatives. The formative -ka- occurs in í-ká-kol-í ‘I haven’t done yet’ but it is not clear this is a real negative.

7 Relatives Much as C10-20-30-40. Subject: boto oy-a-Ø-kusw-íkí ‘The man who was coming out of the house’, lit. man who-he-comeout-IPFV/P<sub>1</sub> (oyo + a > oya). Object: liói e-lí-onjí-mí ‘word e-which-spoke-I’. The order is: Antecedent # REL – SM... (# subject). Verb always agrees with the antecedent, and in object relatives the subject pronoun occurs post-verbally. Relatives and absolutes appear tonally identical.

8 Subjunctive SBJ has H on SM (tó-kol-eke ‘Let’s do, we should do, etc’ vs tókoléke ‘Let’s not do’). The subjunctive also occurs as polite IMP and in the negative IMP.

9 Imperative Sg: kol-áká ‘Do’, tá-kol-á ‘Do, urgent’. Plural as preceding, or kol-áká-í. So characterised by H on FV, plus lexical tone (/ -kol- /).

C61 Lo-móngo

	Perfective	Imperfective -yo- ... -ak-	Habitual -ó- ... -ak-	Progressive -yó- ... -e -ó- ... -e	Reinforced -aka	Anterior -o- ... -a / -i
P <sub>2</sub> ´ -ákí	Yésu á-lak- <b>ákí</b> Bayúda <i>Jesus taught the Jews</i>  N: ba-tá-bun- <b>ákí</b> <i>they did not fight</i>		á-ó-lak- <b>ákí</b> <i>he taught,</i> <i>was teaching,</i> <i>used to teach</i>		tó-ól-ok- <b>aka</b> <i>we certainly heard</i>	tó-ó-sol- <b>a</b> <i>we have washed</i>  t-ó-tány- <b>í</b> <i>we have (already)</i> <i>found</i>
P <sub>1</sub> ´ -aki	ó-étam- <b>akí</b> <i>you slept</i>  N: a-t-ól- <b>aki</b> <i>he did not leave</i>		á-ó-lak- <b>aki</b> <i>he taught,</i> <i>was teaching,</i> <i>used to teach</i>		tõ-ol-ok- <b>aka</b> <i>we certainly heard</i>	tõ-o-bun- <b>a</b> <i>we (have) fought</i>  t-ó-bun- <b>í</b> <i>we have already</i> <i>fought</i>
-Ø-	tó-Ø-tám-b-a <i>we jump,</i> <i>are jumping,</i> <i>will jump</i>  N: bá-fó-sám-b-e <i>they did not judge,</i> <i>are not judging</i>	tó-yõ-bin- <b>ak-a</b> <i>we often dance</i>	tó-ó-bin- <b>ák-á</b> <i>we dance</i>  (?) N: to-tá-is- <b>ák-á</b> <i>we never hide</i>	tó-yó-sál- <b>e</b> <i>we are fleeing</i>  to-ó-lot- <b>é</b> <i>we are always fleeing</i>  N: bá-fó-ó-bin- <b>e</b> <i>they never dance</i>	ba-Ø-kel- <b>aka</b> <i>they certainly do,</i> <i>are certainly doing it</i>  N: tó-fó-lel- <b>áké</b> <i>we do not usually</i> <i>cry</i>	
F ´ -ífo-	tsw- <b>ífo</b> -kel-a <i>we will do</i>  N: tó-fáo-kel-a				nj- <b>ífo</b> -kamb- <b>aka</b> <i>I will work and work</i>  N: tó-faó-kamb- <b>aka</b> <i>we will not ...</i>	
F <sub>1</sub> ´ -õ-	á-õ-bók-a <i>he (will) throw</i>					
F <sub>2</sub> ´ -yo- ... -a	tó- <b>yo</b> -tsingol- <b>a</b> <i>we will explain</i>	a- <b>yo</b> -non- <b>ák-í</b> <i>will he keep growing?</i>  (?) N: a-fangó-kol-a <i>he will not take</i> <i>any more</i>				

## C61 Lo-móngo

1 General Spoken in very large parts of NW DRC. Numbers vary according to who is included but range up to 5 million. Considerable dialect variety. Source is Hulstaert (1965, vol. 2). Whereas the difficulty with many other sources is trying to assemble a jigsaw puzzle with several missing pieces, the difficulty with Hulstaert is fitting the many pieces into one pattern. Structures, tones, meanings and associated syntax are set out in great detail. Hulstaert spent many years on this. A fine grammar. What follows deals with central, not peripheral dialects. 7x1.

2 Structure Pre-stem – SM – NEG – TA – (OM –) root – EXT – FV # object

Pre-stem: (NEG), REL.

SM: n (nj/\_V); o; a (o/ in relative); to; lo; ba. All behave identically tonally, according to TA.

NEG: ta, H except in a very few cases (all SMs L); fa, H except in a few cases (all SMs H).

TA: Ø General Present, (Ø with FV e, a, i, aka, iki, etc); ífo F; o(l) with various tones in F<sub>1</sub>, HAB, PRG, ANT, ‘distanciel’; yo F<sub>2</sub> and other forms. Also forms which are/were visibly compounds.

(OM): Object pronouns can occur here or post-verbally.

FV: a; i (L near, H far); e SBJ and various moods and NEG; isa ‘intensive special perfect’. All four are tonally variable, depending on meaning/function. The first three also combine with -ak-, to give several semantic and tonal variants. Vowel height and tone assimilation.

3 Tense Three futures (‘certain’, Immediate, Far), (null) present, two pasts. Two futures, only one Negation, Relative. Hulstaert says the pasts (called Hodiernal and Hesternal) have flexible reference.

4 Aspect Including statives but ignoring tonal variants, Hulstaert has 44 positive absolutes. Of these only 6 are clearly straight ‘tenses’ or PFVs (two pasts, three futures, null present). That means 38, the majority, are aspectual forms (or aspects other than PFV). The six shown in the matrix are those occurring most often but there are other minor moods and aspects. One feature of the system is the number of ANTs (simple, strong, reinforced, special 1, special 2).

5 Negation *Tá* occurs predominantly in pasts, ANTs, CNDs, in the strongest HAB, IMPs and strong SBJs. It may become prefixal nta- in one form. *Fá* sometimes merges with following vowel to give (long or short) [fó]. Hulstaert says many negatives differ tonally (mainly in tone of the SM) but not structurally from the corresponding positives.

6 Relatives Two strategies, one as the pattern already seen in C10-20-30-40-50. The other appears when the subject of the REL clause is a pronoun: be-lemo bë-kí’ mí wěkóláká ‘The trades I have learned’, lit. antecedent concord-‘AUX’ki- imi(subject pronoun)-verb. The verb has no SM, a frequent pattern.

7 Subjunctive á-kel-e ‘Let him do’, á-ó-kel-e ‘same, plus continuity and distance’, tó-kend-ε ‘Let's go’, bá-ya-ke (-ak-e) ‘Let them come (certainly)’. a-ta-yá-ké ‘He must not

come'. So positive IMPs have final -e and a H on the SM. Hulstaert also has: á-fó-tómb-a 'Let him not carry', bá-fó-bín-aka 'They shouldn't dance repeatedly', but are they SBJs?

8 Imperative Sg kotá 'Write', kám-áká 'Squeeze repeatedly'. Pl lo-kotá. IMPs have a final H, plus the lexical tone of the verb. In total there are 4 positive and 4 negative subjunctives; 5 positive and 3 negative imperatives. The variables are the pre-stem morphemes (positive: null, -o-, -yo-; negative: -ta-, -fo-, -ko-) and the suffixes (-a, -e, -ake, -aka), some with tonal variants.

C75 Kɛla

	Perfective	Imperfective -Ø- (-ak-)	Anterior -ó-
P <sub>3</sub> -o-	<p>á-o-kádang-a <i>he roasted</i></p> <p>R: ô-(o-)kádang-a <i>he who roasted</i></p> <p>N: a-pó-kádang-á</p>	<p>á-Ø-kádang-ak-i <i>he used to roast</i></p> <p>R: ǒ-(o-)kádang-ak-i</p> <p>N: á-pó-kádang-ak-i</p>	
P <sub>2</sub> -mbo-	<p>â-mbo-kádang-a</p> <p>R: ô-mbo-kádang-a</p> <p>N: â-po-kádang-a</p>	<i>see Notes</i>	
P <sub>1</sub> -mbo-	<p>â-mbo-kádang-a</p> <p>R: ó-mbo-kádang-a</p> <p>N: â-po-kádang-a</p>		
	<p>â-ó-kádang-a <i>he roasts, is roasting</i></p> <p>R: o-ndǒ-kádang-á</p> <p>N: â-pó-kádang-a</p>	<p>á-Ø-kádang-a <i>he is roasting</i></p> <p>R: ǒ-Ø-kádang-a</p> <p>N: a-pó-kádang-é</p>	<p>a-ó-kádang-a <i>he has/had roasted</i></p> <p>R: ó:-kádang-a</p> <p>N: á-ó-pó-kadang-a</p>
Future -kó-	<p>â-kó-kádang-a <i>he will roast</i></p> <p>R: o-ndô-kó-kádang-a</p> <p>N: á-po-ngó-kádang-a</p>		

1 Background 180, 000+ speakers in DRC's Kasai Oriental Province (north central DRC). Forges 1977. Meeussen 1952 has a good description of related C76 Ombo. 7x1.

2 Structure SM - Neg - TA - FUT - LIM - OM - root - EXT - ak - FV

SM: n (nd, ndo), o, 3s o REL, otherwise a, to, do, ba. All underlyingly L tonally – raised to H in certain tenses. In Ombo participants are L, all others H.

NEG: -po- 'ne...plus'; -to- 'pas...déja, pas...encore'.

TA: 6 in IPFV, NAR; -o- in P<sub>3</sub>, ANT, PRS; -mbo- in P<sub>1</sub>, P<sub>2</sub>; -ndo- only in (some) non-past RELs;

-odo- and -ndo- are variants of -o-; -kó- future.

LIM: -yo- 'come/go to'

OM: usually just one, two may occur, though rarely.

-ak-: occurs regularly in the past IPFV and NAR as -aki; may be used, as -aka, with all pasts, present, future, and the IMP.

FV: -a, -e, -i occur, each with distinctive tone patterns. Thus *á* in the present, but *a* in all other forms; optative *é* but SBJ *e*. Meeussen mentions that metatony occurs with some forms in Ombo, but this is not mentioned by Forges for Kela. -i only occurs in -ak-i.

3 Tense Future reference is clear. P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> are said to refer to today, yesterday or before, and some time ago, respectively. There is also a NAR, said to be very common. The matrix shows REL and NEG forms (Forges also has REL+NEG forms).

4 Aspect Forges shows a complete PFV set; two IPFVs; a single ANT. She says the ANT "indicates that an action was complete before the start of another", it is only shown with a past translation (*il grilla, il eut grille*). Although she only shows two IPFV examples, she says (p. 99) -aka can be added to all (perfective) tenses, adding a sense of repetition or duration: -aki can be added to all perfective tenses, giving a sense of certainty ("It's certain he cooked chickens").

5 Negative Forges says -po- may occur with all positive forms, and that -to- may occur with all except the future. She has many examples of -po-, very few of -to-. -po-, at least, also occurs in imperatives and relative clauses. An -e appears in the present IPFV.

6 Relative Forges treats the shape, not the syntax of the REL. They differ from absolutes by having a) pronominal not verbal prefixes (structurally only 3s differs), b) a L replacing or added to the basic tone of the SM, and c) certain TA markers different from those in absolutes. Only subject RELs exemplified: in these the verb in the REL clause follows and agrees with the head noun.

7 Subjunctive (-e) Forges shows the forms but few of the functions. She has a "present" and ("very rare") past subjunctive, and an optative. Present and past TA (-ó-) subjunctive are formally different. Underlying tone of the SM is H, to which a L is added in the optative. The /-e/ is H, but L in the "present". The optative is said to express wishes.

8      Imperative      IMPs have a final H, NEGs a final -é. Sg kádang-á ‘Roast’, NEG po-kádang-é, pl do-kádang-á, do-po-kádang-é. Adding -ak- adds politeness: kənd-á ‘Go’, kənd-ák-á ‘Please go’. Repetition expressed by ‘be+infinitive’: yadá ikúd-ak-a ‘Hit several times’.

C83 Bushóŋ

	Perfective	Imperfective -Ø-	Habitual ´ ... -m- ... -k´	‘Absolute’ -dy
P <sub>4</sub> -mâa-	ta-mâa-shəl <i>we chose</i>			
P <sub>3</sub> -măa-	ta-măa-shəl <i>we chose</i> ta-măa-bók <i>we shot</i>			
P <sub>2</sub> ´ -m- ... ´	tá-m-bók´ (M) <i>we shot</i>	ta-Ø-bók <i>we were shooting</i> N: ka-ta-Ø-bók		ta-Ø-bók-dy´ (M) <i>we shot</i> N: ka-ta-Ø-bók-dy
P <sub>1</sub> ´ -a-	tă-a-bók <i>we just shot</i>			
		ta-Ø-bók´ (M) <i>we are shooting, will shoot</i> N: ka-ta-Ø-bók	tá-m-bók-k´ (M) <i>we shoot (regularly)</i> N: ka-tá-m-bók-k	
Future ´ -ká- + REDUPLICATION	ta-bó-ká-bók <i>we will shoot</i>			

C83 Bushóǹ

1 Background Source is Vansina (1959). ‘50,000–100,000’ speakers in DRC’s Kasai Occidental Province. 7x1. Metatony. Huge loss of final vowels.

2 Structure Pre-Stem – SM – LIM – TA – OM – root – EXT – FV (– tone)

Pre-stem: NEG ka- or ko-.

SM: la; a; a; ta; bo; ba. All behave identically tonally, according to TA.

TA: Ø associated with the IPFVs (distinguished by metatony); a P<sub>1</sub>; m P<sub>2</sub>; maa (P<sub>3</sub> and P<sub>4</sub>, different tones); ká Future, kaaká ‘indéterminé’.

Limitative: ta ‘action déjà accomplie’, only occurs with the infinitive and certain past tenses. There is also ka NAR, whose position is unclear, other than it precedes OM and root.

FV: Palatalization of final C, caused by a now lost -e SBJ; dy ‘absolu’; k HAB and SBJ NEG.

Tone: IMP SBJ reverses the tone of the next word. In other forms a H appears on the next word, if it is a noun (metatony, marked M in the matrix).

3 Tense Future reference is clear enough: the Future in the matrix refers exclusively to future, and the present IPFV can also refer to near future.

Past reference is more problematic. Vansina shows four degrees of Past: Immediate, (probably) Hodiernal, Pre-Hodiernal, Far. These and the future are said to ‘clearly accentuate the idea of the time in which the action occurs’. I assume this means they answer a question such as ‘When did/will you verb?’ and are Perfectives. Then, besides a ‘constatatif présent’, Vansina has a ‘constatatif passé’, which states simply that an action occurred in the past, translated by a French imperfect. Finally, Vansina has an ‘absolu’, referring to a past action ‘of which no trace remains’. I do not know what to make of the ‘constatatif’: Vansina says the present constatatif refers to a present or future action, which suggests a progressive or imperfective to me, so I take the past constatatif to be a Past Imperfective or Progressive. The absolute, marked by <dy> and metatony, is said to mean that a past action occurred of which no trace remains. The suffix [dy] is a palatalised [l], which I take to be a remnant of -ile: in most Bantu languages this would express an anterior – past action took place and left a trace, whereas here Vansina expressly says that it means no trace was left. Despite this, I tentatively feel this is an anterior. Finally, there is a Narrative ka-, not used independently and only occurring in continuous narrative. Vansina translates it by a present participle (‘moi tirant un animal’).

4 Aspect Beside the tentative PFV, IPFV, and absolute, Vansina shows a timeless HAB. Also Resultative -ta- ‘already’, associated only with pasts and infinitive. Many compound verbs: the most salient are one involving reduplication and another involving ‘be’. The reduplication has a first, inflected verb, followed by an infinitive and refers to repeated, frequent, or habitual action (la-bók á-bók ‘I throw often’). Use of the copula ‘be’ (-báak) represents duration, so lá-m-báak á-kel ‘I was doing, used to do’: unclear how this relates to the past constatatif.

5 Negation Pre-SM ka- (or ko-). NEG RELs also involve pronominal -mbe; baat ba-mbé ka-bá-m-bwaak’k ‘People who don’t fall...’, lit. people they-mbé NEG-they-fall’.

6 Relatives The general relative pattern is as elsewhere in Zone C (bikét bí-dyá mwáan ‘Things the child eats’ (lit. things which-eats child). RELs take pronominal, not verbal prefixes (so some are tonally or structurally different). Vansina shows only certain tenses as occurring relativised.

7 Subjunctive SBJ has stem final palatalised consonants (written Cy) and adds a front element to stem vowel (e.g. o > we, u > wi): short stem vowels are H, while long ones are F.

8 Imperative IMP sg consists of simple stem, plural adds a suffix. IMP sg reverses tone of next word, if a noun: nyam ‘animal’, bók nyám ‘Shoot an animal (sg)’, bók-ányény nyam.

## D13 Mituku

	Perfective	Habitual <b>-ang-</b>	Progressive <b>(M)</b>	Preferential <b>-tá-</b>	Conditional <b>-ná-</b>
P <sub>6</sub> 'Historical Past' <b>-a- + mónɔ</b>	<b>t-a-bund-a mónɔ</b> <i>we took</i> N: <b>a-t-á-bund-a mónɔ</b>		<b>t-a-bund-á</b> <i>"present participle"</i> N: <b>a-t-á-bund-á banto</b> <i>we were taking people</i>	<b>t-á-ta-bund-ang-a (M)</b> <i>we already used to catch</i>	
P <sub>5</sub> 'Far Past' <b>(-a- ...) -íí</b>	<b>to-Ø-bund-íí</b> <b>to-a-bund-íí</b> <i>we took</i>				<b>to-ná-bund-íí (M)</b> <i>we could have caught</i> N: <b>a-tó-ná-bund-íí</b>
P <sub>4</sub> <b>(-a- ...) -iyé</b>	<b>to-Ø-bund-iyé</b> <b>to-a-bund-iyé</b> <i>we had taken</i> N: <b>a-t-á-bund-iyé</b>				
P <sub>3</sub> 'a week ago' <b>(-a- ...) -iye</b>	<b>to-Ø-bund-iye</b> <b>t-a-bund-iye</b> <i>we had caught</i> N: <b>a-t-á-bund-iye</b>				<b>to-ná-bund-iye</b> <i>if we had caught</i> N: <b>a-tó-ná-bund-iye</b>
P <sub>2</sub> 'Hesternal' <b>(-a- ...) -iye-bí</b>	<b>to-Ø-bund-iye-bí</b> <b>t-ǎ-bund-iye-bí</b> <i>we had caught</i>			<b>tá-ta-bund-ang-a-bí</b> <i>(?) we already used to catch</i>	<b>to-ná-bund-iye-bí</b> <i>we could have caught (yesterday)</i>
P <sub>1</sub> 'Recent' <b>(-a- ...) -í</b>	<b>t-ǎ-bund-í</b> <i>we (have) just caught</i>	<b>t-a-bund-áng-í</b> <i>we used to catch</i>		<b>t-a-tá-bund-í</b> <i>we have just caught by preference</i> <b>t-a-tá-bund-áng-í (M)</b> <i>we used to catch by preference</i>	<b>to-ná-bund-í</b> <i>if ever we catch</i> <b>to-ná-bund-áng-í</b> <i>even if we caught</i>
	<b>tõ-Ø-bund-í</b> <i>we are catching</i>	<b>tõ-Ø-bund-áng-í</b> <i>we usually catch</i> N: <b>a-tó-bund-áng-í</b>	<b>tó-Ø-bund-a</b> <i>"present participial"</i> N: <b>a-tó-bund-a</b> <i>we are not taking</i>	<b>to-tá-bund-á nyama</b> <i>we prefer to catch animals</i> <b>to-tá-bund-í</b> <i>we are catching</i>	<b>to-ná-bund-a nyama</b> <i>perhaps we will catch an animal</i> <b>to-na-bund-ang-a</b> <i>even if we caught</i> N: <b>a-tó-ná-bund-a</b> <i>if we do not catch</i>
Future <b>-lo- / -li- (M)</b>	<b>tó-(lo-)bund-a</b> <i>we will take</i> N: <b>a-tó-(lo-)bund-a</b>				

## D13 Mituku

1 General As D10 is linguistically disparate, we include D13 and D14 (D12 is even more disparate). Source Stappers (1973). Unknown number of speakers in in DRC's Orientale Province. D13/14 have 7x1 and metatony (D13 details clear, D14 less clear).

2 Structure Pre-SM – SM – TA – OM - root – EXT – ang – FV – post-FV # Object

Pre-SM: 1) REL object, 2) NEG *a* (L, and all SMs are H). These do not co-occur.

SM: *ne, o, ó, to, mo, bé*. Absolutes and subject RELs occur here. Participants are L in REL and most absolutes, but H in the negative and SBJ. Class SMs are always H.

TA: *6* occurs in several forms but nowhere as the only marker; *a* occurs widely, tonally variable, mainly with past reference, often deletable without change of meaning (indicated by (a)); *lo/le* FUT; *ná* Possible; (*a*)*tá-á* 'Preferential, already..'; *no/ne* NEG SBJ.

OM: Even when a nominal object is present, an OM is used. When no TA *a* is present, a post-verbal pronoun may replace it: *ɔ-bɛ-mɛnj-ɛ* or *ɔ-mɛnj-ɛ bɛɔ* (Cl.8) 'that you show them'.

ang: HAB (past, present). Also occurs in emphatic IMP (see 7). *Ak* also occurs in an IMP (see 7).

FV: *a* Possible, P<sub>6</sub>; *á* (M) FUT, PRS, P<sub>1</sub> REL; *ɛ* SBJ; *íli/ítí/étí* P<sub>5</sub>; *íyé* P<sub>4</sub>; *íyɛ* P<sub>3</sub>; *íyɛbi/íyɛbi* P<sub>2</sub>. The alternatives for P<sub>1</sub> seem to be in free variation, those for P<sub>2</sub> may be. *-i p*.

Post-FV: *ái* NEG SBJ; *i p*. IMP; *ká* Polite IMP. *Ká* follows *i*. Maybe *mónɔ* in P<sub>6</sub>.

3 Tense Stappers shows well over a dozen perfective forms, clearly not HAB, PRG, CND, or 'Preferential'. Excluding the one future and the present still leaves 14 past forms. The four with (a)...*ítí* and (a)...*ɛ!tí* are said to be synonymous with (a)...*íli*, leaving ten. Four of these have apparently optional pre-stem (a). That leaves six forms, labelled P<sub>1</sub> to P<sub>6</sub> in the matrix. This should not be interpreted to mean that Mituku has six such degrees of past, but rather that I am unable to penetrate Stapper's analysis: he gives a label, a one-sentence semantic characterization at best, and no examples. Some may represent a dependent versus independent distinction, others perfective versus anterior, or definite versus indefinite. Readers may make their own judgements.

4 Other categories PFV, PRG, HAB, Preferential (Stappers' term), and CND.

5 Negation Except for SBJ and REL, all negatives involve Pre-SM #*a-*. It is L, and following SMs are H. 2/3s (and 1s if followed by *a*) have #*nt-*. SBJ has a H-toned SM, followed by *no/ne* (dep. on vowel of SM), and suffix *-ái*. REL involves an AUX *-iya* 'refuse': *banto bi-to-iyá ko-bunda* 'People who we don't take..' (lit. people who-we-refuse to-take).

6 Relative Object RELs are marked at pre-SM (*banto bá-to-bund-á* 'People who-we-took?'), subject RELs at SM (*monto w-a-bund-á..* 'Man who takes..'). RELs (subject and object) agree with the antecedent, subject pronouns follow (*banto bê-tundá bê* 'men who-take they').

7 Imperative *Tómá* 'Send', *bundá* 'Hold'; *p. tómá-i, bundá-i; tóm-angá* 'Envoie donc'; *bund-áká* 'Please hold', *p. bundá-i-ká*. SBJs retain lexical tones and add a final H.

8 Subjunctive SBJs have H on SM and final *-é*, while all stems (without OM) are L: *tó-bund-é* 'Let's hold', *tó-tom-é* 'Let's send'. NEG: *tó-nô-bund-á-i* 'Let's not take'.

D14 C-enyá

	Perfective	Imperfective -ang-	Progressive -óko- ... (í)	Anterior -e ... -é (í)
P <sub>2</sub> -a- ... -angá (í)	b-a-kókól-ángâ-y <i>you (pl.) won</i> N: b-ít-á-min-ángá:-bó <i>they did not swallow</i>	t-a-món-ángă-y <i>we used to see</i>		
P <sub>1</sub> -a' ... (-ang)	b-a-kókól-a óbí <i>you won</i> N: u-t-á-mín-a óbí-ándé <i>he did not swallow</i>			
	n-á-món-akê-y <i>I see</i> N: n-t-á-món-áke-áne	t-ô:-lúbé-angă-y <i>we hit (repeatedly)</i>	n-ô:-món-a <i>I am seeing, will see</i> N: n-t-ô:-món-á:ne	o-món-ê-y /o-e-món-é`í/ <i>you have seen</i>  m-é-tálál-é <i>they are hard</i>
Future -eka- ... -a (í)	b-éká-món-ă <i>they will see</i> N: u-t-éka-lúbé-íabe <i>you (pl.) will not hit</i>	u-eka-món-angă-y <i>you will see (repeatedly)</i>		

## D14 C-enyá

1 General Source is Spa (1973). 7,000 speakers in DRC's Orientale Province, with some dialect variation. The area is characterised in general by bilingualism, low literacy, and a clustering of different language communities. Spa is describing Enya of Kisangani.

## 2 Structure

REL – SM – NEG – TA – root – EXT – Pre-FV – FV – i # Post-VB # object

REL: Consists only of a L replacive tone, that docks to its right, replacing the tone of that syllable.

SM: n; o; ó; t; b; bá. Participants L, the others H.

TA: a Pasts, CNS, Present; eka FUT; e ANT/SBJ/CND/etc; ekéna CNT; ína INCE. A and e are tonally variable, depending on category.

Pre-FV: ang, occurs in IPFV, P<sub>2</sub>, (P<sub>1</sub>), CND; a negative SBJ. Occurs as -ak- in PFV Present.

FV: a NEU; -i in one NEG SBJ (see 8); -ε in ANT, 'present' SBJ, CND, IMP, and one Imminent. All three vary tonally, depending on the verb category. (For positive -i, see Post-VB).

-i: Occurs in 1/2p Imperatives and Hortatives (see 7, below).

Post-VB: mó(nɔ) Far, sé(nɔ) Near (both Past or Future); `óbí 'yesterday, tomorrow'; `í 'action déterminée'. Optional. Last can follow/precede the others. First three co-occur with several tenses.

Object: Nominal and pronominal objects occur after the verb and post-verbal (see 7, below). Few exs.

3 Tense Apparently a future, a present, and two pasts. Spa characterizes the Near Past as having suffixal -(ang)a but his translations have forms with -ang- as 'a little while ago', and without as 'yesterday', so perhaps there are three pasts? The Progressive can also refer to the future.

4 Aspect and other categories PFV (without -anga), IPFV (-anga), PRG, ANT, the last two only given for the 'present'. With stative verbs, ANT refers to the current state (see matrix). Spa also shows a CNS (almost same shape as the Near Past), Past CND (same shape as the SBJ), CNT (to continue verbing), INCE (be already verbing), and Imminent ('be about to'). The last three occur with a limited set of forms and/or are only partly grammaticalised.

5 Negation Except in IMP, 'conjunctif', and a SBJ, all negatives are formed with -it'- at NEG. ANT and a SBJ also have -é'- at TA and -é'- at FV. Negatives are often followed by possessives. These features (underlined) are seen in: /t-it-é-mɔn-é mɔ-a b-ító/ 'We have not seen'. IMPs, narrative, and one SBJ form involve an AUX -b`ú(g)- (meaning unknown) and INF.

6 Relatives RELs, structurally identical to absolutes, have a floating L at pre-SM. As in Zone C, relativised verbs agree with the antecedent, whether subject or object of the REL clause. Subjects follow in object clauses (b-a-timbóláke wé '...that he turns' (lit. that-he-turns he)).

7        Subjunctive    SBJs have pre-stem *é* and FV *-`é*: *n-é-mən-é* ‘Let me see...’, *w-é-kal-é íaba* ‘You should cross...’. They are thus structurally but not always tonally similar to 2 and 3 in 7. SBJs can be negated in two ways: *t-o-búá ó-lúbé-a* ‘We shouldn’t hit’, *búá ó-mina* ‘Don’t swallow’ (both with AUX + INF), or *n-té-min-áng-i* ‘I shouldn’t swallow’ (*it’ + e’...-ang-’ i*).

8        Imperative    (1) *kál-á íaba* ‘Cross (sg) the river’ (H on FV); *kál-á í íaba* ‘ditto (pl)’ (same with *-i*) (2) *t-é-kál-é i yó* ‘Let’s cross it’, *b-é-món-é í mǎ:le* ‘Look (pl) at water’ (3) *kə-mən-é* ‘Go (sg) and look’, *kó-kál-é í obí íaba* ‘Go (pl) and cross the river tomorrow’.

D23 Kumu

	Perfective	Habitual -dɪ-	Progressive -p <sup>h</sup> o-	Persistent -p <sup>h</sup> oto-	Inceptive -sɔ-
Past Definite -tɔ- ... -í	a-tɔ-bik-í <i>he came</i>				
P <sub>2</sub> da- ... -Ø- ... -í(má)	dɪ-bi-Ø-dem-í(má) <i>we hoed (before yesterday)</i> N: dɪ-bí-kí-dem-í				
P <sub>1</sub> -Ø- ... -í(má)	bi-Ø-dem-í(má) <i>we hoed, have hoed</i> N <sub>1</sub> : bí-kí-dem-ímá <i>we have not hoed</i> N <sub>2</sub> : bí-kí-dem-imbe <i>we have not hoed yet</i>				
	bi-ɔ-dem-á(má) <i>or</i> bi-dem-á(nd)i <i>we are hoeing, will hoe</i> N: bí-kí-(ɔ-)dem-á(má) <i>or</i> bí-kí-dem-ekó <i>we will not hoe</i>	bi-dɪ-dem-a <i>we hoe</i>	bi-p <sup>h</sup> o-dem-a <i>we are hoeing</i>	bi-p <sup>h</sup> oto-dem-á <i>we are still hoeing</i>	bi-sɔ-dem-a <i>we are about to hoe</i>

## D23 Kumu

1 General D20-30 is even more linguistically diverse than D10. For more on D20-30, see Kutsch-Lojenga (2003: 451–2). We have chosen D23, D25, and D33 for exemplification. Source for D23 is Harries (1958). 400,000 speakers in DRC's Maniema, Orientale, and North Kivu Provinces. Many also speak Congo Swahili and/or Lingala. D12 speakers use it as a second language. 7x1. Harries says there is vowel harmony but does not mark it.

2 Structure Pre-SM – SM – NEG – TA – OM – root – FV

Pre-SM: dá P<sub>2</sub>/NAR, followed by ká NEG (1-2-3s (for pl, see under NEG, just below)).

Da and ka have three shapes: I assume basic ká NEG, and by analogy dá Far Past.

SM: ni; u; a; bi; bu; ba. (No agreement between nouns and verbs.)

NEG: In plural persons, the NEG marker follows the person marker (bí-kí-..., bá-ká-..., etc).

TA: u PRES/FUT/NAR; to/to in Past Definite/Hypothetical; di HAB; p<sup>h</sup>o PRG; p<sup>h</sup>oto PER; su INCE.

(EXT: Harries says he found no 'clearly defined system' of extensions.)

FV: a NEU; e SBJ; á(má) in PRES/FUT; í(ma) Past; á(nd)i PRES/FUT; i Past Definite; aku/eku FUT NEG; imbe 'not yet' NEG.

3 Tense P<sub>2</sub> is said to refer to 'before yesterday', P<sub>1</sub> is exemplified as 'yesterday', nothing is said about the meaning of the Past Definite. No discrete future, but the two presents, although different in shape but said to be identical in meaning, also cover future reference.

4 Other categories PRG, PER, and INCE are clear. What I have labelled HAB, Harries calls 'Habitual or Continuous Present' (by contrast with the PRG, of which he says 'continuous at the time of speaking'). Of the P<sub>1</sub> Harries says that 'the effect of the action is maintained', so maybe it is an ANT? Harries describes the two present forms at the foot of the first column as 'Present /Future', translates the first as 'We are hoeing, we shall hoe' and says the second is synonymous.

Harries also has two NARs, 'dependent' verbals, and temporal, CND and hypothetical clauses. One NAR appears identical to P<sub>2</sub>. The other is identical to the first PRES in the matrix, except for a H on the first syllable; it is common in Harries' two texts. Dependent verbals involve nothing not seen in the main verb forms (e.g. a-ulá á-u-sóma 'He is lying reading' = he is lying he-NAR-read). Temporal (when) and CND (if) clauses are identical, involving juxtaposing two or more clauses in asyndetic structures (You come here, you will see it, for 'If you...'). In hypotheticals, the protasis contains -to-/-to-, the apodosis may be introduced by *mbr*, so *br-tó-úga námá mbr bikidímá ógogo* 'If we had gone yesterday, we would arrive this evening'

5 Negation All NEG markers work identically (RELs not shown). Plural person markers precede the NEG, singulars follow. When SMs have [i, u, a], NEG markers are [ki, ku, ka].

6 Relatives Relatives, subject or object, do not differ from absolutes in form, but must include a demonstrative: *mri (ndó) agóma* '(That) tree fell', *mri ndó agóma...* 'The tree which fell'.

7      Subjunctive and Imperative    SBJ, /-e/, in polite requests, negative commands, and  
‘certain dependent clauses’. IMP: démá ‘Hoe’ (y-ág-a ‘Eat’), démá-ni ‘ditto (pl)’, NEG ku-dém-  
é, bú-kú-dém-é. With object: m-bétá miki ‘Beat the child’, NEG kú-m-bété miki; ku < ka + u.

## D25 Ke-lega

	Perfective	Imperfective -ag-	Progressive -ko-	Persistentive -ké-	Inceptive -sǎ- / -sě-
P <sub>3</sub> -a- ... -elÉ	tw-a-bolót-ele <i>we pulled</i> N: ta-tw-á-bolot-ele	tw-a-bolót-ág-á <i>we were pulling</i> N: ta-tw-á-bolot-ag-a			
P <sub>2</sub> -ǎ- ... -ele	tw-ǎ-bolot-ele <i>we pulled</i> N: ta-tw-á-bolot-elÉ	tw-ǎ-bolot-ag-elÉ <i>we were pulling</i> N: ta-tw-á-bolot-ag-elÉ	tw-ǎ-bez-ag-ele to-ko-kangól-á <i>we were clearing</i>		
P <sub>1</sub> -a-	tw-a-bolót-á <i>we pulled</i> N: ta-tw-á-bolot-a	tw-ǎ-bolot-ag-a N: ta-tw-á-bolot-ag-á			tw-ǎ-bez-ag-a to-sǎ-kangol-a <i>we had started clearing</i>
-(i)ko-		to-ko-bolot-ag-a	to-ko-bolót-á <i>we are pulling, will pull</i> N: ta-tó-ko-bolót-á	to-ké(-le) tw-a-kangol-a <i>we are still pulling</i>	to-sǎ-kangol-a <i>we have already cleared, started to clear</i>
F <sub>1</sub> -ǎ- ... -É	tw-ǎ-bolót-É <i>we will pull</i> N: ta-tw-á-bolót-É	tw-ǎ-bolot-ág-É			tw-â-b-É to-sǎ-kangol-a <i>we will already have cleared</i>
F <sub>2</sub> -ka-	to-ka-bolot-a <i>we will pull</i> N: ta-tó-ka-bolot-á	to-ka-bolot-ag-a			

## D25 Ke-lega

1 General Meeussen (1971), Botne (2003). Although they treat slightly different dialects, the similarities are great, the differences small. Nearly 500,000 speak Lega in east-central DRC, mainly S. Kivu Province. 7 vowels: length only distinctive in a very few items (Botne).

## 2 Structure

Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – IPFV – FV – IMP pl # obj

Pre-SM: (1) ga ‘when, if’ (2) bo ‘when’ (3) object REL (4) ta NEG (1s nsi, 2/3 nt).

SM: n(e); o; á/é; to; mo; bá/bé. Participants L, others H.

NEG<sub>2</sub>: tá (H?).

TA: a mainly Past; ka F<sub>2</sub>; ko PRG; -kí- PER; sǎ/sě INCE; ná POT; nõ NAR; anó ‘nevertheless, OPT’. Tones as marked, except a, na, ano, whose tones depend on the category (ǎ F<sub>1</sub>/P<sub>2</sub>; a P<sub>1</sub>/P<sub>3</sub>/CNJ).

OM: Only one object pronoun can occur at OM, so any second pronoun occurs post-verbally.

FV: a HOR/OPT/INCE/POT/F<sub>2</sub>; á IMP/NAR/P<sub>1</sub>/PRG; é SBJ/F<sub>1</sub>; ε NEG SBJ; ile P<sub>2</sub>/CND; ílé P<sub>3</sub>.

Tones marked are those of absolutes, RELs may contrast.

IMP pl: zi.

3 Tense Three pasts, two futures: Present -ku- can refer to future situations. Past – and presumably future – reference is relative: P<sub>1</sub> translates as ‘has just verbed’, P<sub>2</sub> as ‘this morning or a time before P<sub>1</sub>’, P<sub>3</sub> refers to time before P<sub>2</sub>. That F<sub>1</sub> derives from the SBJ can be seen from the suffix and the tones. Narrative (nõ) combines with various tenses (to-ka-nõ-nwa ‘and we will drink’).

4 Aspect and other categories PFV contrasts in all tenses with IPFV (ag), while PRG (ko), INCE (sǎ, sě), PER (ké) are only attested in some tenses: PRG and INCE occur at TA in the Present, but need AUX be-support in other tenses, while PER is only attested in compounds.

Aspects can co-occur (tw-ǎ-bez-aga tu-sě tw-a-kangólá we-P<sub>1</sub>-be-IPFV we-INCE we-P<sub>1</sub>-clear ‘We had already started to clear’, lit. we were we started we cleared).

Compounds translated as ANTs appear in Botne. The AUX has tensed form of ‘be’, and the main verb has a past tense: tw-a-béz-ágá tw-a-kangólá ‘We had cleared’ (lit. we-P<sub>3</sub>-be-IPFV we-P<sub>1</sub>-clear); to-ka-bá tw-á-kangola ‘We will have cleared’. Anterior meaning is expressed by combinations of tense and PFV. Other aspects are expressed by AUX plus INF (p. 443).

The *le* form of ‘be’ occurs in PRG, PER, and INCE, *ba/bεz* in other contexts.

5 Negation INFs and RELs have -ta-, otherwise -ta- at Pre-SM (1s si, 2/3s nt).

6 Relatives Subject RELs and absolutes have the same structure but differ tonally and/or in shape of the SM: monto á-kangol-ile iswá ‘Person cleared field’, monto w-ǎ-kangol-ilé ‘Person who cleared...’. Object RELs are marked at Pre-SM: nnyama zi-bá-tá-gek-é... ‘The meat that they don’t cook’ (lit. meat which-they-NEG-cook’).

7     Subjunctive   SBJ has a H on SM and the final -é: tó-kangol- é ‘Let’s clear’, mó-kangol é ‘(You should) clear’. Both authors also have a form (Meeussen ‘conjunctif’, Botne ‘Hortative’) similar in function but different in shape to SBJ: (ni-kotóndá) w-a-súbanya ‘(I-want) you-conjunctif-return’.

8     Imperative   Stem and FV (H), (and zi ‘pl’). gyangá(zi) ‘Follow’, nwá(zi) ‘Drink’.

D28 Ki-(h)ɔlɔ(h)ɔlɔ

	Perfective	Habitual (?) -à-	Progressive + -mo-ko-	Persistent (?) -ké-	Anterior (?) -ile
P <sub>3</sub> -ilé	to-lɔl-ilé <i>we looked</i> N: a-to-lɔl-ile				N: a-ba-b-ééle bá-á-mw-ené <i>they had not seen</i>
P <sub>2</sub> -á- ... -aga	tw-a-lɔl-ága <i>we looked</i> N: a-tw-e-bá-lɔl-ag-é	tow-eelé tw-á-lɔl-a <i>we used to look</i>		n-ké-b-ééle kokaasi <i>I was still at work</i> N: a-kí-tw-e-bá-lɔl-ag-é <i>we did not look anymore</i>	
P <sub>1</sub> -á-	tw-a-lɔl-ǎ N: a-tw-e-bá-lɔl-e			nan-ké-b-a kókaasi <i>I was still at work</i> N: a-kí-tw-e-bá-lɔl-e <i>we did not look anymore</i>	
	tw-a-lɔl-a <i>we look, are looking</i> N: a-tw-ǎ-lɔl-a	tw-e-tw-a-lɔl-a <i>we look</i>	w-e-mó-ko-keb-a <i>she is searching</i> w-aa-kó-lɔl-a <i>she is looking</i>	(bobaga) bó-ké-hw-a <i>(the poison) is still ineffective; (-hó- finish)</i> N: a-tw-a-li-lɔl-ě <i>we have not looked yet</i>	
F <sub>1</sub> -aka-	tw-aka-lɔl-a <i>we will look</i> N: a-to-lɔl-i			tw-aka-b-a tó-ké kokaási <i>you will still be at work</i>	
F <sub>2</sub> -aka- ... -aga	tw-aka-lɔl-aga N: a-to-ká-lɔl-i				

1 General Source is Coupez (1955; 160 pages). Spoken on the east central shore of Lake Tanganyika in Tanzania and on the opposite side of the lake in DRC's Katanga Province by a total of 12,500 people. Coupez says the Hɔlɔhɔlɔ were 'formerly numerous'. 7 vowels, with the distinctions between the two highest back vowels hard to hear. Length distinctions are few.

2 Structure Pre-SM – SM – NEG – TA – OM – root – EXT – FV

Pre-SM and á: a NEG; ná NEG; Object REL + á. First two are followed by H. None co-occur.

SM: n; o; ó and a (a with NEG/SBJ); to; mo; bá. Participants L, others H. 1s NEG nsi.

NEG: sí.

TA: a HAB; á P<sub>1</sub>, P<sub>3</sub>; ka Itive (in IMPs); ké PER: ale 'not yet'; álé Irrealis; aka FUT; aké 'first have to verb'; akéka 'ditto, but more distant'; áké Past PER; ako PRG; moko PRG.

FV: a NEU; é SBJ; í FUT/SBJ NEG; ile P<sub>3</sub>; wé IPM pl; aga and anga indicate further away in past or future time (anga is infrequent); agé 'have no longer' (uncommon); aganga (= ag + anga). The last four forms, and even wé might be analyzed as Pre-FV and FV.

3 Tense Three pasts (P<sub>1</sub> 'passe immédiat', P<sub>2</sub> between P<sub>1</sub> and P<sub>3</sub>, P<sub>3</sub> 'passé éloigné, prétérit'), various presents, two (?) futures.

While P<sub>1</sub> and P<sub>2</sub> are clear, the role of P<sub>3</sub> is less so: is it Far Past, as Coupez says, or is it an Anterior? In the accompanying texts there is very little evidence for it as a far past, where it rarely occurs at all in clearly tense function. If in tense function, it most often refers to something that happened shortly before time of reference. Further, it often occurs with stative verbs translated as a French (or English) Present. Predominantly in Bantu languages, statives in this function are represented by -ile, which also has a near, not far, past reference. Hɔlɔhɔlɔ may be an exception.

On the other hand, evidence largely in favor of it as (Far) Past, not Anterior comes from 'be'. Coupez (p. 83–6) provides no past paradigmatic forms for 'be'. The only forms of 'be' referring to past are seen in compounds, where 'be' forms the first verb: mbéelé nándɔla 'I used to look' (lit. I was I-look); a-ba-béélé báámwéné 'They hadn't found' (NEG-they-were they-found); n-ke-béélé ko-kaasi 'I was still at work' (I-still-was at-work). In these forms only -béele (/ba + ile/) occurs. Are they pasts or anteriors? They might be used to argue for -ile as a past tense, because in Hɔlɔhɔlɔ, as in most other Bantu languages, tense appears on the left, that is, in the 'be' auxiliary, with aspect following, on the right. Against that, it can be argued that -ile also occurs in the second, aspect, position (see báámwéné above) and that the only visible past forms of 'be' are these -béele forms). In that case, the -béele forms are anteriors used as pasts, and 'be' is in fact here a stative verb. To use aspect as tense occurs widely cross-linguistically. I have interpreted Hɔlɔhɔlɔ as having three past tenses and no anterior but readers may decide for themselves.

There is a striking similarity to the system of past tense morphology in F20 and parts of F30. Both are apparently innovated.

One of the drawbacks of the Tervuren system is that its proponents concentrate on single verb forms and assign a very secondary role to compound forms. If we had access to more compounds, evidence for Anteriors might emerge.

The data presented paradigmatically by Coupez for future shows a Near (aka) and a Remote (aka/aga) Future. These exactly mirror the two pasts in their use of -aga to represent a remoter stage. There are two snags, both different from that in the past. One is that Coupez says quite clearly (p. 101) that the near future does not represent the actions of today. But nowhere does he say how such actions are to be represented, and the evidence from the text does not really seem support this claim about excluding today. Second, there are two additional forms referring to future, both compounds, consisting of an auxiliary plus the second, lexical, verb in the subjunctive: o-sy-a ó-kwél-ε ‘You will marry’, na-n-jâ n-kwél-ε ‘I will marry’, and wáása é-bwílil-é ‘He will return’, na-nj-â n-kálóból-é ‘same, but further in future’. The -sya auxiliary may derive from ‘come’, while -ja is apparently from ‘go’. These first three of these forms can refer to today, but they can also refer to more distant future events, and they have a strong component of will, desire, or intention. That is, they function as English ‘I am going to marry’ or French ‘Je vais épouser’. It seems to me best to say here that we have a system in transition, just as English or French. A single matrix cannot show transition well, so, as with pasts, I have omitted this third future possibility.

In passing, it is instructive to compare parts of this with the analysis of Ndali by Swilla, (1998). She describes Ndali as having two futures, F<sub>1</sub> in -Ø/-e, and F<sub>2</sub> in -ka/-e. Structurally that is precisely how Coupez analyses the near (tú-lól-ε ‘que nous regardions’) and far subjunctive (tú-ká-lóle ‘que nous regardions (plus tard)’) in Hólóhóló. Swilla says Future and Subjunctive have identical forms in Ndali. Future and subjunctive negatives are identical in Hólóhóló.

4 Aspect and other categories Holoholo has a PFV (aspectually unmarked), PER (kí), and probably HAB and PRG (e+mo+ko ‘be in/at...’, where -e- is a short form of -le ‘be’), although the latter two do not show a full set of forms. The category ANT and its status have been sketched above and the column is deliberately left blank in the matrix.

There are two forms with -a-ké- ‘Il faut que je...d'abord’ and -a-ké-ka- ‘Il faut que je regarde d'abord (at a later time)’: Coupez calls these ‘preferential’ but they may well be PERs (‘I still am to/have to...’), preceded by a tense marker. These -ke- forms and the category PER need further examination.

Finally, Coupez shows three Conditionals/Irrealis in -ali-, presumably a compound morpheme, consisting of -a- ‘past’ and -li- ‘be’: tw-alé-lólâ (/ -álé-/) ‘We would have looked’, a-tw-alé-lól-e (/ -ale-...-é/) ‘We haven’t looked yet’, mbilá já-álé-nókéé (/ -álé-/) ‘If the rain had fallen...’.

5 Negation Hólóhóló has three NEG formatives: -sí-, -ná-, -a-. Also suffixal -í. *Sí* occurs with INF and all RELs; -ná- with SBJs; otherwise -a-. Suffixal -í occurs in NEG FUTs and SBJs. NEG HAB has no -i: since Coupez does not really describe presents, perhaps -i occurs there?

6 Relatives Subject RELs differ only tonally from absolutes: ó-lél-ilé ‘He raised’, o-lél-ile ‘...who raised’. Object RELs are marked by OM + á- at Pre-SM: the tone of -á- affects surrounding tones. Ex.: to-lól-ilé ‘We watched’, but monto w-aa-tó-lól-ilé ‘Person we watched’.

7 Subjunctive Underlying tone of SM is H, of root and suffixal -ε is L: ó-lól-ε ‘(You should) look’, á-lól-ε ‘He should look’, tó-lól-ε ‘Let’s look’. Ka-lól-ě ‘Look (later)’, ó-ká-lól-ε

‘(You should) look (later)’. NEG: nɔ-ɔ-lɔl-i ‘Don’t look’, na-tó-lɔl-i ‘Let’s not look’, nɔ-ɔ-ká-lɔl-i ‘Don’t look (later)’. SBJ may refer to Near Future, beside its usual modal uses (C: 93).

8 Imperative Sg lɔlă ‘Look’, kómbá ‘Sweep’, hímya ‘Lift’: final tone is the opposite of the underlying tone of the root. Pl lɔl-wé, kómb-wé, hímiíbwé. See also under SBJ.

D33 Nyali

	Perfective	Progressive	Anterior
P <sub>2</sub> -á-	k-á-kor-a ( <i>raised pitch</i> ) we bought		
P <sub>1</sub> -á-	k-á-kor-a we bought  N: ká-ku-kor-á		
-á-	(1) k-á-kór-a we are buying  N: k-á-u-kór-á  (2) k-á-kor-á we are buying, will buy  N: k-á-u-kor-á	k-á-kuka-kor-á we are in the act of buying	k-á-kora-i we have bought  N: í-sí-bóláná vovi he has not come yet
Future -á-	k-á-kor-á ( <i>raised pitch</i> ) we will buy		

## D33 Nyali

1 General Source is Harries (1959). Spoken by 43,000 people in DRC's Orientale Province, Ituri District. Within D33 there is variety but all varieties have a partly functioning but reduced noun class system, some concord between noun and other constituents, a 9-vowel system with ATR-harmony, and a high level of similarity to each other. We follow Harries and write 5 vowels.

## 2 Structure

Pre-SM – SM – TA – (OM –) root – EXT – FV – Post-FV # object pronoun

Pre-SM: ké (also ká) Itive, IMP ((saú) ké-lema 'go and cultivate'): a IMP + object.

SM: mu; u; 3s i (SBJ, and a very few others) or a regular; ki; ni 2p (as 3s i) or bu regular; ba.

TA: á occurs in all tense markers so appears to be frozen morphology marking tense, or indicative; ákuka PRG (the infinitive has two possible shapes ka- and i-, so -áku+ka is a locative of sorts ('be at...')); na object marker; sí NEG SBJ, IMP, 'not yet'; u NEG Non-Past; ku NEG Past. Harries says it is unclear whether u/ku are negative markers or TAs associated with negative. See 5.

(OM): Only 1st and 3rd persons may be encoded at OM, e.g. a-na-su-benda 'He will hit us' (or a-na-béndá usú). Other objects are indicated by post-verbal pronoun. However the object is indicated, the -na- shown in the examples is always present.

Root: Before some, but not all, vowel initial roots, an [n] is inserted.

EXT: Harries notes -is 'causative', -il 'applicative', -any/-ony passive.

FV: a NEU; eni 1/2p Imperative; eni 'when, if' (+ non-past reference).

Post-FV: ú IMP sg; u 'when, if' (+Past); ei IMP NEG, i or ine ANT.

3 Tense Harries says the two pasts, apparently Hesternal vs Pre-Hesternal, differ only by the farther past having a raised pitch. Similarly, the Present which translates present and future represents a 'distant' future if said with a raised pitch. Harries shows three 'Presents', the two in the left hand column, and the Progressive. I have interpreted the Progressive as such, because it seems to consist of locative and infinitive, and because Harries translates it as 'be in the act of'. The difference between the other two is unclear – both co-occur with *opúla* 'now'.

4 Aspect and other categories I assume the difference between the two 'Presents' is aspectual. ANT translates as 'have ...ed' with active verbs but as the result of action with statives. Harries also mentions a NAR, 'participles', dependent temporal tenses, CND, and hypotheticals. NAR is formed with -á-, so it is hard to say which of the several tenses it most resembles (apparently the first Present). 'Participles' (I found him working) are formed by using the infinitive ('nomino-verbals'). Temporals ('When...') involve -u in the Past (a-bólán-u 'When he arrived') and -eni in the Non-Past (á-bólán-eni 'When he arrives'). CNDs ('If we go...'), and most hypotheticals ('If we had gone...') work in a similar way.

5 Negation A three-way split between Past, Non-Past, and SBJ/IMP/'not yet' (see 2).

6 Relatives are structurally identical to absolutes but involve one or more demonstratives.

7      Subjunctive and Imperative    SBJ is marked, not by -e but by absence of pre-stem *a*. It appears to occur in the usual syntactic range of the subjunctive. IMP: s-a-ú ‘go’ (-sa ‘go’), saú ké-lém-a ‘Go and hoe’, a-fel-á imá inge ‘Carry this thing this for me’, u-sí-s-ei ‘Don’t go’. Pl s-eni ‘Go’, ni-sí-s-ei ‘Don’t go’, ki-s-eni ‘Let’s go’.

D42 Ki-nande

	Perfective	Imperfective <b>-ká-</b>	Progressive <b>-námu-</b>	Persistentive <b>-ki(ná)-</b>	Inceptive <b>-limu-</b>	<b>-na-</b>	Anterior <b>-ire</b>
P <sub>4</sub> <b>-a-</b>	tw- <b>a</b> -gul-a <i>we bought</i>	tw- <b>a</b> -by-á tú- <b>ka</b> -gul-a <i>we were buying, used to buy</i>	tw- <b>a</b> -by-á í-tu- <b>námu</b> -gúl-a <i>we were buying</i>			tw- <b>a-na</b> -gul-a <i>we bought (but no longer have)</i>	tw- <b>a-gul-ire</b> <i>we have bought (long ago)</i>
P <sub>3</sub> <b>-a-</b>	tw- <b>á</b> -gúl-a	tw- <b>á</b> -by-á tú- <b>ka</b> -gul-a	tw- <b>á</b> -by-á í-tu- <b>námu</b> -gúl-a	tw- <b>á</b> -by-á í-tu- <b>kiná</b> -gúl-a <i>we were still buying</i>		tw- <b>a-ná</b> -gúl-a	tw- <b>á-gúl-ire</b>
P <sub>2</sub> (-mó-) ... <b>-lya-</b>	tú- <b>lya</b> -gul-a	tú- <b>lyá</b> -by-á tú- <b>ka</b> -gul-a <i>or</i> tú- <b>lw-é</b> tú- <b>ka</b> -gul-a					
P <sub>1</sub> <b>-kábi-</b>	tu- <b>kábi</b> -gul-a <i>we just bought</i>						
		tu- <b>ká</b> -gul-a <i>we buy, are buying</i>	tu- <b>námu</b> -gul-a <i>we are buying</i>	tu- <b>kiná</b> -gúl-a <i>we still buy</i>	tu- <b>limu</b> -gul-a <i>we are starting to buy</i>	tu- <b>ká-na</b> -gul-a <i>we sometimes buy</i>	(tú-Ø-gúl-ire) <i>see Notes</i>
F <sub>1</sub>	tu- <b>síg'</b> í-tw- <b>á</b> -gúl-a <i>we are about to buy</i>						
F <sub>2</sub> <b>-kándi-</b>	tu- <b>kándi</b> -gul-a <i>we will buy</i>	tu- <b>kándí</b> -by-á tú- <b>ka</b> -gul-a	tu- <b>kándí</b> -by-á í-tu- <b>námu</b> -gul-a				
F <sub>3</sub> <b>-kándisya-</b>	tu- <b>kándisya</b> -gul-a	tu- <b>kándisyá</b> -by-á tú- <b>ká</b> -gúl-a	tu- <b>kándisyá</b> -by-á í-tu- <b>námu</b> -gul-a				

## D42 Ki-nande

1 Source, community Mutaka, P. (1994 and p.c.), Mutaka, J. (p.c.), L. Hyman kindly lent me his detailed notes on work done with Valinande. My thanks go to all three. Over 900,000 speakers in DRC's North Kivu Province. 7x1 /i, ɪ, ε, a, ɔ, u, u/: we represent only 5 vowels. Vowel height harmony operates to the left and right, producing two extra vowels [e, o]. Mutaka discusses tone at length. *Gula* is a toneless verb. Tones in 2, and above and to the left of the matrix, are Mutaka's underlying tones.

2 Structure Pre-SM – SM – NEG – TAM – OM – root – EXT – FV

Pre-SM: sí NEG; mó (see end of 4); í always indicates that the verb is or has been the second member of a compound.

SM: nyi; u; a; tu; mu; ba.

NEG<sub>2</sub>: te, with ta in a few contexts.

TAM: A morphologist's dream. Unlike in most Bantu languages, up to seven (more?) TAM markers may co-occur (Nurse & Philippson 2003: 9), and that in a total string numbering up to twenty or so morphemes. They are: (1) in first position, Ø occurring with -ire, -e, but nowhere independently; a in P<sub>4</sub>, P<sub>3</sub>; ká IPFV, but combines with others not always as IPFV; or ki(ná) PER (2) after any of these four come, in order, these, with rough labels or translations: nga POT; na 'indeed, etc'; áamá 'just now'; ama 'if'; bi in immediate pasts (ká-bi, áamá-bi 'have just', amábi 'if ever'); lyá P<sub>2</sub>; e ?; né ?; limu PRG<sub>1</sub>; námu/nemu PRG<sub>2</sub>; ndi ?; tá 'do first'; syá Votive/FUT; sya 'again'; ya Itive; and others. Mutaka's (1994: 51) lengthy list of combinations in one-word verbs does not exhaust the possibilities: it and the list in Hyman's notes suggest well over a hundred possibilities for most verbs. Also many compounds occur (see matrix for some), with derivatives of -bya and -li 'be', -lwa 'leave', -síga 'remain' (as in 'It remains to be done'), or rester (as in 'Il me reste a partir, see 3), -sala, originally 'vomit', in the first member of the compound, marked for almost any TAM. The second verb encodes a more restricted set of aspects and moods.

OM: Only one observed.

FV: Mutaka has underlying /a/ NEU; /e/ SBJ; ire ANT and related categories; aCa; aCe. The last two are set up to account for certain vocalic phenomena, the abstract C surfaces as [g] in one geographically isolated dialect.

3 Tense Four degrees of past (Immediate, 'today', 'yesterday and a few days beyond', Remote Past), when locating events relative to time of speaking. However, time reference is relative, not absolute. P<sub>3</sub> and P<sub>4</sub> differ only tonally: P<sub>3</sub> has suffixal HL melody – the H surfaces on the root vowel and the vowel preceding the root, whereas P<sub>4</sub> has a suffixal L (see Mutaka 1994 for details).

To Mutaka's two futures I have added a third, F<sub>1</sub>, a compound based on -síga (tu-ki-síg' í-twá-gúla 'We're about to buy'), with the -kándi- form F<sub>2</sub> ('today'), -kándisya- F<sub>3</sub> ('beyond today').

4 Aspect and mood The matrix is a preliminary sketch of most of the main possibilities because it is impossible to cover all aspect and mood combinations here or in the matrix. The main ones are best seen by considering the present/timeless forms – beside PFV, there are: IPFV (tu-ká-gula 'We buy, are buying'), PRG (tu-námu-gula), INCE (tu-limu-gula), PER

(tu-kiná-gúla), the na-form, and the ANT. Gaps in pasts and futures for many of these are mostly the result of ignorance. PFV, IPFV, PRG, INCE, and PER are fairly transparent. Less transparent are: na-forms, ANTs, compounds with -a- in the second verb, and, less important, the role of initial mó-.

ANTs with -ire. The null form does not appear in regular contexts but with the kind of meaning we would expect in e.g. itwé tulí hanó tú-Ø-gúl-ire hilóle ‘We are here in a state of having bought bananas’. Similar are the two past ANTs (P<sub>3</sub>, P<sub>4</sub>) in the matrix, which essentially also mean ‘We are now in a state of having bought bananas, which took place in the middle or remote past’.

Na-forms. It is not clear that there is ONE na-form. The data seen carries several translations, ‘sometimes, just, indeed, *did* verb, etc’, from which it is impossible to work out a good core or range of meanings, e.g. tu-ká-na-gula ‘We sometimes buy’, tw-a-na-gula ‘We did buy (and no longer have)’, eri-ná-tuma ‘To just send’, tu-ná-gúl-e ‘Let’s buy indeed’. Tw-a-byá tú-ka-gula and tw-a-na-byá tú-ka-gula both translate as ‘We were buying, used to buy’, semantic difference not known. *Na* and *ire* join in tu-ná-gúl-ire ‘We have bought (recently) and still have’.

A-Compounds. Many different compounds occur with /-a-/ in the second verb. Some are: tw-á-sal-á tw-a-gúla ‘We finally bought’, tw-ana-byá tw-a-gúla ‘Whenever we bought’, tú-lyá-byá tw-á-sal-á tw-a-gúla ‘When we finally bought’, tu-kándí-byá tw-a-gúla ‘When we (will go)’, sí-tu-lí tw-a-gúla ‘We haven’t bought yet’. All are past in form but the tones do not correspond to those in any of the single past forms. Since they are visibly not ANTs (lacking the -ire) they may be PFVs: ANTs in the second verb would indicate the continuing relevance or presence of a prior action, whereas these apparent PFVs emphasize that the prior action buying was/is over and done with at the time specified in the first verb?

Pre-SM *mó* ([mól]). May occur with P<sub>3</sub> forms, in circumstances that appear to be syntactically determined. So twágúla ehilóle and mó-twágúla ehilóle ‘We bought’, mó-twágúlire ‘We have bought bananas’, and twágúla ehilóle hyó muligólo ‘We bought bananas yesterday’ are all acceptable but \*mó-twágúla ehilóle hyó muligólo ‘We bought bananas yesterday’ is not.

Adding *mó* to the General Present moves it into the past: tu-ká-gula ‘We buy (it is our job to buy)’, versus mó-tu-ká-gula ‘We bought (what we did was buy)’. Note also tú-lw-é i-mó-tw-anámá-ly-â ‘We had just eaten = we were we have just eaten’.

Ventive (-syá-, from ‘come’, also in the Remote Future, and Itive (-ya-, based on ‘go’) occur late in the TAM string.

5 Negation IND, SBJ, IMP have -sí-. Most REL have -te-, with -ta- in some contexts.

6 Relatives ‘We bought bananas last year’ tw-a-gula ehilólé hyokó gundí mwáka; ‘Women bought...’ abákali ba-(a)-gula...; ‘Women who...’ abákali a-ba(a)gula ehilóle...; ‘Bananas which women bought...’ ehilóle abákali ba-(a)-gula okó...; ‘Bananas we bought...’ ehilóle tw-a-gula okó... Subject REL differs from the absolutive only by having an augment on the verb. Object RELs, with noun if present, stand at the left of the REL clause, next to the head noun.

7 Subjunctive (-e) and Imperative Gula ‘Buy’, NEG í-si-wa-guláa or sí-wú-gúl-e, u-ná-gúl-e ‘Buy indeed’, á-gúl-e ‘Let her buy’, a-ngá-gúla ‘She should buy’, Pl mú-gúl-e, NEG sí-mú-gúl-e or í-si-mw-a-guláa, tú-gúl-e ‘Let’s buy’, NEG sí-tú-gúl-e, tú-yá-gúl-e ‘Let’s go and buy’, tu-ná-gúl-e ‘Let’s buy indeed’, bá-gúl-e or leká bá-gúl-e ‘Let them buy’.

## D53 Ma-shi

	(?)	(?) -ire	Progressive -áá-	Persistentive -ci-	(?) -ká-
P <sub>2</sub> -à-	rhw-áa-yiimb-aga <i>we sang</i> N: rhu-rháa-yiimb-aga	rhw-áa-yiimb-ire <i>we sang</i>	n-á-li n-aa-gend-a <i>I could/would have gone</i> N: ntáali n-aa-gend-a		
P <sub>1</sub> -á-	rhw-aa-yiimb-ága' <i>we sang</i> N: rhu-rhaa-yiimb-ága'	rhw-aa-yiimb-íré' <i>we sang</i>		N: ba-rha-a-ci-shakul-aga <i>if they had not pounded</i>	
-Ø-	rhu-Ø-shakúl-á <i>we pound</i> N: ba-rha-derh-a cíci <i>they never speak, they do not say anything</i>	rhu-Ø-yiimb-íré' <i>we are singing</i> N: rhu-rha-shakwíir-ii <i>we are not pounding</i>	rhw-áa-yiimb-a <i>we sing, are singing, will sing</i> rhulí rhw-aa-shakul-a <i>we are pounding</i> N: bi-rha-ly-aa <i>they do not eat</i>	rhw-áa-ci-shakul-a <i>we are still pounding, we will pound again</i>	ba-ka-shakúl-a <i>if they pound</i> N: ba-rhaa-shakul-aga <i>if they did not pound, had not pounded</i>
Future -a-	rhw-áa-bi-shakul-e <i>they will pound them</i> N: rhu-rháa-shakul-ée <i>we will not pound</i>				

D53 Ma-shi [ámashi]

1 General Polak-Bynon (1975). 650,000 speak Shi, in eastern DRC, N, W, and S of Bukavu. Non-prenasalised /t/ realised as a voiceless trilled fricative, written rh. 5x2.

2 Structure SM – NEG – TA – LIM – OM – root – EXT – ag – FV – Post-FV

SM: n; u; a; rhu; mu; bá. Participants and classes 1, 4, and 9 L, others H. REL markers appear here.

Basic TA markers are: Ø HAB/dependent and with ire and e; ci ‘if’; ka various; á P<sub>2</sub>; a P<sub>1</sub>; áá PRG. Also complex markers. Polak-Bynon says the ‘number of one-word forms which can be generated from a single root is almost unlimited’. Also compounds and partly grammaticalised forms.

Limitative: (n)ka ‘when, if’; ná ‘and, also’; ci PER. These also occur in complex TA markers.

OM: Normally one allowed, two if the second is the 1s.

ag: Polak-Bynon says ‘part of the structure of certain tenses, but can be added to most other tenses ... has little semantic load, but sometimes expresses slight emphasis’. See 4, below.

FV: a NEU; e SBJ; a remote Future; ir-e; ir-i NEG of ir-e. See 4, below. Post-FV: í IMP pl.

3 Tense One future, two pasts, P<sub>2</sub> (a/ágá, a/íré), P<sub>1</sub> (á/aga, á/ire), of which Polak-Bynon says that their reference is ‘subjective...cannot be defined in terms of absolute time...’. Also a simple a/a Narrative.

Polak-Bynon shows three ‘presents’: Ø/íré ‘Immediate’ (rhu-yiimb-íré ‘We are singing, have just sung, are about to sing’), Ø/a Habitual (rhu-súnik-a ‘we push (as a job)’), áa/a ‘future’, which I interpret as Progressive (rhw-áa-yiimb-a ‘We sing, are singing, will sing’). The third form is the one which appears predominantly in inflected compounds (rhu-lí rhw-aa-shakula ‘We are pounding = we-be we-aa-pound’), suggesting it is the real PRG/IPFV marker. Today's future reference is a semantic extension of the Progressive function, common in Bantu.

On the other hand, in dependent clauses, the unmarked form appears (éerhi aabakazí ba-Ø-sunika... ‘When the women push...’). It also appears in compounds such as ba-a-li bá-Ø-lwaala (they-P<sub>2</sub>-be they-Ø-be sick) ‘They were always sick’. Such forms are rare in the examples and only in apparently stative verbs (‘be sick’), making it hard to judge the aspectual status of Ø.

Future reference less clear. Partly carried by Progressive. Polak-Bynon gives a Remote Future (bá-a-naá-shakul-e ‘They will pound’) but does not consider it a basic form, so I follow her interpretation.

4 Aspect Non-future ire-forms contrast with a set with -aga- or -a-. Structures and tones are clear, but meanings are not. Ire-forms are described as ‘PFV’ (‘not the present’) and ire-less forms as ‘general’. ‘PFV’ undefined and both sets have the same simple French translation. The matrix avoids labels. Possibly, in this book’s terms, aga/a-forms are PFV and ire-forms are ANT?

5 Negation Shi has a single negative, including SBJ and REL, marked by low toned-ta- [rha] at NEG. The Ø/ire Present has a negative FV -iri. The fact of -ire- representing

Imperfective/Present is in itself unusual and its association with suffixal -i is also. That stative verbs (mbwíine ‘I see’) are also here suggests that the general usage originated in an ANT usage.

6     Relatives     Subject RELs have underlying L before the antecedent and by (L) prefixes. Only a subject REL agrees with the antecedent. Exs. Subject REL [áabalumee bá-a-geendaga] ‘Men who left’ ([áabalumé ba-a-geendaga] ‘Men left’). Object REL: [émijocò bá-a-shakw-iire] ‘Bananas (which) they-past-crush-past’.

7     Subjunctive and Imperative     ‘IMP only used in...orders to a child or inferior’, otherwise SBJ used. P-B posits stem and -à-á (sg with no OM, sg plus 1s OM), -à-é (sg with all other OMs), -à-é (pl). Use of -aga adds some emphasis. SBJ has -e and floating H before the stem.

## D66 Gi-ha

	Perfective	Progressive (-ri-)kó + ZERO PRESENT	Persistentive -cháa- / -ki-	Anterior -ye
P <sub>2</sub> -á-	tw-áa-gur-a <i>we bought</i>  N: nti-tw-aá-gur-a		tw-aá-ri tú-ki-gur-a <i>we were still buying</i>	CONJ: tw-aá-guz-e DIS: tw-aá-ra-gúz-e <i>we have bought</i>  N: nti-tw-aá-guz-e <i>we have not bought</i>  w-a-ri w-á-gii-ye <i>you had not gone</i>
P <sub>1</sub> -a-	tw-aa-gur-a <i>we bought</i>  N: nti-tw-aa-gur-a	(y-a-bá) a-Ø-ri-kó a-(ra-)bíb-á <i>he was planting</i>	tw-aa-ri tú-ki-gur-a <i>we were still buying</i>	CONJ: y-a-guz-e DIS: y-a-a-guz-e <i>he bought</i>  N: nti-tw-aa-guz-e
-Ø-	CONJ: tu-Ø-gur-a DIS: tu-ra-rim-a <i>we cultivate, are cultivating, will cultivate</i>  N: nti-tu-Ø-gur-á	(tu-Ø-ri-)kó-tu-ra-gur-a <i>or</i> tu-Ø-haa-ye tú-Ø-gur-a <i>we are buying</i>  N: nti-tu-Ø-ri-ko tu-ra-gur-a	CONJ: tu-Ø-cháa-som-a <i>we still study</i> DIS: tu-ra-cháa-mu-kór-era <i>we still work for him</i>  N: nti-tu-ki-som-ă	bá-Ø-tu-bon-ye <i>they have seen us</i>  N: ba-tá-tu-Ø-bon-ye <i>they have not seen us</i> nti-tu-ráa-gur-a <i>they have not bought yet</i>
Future -roo-	tu-roo-gur-a <i>we will buy</i>  N: nti-tu-róo-gur-a	a-roo-ba a-Ø-ri-kó a-(ra-)dy-á <i>he will be eating</i>	tu-roo-ba tu-ki-gur-a <i>we will still be buying</i>  N: nti-tu-roo-ba tu-ki-gur-a	tu-roo-ba tw-aá-guz-e tu-roo-ba tu-ra-guz-e

## D66 Gi-ha

1 General Main source Harjula (2004), supplemented by Ntabaye/Nurse (in Nurse 1979a: 16–26). Some 800,000 (?) speak Ha in western Tanzania's Kigoma Region. 5x2.

2 Structure Pre-SM – SM – TA – focus – OM – root – EXT – FV – Post-FV

Pre-SM: Locatives-temporals hó, kó, followed by NEG<sub>1</sub> nti- (1s si-). Also independent REL.

SM: 1s n/\_C, often nd/\_V; u; 3s y/\_V, a/\_C; tu, mu, ba. They have no accent of their own.

NEG<sub>2</sub>: ta, H in some tenses, L in others.

TA: Ø General Present/Near Future, and with -e and -ye; a P<sub>1</sub>; á P<sub>2</sub>; roo FUT; ka NAR (2); oo

POT; ráa 'not yet', cháa (IND)/ki (SIT, REL) PER. For a third -a-, see Hyman & Katamba 1990.

Focus (DIS): ra Present, P<sub>2</sub>; a P<sub>1</sub>; ra before PER cháa; tonally in POT/the two NARs.

OM: Two (DO, IO) possible but not common, one OM is commoner.

FV: a NEU; e SBJ; ye (several allomorphs).

Post-FV: Locative (mwó).

3 Tense One future, two pasts described as representing Hodiernal vs Pre-Hodiernal. The null present represents a habitual, repeated, or generic situation, situation in progress, near future, even recent past, and is used as a Narrative.

4 Aspect and other categories IPFF (Harjula's 'progressive') and PER are clear, though some details in Harjula and Ntabaye/Nurse differ, and Ntabaye/Nurse have more forms than Harjula. What is labelled ANT<sub>2</sub> refers to a situation that happened prior to a time other than the present, while what Harjula labels ANT<sub>1</sub> (a) refers to a 'situation...in the past but... relevant to or continuing at the moment of speech'. While the shape and existence of the forms in the ANT<sub>1</sub> and PFV columns are not in doubt, their semantic content is. Harjula describes the reference of ANT<sub>1</sub> as above, saying of her PFV past (ye) that it is a 'simple past: the action has taken place and is now complete'. These definitions are hard to prove or disprove by the brief English translations and texts at the end: it is commoner across Bantu for -ile to carry ANT and -a- to carry PFV; and, above all, it is H's PFV (ye) that appears as second verb in ANT<sub>2</sub>. I have therefore taken the liberty of relabelling her ANT<sub>1</sub> and PFV as in the matrix.

Harjula has a set of SIT forms, which, with the exception of the PER, are structurally identical but tonally different from the corresponding main clause forms.

As other D60 languages, M42, P13, and Zone S languages, Ha distinguishes Conjunctive (unmarked) from Disjunctive, marked as outlined in 2, above.

5 Negation Primary vs secondary NEG. Secondary -ta- at NEG<sub>2</sub> in INF, REL, SIT, POT. Otherwise Pre-SM (IND, SBJ) -nti- (1s -si-). Note nti-tu-ráa-mara 'We haven't finished yet' (vs nti-tu-rím-ye 'We haven't cultivated').

6 Relatives Two RELs. The independent REL, used only with subject RELs, consists of a prefix at Pre-SM and an accent realised mostly on the syllable after the SM: a-ba-róo-kóra 'Those who will work', lit. REL-SM-FUT-work. The other REL is marked by a tone pattern different from that of main clauses, by use of the secondary NEG, and in object NEG<sub>s</sub>, by a REL pronoun or use of the OM. Subject REL: umuwáana a-rirá 'Child who is crying' (a-rira 'He is

crying'), object REL: ibásekeeri n-a-yí-biiki-je 'Bicycle that I left', lit. bicycle I-past-it-leave-ANT.

7 Subjunctive (-e) and Imperative Sg genda 'Go', nti-ú-gend-e 'Don't go', ni-u-gendé 'Please go', n-aa-gend-é 'Let him go'; Pl ni-mu-gend-é 'Go', tu-gend-é 'Let's go', tu-bwiir-e 'Tell us', m-p-é or (i)m-p-a 'Give me'.

E15 Lu-ganda

	Perfective	Habitual (-anga)	Progressive -Ø-	Persistentive -kia-	Anterior -ie
P <sub>2</sub> -á-	tu-á-gul-á <i>we bought</i> N: te-tu-á-gul-á	tu-a-gul-anga <i>we used to buy</i> N: te-tu-a-gul-anga	tu-a-li tu-gul-a <i>we were buying</i> N: tu-a-li te-tu-gul-a	tu-a-li tu-kia-gul-a <i>we were still buying</i> N: tu-a-li te-tu-kia-gul-a	tu-á-lí tú-guz-e <i>we had bought</i> N: tu-a-li te-tu-guz-e
P <sub>1</sub> -á- ... -ie	tu-á-gúz-ê <i>we bought</i> N: te-tu-á-guz-ê	tú-Ø-gul-á <i>we buy</i> N: te-tú-Ø-gúl-á	tu-a-ba-dde tu-gul-a <i>we were buying</i> N: tu-a-ba-dde tu-gul-a	tu-a-ba-dde tu-kia-gul-a <i>we were still buying</i> N: tu-a-ba-dde te-tu-kia-gul-a	tu-a-ba-dde tu-guz-e <i>we had bought</i> N: tu-a-ba-dde te-tu-guz-e
-Ø-	tú-Ø-gul-a <i>we are buying</i> N: te-tu-Ø-gul-a		tú-kiá-gul-a <i>we are still buying</i> N: te-tú-kiá-gul-a	tu-Ø-guz-e <i>we have bought</i> N: te-tú-Ø-gúz-é	
F <sub>1</sub> -naa-	tú-naa-gúl-á <i>we will buy</i> N: te-túú-gúl-ê		tu-naa-ba tu-gul-a <i>we will be buying</i> N: tu-naa-ba te-tu-gul-a	tu-naa-ba tu-kia-gul-a <i>we will be still buying</i> N: tu-naa-ba te-tu-kia-gul-a	tu-naa-ba tu-guz-e <i>we will have bought</i> N: tu-naa-ba te-tu-guz-e
F <sub>2</sub> -li-	tú-li-gul-á <i>we will buy</i> N: te-tú-li-gul-á	tu-naa-gul-anga <i>we will buy regularly</i> N: te-tu-naa-gul-anga	tu-li-ba tu-gul-a <i>we will be buying</i> N: tu-li-ba te-tu-gul-a	tu-li-ba tu-kia-gul-a <i>we will be still buying</i> N: tu-li-ba te-tu-kia-gul-a	tu-li-ba tu-guz-e <i>we will have bought</i> N: tu-li-ba te-tu-guz-e

## E15 Lu-ganda

1 General Over three million speak Ganda as first language and another million as second, mainly in Uganda's Buganda Province. It forms a group with E16-17: it is well described, they are less well described. E101-102 are poorly known. Other small related varieties (see Ladefoged et al 1972) are unknown. Source is Ashton et al (1954). 5x2.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – ang – FV – Post-FV

Pre-SM: te NEG; ne 'NAR'; nga participial, 'when, if'; subject REL = preprefix vowel (a-, e-, o-).

SM: n; o; a/y (before vowel); tu; mu; ba. Tones depend on the tense/aspect.

NEG<sub>2</sub>: ta.

TA: Ø Present; a PastANT<sub>1</sub>; ká 'Hortative' (with SBJ); aka 'just verbed, since'; li F<sub>2</sub>; naa F<sub>1</sub>; andi CND; kya PER. Only one TA marker is allowed, but some are visibly compounds.

ang: in Past/Future HAB, and present-used-as-command, 'now and again, from time to time, etc'.

FV: e SBJ; ye Recent Past, ANT; a all other functions.

Post-FV: Locative (yo, wo, ko, mo). Morphemes similar to those shown at Post-FV for E22 also occur in Ganda but are treated by Ashton et al as independent particles.

3 Tense Two pasts, two futures (more or less Hodiernal vs Beyond Hodiernal). Some (all ?) younger speakers replace F<sub>1</sub> and F<sub>2</sub> forms by -jja + ku ('come + infinitive') and genda + ku ('go + infinitive'), respectively; tu-jja ku-gula and tu-genda ku-gula.

Ashton et al interpret -aka- as a+ka, where ka adds the element of a short period of recent time. In E31c I have interpreted this as one formative, indicating the nearest of four pasts ('just verbed').

4 Aspect PFV, HAB (?), PRG, PER, and ANT. The -ang- occurs in three places: in Far Past and Future as a HAB; with the present-used-as-command and the IMP, translated as 'from time to time, now and again, always, again, etc'; in the negative Present (te-tu-gul-anga 'We don't buy'). This might be better interpreted as IMPF. It does not so occur in the positive Present (\*tu-gul-anga 'We buy').

5 Negation Ganda has two negatives: -ta- with RELs, INFs, after ne-; te- (1s si-) in other contexts. Prohibition can be expressed via -leka ('refrain from'): leka kusoma 'don't read'. Most tenses are formally negated by prefixing te-, without structural changes.

6 Relatives Subject relativization is by preprefixation (y-a-gúl-a 'He bought', e-y-agúla 'He who bought'), with some tone changes. Object relativization inserts a demonstrative agreeing with the antecedent: ekikopo kya (Mukasa) y-agúla 'Cup which (Mukasa) he-bought'.

7 Subjunctive All verbs have the same SBJ pattern: o-gul-ê 'You should buy', o-kol-ê 'You should do', a-gul-ê 'He...', tu-gul-ê, mu-gul-ê. NEG: t-óó-gúl-ê, t-áá-gúl-ê, te-túú-gúl-ê.

8      Imperative      Singular consists of root (L) and FV (H); gulá ‘Buy’, kolá ‘Do’, NEG t-ó-gúlâ, tókolá. Plurals and use of OM (except 1s) involve the SBJ, e.g. pl mu-gul-ê, mu-kol-ê. Commands can be given in five ways (Ashton et al: 221–224), via: IMP (as here); SBJ (7); the present indicative (o-gúl-a ‘You are to buy’); IMP or Present with -ang- (repetitive meaning: som-angá ‘Read’, o-sóm-ángá); a compound with -ba ‘be’ (ggwe o-ba- o-genda ‘YOU go (not John’)).

The form ogúla ‘You are to buy’ is tonally and structurally the General Present indicative, here used as a form of command. This has parallels in E22 forms where future indicatives may have a command status (mu-rá-gur-a (F<sub>1</sub>), mu-rí-gura (F<sub>2</sub>), both ‘You should buy’), and in the forms called ‘conjonctif’ by Belgian analysts in D25 and D60, which are formally different from the SBJ, are similar in shape but different in tones to indicative forms, and express wishes or hopes.

E22 Ru-(h)aya

	Perfective <b>-Ø-</b>	Habitual <b>-Ø- / -aga</b>	Progressive <b>n(i)-</b>	Persistent <b>-ki-aa-</b>	(Perfective +) P <sub>1</sub> Perfective <b>-áá-</b>	Anterior <b>-Ø- ... -ire</b>	Perfective + Anterior <b>-áá- ... -ire</b>
P <sub>3</sub> <b>-ka-</b>	tú-ka-gur-a <i>we bought</i> N: ti-tu-á-guz-ire	tu-a-gur-âga <i>we used to buy</i> N: ti-tu-á-gur-aga	tú-ka-bá <b>n(i)</b> -tu-gúr-a <i>we were buying</i> N: tú-ka-bá tu-tá-(r)i-ku-gur-a	tú-ka-bá tu-ki-áá-gur-a <i>we were still buying</i> N: tú-ka-bá tu-tá-ki-gur-a	tú-ka-bá tu-áá-gur-a <i>we had just bought</i> N: tú-ka-bá tu-tá-ka-guz-ire	tú-ka-bá tú-Ø-guz-ire <i>we had bought</i> N: tú-ka-bá tu-ta-guz-íre	tú-ka-bá tu-áá-guz-ire <i>we had already bought</i> N: tú-ka-bá tu-tá-ka-guz-ire
P <sub>2</sub> <b>-Ø- ... -ire</b>	tu-Ø-guz-íre <i>we bought</i> N: ti-tu-guz-íre	tu-Ø-gúr-a <i>we buy</i> N: ti-tu-gúr-a	tu-Ø-ba-ire <b>n(i)</b> -tu-gúr-a <i>we were buying</i> N: tu-ba-ir-e tu-tá-(r)i-ku-gur-a	tu-Ø-ba-ire tu-ki-áá-gur-a <i>we were still buying</i> N: tu-ba-ire tu-tá-ki-gur-a	tu-Ø-ba-ire tu-áá-gur-a <i>we had just bought</i> N: tu-ba-ire tu-tá-ka-guz-ire	tu-Ø-ba-ire tú-Ø-guz-ire <i>we had bought</i> N: tu-ba-ire tu-ta-guz-íre	tu-Ø-ba-ire tu-áá-guz-ire <i>we had already bought</i> N: tu-ba-ire tu-tá-ka-guz-ire
P <sub>1</sub> <b>-á(a)-</b>	tu-áá-gur-a <i>we bought</i> N: ti-tu-á-gur-a		tu-a-ba <b>n(i)</b> -tu-gúr-a <i>we were buying</i> N: tu-a-ba tu-tá-(r)i-ku-gur-a	tu-a-ba tu-ki-áá-gur-a <i>we were still buying</i> N: tu-a-ba tu-tá-ki-gur-a	tu-aa-ba tu-áá-gur-a <i>we had just bought</i> N: tu-aa-ba tu-tá-ka-guz-ire	tu-aa-ba tú-Ø-guz-ire <i>we had bought</i> N: tu-aa-ba tu-ta-guz-íre	tu-a-ba tu-áá-guz-ire <i>we had already bought</i> N: tu-a-ba tu-tá-ka-guz-ire
<b>-Ø-</b>			<b>n(i)</b> -tu-gúr-a <i>we are buying</i> N: ti-tú-(r)i-ku-gur-a	tu-ki-áá-gur-a <i>we are still buying</i> N: ti-tú-ki-gur-a	tu-áá-gur-a <i>we have just bought</i> N <sub>1</sub> : ti-tu-áá-gur-a N <sub>2</sub> : ti-tú-ka-guz-ire	tu-Ø-guz-íre <i>we have bought</i> N: ti-tu-guz-íre	tu-áá-guz-ire <i>we have already bought</i> N: ti-tú-ka-guz-ire
F <sub>1</sub> <b>-raa-</b>	tu-raa-gúr-a <i>we will buy</i> N: ti-tuu-gúr-e		tu-raa-ba <b>n(i)</b> -tu-gúr-a <i>we will be buying</i> N: tu-raa-ba tu-tá-(r)i-ku-gur-a	tu-raa-ba tu-ki-áá-gur-a <i>we will still be buying</i> N: tu-raa-ba tu-tá-ki-gur-a	tu-raa-ba tu-áá-gur-a <i>we will have just bought</i> N: tu-raa-ba tu-tá-ka-guz-ire	tu-raa-ba tú-Ø-guz-ire <i>we will have bought</i> N: tu-raa-ba tu-ta-guz-íre	tu-raa-ba tu-áá-guz-ire <i>we will have already bought</i> N: tu-raa-ba tu-tá-ka-guz-ire
F <sub>2</sub> <b>-ri-</b>	tu-ri-gúr-a <i>we will buy</i> N: ti-tú-ri-gur-a	tu-raa-gur-âga <i>we will buy regularly</i> N: ti-tuu-gur-êga	tu-ri-ba <b>n(i)</b> -tu-gúr-a <i>we will be buying</i> N: tu-ri-ba tu-tá-(r)i-ku-gur-a	tu-ri-ba tu-ki-áá-gur-a <i>we will still be buying</i> N: tu-ri-ba tu-tá-ki-gur-a	tu-ri-ba tu-áá-gur-a <i>we will have just bought</i> N: tu-ri-ba tu-tá-ka-guz-ire	tu-ri-ba tú-Ø-guz-ire <i>we will have bought</i> N: tu-ri-ba tu-ta-guz-íre	tu-ri-ba tu-áá-guz-ire <i>we will have already bought</i> N: tu-ri-ba tu-tá-ka-guz-ire

## E22 (O)-ru-(h)aya

1 General 1.2+ million people in Tanzania's West Lake Province speak Haya, part of the Rutara languages, for which the verb is fairly well described (Muzale 1998, forthcoming). The current sketch is based mainly on Muzale (1998), discussions with Muzale, parts of Byarushengo et al (1979, esp. p. 45–71), and a glance at Rugemalira (2003, describing E21). 5x2. Here and in the matrix, where known, tones are surface. In E13, E22, E31, and probably others, verbs lose their tone when followed by other material, thus twáágura## but twaagura + X.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV – Post-FV

Pre-SM: ni PRG (not with NEG or REL); ti NEG<sub>1</sub> (but copula is tsi); subject REL, which is the presence of the augment vowel (a-, e-, o-); ká 'when, if'; ká in Hortative (see 8).

SM: N; o; a/y (before vowel); tu; mu; ba. Tones depend on the tense/aspect.

NEG<sub>2</sub>: ta.

TA: Ø Present; a(a) P<sub>1</sub>/ANT<sub>1</sub>; ka P<sub>3</sub>, NEG ANTs; ri F<sub>2</sub>; raa F<sub>1</sub>; ra ANT<sub>2</sub>, F<sub>1</sub> IMP; aku CND; ki/ky(a:) PER. Only one TA marker is allowed, but some are visibly compounds.

OM: Up to three may co-occur, with an independent locative as clitic.

FV: a NEU; e SBJ, F<sub>2</sub> NEG; aga HAB (only in Past and Future); ire P<sub>2</sub>, ANT.

PostFV: Locative markers (mwo, ko, ho); interrogative clitics; je 'well'. The stem and applicative suffix may reduplicate: -bara 'count', -bariirira 'estimate', -barabara 'make a quick count'.

3 Tense The Haya system is usually represented as asymmetrical, with three degrees of past (Hodiernal, Hesternal, Beyond Hesternal), two futures (Hodiernal, Beyond Hodiernal), and present. These are absolute, by contrast with the relative tenses of many other languages.

This can be analyzed differently (Muzale 1998, Hewson et al 2000). The Hodiernal Past could be treated as a form of present – the Memorial Present – containing whatever is in the memory since the start of the most recent period of consciousness, that is, since the start of the current day. In that case, the system becomes symmetrical, with two degrees of past and future (and present).

4 Aspect PFV, HAB (aga), PRG (ni), PER (kí(+aa)), ANT (ire). Various combinations of aspect are possible (PFV + PFV, PFV + ANT), and there is also a Remote Anterior in -ra-/-ire 'To have done something a long time earlier'. This is discussed in 4.10.

HAB is marked by -aga only in (Far) Past and Future, and the tense markers in these forms are those otherwise associated with Near Past and Future. Ag- plus SBJ -e can give -ag-e or -e-ga.

5 Negation Haya has two negatives: -ta- with RELs, IMPs, INFs, and the second verb in compound verbs, and ti- in other contexts. In compounds, either the first (auxiliary) part or the second (lexical) can be negated. By negating the main verb, its lexical content is being denied: turaabá tu-tá-kaguzire 'We won't have bought'. By negating the auxiliary, the TA component is refuted: ti-tuubé twáaguzire 'We won't have bought yet'. This deserves further investigation.

6 Relatives Subject relativization is indicated by the use of the preprefix: y-áá-rim-ire ‘He has cultivated’, e-y-áá-rimire ‘He who has cultivated’. In a few tenses a change of tone or formative occurs. In object relativization a demonstrative agreeing with the antecedent is inserted: omuntu owo ba-atémire ‘Person who they-cut’.

7 Subjunctive Subjunctive -e occurs in the usual range of contexts.

8 Imperative ‘Buy’ gura (sg), mu-gúr-e (pl); ‘Buy it’ ki-gur-e (tones?); ‘Don’t buy’ o-ta-gúr-a (sg), mu-ta-gúr-a (pl); ‘You (pl) should buy’ mu-rá-gur-a (F<sub>1</sub>), mu-táá-ku-gura (NEG), mu-rí-gura (F<sub>2</sub>), mu-tá-ri-gura (NEG); ká-tu-gúr-e ‘Let’s buy’. The sixth and eighth forms are reminiscent of the conjunctif of D25/D61: E15 data suggests they are Present indicatives.

## E31c Lu-bukusu

	Perfective	Imperfective -ang-	Progressive (*be' +) xu-	Persistent (*be' +) -sii-	Anterior
P <sub>4</sub> -à-	xw-a-kul-á <i>we bought</i>	xw-á-kul-aang-a <i>we used to buy, were buying</i>		xw-á-b-á xu-sii-kul-a <i>we were still buying, still used to buy</i>	xw-á-b-á xw-áa-kul-a <i>we had bought or P<sub>3</sub> and P<sub>2</sub> below</i>
P <sub>3</sub> -áá- ... -ilé	xw-aa-kúl-ile <i>we bought</i>	xw-aa-kúl-il-aang-e <i>we were buying</i>	xw-aa-b-éélé xu-kúl-a <i>we were buying</i>	xw-aa-b-éélé xu-sii-kul-a <i>we were still buying, still used to buy</i>	xw-aa-b-éélé xw-aa-kul-ile <i>we had bought</i>
P <sub>2</sub> -ilé	xu-kúl-ile <i>we bought</i>	xu-kúl-il-aang-e <i>we were buying</i>	xu-b-eelé xu-kúl-a <i>we were buying</i>	xu-b-eelé xu-sii-kul-a <i>we were still buying, still used to buy</i>	xu-b-eele xw-aa-kul-ile <i>we had bought</i>
P <sub>1</sub> -aaxa-	xw-aaxa-kul-a <i>we just bought</i>	xw-aaxa-kul-aang-a <i>we just stopped buying</i>	xw-ááxá-b-á xu-kúl-a <i>we were just buying</i>	xw-ááxá-b-á xu-sii-kul-a <i>we were still buying, just now bought</i>	xw-aaxa-b-a xw-aa-kul-ile <i>we have/had just bought</i>
-Ø-	xu-Ø-kúl-a <i>we buy (in general)</i>	xu-Ø-kúl-aang-a <i>we buy regularly</i>  xu-la-kul-aang-a <i>we have been buying</i>	xu-lí-xó xu-kúl-a <i>we are buying</i>	xu-sii-kul-a <i>we still buy, are still buying</i>	xw-aa-kul-ile <i>we have bought (recently)</i> xw-áa-kul-a <i>we have bought (remoter)</i>
F <sub>1</sub> -la-	xu-la-kul-a <i>we will buy</i>  <b>káne</b> xú-kúl-e <i>we will buy (less definite for some people)</i>	xu-lá-b-á xu-la-kul-aang-a <i>we will have been buying</i>  <b>káne</b> xú-b-é xu-la-kul-aang-a <i>we will have been buying</i>	xu-lá-b-á xu-kúl-a <i>we will be in the process of buying</i>  <b>káne</b> xú-b-é xu-kúl-a <i>we will be in the process of buying</i>	xu-lá-b-á xu-sii-kul-a <i>we will still be buying</i>  <b>káne</b> xú-b-é xu-sii-kul-a <i>we will still be buying</i>	xu-la-b-a xw-aa-kul-ile <i>we will have bought</i>  <b>káne</b> xú-b-é xw-aa-kul-ile <i>we will have bought</i>
F <sub>2</sub> -xa- ... -e	xu-xa-kul-e <i>we will buy</i>	xu-xa-kul-aang-e <i>we will have been buying</i>	xu-xá-b-é xu-kúl-a <i>we will be in the process of buying</i>	xu-xá-b-é xu-sii-kul-a <i>we will still be buying</i>	xu-xá-b-é xw-aa-kul-ile <i>we will have bought (recently)</i>  xu-xá-b-é xw-áa-kúl-a <i>we will have bought (remoter)</i>
F <sub>3</sub> -lí-	xu-li-kúl-a <i>we will buy</i>	xu-li-kúl-aang-a <i>we will be buying, we will buy (HABITUAL)</i>	xu-li-b-á xu-kúl-a <i>we will be in the process of buying</i>	xu-li-b-á xu-sii-kul-a <i>we will still be buying</i>	xu-li-b-á xw-áa-kúl-a

## E31c Lu-bukusu

1 General Some 600,000 speakers in Kenya's Western Province. A variety of Luyia (Luhya), spoken by some 4 million western Kenyans. This originated in work done by W. Khisa/L. Hyman, who kindly copied it, and parts of it were further elaborated with N. Mutonyi (esp.) and L. Kisembe. My thanks to all four contributors. Information on NEG, REL, IMP, and SBJ from de Blois (1975). As I know more of TA than of other features, and as TA is complicated here, I concentrate on it. Most Luhya varieties have very similar TA systems (e.g. Botne et al 2006). 5x2 (southern Luyia dialects have seven).

2 Structure Pre-SM – SM – TA – OM – root – EXT – ang – FV – Post-FV

Pre-SM: se NEG<sub>1</sub>; pre-prefix (of mainly CV- shape); ne- 'if'; maybe others.

SM: N; o; a/ga/o; xu; mu; ba. All H, preceded by a 'free L'. 3s o [w] mainly with NAR, ga mainly in Pasts, otherwise a.

TA: Ø PRES and P<sub>2</sub>; â P<sub>4</sub>, áá P<sub>3</sub>; áá' one ANT; áá NAR; aaxa P<sub>1</sub>; lá F<sub>1</sub>; xá F<sub>2</sub>; lí F<sub>3</sub>; sii PER; xá NEG<sub>2</sub>.

OM: Only one allowed.

ang: IPFV, including in INF and IMP. A different shape in li-ch-ák-(ak-)a 'Eat (really) urgent'.

FV: e SBJ, F<sub>2</sub>, IMP pl (tones differ); ile P<sub>2</sub>, P<sub>3</sub>, ANT (tones differ): otherwise a. Most speakers combine -anga and -ile as il-aang-e, but a few older speakers have aang-ile.

Post-FV: Locative (mó, yó, etc).

3 Tense The role of tone complicates the analysis. It varies according to context, so Remote Anterior 'We have cultivated', xw-áa-lima (pre-pause declarative), xw-áa-líma (before a complement), xw-áá-límá (pre-pause question). It varies according to category: xw-á-lima P<sub>4</sub>, xw-áa-lima Anterior, xw-aa-lim-a Narrative. It also has a syntactic role: the contrast between declarative and question above, and a-lá-ca 'She will definitely go' versus a-la-ca 'She may go' (L. Kisembe). Tones shown in matrix are those in pre-pausal declarative phonetic forms.

Most sources agreed on four pasts (the only disagreement was whether or not P<sub>1</sub> *aaxa* was in fact a tense) and three futures. In a neutral situation (is any situation neutral?) P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub> refer to 'very recently/just, today, a short time before today, remote', F<sub>1</sub>, F<sub>2</sub>, F<sub>3</sub> to 'today, beyond today, remote', respectively. P<sub>1</sub>, P<sub>2</sub>, F<sub>1</sub> are fixed in meaning, the last two being hodiernal, including last night and tomorrow morning, but the others are flexible in reference, depending on the circumstances and the speaker's attitude to the circumstances. Thus, for example, xwaalímile 'We bought' is P<sub>3</sub> but can be used of a few days ago, or last month, or last year. Someone discussing events of twenty years ago could use that form if the events were still vivid in the memory.

4 Aspect PFV, IPFV, PRG, PER, ANT. Bukusu, as Haya, illustrates well the functions of two Anteriors – both translate as 'have/had verbed' but one (see 3) refers to situations nearer the moment of reference, the other to more remote situations. Bukusu also exemplifies well possible aspectual contrasts in the Present: 'we X (in general), we X (regularly), we are Xing'.

5     Negation     SBJ, REL, and other ‘dependent’ forms have -xá- at NEG, otherwise se-. Most positives and negatives are structurally and tonally identical, a few differ tonally. One such ‘dependant’ form is ba-xá:-mu-ulila ‘They haven’t heard him yet’ (lit. they-notyet-him-hear).

6     Relatives     Subject relatives involve an SM of the shape CVV-, H-tones with a in most classes) preceding L. Object relatives insert a pronominal form between antecedent and verb ([bába:ndu níbo bá-lí-bóná] ‘People who they-will-see’ ([níbo < /ní-bá-o/). Negative is -xá-.

7     Subjunctive    SBJ -e occurs in plural IMPs, in IMPs with OM, and other typical contexts. Tone different from IMP ([é]) to SBJ ([e], with a H on the SM). Negative is -xá-.

8     Imperative     Root and VF -á: ti:lá ‘Hold’. With OM: m-b-é ‘Give me’ (me-give-SBJ).

## E42 Eke-gusii

	Perfective	Imperfective (-na- ...) -ko-	Progressive INF + 'be' / 'be' + INF	Anterior (?) -ire	'Narrative' -raa-
P <sub>4</sub> -a- ... -éte	mbá-a-c-éte <i>they came</i> (beyond 48 hours ago)  N: ti-n-áa-gor-éte <i>I did not buy</i>				(?) mbá-raa-gany-éte <i>they waited, then ...</i>
P <sub>3</sub> -aa-	kw-â-rug-a <i>you cooked</i> (24–48 hours ago)  N: ti-ri-áá-ícori-a <i>I did not fill</i>	N: a-tá-a-ná-kó-rug-a <i>he was not cooking</i>	(1) n-a-aré gó-ik-a <i>I was arriving,</i> <i>used to arrive</i>  (2) n-kó-riá n-á-are <i>I was eating</i>	y-a-biár-ire <i>it (cow) gave birth</i>  n-a-rúg-ire <i>I have cooked</i>	ntw-â-raa-soom-a <i>we read, then ...</i>
P <sub>2</sub> -á- ... -ete	mbá-á-c-ete <i>they came (last 12 hours)</i>				n-á-raa-káán-éte <i>he first refused, then ...</i>
P <sub>1</sub> -á-	kw-á-rūg-a <i>you cooked</i> (last hour or two)  N: ti-n-áá-ícori-a <i>I did not fill</i>	tw-á-ná-kō-gend-a <i>we kept going</i>  ci-á-ná-ko-et-a <i>they were passing</i>	n-á-áre ko-rug-a <i>or</i> n-kó-rūg-a n-á-áre		ńtw-á-raa-soom-a <i>we read, then ...</i>
	n-Ø-dúg-a <i>I cook</i>  N: tí-ndí kó-rūg-a	(1) a-kó-gend-a <i>he goes from time</i> <i>to time</i>  (2) tó-ná-kó-gend-a <i>we keep going</i>	n-gó-kōr-a áre <i>he is working</i>  N: tí-ndí kó-rūg-a <i>I am not cooking</i>	n-á-ráá-ire <i>she is asleep</i>  n-é-rug-ire <i>it is cooked</i>	á-ko-raa-bwát-a <i>sometimes he seizes,</i> <i>then ...</i>
Future -e	(n)-á-gōr-e <i>he will buy</i>  N: tá-á-ko-gor-a	as (2) above	?		(1) ntó-raa-soom-a <i>we will read, then ...</i>  (2) tó-ráá-mínyok-e <i>we will run, then ...</i>

## E42 Eke-gusii

1 General Choosing a suitable E40 language was hard: E41 is really part of E30, E46 part of E50, southern E40 varieties (the most typical) are poorly described, the two major E43 sources disagree on data, so E42 was chosen, but it is in many ways atypical. Source is Whiteley (1960); Cammenga (2002) was not consulted. 7x2. ‘Two million’ (Gordon 2005) speak Gusii, including second language speakers, in SW Kenya’s Kisii District.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV – Post-FV

Pre-SM: ti (L, next syllable H) NEG<sub>1</sub>; n ‘focus’; nâ ‘optative future’.

SM: n/nyi; o (frequent)/ko (in a few forms); a (regular)/o (REL); to; mo; ba. In most forms all prefixes behave identically tonally, but in a few classes, 1, 4, and 9, are L, the others H.

NEG<sub>2</sub>: tá.

TA: Ø PRES (with a) only in a few functions, but regularly with other FV; a P<sub>3</sub>/P<sub>4</sub>; á P<sub>1</sub>/P<sub>2</sub>; ko PRG; ka ‘distance from context, NAR’; raa ‘an action occurs after the one cited’; na CNT, which does not occur independently. See 4.

FV: ε SBJ/FUT (positive SMs always H); ire stative/ANT, often relative; εte predominantly Past PFV (εti in some NEG<sub>1</sub>s); a NEU; (frozen) nge optional after re ‘be’ in some compounds.

Post-FV: o Locative.

Unlike most eastern Bantu languages but as E43, F33, F34, Gusii has several compounds with the order n-INF + AUX (be), e.g. n-kó-remá á-re ‘He is hoeing’ (lit. it is-at-hoeing he-is), n-kó-remá n-áá-re ‘I’ve been hoeing’. The regular order also occurs, mostly in NEG<sub>1</sub>s/RELs, e.g. t-á-rí gó-sooma ‘She is not reading’ (lit. not-she-be at-reading).

3 Tense Four pasts (last hour or two, today, ‘between 24 and 48 hours prior to’ reference point, beyond two days) and one future. The fact that Whiteley says ‘there is some looseness in the usage of young people’ and that the term ‘last year’ involves P<sub>1</sub> (‘the year that passed-P<sub>1</sub>’) suggests that at least some of these past markers can have relative reference.

4 Aspect PFV, IPFV, PRG, ANT/stative, ‘NAR’, CNT. Six tenses and six aspects would give a possible maximum of 36. Although some of the 36 are not attested Whiteley has 120 combinations, including negatives. This is because, unlike most eastern Bantu languages (but see E62, G22, G23), Gusii allows strings of several TA markers. Tense (Ø, a, á, ka) is always on the left, followed by various aspect morphemes, which occur in the order -ko-, -raa-, -na-, -ko-, with a very few exceptions. The longest string, including NEG, contains six markers: ba-tá-á-kó-raa-ná-gó-sang(root)-er-er-ek-an-a ‘They should meet together first perhaps (and then..)’ (p. 37). Future is marked by suffixal -e, thus Present and Future have null at TA, so it is not surprising that the longest strings have past reference. The morpheme -raa- is unique in eastern Bantu by indicating other verbs are to follow – it is usually only NAR -ka- that indicates that other material precedes.

5 Negation Primary (ti-) versus secondary negative (-tá-), the latter mainly in RELs, SBJs, and subordinate clauses, the former in main clauses. Apart from the NEG morpheme, negatives and positives are sometimes the same but often different.

6 Relatives In general, relatives and absolutes differ tonally. Subject REL: éndáágera eyé mbuya e-rugire ‘Food this well it-is-cooked’ versus éndáágera erúgíre buya ‘Food which-is-cooked well’; object REL: ámare áya tw-á-rora ‘Clouds those which-we-past-see’.

7 Subjunctive and Imperative These are not dealt with in detail by Whiteley, except remarks about use of SBJ (p. 38–43). The little data provided suggests they are much as elsewhere in eastern Bantu.

E51 Gekoyo (1) (Kikuyu, Gikuyu, [ɣekoyo])

	Perfective <b>-a</b>	Perfective <b>-ire</b>	Imperfective <b>-aga</b>	Anterior <b>-eete</b>
P <sub>3</sub> <b>-a-</b>		tw- <b>a</b> -rúg- <b>iré</b> <i>we cooked (before yesterday)</i>	tw- <b>a</b> -rúg- <b>ágá</b> <i>we used to cook, were cooking</i>	tw- <b>a</b> -rúg- <b>éeté</b> <i>we had cooked</i>
P <sub>2</sub> <b>-raa-</b>		to- <b>raa</b> -rúg- <b>ire</b> <i>we cooked (yesterday)</i>	to- <b>raa</b> -rúg- <b>ágá</b> <i>we used to cook, were cooking</i>	to- <b>raa</b> -rúg- <b>eete</b> <i>we had cooked</i>
P <sub>1</sub> <b>-ko-</b>			tóo- <b>ko</b> -rúg- <b>ágá</b> <i>we were running (earlier today)</i>	tóo- <b>ko</b> -rúg- <b>éeté</b> <i>we had cooked (today)</i>
<b>-Ø-</b>		to- <b>Ø</b> -rúg- <b>iré</b> <i>we ran (earlier today)</i>	to- <b>Ø</b> -rúg- <b>aga</b> <i>we run (regularly)</i>	to- <b>Ø</b> -rúg- <b>éete</b> <i>we have (already) cooked (some time ago)</i>
	tw- <b>ǎ</b> -rúg- <b>a</b> <i>we just ran</i>			
	to- <b>raa</b> -rúg- <b>á</b> <i>we are running</i>			
<b>-ko-</b>	tóo- <b>ko</b> -rúg- <b>á</b> <i>we are running, will run (today)</i>			
F <sub>1</sub> <b>-ree-</b>	to- <b>rée</b> -rúg- <b>á</b> <i>we will run (today, beyond)</i>		to- <b>rée</b> -rúg- <b>ágá</b> <i>we will run (regularly)</i>	
F <sub>2</sub> <b>-kaa-</b>	to- <b>kaa</b> -rúg- <b>a</b> <i>we will run (tomorrow or later)</i>		to- <b>kaa</b> -rúg- <b>ága</b> <i>we will run (regularly)</i>	

E51 Gekoyo (2) (Kikuyu, Gikuyu, [ɣekoyo])

	Perfective <b>-a</b>	Perfective <b>-ire</b>	Imperfective <b>-aga</b>	Anterior <b>-eete</b>
P <sub>2</sub> <b>-a-</b>	tw- <b>ǎ</b> -rúg- <b>a</b> <i>we just cooked</i> N: to-tii-na-rúg- <b>a</b>	tw- <b>a</b> -rúg- <b>iré</b> <i>we cooked</i> N: to-tí- <b>a</b> -rúg- <b>iré</b>	tw- <b>a</b> -rúg- <b>ágá</b> <i>we cooked, used to cook</i> N: to-tí- <b>a</b> -rúg- <b>ágá</b>	tw- <b>a</b> -rúg- <b>éeté</b> <i>we had cooked</i> N: to-tí- <b>a</b> -rúg- <b>éeté</b>
P <sub>1</sub> <b>-raa-</b>	to- <b>ráa</b> -rúg- <b>á</b> <i>we are cooking</i> N: to-tí- <b>ráa</b> -rúg- <b>á</b>	tó- <b>ráa</b> -rúg- <b>ire</b> <i>we cooked</i> N: to-tii-na-rug- <b>a</b>	to- <b>ráa</b> -rúg- <b>ágá</b> <i>we cooked, used to cook</i> N: to-tí- <b>ráa</b> -rúg- <b>ágá</b>	to- <b>ráa</b> -rúg- <b>eete</b> <i>we had cooked</i> N: to-tí- <b>ráa</b> -rúg- <b>eete</b>
‘Today’ <b>-ko-</b>	toó- <b>ko</b> -rúg- <b>á</b> <i>we are cooking, will cook (today)</i> N: to-tii-ku-rúg- <b>a</b>		tóo- <b>ko</b> -rúg- <b>ágá</b> <i>we were cooking</i> N: to-tii- <b>ko</b> -rúg- <b>aga</b>	tóo- <b>ko</b> -rúg- <b>éeté</b> <i>we had cooked (already)</i> N: to-tii- <b>ká</b> -rúg- <b>eete</b>
<b>-Ø-</b>		to- <b>Ø</b> -rúg- <b>ire</b> <i>we cooked (today)</i>	to- <b>Ø</b> -rúg- <b>aga</b> <i>we cook</i> N: to-tí-rúg- <b>ágá</b>	to- <b>Ø</b> -rúg- <b>éete</b> <i>we have already cooked</i> N: to-tí-rúg- <b>éeté</b>
F <sub>1</sub> <b>-ree-</b>	to- <b>rée</b> -rúg- <b>á</b> <i>we will cook</i> N: to-tí- <b>rée</b> -rúg- <b>ǎ</b>		to- <b>reé</b> -rúg- <b>ágá</b> <i>we will cook regularly</i> N: to-tí- <b>rée</b> -rúg- <b>agǎ</b>	
F <sub>2</sub> <b>-kaa-</b>	to- <b>kaa</b> -rúg- <b>a</b> <i>we will cook</i> N: to-tí- <b>kaa</b> -rúg- <b>á</b>		to- <b>kaa</b> -rúg- <b>ágá</b> <i>we will cook regularly</i> N: to-tí- <b>kàa</b> -rúg- <b>ágá</b>	

E51 Gekoyo (Kikuyu, Gikuyu, [ɣekoyo])

1 General Some 5.5 million speakers in south central Kenya. Fairly well described. This sketch based on Barlow (1960), Bennett 1969, and discussions with Bennett, to whom our thanks are due. 7x2. Matrix tones are ‘morphophonemically based’ (Bennett): tones on this page are not indicated. As in some other East African languages (e.g. Chaga, Sukuma), underlying tones appear some surface syllables to their right. Gekoyo speakers may find the forms in the matrix odd, as they occur more often with initial *ne-* in real speech.

2 Structure *ne* - SM – NEG – TA - OM – root – EXT – FV – Post-FV

*ne*: used as a focus marker to accentuate the verb or VP. Doesn’t co-occur with NEG or REL.

SM: N, o, a (regular)/o (REL), to, mo, ma.

NEG: most negation marked here; primary *ti* in SBJs, main clauses; secondary *ta* in ‘subordinate clauses (REL...SIT, CND, etc’, Ba). *Ti* realized as *#nd* in some classes.

TA, in order: (1) *nge* CND (2) *ḡ* PRS (with -a) only in a few verbs and functions, but regularly with other FV; a P<sub>3</sub> (or ‘just past’) *raa* P<sub>2</sub> (or PRG) *ko* HOD; *ree* F<sub>2</sub>; *kaa* F<sub>3</sub>; *ka* Itive, NAR; *ke* NAR, SIT; *rɔɔ* strong wish (‘may..’, with IND); *ngɔ* meaning ?; minor formatives (3) *na* in past reference, often but not always negative (4) *ke* ‘connective’ (Barlow: 264).

OM: one OM allowed (DO or IO). If DO and IO co-occur, IO is at OM, DO as post-verbal pronoun.

FV: *e* SBJ; *ire* PFV pasts; *e:te* ANT pasts; *aga* IPFV; a neutral.

Post-FV: pl. IMP -i or -ni.

3 Tense A common view of the system (Barlow (210-1), Johnson (1980)) has three pasts (today, yesterday and other recent pasts, remote), present, and three futures (today, today and beyond, beyond today). A second analysis, the one seen in our first matrix, would see three pasts but only two futures, because the today future of the first analysis is in fact only a semantic extension of the *ko*-present, an extension we have seen widely in Bantu.

Our second matrix differs from the first in two ways. Most obviously, it recognises that since *ko* refers to today (past, present, or future), the system can be reduced to two pasts, two futures, and a wide, hodiernal present, represented by *ko*. But a glance at the first matrix shows that when the -a-, -raa-, and -ko- combine with the suffixes -ire, -e:te, and -aga they represent P<sub>3</sub>, P<sub>2</sub>, and P<sub>1</sub>, respectively, but when they combine with suffixal -a, their reference is shifted forward, so that they represent P<sub>1</sub>, present, and present/near future, respectively. Meaning and form are out of sync for these three markers, which implies they have collectively undergone a change of function. The fact that the majority reference is to P<sub>3</sub>, P<sub>2</sub>, and P<sub>1</sub>, and that Barlow (p. 130) says that use of -raa- as a present ‘seems to have become more prevalent in recent years’ suggests that it is probably the forms with suffixal -a which have shifted.

4 Aspect Clear morphological distinction in one-word verbs (matrix): PFV (-a/-ire), IPFV (-aga), ANT (-e:te). Many compounds (Barlow: 180-1, esp. Mugane 1996: 125-39), most with forms of ‘be’, are possible: they add three additional features (‘just past’, PRG/SIT, ANT).

5 Relative REL forms (other than 3s o- for absolutive a-) are structurally identical to absolutives but tonally different. Only subject RELS agree with the antecedent. When the

antecedent is definite, a demonstrative is used. Ando ma-rem-aga ti igota ‘People who cultivate are not idlers’, eta motumia ocio o-ko-rema harea ‘Call that woman who is cultivating there’.

6        SBJ (-ε)/IMP Sg rug-a ‘Cook’, nd-o-rug-ε ‘Do cook’, o-rug-ε ‘Please cook’, ke-rug-ε ‘Cook then’, o-ka-rug-ε ‘Go cook (after a time)’, NEG tiga ko-gwata or nd-o-ka-gwat-ε ‘Don’t hold’, pl rug-a-i/rug-ε-i/rug-a-ni/rug-ε-ni, etc. For SBJ, see Barlow: 29-30, 166-9.

## E62b Ki-vunjo (Chaga)

	Perfective	Habitual <b>-ke-</b>	Progressive <b>-i-</b>	Anterior <b>-ie</b>	Completive <b>-m-</b>	'Intend to' (Definite) <b>-ce-</b>	'Intend to' (Less Definite) <b>-nde-</b>
P <sub>2</sub> <b>-le-</b>	lǔ- <b>le</b> -káp-â <i>we hit</i>	lu- <b>we-ke</b> -kap-a <i>we used to hit, we hit regularly</i>	lǔ- <b>we-(i)</b> -káp-â <i>we were hitting</i>	lu- <b>we</b> -kap- <b>ie</b> <i>we had hit</i>	lǔ- <b>le-mí</b> -káp-â <i>we had already hit</i>	lu- <b>le-ce</b> -kap-a <i>we intended to hit</i>	lu- <b>le-nde</b> -kap-a <i>we intended to hit</i>
P <sub>1</sub> <b>-a-</b>	l- <b>ǒ</b> -káp-â (/lw- <b>a</b> -kapa/) <i>we hit</i>				l- <b>omí</b> -káp-â (/lw- <b>a-m</b> -káp-a/) <i>we have/had already hit</i>	l- <b>o-ce</b> -kap-a (/lw- <b>a-ce</b> -káp-a/) <i>we intended to hit</i>	l- <b>o-nde</b> -kap-a <i>we intended to hit</i>
		lǒ- <b>ke</b> -káp-â <i>we hit regularly</i>	lw- <b>ĩ</b> -káp-â <i>we are hitting, we will hit</i>	lu-kap- <b>ie</b> <i>we have hit</i>		lw- <b>ice</b> -kap-a <i>we will hit (right now)</i>	lw- <b>i-nde</b> -kap-a <i>we intended to hit</i>
F <sub>1</sub> <b>-(e)ci-</b>	lw- <b>eci</b> -káp-â <i>we will hit</i>		lǔ- <b>weci</b> -káp-â <i>we will be hitting</i>			lu- <b>ci-ce</b> -kap-a	lu- <b>ci-nde</b> -kap-a
F <sub>2</sub> <b>-e-</b>	lw- <b>e</b> -káp-a <i>we will hit</i>		lu- <b>we</b> -káp-a <i>we will be hitting</i>			lw- <b>e-ce</b> -kap-a	lw- <b>e-nde</b> -kap-a

## E62b Ki-vunjo (Chaga)

1     General     ‘Chaga’ is a unitary name for all E60 varieties except Gweno, misleading because ‘Chaga’ is less homogenous than, for example, the E50 varieties (Gikuyu, Kamba, etc), which each have a separate language name. Few varieties are adequately described. I have chosen Vunjo because it is the best and most recently treated. As there is no grammar of Vunjo, I deal briefly with certain topics (5–8) below based on other dialects. Over a million people speak ‘Chaga’. Main sources are Moshi (1994 and p.c.) and Nurse (2003), supplemented by Raum (1964, a trove of detailed data) for the neighboring dialect Old Moshi. 5x1.

2     Structure     FM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV – Post-FV # NEG<sub>1</sub>

F(ocus)M(arker): N’. Occurs mainly in positive main clauses, not NEG<sub>1</sub>s or RELs (Dalgish 1979, Moshi 1988).

SM: ngi; u; a; lu; m(u); wa. Behave identically, behaviour depends on tense/aspect.

NEG<sub>2</sub>: la.

TA: Contrary to other Bantu languages, Chaga allows up to four (five?) TA markers in a string. They occur in this rough order (also Moshi: 150–6, Raum: 117–43): (1) ka NAR, ‘when, if’ (‘SIT’?) (2) we in some PRGs, HABs, (?) ANTs (3) lé P<sub>2</sub>; a P<sub>1</sub>; ké HAB; i PRG (evidential?); keru PRG (inferential?) (4) (e)ci F<sub>1</sub>; e F<sub>2</sub>, m CMP (5) ce ‘intend to’ (definite); nde ‘intend to’ (indefinite).

OM: Up to four OMs are allowed (Moshi 1998).

FV: a NEU; e SBJ; ie ANT. Evidence for a fourth FV (i) is unclear. In some verbs there is a contrast such as ngi-m-bonié ‘I have seen him (yesterday)’ versus ngi-wony-i (mndu) ulalu ‘I see (a person) now’, some kind of stative. Unclear how many verbs this can occur with.

Post-FV: (e)ny IMP pl.

3     Tense     Two pasts (P<sub>1</sub> Hodiernal, P<sub>2</sub> Pre-Hodiernal) and two futures. The (Present) Progressive is also used for future reference. Progressive, F<sub>1</sub>, and F<sub>2</sub> refer to today and a bit beyond, tomorrow and a bit beyond, and remote future, respectively. Moshi also says F<sub>2</sub> refers to indefinite situations, F<sub>1</sub> and Progressive to definite. The ka-form can co-occur with several tenses.

4     Aspect     The PFV, PRG, HAB, ANT, and CMP (‘change of a pre-existing state or cessation of a process’ (Moshi 1994: 149)) categories are clear enough. The two ‘Intend to’ categories on the right are modal rather than aspectual, put in to illustrate possibilities. Several aspects and moods may combine, in lengthy strings. Chaga, including Vunjo, permits a unique view of grammaticalisation processes. The infinitive is (class 5) i-, so when the infinitive of a lexical verb combines with the final [a] of a preceding AUX, the result is [e]. It can be assumed that any TA consisting of (consonant +) [e] derives from a former AUX: thus me < mala ‘finish’ + i, we < wa ‘be’ + i, ce ‘come’, nde ‘go’, ke ‘be (-kala)’. Some are less transparent, e.g. le P<sub>2</sub>, e F<sub>2</sub>.

5     Negation     Two NEG<sub>1</sub>s, one (NEG<sub>2</sub>) used with SBJ, REL, and subordinate clauses, the other in main clauses, occurring clause- or sentence-final. Indications are that originally the main

clause negator had a different shape for each person/class, now only kept in Gweno and elderly people in central Kilimanjaro, other dialects have generalised one form (Vunjo -pfó).

6     Relatives     RELs in Chaga work in general as those in E50, which see.

7     Subjunctive   Forms with -e in 8 are SBJs. Raum suggests SBJ has usual functional range.

8     Imperative (Old Moshi)     Sg kapa ‘Hit’, u-kap-e/N-o-kap-e ‘ditto, politer’, m-kap-e ‘Hit him’, keve-kap-a ‘Keep on hitting’. NEG ku-la-kap-e, pl kap-e-ny.

E72 Ki-giryama

	Perfective	Imperfective -ki-	Habitual	Progressive -na-	Progressive -ni	Persistentive -chere + ku-	Anterior -dza(ku)-
P <sub>2</sub> -áá(ku)-	f-á-gul-a <i>we bought</i> N: k <sup>h</sup> a-fu-gul-ire	f-á-kala fu-ki-gul-a <i>or</i> weré fu-ki-gul-a <i>we were buying,</i> <i>used to buy</i>	f-á-kala fu-ka-gul-a <i>or</i> weré fu-ka-gul-a <i>we used to buy</i>	f-á-kala fu-na-gul-a <i>or</i> weré fu-na-gul-a <i>we were buying</i>		hw-á-kala hu-chere ku-gul-a <i>we were still</i> <i>buying</i>	weré fu-dza-gul-a <i>we had bought</i>
P <sub>1</sub> -dza(ku)-	fu-dza-gul-a <i>we bought</i> N: k <sup>h</sup> a-fu-dza-gul-a <i>we have never</i> <i>bought</i>	fu-dza-kalá fu-ki-gul-a		fu-dza-kalá fu-na-gul-a		?	?
	fu-gul-a <i>we buy</i> N: k <sup>h</sup> a-fu-gul-a <i>we do not buy,</i> <i>are not buying</i>	fu-ki-gúl-a <i>if we buy,</i> <i>we buying</i>	siswí ni-ku-gul-a <i>we run</i>	fu-na-cimbír-a <i>we are running</i> N: k <sup>h</sup> a-fu-gul-a	fu-ku-gul-a-ni <i>we are buying</i>	hu-chere ku-gul-a <i>we are still buying</i>	fu-dza-gul-a <i>we have bought</i> N: k <sup>h</sup> a-fu-dza-ngwe ku-gul-a <i>we have not</i> <i>bought yet</i>
Future -nda(ku)-	fu-nda-gul-a <i>we will buy</i> N: k <sup>h</sup> a-fu-nda-gul-a	fu-nda-kala fu-ki-gul-a	fu-nda-kala fu-na-gul-a	fu-nda-kala fu-na-gul-a			fu-nda-kala fu-dza-gul-a <i>we will have bought</i>

## E72b Ki-giryama

1 General Giryama is the largest and best known of the Miji Kenda ('Nine villages'). Giryama number ca. 500,000, the Miji Kenda in total just over a million. Miji Kenda communities stretch from the central Kenya coast south to northern Tanzania. The Giryama are at the northern end, between Malindi and just north of Mombasa along and just inland of the coast. Little dialect variation. The source is the Giryama Bible Translation and Literacy Project (1993a). It is almost complete but does not indicate tones for some forms. 5x1. Two basic tones, prominence on the penult. The Giryama system is very like that of Standard Swahili.

2 Structure Pre-SM – SM – TA – REL – OM – root – EXT – FV – Post-FV

Pre-SM: k<sup>h</sup>a (1s si); niku HAB; na HOR.

SM: ni; u; 3s á/w (before vowel)/yu (with nda); fu (1p excl), hu (1p incl); mu, má. Participants underlyingly L, all others underlyingly H.

TA: Ø Present, and as place filler with e/ire/i; á (underlying /a:/) P<sub>2</sub>; dza P<sub>1</sub>, ANT; nda FUT; na IPFV; ku PRG; nga CND; ri P<sub>2</sub> REL; dzi P<sub>1</sub> REL; ndi FUT REL; riho 'when'; si NEG<sub>2</sub>; ki SIT? ('if', P<sub>2</sub> NAR, etc); ka ('if', P<sub>1</sub> NAR, etc). Meanings of ka/ki not completely clear.

REL: Class marker plus -o.

OM: Only one allowed. If IO and DO co-occur, IO at OM and DO post-verbally as demonstrative.

FV: a NEU; e SBJ; ire in limited contexts (NEG/REL Past; in stative verbs); i in a few NEG<sub>s</sub>.

Post-FV: REL (class marker + o); ni IMP pl; ni 'what, why', dze 'how', hi 'where', t<sup>h</sup>o 'well'.

3 Tense Two pasts, one future. P<sub>2</sub> (á) refers to situations before today: P<sub>1</sub> (dza) refers to events on the day of speaking but also to earlier events, either if they have some relevance to the present or if they appear recent compared to the range of -a-. So -dza- is both P<sub>1</sub> and Anterior, and represented as such in the matrix. There is some evidence that -dza- (from 'come') has recently replaced -ire-. *Ire* still occurs in the P<sub>2</sub> negative and as the P<sub>1</sub> of 'come' itself (so fu-dz-ire, not \*fu-dza-dza) and in statives (so a-rere 'He is sleeping', the imbricated ire-form of -lala).

4 Aspect PFV, IPFV, 'ki', HAB, PRG, PER, ANT. PRG fu-or-a-ni 'we are (at) writing' represents the action as ongoing at the moment, while CNT fu-na-or-a 'we are writing' suggests an action which might be ongoing at the moment or over a longer period including the moment ('we are writing a book'). P<sub>2</sub> IPFV indicates an event ongoing around the time of reference; HAB an action which once took place but does not anymore; -ki- appears to characterise an event occurring at the same time as another event. *Ki* does not occur independently. As can be seen in the matrix, the AUX 'be' in P<sub>2</sub> can be either *kala* or *were*, a frozen -ire form of -wa 'be'. Beside the matrix forms there are also -ka- P<sub>1</sub> NAR, -ki- P<sub>2</sub> CNS, and -nga- 'conditional'.

5 Negation Primary k<sup>h</sup>a- versus secondary -si-, the latter occurring in RELs and SBJs. K<sup>h</sup>a-fu-dza-gula 'We have never bought' and k<sup>h</sup>a-fu-dza-ngwe ku-gula 'We haven't bought yet' may be in the wrong boxes in the matrix.

6 Relatives RELs are represented (a) in the verb (at'u ma-ri-o-guza 'People who sold...') (b) using amba-o (at'u amba-o ma(a)kudza 'People who came') (c) suffixally (mwalimu afundisha-ye 'teacher who teaches...') (d) suffixed to 'be' (at'u ma-ri-o manazaziga 'People who are playing').

7 Subjunctive and Imperative Henda 'do', ni-ph-a 'Give me', mu-ph-e 'Give him', u-ka-gul-e 'Go and buy', NEG u-si-hend-e. Pl henda-ni, mu-si-hend-e(ni). (na)-ma-ry-e keki 'Let them eat cake'.

## E74a Ki-dawida

	Perfective	Habitual	Progressive	Persistent	Anterior -á-
P <sub>4</sub> -(e)de-	d-edé-ghu-a <i>we bought</i>	d-edúé-ghu-a <i>we used to buy</i>	d-edé-ka di-ki-ghú-a <i>we were buying</i>		
P <sub>3</sub> -ere- ... -ieghe	d-ere-m-bòn-ieghe <i>we saw him</i> N: nde-d-ere-ghu-ieghe <i>we did not buy</i>				
P <sub>2</sub> -e- ... -ieghe	d-e-m-bòn-ieghe N: nde-d-e-ghu-ieghe				
P <sub>1</sub> -a- ... -ieghe	d-a-m-bòn-ie(ghe) N: nde-di-Ø-won-ieghe				
		d-áda-ghu-a d-a-ghu-ághá d-a-lálá-ghu-a <i>we buy regularly</i>	d-áwía-ghu-a d-áwe-ghu-a dí-a-ghu-a <i>we are buying</i> N: ndé-di-wié-ghu-a	d-adá-dua di-ki-ghú-a <i>we are still buying</i> N: d-adu-ágha di-se-ghu-e <i>we have not bought yet</i>	d-a-ghú-a <i>we have bought</i> N: ndé-di-Ø-ghú-ě
F <sub>1</sub> -Ø-	di-Ø-ghú(agh)-a <i>we will buy</i> N: nde-di-Ø-ghu-a				
F <sub>2</sub> -cha-	di-cha-ghu-a N: ndé-di-cha-ghu-a				

## E74a Ki-dawida

1 General In and around the Taita Hills in SE Kenya live the Dawida (E74a), Sag(h)ala (E74b), Kasighau (E74c). Though collectively referred to as ‘Taita’, Dawida and Saghala are best regarded as two languages: Kasighau is most similar to Dawida. Saghala and especially Dawida have considerable dialect variation. Over 200,000 speakers of Dawida, some 10,000 of Saghala, fewer of Kasighau. No modern comprehensive published grammatical account of Dawida (Maynard 1907; Philippson and Montlahuc 2003), though Nurse & Philippson have unpublished material. This sketch is based mainly on work with Ms. P.F. Mwafusi, from Mbololo, with input from G. Philippson (p.c.). Bracketed forms in 2 are some of the dialect variants. 5x2. Tones shown are surface and not directly indicative of underlying tones. All forms shown are attested in one source or other; there may be some inadvertent jumbling of forms from different dialects.

2 Structure NEG<sub>1</sub> – SM – TA – OM – root – EXT – FV

NEG<sub>1</sub>: nde (1s si). Maynard also has ne and na as regional variants, little heard today.

SM: ni; ku; u; di; m; wi. Tones do not distinguish participants from classes, depend on TA form.

TA: Ø Near Future (Present), co-occurs with e, agha, ieghe, ie; á ANT; all other -a- are likely L; ka (ke) POT, NAR; aka INCE; ki in second member of compounds, IPFV; se (sa, seke, sake) NEG<sub>2</sub>; e P<sub>2</sub>; ca (< ‘come’) FUT; áda HAB; ere P<sub>3</sub>; ede General Past; edue ‘used to’; awia (awe, a) PRG. Some of these are transparent reductions of AUXs.

OM: Only one seen but information may be incomplete.

FV: a NEU; e SBJ (see 4 also); agha IPFV, POT; ie (see 4); (i)eghe (< -ile+agh) Past PFV.

3 Tense All dialects appear to have (at least) three pasts, not all encoded identically. Although reference varies from dialect to dialect, P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> refer predominantly to today, yesterday and maybe a few days previously, and remote, respectively. P<sub>4</sub> is elusive: while it can refer to any past situation, both Maynard and Philippson and Montlahuc suggest it has restrictions – Maynard says it mainly occurs in questions, Philippson and Montlahuc say it does not occur in RELs or NEGs, and may relate to focus. It needs more investigation. Two futures, Near and Far: the null form also has present reference in NEG and REL.

4 Aspect, other categories, compounds Impossible to do justice to aspects here. In the ‘present’, PFV (used as F<sub>1</sub>), HAB, PRG, PER, ANT contrast. Data largely lacking for past and future contrasts. The morphology varies for several aspects – while much is done synthetically here, other dialects use compounds, often with ‘be’. Several TA markers derive from AUXs (-dua ‘continue’, -lala ‘sleep’, etc, see Maynard: 29–31). There are also mysteries. Thus the role of -ie: it occurs with Ø in RELs/NEGs but with -a- in declaratives with (only?) stative verbs (so lui lw-a-vimba ‘Hand has swollen’, lw-a-vimb-ie ‘is swollen’). So also the suffix in n-a-kun-d-e ‘I like’.

5 Negation Primary (nde-) versus secondary (see 2), occurring in REL, SBJ, IMP, and subordinate clauses. Post-verbal strengtheners (from Maynard) in si-ca-ghenda mbai ‘I definitely won’t go’, si-m-bonie anduangi ‘I didn’t see him’, ku-se-ghu-e le ‘If you don’t buy’.

6 Relatives Inadequate information on RELs. Some RELs and absolutes (e.g. -ie and -agha forms) differ tonally, others do not (e.g. -ieghe forms). Some TA formatives also differ (so Ø/ié only occurs in RELs/NEGs). Demonstratives are often but not necessarily present.

7 Subjunctive (-e) and Imperative (From Maynard, so toneless). 'Do' bonya (sg), bony-enyi (pl), wi-lek-e 'Leave them', mu-m-bang-e 'Call ye him', mu-chi-duk-e 'Carry ye him', bony-ama 'Do it (peremptory)', ku-che ku-di-kir-ege 'You should come and save us (continuously)'. NEG u-se-bony-e 'He shouldn't do', leka bora 'Don't sing', ku-kota mbai 'Don't dig' (ku = INF), ku-se-bony-e (ku = 2s) or ku-se-ke-bony-a 'Don't do' (ku = INF), pl m-se-bony-e.

E253 E-chi-ruri

	Perfective	Habitual -ga	Progressive -Ø-	Persistentive -caa-	Anterior (-ga ...) -ile
P <sub>3</sub> -a-	ci-a-gul-íle <i>we bought</i> N: ci-ta-a-gul-íle	ci-a-gul-á-gâ <i>we used to buy</i> N: ci-a-ga ci-ta-kú-gul-a	ci-a-lí-ga cí-Ø-gul-a <i>we were buying</i> N <sub>1</sub> : ci-a-lí-ga ci-ta-kú-gul-a N <sub>2</sub> : ci-ta-lí-ga cí-gul-a	ci-a-lí-ga cí-gendelela o-ku-gul-a <i>we were still buying</i> N <sub>1</sub> : ci-a-li-ga ci-ta-kú-gendelela o-ku-gul-a N <sub>2</sub> : ci-ta-lí-ga cí-gendelela o-kú-gul-a	ci-a-lí-ga cí-a-gúl-ile <i>we had already bought</i> N <sub>1</sub> : ci-a-lí-ga cí-cá-li (o)kú-gul-a N <sub>2</sub> : ci-ta-lí-ga cí-a-gúl-ile
P <sub>2</sub> -a-	ci-ama-a-gúl-a <i>we bought</i> N: ci-ta-ama-a-gúl-a ci-Ø-gul-írê N: ci-ta-gúl-írê	e-ci-Ø-gúl-á-gâ <i>we buy regularly</i> N: ci-ta-kú-gul-a-ga	ci-a-lí-ga cí-Ø-gul-a <i>we were buying</i> N: ci-a-li-ga ci-ta-kú-gul-a	ci-a-li-ga cí-caá-gul-a <i>we were still buying</i> N: ci-a-lí-ga cí-caá-li (o)ku-gul-a	ci-a-li-ga cí-gúl-ile <i>we had already bought</i> N: ci-a-lí-ga cí-caá-li-ga (o)kú-gul-a
P <sub>1</sub> -a-	ci-a-gul-a <i>we bought</i> N: ci-ta-a-gúl-a		ci-a-li cí-Ø-gul-a <i>we were buying</i> N: ci-a-li ci-ta-kú-gul-a	ci-á-li cí-caa-gúl-a <i>we were still buying</i> N: ci-á-li ci-ta-kú-gul-a	ci-a-caa-gúl-ile <i>we had already bought</i> N: ci-á-li cí-ca-li-ku-gul-a
-Ø-			e-ci-Ø-gúl-â <i>we are buying, buy, will buy</i> N: ci-ta-kú-gul-a	ci-caa-gul-a <i>we are still buying</i> N: ci-caa-li ku-gul-a <i>we have not bought yet</i>	ci-a-gul-ile e-ci-mál-a o-kú-gul-a <i>we have already bought</i> N <sub>1</sub> : ci-caa-li ku-gul-a N <sub>2</sub> : ci-ca-li ku-mal-a o-ku-gul-a
F <sub>1</sub>	e-ci-Ø-íjo-(ku-)gul-a <i>we will buy (certainly)</i> N: ci-ta-kú-ja-ku-gul-a ci-laa-gul-e <i>(not certain)</i>		e-cí-Ø-ba cí-Ø-gul-a <i>we will be buying</i> N: e-cí-Ø-ba ci-ta-kú-gul-a	e-cí-Ø-ba cí-caá-gul-a <i>we will still be buying</i> N: e-cí-Ø-ba ci-ta-kú-gul-a	e-cí-Ø-ba cí-a-gúl-ile <i>we will have already bought</i> N: e-cí-Ø-ba cí-ca-li ku-gul-a
F <sub>2</sub> -aka- ... -e	ci-aka-gul-e	ci-aka-gul-e-ga <i>we will buy regularly</i>			
F <sub>3</sub> -li-	ci-li-gúl-â <i>we will buy</i> N: ci-ta-li-gúl-a	ci-li-gul-á-gâ <i>we will buy regularly</i> N: ci-ta-li-gúl-a-ga	ci-li-ba cí-Ø-gul-a <i>we will be buying</i> N <sub>1</sub> : ci-li-ba ci-ta-kú-gul-a N <sub>2</sub> : ci-ta-lí-ba cí-gul-a	ci-li-ba cí-géndeléléla o-kú-gul-a <i>we will still be buying</i> N: ci-li-ba ci-takú-gendelela o-ku-gul-a	ci-li-ba cá-mál-ile ku-gul-a <i>we will have already bought</i> N: ci-li-ba cí-ca-li kú-mal-a o-ku-gul-a

## E253 E-chi-ruri

1 General E25 varieties ('Suguti') are separate from E21-24 and less well described. All information from Massamba (1982, and papers written as a 1970's undergraduate). SE Lake Victoria. Treated as a variety of Kwaya by Gordon (2005), total population 102,000. 5x2.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – HAB – Post-FV

Pre-SM: The General Present has a lowered copy of the SM vowel here, see next.

SM: (e)ni; (o)u; 3s kaa General Present, otherwise a; (e)ci; (o)mu; (a)βa.

NEG: ta.

TA: Ø Present, and all suffixes; a P<sub>1</sub>, P<sub>3</sub>; ama-a one P<sub>2</sub>; laa F<sub>1</sub> (uncertain); li F<sub>3</sub>, also (different) in 'not yet'; ku in some NEG; Vjoku F<sub>1</sub> (certain, from 'come to'); cáá PER; cááliku 'not yet' (= 'be still at'); ká POT ('if'); aká F<sub>2</sub>, also in past POT.

OM: Up to two exemplified.

FV: a NEU; e SBJ, F<sub>1</sub>, F<sub>2</sub>; ire P<sub>3</sub>, P<sub>3</sub>, ANT; i in REL Past.

HAB: gá. Massamba treats this as an add-on to the verb. Post-FV: ki 'how', and maybe others possible?

3 Tense Three pasts and futures: 'today', 'up to a few days beyond today', and 'remote'. Massamba (1982) gives cigur-Ïê and c-ama-a-gúla as equivalent for P<sub>2</sub>. Certainly today's future, and maybe the others, contrast +/- certainty. The null-present has wide reference: 'I verb, am verbing, will verb, up to some days into the future'.

4 Aspect and other categories PFV, HAB, PRG, PER, ANT. Morphologically, these are almost classically Bantu: PFV is unmarked, HAB involves -ga, ANT involves -ile, PER is based on PRG plus -cáá-, and non-present forms of PRG prepose a tense-marked form of 'be' to the present form of the lexical verb. The P<sub>1</sub> ANT preposes a particle inflected for SM: 'I have already bought' /ni-a ni-a-gul-ile/ [naa naagulile], 1p /ci-a ci-a-gul-ile/ [caa caagulile], etc. The null present involves a prefix at Pre-SM: e-ni-Ø-gúla 'I buy', o-mu-Ø-gúla 'ye buy', etc (3s has kaa-).

Several pairs/sets of items are distinguished tonally (the details are not always known). Thus ci-li-gülá 'We will buy (F<sub>3</sub>)', but different when it renders 'If we buy (F<sub>3</sub>)'. Although structurally identical, the P<sub>3</sub> PFV differs from the Present ANT and from two other P<sub>3</sub> forms, 'When we bought' and 'We would have bought'. The F<sub>2</sub> c-aka-gul-e 'We will buy' differs tonally from the same form used as a CND 'If we buy'.

English 'When...future' is rendered by frozen forms of the future of 'be', followed by inflected form of the main verb, thus: a-laa-βa c-a-gula 'When we buy (F<sub>1</sub>)', lit. 'future we have bought', a-laa-βa c-aka-gul-e 'ditto, F<sub>2</sub>', a-li-βa c-a-gula 'ditto, F<sub>3</sub>'.

5 Negation The main NEG marker is -ta- and all indicative forms are negated by placing -ta- after the SM. The IMP NEG involves an auxiliary 'leave' plus INF: siga kú-téma 'Don't cut'. The form that translates as 'not yet' is in fact based on 'be still at'. Negative relatives?

6 Relatives The only REL in Massamba (1982) is: abayara a-bá-teek-í ‘The girls who cooked’.

7 Subjunctive (-e) and Imperative Sg ‘Buy’ gula, u-gǔl-ê, ‘Buy it’ gu-gǔl-ê, NEG sg siga kú-gula, pl musige kúgula.

F10 Sí-tóngwé / Sí-bhendé

	Perfective	Habitual <b>-ko:-</b>	Progressive <b>-(li)ku-</b>	Persistentive <b>-si-</b>	‘Emphatic’ <b>-ang-</b>	? <sub>1</sub> <b>-na-</b>	? <sub>2</sub> <b>-li-</b>	Anterior <b>-ile</b>
P <sub>2</sub> <b>(-a- ...) -ká-</b>	tw- <b>a-ka</b> -ghúl-a <i>we bought</i>	tu- <b>ko:-ka</b> -ghul-a <i>we used to buy</i>	tu- <b>ká</b> -bé:lé tú- <b>likú</b> -ghúl-á <i>we were buying</i>		tw- <b>a-ka</b> -ghul- <b>ǎng</b> -a	tw- <b>a-na-ká</b> -ghúl-á	tw- <b>a-li-ká</b> -ghúl-á	tú- <b>ká</b> -ghus- <b>ilé</b> <i>we have bought</i>
P <sub>1</sub> <b>-a-</b>	tw- <b>â</b> -ghul-a		tu- <b>Ø</b> -bé:lé tú- <b>likú</b> -ghúl-á	tú- <b>sy-a-likú</b> -ghúl-á <i>we were still buying</i> (?)	tw- <b>a-ghul-âng</b> -a	tw- <b>a-na</b> -ghúl-á	tw- <b>a-li</b> -ghúl-á	tú- <b>Ø</b> -ghus- <b>ilé</b> <i>we (have) bought</i>
		tu- <b>ko:-</b> ghúl-á <i>we buy</i>	tu- <b>(li)kú</b> -ghúl-a <i>we are buying</i>	tú- <b>si</b> -ghúl-á <i>we still buy</i>  tú- <b>sy-a:-ly-ǎ</b> <i>we are still eating</i>	tú- <b>la-kú</b> -ghúl-a <i>we are buying right now</i>			
F <sub>1</sub> <b>-lo:-</b>	tu- <b>lo:-</b> ghúl-á <i>we will buy</i>		tu- <b>ló:-</b> βa tú- <b>likú</b> -ghúl-a					
F <sub>2</sub> <b>-lo:-ká-</b>	tu- <b>lo:-ká</b> -ghúl-á		tu- <b>lo:-ká</b> -βa tú- <b>likú</b> -ghúl-á					

## F10 Sí-bhendé, Sí-tóngwé

1 General 40,000–45,000 speakers of the two F10 languages (Tongwe F11, Bende F12) in W Tanzania, on the eastern side of Lake Tanganyika. Very similar, they are treated here as one. All data from Ms. Yuko Abe, part of her doctoral thesis: I am very grateful to her. Some of the statements in 2 are directly from her, indicated by use of ‘...’. Until her work, nothing linguistic was known about F10. All tones shown are surface and tones are often not given in 2, as their underlying value is not known yet. Tones are also not known for forms without tones in the matrix and in 4 and 7, below. 5x2.

2 Structure Pre-SM – SM – NEG – TAM – OM – root – EXT – ang – FV – Post-FV

Pre-SM: na ‘Associative’, in a few subordinate NEG; ke may occur in IMP/SBJ, a reduced form of leka ‘let’; te NEG.

SM: 1s N, nsi; 2s u, ghu; 3s á, gha; tu; mu; bhá. 2/3s ghw/gha /\_V, u/a /\_C. 1s nsi in NEG. Participants L, rest H.

NEG: si.

TAM: (1) a (L) P<sub>1</sub>; á NAR. When /a/ appears it is always first, then (2) one of: na ‘accomplishment’; li ‘historical fact’; (li)kú General Present; lakú PRG; lo: FUT; ko: HAB; syá /si-a/ and si (L) PER; ná(:) ‘Irrealis’; na:-na NEG ‘experience’ (3) when /ká/ ‘far (past, future)’ appears it is always last and predominantly H. Ø only appears with -ile and -e.

OM: Certainly one, maybe two.

ang: ‘emphatic’, occurs with INDs and IMP-SBJs. Becomes [eng] before -e.

FV: a NEU; e SBJ, 2p IMP; i in ‘Associative SBJ’; ile ANT (becomes [e] after stems with more than three syllables).

Post-FV: ‘participant’; ‘clause type’; locative (ho, ko, mo).

3 Tense Two pasts and futures, both Hodiernal versus Beyond Hodiernal. The latter is formed by adding -ká- to the former. Also two narratives, tonally distinct from PFV past: tw-á-ghula, tw-á-ka-ghula.

4 Aspect and other categories Shape and meaning of some aspectual categories is clear: PFV, PRG, HAB, ANT. It is not clear how the three PER’s differ and whether there are more of them. As in other languages, at least some PER forms are built on PRGs. The shape and place in the system of the three other categories is clear enough, but not their meaning: -(a)na- ?<sub>1</sub> ‘Accomplishment’, -ang- ‘Emphasis’, -(a)li- ?<sub>2</sub> ‘(Past) Historical Fact’. Some aspects can combine, so ‘Emphasis’ and ‘Historical Fact’ co-occur in tw-ali-ghul-anga and tw-ali-ka-ghul-anga. For other cases of ‘Emphasis’, see 7.

Also tu-ná-ghúl-é ‘Irrealis’, and tú-na-ghula ‘We might buy’.

Several compounds encode ‘Cohortative, Conditional, Resultative’.

5 Negation Primary (te-) versus secondary (-si-) NEG. Secondary NEG occurs in SBJs and NEG Irrealis, with primary NEG everywhere else. For reasons of space, NEG are not shown in the matrix, but with few exceptions (e.g. PER’s), any matrix form may be negated with te- at Pre-SM. RELs?

6 Relatives Bhá:ntú bha:ghula mákóndé ‘People who bought bananas (today)’, mákóndé gho-bha-ghúsilé bhá:ntú ‘Bananas which-they-bought people’. Abe thinks absolutive and subject REL may be tonally identical (?).

7 Subjunctive (-e) and Imperative ‘Buy’ ghúlă, pl ghúlě:, (ke)tu-ghúl-e ‘Let’s buy’, tu-ka-ghúl-e ‘Let’s go buy’, tu-ghul-éngé ‘Let’s buy (emphatic)’, tu-ka-ghul-eng-e, NEG sg nósighúl-í /na-u-si-ghul-i/, also ghw-e-(ná-)ghúl-e ‘Don’t buy’, tú-si-ghúl-í ‘Let’s not buy’.

F21 Ke-sukuma (Kĩrya dialect) – Part 1

	(+) Direct Evidence	(-) Direct Evidence	Imperfective <sub>1</sub> (?) (‘be’ +) - <b>gu-</b> ... - <b>aga</b>	Imperfective <sub>2</sub> (?) (‘be’ +) - <b>gu-</b> ... - <b>aga</b>	Progressive (‘be’ +) - <b>lu-</b>	Persistentive <b>-taali</b>	Anterior (‘be’ +) - <b>ile</b>
P <sub>4</sub> -aa-	d- <b>áá</b> -gól- <b>ă</b> <i>we bought</i> N: du-da-gól-ilě	du-ga-gól-a <i>we bought</i> N: <i>as left</i>	d- <b>áá</b> - <b>βiiz</b> - <b>ágá</b> du- <b>gu</b> -gól- <b>aga</b> <i>we were buying,</i> <i>used to buy</i> N: d- <b>áá</b> - <b>βiiz</b> - <b>ágá</b> du-dóó-gól- <b>aga</b>	d- <b>áá</b> -gól- <b>agă</b> <i>we were buying,</i> <i>used to buy</i> N: d- <b>áá</b> - <b>líí</b> du-daa-gül- <b>agă</b>	d- <b>áá</b> - <b>βiiz</b> - <b>ágá</b> dó- <b>líí</b> -gól-a <i>we were buying</i> <i>(when ...)</i> N: d- <b>áá</b> - <b>βiiz</b> - <b>ágá</b> du-dóó-gól-aga	d- <b>áá</b> - <b>lí</b> dǔ- <b>taali</b> dó- <b>líí</b> -gól-a <i>we were still buying</i> N: d- <b>áá</b> - <b>lí</b> dǔ- <b>taali</b> du-dóó-gól-aga	d- <b>áá</b> - <b>lí</b> du-gól- <b>ilě</b> <i>we had bought</i> <i>(and still had)</i> N: d- <b>áá</b> - <b>lí</b> du-daa-gól- <b>ilě</b>
P <sub>3</sub> -á- ... -ile	d-aa-gól- <b>ilě</b> <i>we bought</i> N: <i>as above</i>	<i>as above</i> N: <i>as above</i>	d-aa-lóó- <b>βiiz</b> - <b>ága</b> du- <b>gu</b> -gól- <b>aga</b> N: d-aa-lóó- <b>βiiz</b> - <b>ága</b> du-dóó-gól- <b>aga</b>	d-aa- <b>líí</b> dó-gá-gól- <b>aga</b> <i>we were buying</i> N: d-aa- <b>líí</b> du-dóó-gól- <b>aga</b>	d-aa- <b>βiiz</b> - <b>ile</b> du- <b>lu</b> -gól-a <i>we were buying</i> <i>(when ...)</i> N: d-aa- <b>βiiz</b> - <b>ile</b> du-dóó-gól-aga	d- <b>áá</b> - <b>lí</b> dǔ- <b>taali</b> dó- <b>líí</b> -gól-a <i>we were still buying</i> N: d- <b>áá</b> - <b>lí</b> dǔ- <b>taali</b> du-dóó-gól-aga	<i>as above</i> N: <i>as above</i>
P <sub>2</sub> -á- ... -aga	d-aa-gól- <b>agă</b> <i>we bought</i> N: <i>as above</i>	d-aa- <b>lí</b> d- <b>áá</b> -gól- <b>agă</b> <i>we (had) bought</i> N: d-aa- <b>lí</b> du-da-gól-ilě	<i>as above</i> N: <i>as above</i>	<i>as above</i> N: <i>as above</i>	d-aa- <b>βiiz</b> - <b>ága</b> du- <b>lu</b> -gól-a N: d-aa- <b>βiiz</b> - <b>ága</b> du-dóó-gól-aga	<i>as above</i> N: <i>as above</i>	d-aa- <b>lí</b> dó-gól- <b>ilě</b> <i>we had/have</i> <i>bought</i> <i>(and still have)</i> N: d-aa- <b>lí</b> du-daa-gól- <b>ilě</b>
P <sub>1</sub> -á-	d-aa-gól- <b>ă</b> N: <i>as above</i>	d-aa- <b>lí</b> d- <b>áá</b> -gól- <b>ă</b> <i>we (had) just</i> <i>bought</i> N: <i>as above</i>	d-aa- <b>lí</b> d- <b>áá</b> - <b>βiiz</b> -a du- <b>gu</b> -gól- <b>aga</b> N: <i>as left</i>	<i>as above</i> N: <i>as above</i>	d-aa- <b>lí</b> d- <b>áá</b> - <b>βiiz</b> -a du- <b>lu</b> -gól-a <i>we were just buying</i> <i>(when ...)</i> N: d-aa- <b>lí</b> d- <b>áá</b> - <b>βiiz</b> -a du-dóó-gól-aga	<i>as above</i> N: <i>as above</i>	<i>as above</i> N: <i>as above</i>

F21 Ke-sukuma (Kĩrya dialect) – Part 2

	(+) Direct Evidence	(-) Direct Evidence	Imperfective <sub>1</sub> (?) (‘be’ +) - <b>gu</b> - ... - <b>aga</b>	Imperfective <sub>2</sub> (?) (‘be’ +) - <b>gu</b> - ... - <b>aga</b>	Progressive (‘be’ +) - <b>lu</b> -	Persistentive - <b>taali</b>	Anterior (‘be’ +) - <b>ile</b>
			<b>du-gu-gól-aga</b> <i>we are buying and have been for a shorter time</i> N: <b>du-dóó-gul-aga</b>	<b>du-ga-gól-aga</b> <i>we buy, are buying and have been for a long time</i> N: <b>du-da-gól-aga</b>	<b>du-lu-gól-a</b> <i>we are buying (right now)</i> N: <b>du-dóó-gul-aga</b>	<b>du-taali dó-lli-gól-a</b> <i>we are still buying</i> N: <b>du-taali du-dóó-gul-aga</b>	<b>du-gól-ile</b> <i>we have bought</i> N: <b>du-daa-gól-ile</b>
F <sub>1</sub> -e	<b>ize du-gól-e</b> <i>we will buy</i> N: <b>du-dóó-gul-aga</b> (as “Present” Progressive)	<i>as left</i> N: <i>as left</i>	<b>du-βiiz-e</b> <b>du-gu-gól-aga</b> <i>we will be buying</i> N: <b>du-βiiz-e du-dóó-gul-aga</b>	<b>ize dó-yóó-gul-a</b> <i>we will be buying</i> N: <b>du-dóó-yóó-gul-a</b>	<b>du-βiiz-e</b> <b>du-lu-gól-a</b> <i>we will be buying</i> N: <b>du-βiiz-e du-dóó-gul-aga</b>	<b>du-βiiz-e dö-taali dó-lli-gól-a</b> <i>we will still be buying</i> N: <b>du-βiiz-e dö-taali du-dóó-gul-aga</b>	<b>du-βiiz-e du-gól-ile</b> <i>we will have bought</i> N: <b>du-βiiz-e du-daa-gól-ile</b>
F <sub>2</sub> -gu-	<b>du-gu-gól-a</b> <i>we will buy</i> N: <b>du-dó-gul-a</b>	<i>as left</i> N: <i>as left</i>	<b>du-gũ-βiiz-á</b> <b>du-gu-gól-aga</b> <i>we will be buying</i> N: <b>du-gũ-βiiz-á du-dóó-gul-aga</b>	<b>du-gũ-yóó-gól-a</b> <i>we will be buying</i> N: <i>as left</i>	<b>du-gũ-βiiz-á</b> <b>du-lu-gól-a</b> <i>we will be buying</i> N: <b>du-gũ-βiiz-á du-dóó-gul-aga</b>	<b>du-gũ-βiiz-á dö-taali dó-lli-gól-a</b> <i>we will still be buying</i> N: <b>du-gũ-βiiz-á dö-taali du-dóó-gul-aga</b>	<b>du-gũ-βiiz-á du-gól-ile</b> <i>we will have bought</i> N: <b>du-gũ-βiiz-á du-daa-gól-ile</b>
F <sub>3</sub> -láá-	<b>dó-láá-gul-a</b> <i>we will buy</i> N: <b>dó-dá-laa-gul-a</b>	<i>as left</i> N: <i>as left</i>	<b>dó-láá-βiiz-á</b> <b>du-gu-gól-aga</b> <i>we will be buying</i> N: <b>dó-láá-βiiz-á du-dóó-gul-aga</b>	<b>dó-láá-yóó-gul-a</b> <i>we will be buying</i> N: <b>dó-dá-laa-yóó-gul-a</b>	<b>dó-láá-βiiz-á</b> <b>du-lu-gól-a</b> <i>we will be buying</i> N: <b>dó-láá-βiiz-á du-dóó-gul-aga</b>	<b>dó-láá-βiiz-á dö-taali dó-lli-gól-a</b> <i>we will still be buying</i> N: <b>dó-láá-βiiz-á dö-taali du-dóó-gul-aga</b>	<b>dó-láá-βiiz-á du-gól-ile</b> <i>we will have bought</i> N: <b>dó-láá-βiiz-á du-daa-gól-ile</b>

## F21 Ke-sukuma (Kiiya dialect)

1 General In WC Tanzania 5 million speak Sukuma and nearly 1 million Nyamwezi, an adjacent and similar variety. Reasonable verbal data for both. Other F20 languages are poorly served. I treat Kiiya, the easternmost dialect. Data from B.F.Y.P. Masele, supplemented by Batibo (1985), Maganga and Schadeberg (1992 (different dialects)). All stops in pre-stem verbal (and nominal) morphemes in Kiiya are voiced, e.g. *tʊ* 1p, *ka* Past, *kʊ* INF occur here as *du*, *ga*, *gʊ*. An exception is *taali* PER. F21-22 have complicated tone systems (Schadeberg, various). Tones here are underlying, in matrix are surface. 7x2, represented as in Maganga and Schadeberg.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – Itive – OM – root – EXT – FV – Post-FV  
Pre-SM: RELs (a, I, u); ní CND; (Nyamwezi also has na Sequential Past).  
SM: ná 1s; ú 2s; a/\_C and u/\_V 3s; tó 1p; mú 2p; bá 3p L for classes 1, 4, 9, H for others.  
NEG<sub>2</sub>: [da, daa, duu] probably all from /-dá-/ plus following vowel. Status of [di] not certain.  
TA: aa P<sub>4</sub>; á P<sub>1,2,3</sub>; ga Far Past (no evidence); ga NAR; gʊ F<sub>2</sub>, IPFV; láá F<sub>3</sub>; Iii PRG; yóu Future, IPFV; taali PER (an auxiliary); u NAR.  
Itive: ga ‘go to’, tonally different from other -ga- at TA. Occurs with most tenses.  
OM: I am not completely sure but apparently only one OM is allowed.  
FV: a NEU; ag(a, e) P<sub>2</sub>, IPFV/IMP; (e)é SBJ/F<sub>1</sub>; íle ANT, P<sub>3</sub>; i 1/2p IMP ‘plural addressee’.  
PostFV: ho, ko, mo LOCs; shi intensifier. Partial (not productive) and complete (productive) stem reduplication, expressing frequency or repetition.

3 Tense Most Sukuma and Nyamwezi varieties have four pasts and three futures. P<sub>1</sub> refers to events that have just taken place and are fresh in the memory, so recently, to paraphrase B. Masele, that if it referred to buying, the coins would still be jingling in your pocket. P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub> refers to events of today; of yesterday and some time previously; farther in the past, respectively. F<sub>1</sub>, F<sub>2</sub>, F<sub>3</sub> refer, respectively, to events just about to happen; of today or tomorrow; beyond that – events of lesser probability. F<sub>1</sub> is based on the Subjunctive (as is the Far Future in Nyamwezi), the two are tonally and segmentally identical. Also two Narratives, one in -u-, the other, less common, in -ga-.

4 Aspect, (Evidential, Inferential) Interaction of Kiiya tense and aspect is discussed in 4.15, so aspects are just listed here: PFV, IPFVs (two), PRG, PER, ANT. Two remote Past PFVs: d-áá-gulá, du-ga-gula ‘We bought’. Masele explains the former as an Evidential – knowledge of the buying is based on personal experience, such a form could be used in court, whereas the latter is an Inferential – speaker not present but infers the buying from what he has heard.

5 Negation The data shows four negative formatives, [da], [daa], [duu], [di]. The first three all derive from /dá/, by predictable assimilation and lengthening. These occur in nearly all negative contexts: indicative, subjunctive, relative, and imperative. The [taa] in the PER [taali] is probably related to this. [di] is a minority form, occurring in the data only in two contexts, the common negative for two futures, and for P<sub>1</sub>. It looks like a leftover of earlier morphology.

6      Relatives      Subject RELs involve a preprefix: a-ba:n<sup>h</sup>ɔ bagi:za ‘People who came’ vs ba:n<sup>h</sup>ɔ bagi:za ‘People came’. Object RELs involve a demonstrative, the verb does not agree with the antecedent: hw’áámapuúmba áyo w-áa-boombeká ‘This is the bran you soaked’ (Schadeberg: 142).

7      SBJ/IMP      A-forms are indicative, e-forms are SBJ. ‘Buy’ sg: gul-ag-á, ka-gul-ag-é ‘Go buy’, ɔ-(ka-)gul-(ag)e (polite), shi-gul-ag-é ‘Buy it’ pl: gul-ag-í, mu-gul-e, du-gul-(ag)e ‘Let’s buy’. Gul-á is marked: if several gul-ag-á produce no reaction, gulá may be used.

F32 Ki-nyaturu

Relative	Tense	Aspect		Perfective	Habitual -(q)u- ... -aa	Anterior -Ø- ... -ie
ní	FP náa	Persistive kír	P <sub>3</sub> -aa- ... -ié	n-á-hang-ie <i>I got</i> N: <i>as below?</i>		
	NP ája		P <sub>2</sub> -á- ... -aa	n-a-háng-aa <i>I got</i> N: n-tí-na-yi-ghór-aa <i>I did not buy it</i>		
	NF naa	Consecutive qaá	P <sub>1</sub> -á-	w-a-rím-a <i>he hoed</i> N: n-tí-na-mi-ghor-a <i>I did not buy it</i>		
				u-qu-hang-a <i>she (is) getting, she will get</i> N: a-tí-u-hang-a	u-qu-hang-aa <i>she gets (regularly)</i> N: a-tí-u-hang-aa	u-Ø-hang-ie <i>he has got</i> N: a-ti-Ø-hang-ie
	FF ikwí		Future -á(q)u-	w-aŭ-hang-a <i>she will get</i>		

## F32 Ki-nyaturu [qenyatoo] (also Kirimi, [qeremi])

1 General F30 languages fall into two groups, F31-32 and F33-34. All are poorly described, Olson (1964) being the only available grammar. For this reason, and because it has a unique verbal feature (Nurse 2000b), F32 is chosen over F31. Main source is Olson, supplemented by Schadeberg (1978, 1980), Yukawa (1989; also on F31), Tucker and Bryan (1957; also on F31), Nurse fieldnotes (also on F31). 556,000 speak Nyaturu, in NC Tanzania. Three main dialect communities, Olson describes Qirwana. 7x2, /i, ɪ, e, a, o, u, u/. <f, t, q> represent non-prenasalised voiceless bilabial fricative, voiceless alveolar tap, voiced velar fricative, respectively. Underlying H tones are realised one syllable to their right.

## 2 Structure

(Pre-verbal complex –) SM – NEG – TM – OM – root – EXT – FV – Post-FV

The pre-verbal complex is described below, in 9.

SM: n(e); u; 3s a- REL, SBJ, otherwise u; qu; mu; 3p vi. Classes 1, 4, 9 are L, others H.

NEG: Two negatives, tí (unshifting H), in most contexts, and ta. See 5.

TM: a P<sub>3</sub>; á P<sub>2</sub>/P<sub>1</sub>; (q)u Present; a(q)u Future (this a is toneless and takes on the tone of the preceding SM); qa Past Narrative; na in some NEGs, after tí.

FV: a NEU; á (unshifting H, in some IMPs); aa HAB/P<sub>2</sub>; íe ANT (also a...-íe P<sub>3</sub>) (several allomorphs); e SBJ (also é with unshifting H in some ‘Hortatives’/SBJs; ée in NEG SBJs); i SBJ pl.

Post-FV: fe ‘where?’, na Interrogative, ki ‘what sort?’.

3 Tense The three pasts refer to ‘Immediate Past, today/yesterday, before yesterday’, respectively. The Present ‘can indicate (indefinite) future, while the (single) future indicates impending action with a sense of urgency’. The Immediate Past (P<sub>1</sub>) ‘may refer to the present or future as well. When it refers to the present it means the action has just been completed at the time of reference. When referring to the future it means the action will just have been completed at the future time indicated.’

There is also a Past NAR -qa-.

4 Aspect PFV, HAB, PER, ANT.

5 Negation SBJ/REL -ta-, versus -tí- in all other contexts.

6 Relatives Relatives, subject or object, involve ní-: muntu ní-wafenja ‘Person who-wants’, muntu ní-u-qómufenja ‘Person whom-you-want’.

7 Subjunctive High-toned SM and -é in the positive, -éé in the negative. See 8.

8 Imperative Direct imperatives consist of root and final -a, polite imperatives use the subjunctive (plural -i). For tonal detail in all these categories, see Schadeberg (1980: 300). La ‘Eat’ li ‘Eat (pl)’, n-tegheeya ‘Hear me’, mo-yanj-e ‘Love him’, o-háng-e ‘You should get’,

a-háng-e ‘He should get’, ká n-énde ‘I’ll be going at once’, kw-énde ‘Let’s go’ o-ta-hang-ee ‘Don’t go’.

9 The pre-verbal complex As indicated in 2, the regular structure, so familiar from other Bantu languages, may be and is often preceded by another structure, the pre-verbal complex, having the shape: ní – tense – (SM) – aspect. Olson writes the first two components as one word, the second two as another word, and the main verb as a third word. The basis for this is unstated. Yukawa writes ní-, tense, and aspect as separate items.

Broadly, ní- is a relative marker (see 6), translating not only as ‘who/which/that’ but also ‘when/while’ etc.

In Olson’s dialect the tense markers are four: Far Past (‘before yesterday’, FP) -náa-, Near Past (‘today, yesterday’, NP) -ája-, Near Future (‘today, tomorrow’, NF) -naa- (Cahi dialect -ári)-, Far Future (after tomorrow, FF) -ikwí-. In Yukawa’s dialect, the reference appears to be the same but some of the shapes differ.

The SMs have the same shape as those in the main structure. The 3s shape is -a-, which is associated with subordinate clauses and structures. This SM can be omitted and in four cases Olson shows a subject noun in this position.

Olson has two aspects: -qaá- Narrative (there is also -qa- Past NAR in the regular structure) and -kír- Persistent. Elsewhere in this book Persistent is considered as aspect but Narrative as tense. Nyaturu does obviously not agree with this analysis. Be that as it may, Nyaturu essentially extracts these two categories from the main verb and preposes them.

The tenses encoded in this pre-verbal complex are not those of the main verbal structure. The two pre-verbal complex pasts indicate today/yesterday versus before yesterday, and the two futures are their mirror image. If used, the pre-verbal complex tense markers appear to set the temporal framework. Tense markers in the main verb then become relative to the temporal framework so established. They can also be used with aspect markers in the main verb and Persistent in the pre-verbal complex.

A good single example is given by Olson, from a folktale ‘Why the Bat never looks at the Sun’:

ní náa yová r-á-j-á rí-qá-hanga mwaátáarí w-a-kuy-áa  
ni Far Past sun it-P<sub>1</sub>-come-P<sub>1</sub> it-NAR-saw bat it-P<sub>2</sub>-die-P<sub>2</sub>  
‘When the sun came it saw the bat had already died’

The initial *náa* in the pre-verbal complex locates the whole event in remote time. The use of P<sub>1</sub> in the main verb indicates the immediacy of the action in remote time (‘as soon as the sun came’). The NAR -qa- indicates that the seeing follows on the coming (‘He came, he saw, he conquered’). The use of P<sub>2</sub> in the last verb says the dying was in the middle past before the arrival of the sun. This use of middle past here suggests that the three pasts have relative as well as, or rather than, absolute reference.

Other examples (from Nurse 2000b: 522–23, all from Olson) are:

náa n-gú-hanga FP I-PRG-get ‘I was getting (before yesterday)’  
náa n-gú-hangaa FP I-HAB-get ‘I used to get’  
náa n-a-hángá FP I-P<sub>1</sub>-get ‘I had just got it’  
ní náa w-a-oná mbura ni FP she-P<sub>1</sub>-see sun ‘When she saw the sun...’

ní náa ikwí w-aʊ-fenja... ni FP FF he-FUT-want ‘When he wanted = will want’

a-kír ʊ-qu-righiRya She-PER she-PRG-speak ‘She is still speaking’

ní náa a-kír ʊ-qu-righiRya ni FP she-PER she-PRG-speak ‘While she was still speaking’

There are signs, not so elaborated, of this pre-verbal complex in neighbouring Nilyamba (Nurse 2000b) and F33, following. Adjacent Southern Cushitic languages have a similar complex, which seems to be a transfer of general structure and even specific morphemes from Cushitic.

F33 KI-langi

	Perfective	Habitual -aa	Progressive	Persistentive -kaa-ri + PROG	Anterior (?) -ire
P <sub>3</sub> -a-	tw-á-bok-á <i>we dug</i> N: sí-tw-á-bok-á	tw-a-vij-aa tw-a-bok-a <i>or</i> tóója tw-á-bok-áa tw-áájá tw-á-bok-áa <i>we used to dig</i>	tw-áá-bók-a <i>or</i> tw-á-ja tw-a-bók-a <i>we were going,</i> <i>used to dig</i> N: sí-tw-aa-bok-a		
P <sub>2</sub> -a- ... -ire	tw-á-bók-iré ijo N: sí-tw-á-bók-ire				tw-áà-ri tó-Ø-dóm-iré <i>we had gone</i>
P <sub>1</sub> -a- ... -ire	tw-a-bók-ire N: sí-tu-Ø-bok-iré				
	tw-a-bók-a <i>we dig</i>	tw-a-bók-aa <i>we dig regularly</i> N: sí-tw-a-bok-aa sí-tu-Ø-bok-a	tw-iyo-(ku-)sek-a <i>we are laughing,</i> <i>will laugh</i> N: sí-tw-iyo-sek-a	tu-kaa-ri tw-iyo-sek-a <i>we are still laughing</i> N: tu-káa-ri ku-sék-a <i>we have not laughed yet</i>	tu-Ø-sék-ire <i>various uses</i>
Future VERB + 'be'	bóka tu-rí <i>we will dig</i> N: sí-tu-ka-bok-ire sí-tu-ri (ku-)bok-a				

## F33 Ki-langi [kɪlangi]

1 General 310,000–350,000 speakers in C. Tanzania. Dempwolff (1915–6), Dunham (2001, 2003), Hawkinson (1976), Seidel (1898) all consulted but little used; main sources O. Stegen (SIL, p.c., to whom thanks are due for his help), own field notes (1975), based on work with J.R.C.S. Mjungu and others. Data gaps remain, so conclusions, esp. about aspect, should be taken as provisional. Langi has changed since 1898. Some dialect variation. 7x2 /i, ɪ, e, a, o, u, u/.

2 Structure NEG<sub>1</sub> – SM – TA – OM – root – EXT – FV

SM: n; u; 3s y/\_V, á/\_C and some V (needs checking); tɔ; mɔ; vá. Participants L, others H.

TA: Ø with ire, e (Seidel also with -a); á P<sub>1</sub>, P<sub>2</sub>, HAB, all have apparently the same tone (underlying L?); á: (H?) Past PFV; a: Past IPFV; [óó(ku)] or [ijo, iyo, iya, eya] (uncertain tone), dep. on dialect, PRES PRG; si NEG, (a)ká ‘when (Past)’; ka NAR and NEG FUT; káari PER. Use of (..) means ‘occurs /\_ vowel or monosyllabic stem, or optional’.

OM: Only one allowed.

FV: a NEU; e SBJ (also tó-ká-vin-é ‘when we danced’); i IMP pl; áa HAB; ire P<sub>1</sub> PFV.

3 Tense Three degrees of past, e.g: ‘We dug’ P<sub>1</sub> tw-a-bók-ire (today), P<sub>2</sub> tw-á-bók-iré (yesterday), P<sub>3</sub> tw-á-bok-á (prior events). Different dialects encode pasts differently. One future (séka tó-ri): future can also be expressed by PRES PRG, by séka tw-ise ‘We are about to laugh’, or ku-séka tó-ri, undetermined future. Also NAR n-ka-seka ‘...and I laughed’.

4 Aspect, compounds, other categories ‘Present’ HAB (n-a-bók-aa), PRG (n-iyo-seka, see 2), PER (tɔ-kaa-ri (tw-iyo-)seka). Unclear if there is an ANT. General Past IPFV seems to combine PRG and HAB (tw-áá-bóka ‘We used to dig, were digging’), though separate Past PRGs and HABs can be formed. Past HAB formative -vija(a) is from -va ‘be’ (see also F21).

Langi (also F34) is characterised by some compounds with order INF + AUX, rather than the expected AUX + INF order. Some with that order as obligatory are seen in 3, one with either order is seen in what follows. This order is likely due to contact from S. Cushitic (Mous 2000).

As in other F languages (see F32), compounds with -ri < ‘be’, -ija < ‘come’, and -a-ja < ‘come’ as the first element occur. Compounds with -ri- refer to recent days, those with ‘come’ to more remote events. They occur as background setters in discourse, so t-áá(-ri) t-a-bók-ire ‘we had dug (when...)', n-áá(-ri) n-á:boka ‘I was digging (when...)', tw-â:ri tó-Ø-dóm-iré ‘We had gone...’, n-á:-já n-á-bok-áa ‘I was digging’. Unclear how to incorporate these in the matrix. IPFVs with AUX + INF (tw-a:ri ku-seka/ku-seka tw-a:ri ‘We were laughing’, wɔla tw-â:ri ‘We were buying’, tw-and-ire kuseka ‘We were laughing, used to laugh’) occur in some but not all sources. Unclear how they differ semantically or syntactically from other IPFVs with similar translations.

Suffixal -ire with pre-stem Ø seems to occur only in subordinate or dependent contexts: compounds (see 4), questions (tô-dom-iré na hári ‘Where did we go?’), POTs, and Past RELs.

5 Negation A single NEG, si-. In one context it alternates optionally with -si-, which also occurs in ku-sí-ná ‘There is not’. Si- may co-occur with post-verbal final -tɔkɔ or -bwé:te (dep. on dialect). AUX -reka (‘desist’) + INF occurs in NEG IMP and some subordinate clauses.

The PER (tu-kaa-ri (tw-iyo-)seka ‘We are still laughing’) has a revealing ‘negative’ (tu-kaa-ri ku-seka ‘We haven’t laughed yet’, lit. we-still-be-to-laugh, ‘We are still to laugh’). See also 7.

6 Relatives Only subject RELs are attested. Nearly all involve -ene: mu:ntu mw-ene a-dóm-iré ‘Person who went’, mu:ntu mw-ene si-a-seka ‘Person who didn’t laugh’.

7 Subjunctive (-e) and Imperative ‘Sing’, ímba (sg), ímb-í (pl), sék-i ‘Laugh’, ímbá sána ‘Sing loudly’, n-de:tér-á ‘mbóri ‘Bring me a goat’, mu-héer-e ‘Help him’, tú-re:tér-é ‘mbóri ‘Bring us a goat’, hend-é ‘Let’s go’, NEG ‘Don’t go’ reká kudómá (sg), rek-í kudómá (pl).

G11 Chi-gogo (Cordell)

	Perfective	Imperfective <b>-aga</b>	Progressive <b>'be' +</b>	Persistentive <b>-kali (ku-)</b>	Anterior <b>-ile</b>
P <sub>3</sub> <b>-a-</b>	n-a-fik-a <i>I came</i>	c-á-noz-aga <i>we used to make, were making</i>	c-a-li (ku-)bit-a <i>we were going</i>		n-a-li ny-end-ile <i>I had loved</i>
P <sub>2</sub> <b>-a-</b>	n-a-fik-á <i>I came</i>				n-a-li n-a-tul-a <i>I had broken</i>
P <sub>1</sub> <b>-Ø-</b>	ci-Ø-bit-a <i>we went</i>				
	ci-ku-bit-a <i>we go, are going</i>	ka-Ø-z-aga <i>she comes (regularly)</i>		ci-kali (ku-)bit-a <i>we are still going</i>	ya-Ø-bit-ile <i>he has gone</i>  ni-mw-end-ile <i>I love her</i>
F <sub>1</sub> <b>-eza + (ku-)</b> (‘come’)	c-eza (ku-)bit-a <i>we will go</i>				
F <sub>2</sub> <b>-o-</b>	c-o-bit-a	n-o-bit-aga <i>I will be going from time to time</i>	n-o-wa n-ku-bit-a <i>I will be going</i>		
F <sub>3</sub> <b>-olo-</b>	c-olo-bit-a	n-olo-bit-aga	n-olo-wa n-ku-bit-a		
F <sub>4</sub> <b>-la-</b>	ci-la-bit-a	ci-la-bit-aga	ni-la-wa n-ku-bit-a		

G11 Chi-gogo (Nyambwa dialect) (Rossel)

	Perfective	Imperfective (?)	Anterior -ile
P <sub>3</sub> <b>-ka-</b>	ci- <b>ká</b> -gul-a <i>we bought</i>	ci- <b>ku</b> -gul-á <i>we used to buy</i>	
P <sub>2</sub> <b>-a-</b>	c- <b>a</b> -gúl-a		c- <b>a</b> -gul- <b>ile</b> <i>we have bought</i>
P <sub>1</sub> <b>-a-</b>	c- <b>a</b> -gul-á		
	ci- <b>lí</b> -gul-a <i>we buy ?</i>		ci- <b>Ø</b> -gúl- <b>ile</b> <i>we have bought</i>
F <sub>1</sub> <b>-ku-</b>	ci- <b>kú</b> -gul-a <i>we are about to buy</i>		
F <sub>2</sub> <b>-o-</b>	c- <b>ó</b> -gul-a <i>we will buy</i>		
F <sub>3</sub> <b>-la-</b>	ci- <b>lá</b> -gul-a		
F <sub>4</sub> <b>-ala-</b>	c- <b>alá</b> -gul-a		
F <sub>5</sub> <b>-olo-</b>	c- <b>oló</b> -gul-a		

G11 Chi-gogo (Nyambwa dialect) (Nurse)

	Perfective	Habitual	Progressive	Persistive <b>-káli-</b>	Anterior <b>-ilé</b>
P <sub>3</sub> <b>-ka-</b>	ku- <b>ká</b> -gúl-a <i>we bought (long ago)</i>				
P <sub>2</sub> <b>-a-</b>	kw- <b>a</b> -gúl-a <i>we bought (yesterday)</i>		kw- <b>a</b> -gúl- <b>aj-e</b> <i>we were buying</i>		kw- <b>a</b> -gul- <b>ile</b> <i>we have already bought</i>
P <sub>1</sub>	ku-gul- <b>ile</b> <i>we bought (recently)</i> N: si-ku-gul- <b>ile</b>	kw- <b>anda</b> -gul-a <i>we used to buy (tonally different from right)</i>	kw- <b>anda</b> -gul-a <i>we were buying (today)</i>		
	ku- <b>ku</b> -gul-á <i>we buy</i>		ni- <b>lí</b> -gul-a <i>I am buying</i> N: si-ni- <b>li</b> -gul-a	ku- <b>káli</b> -gul-a <i>we are still buying</i>	ku-gúl- <b>ile</b> <i>we have bought</i>
F <sub>1</sub> <b>-ku-</b>	ku- <b>kú</b> -gul-a <i>we will buy</i>				
F <sub>2</sub> <b>-la-</b>	ku- <b>lá</b> -gul-a <i>we will buy</i>				
F <sub>3</sub> <b>-o-</b>	k- <b>ó</b> -gul-a <i>we will buy</i>				
F <sub>4</sub> <b>-ala-</b>	kw- <b>alá</b> -gul-a <i>we will buy</i>				
F <sub>5</sub> <b>-olo-</b>	k- <b>oló</b> -gul-a <i>we will buy</i>				

## G11 Chi-gogo

1 General 1.3 million speakers around and especially south of Dodoma in central Tanzania. Three dialect areas are recognised: Nyambwa (west), Nyaugogo (central), Tumba (east). All sources are flawed: Botne (n.d), Guthrie (1948), Nurse (1979), Tucker & Bryan (1957) are incomplete in various ways, Cordell (1941) does not mark prominence and fuses different dialect material, Rossel (1988) does not discuss meaning or show compounds. I chose Rossel, Nurse, who both deal with Nyambwa, albeit different varieties, and Cordell. Rossel says any form has one prominence ('). 5 vowels, length contrast only on the penult. All Gogo varieties have very restructured TA systems, visibly involving material from G30, G60, F30, and maybe non-Bantu.

2 Structure NEG – SM – TA – OM – root – EXT – FV – Post-FV

SM: n(i); u/ku; a; ci (ku in some western dialects); mu; va. Other dialects have 3s a/ka/ya. This and 2s u/ku depend in dialect and tense.

TA (mostly Rossel): li Present; ku F<sub>1</sub>, Past HAB (diff.tones) (general present in Nurse); la F<sub>2</sub>; o F<sub>3</sub>; ala F<sub>4</sub>; olo F<sub>5</sub>; a P<sub>1</sub>, P<sub>2</sub> (different tones), ANT<sub>2</sub>; ka P<sub>3</sub>; ka Itive, NAR. Cordell/Nurse may have different values.

FV: a NEU; e SBJ; ile ANT: Rossel and Nurse have aj-e (\*-ag-) only in IMPs and Past PRGs (eastern dialects have aga in several PRGs).

Post-FV: (e)nyi IMP pl also 2p addressee: ci ‘what?’, mbi ‘interrogative’, etc.

3 Tense Rossel and Nurse present five degrees of future – more easterly varieties perhaps four. Are the five forms semantically discrete? F<sub>1</sub> refers to Immediate Future, F<sub>2</sub> to the period beyond that (tomorrow and a few days), F<sub>3</sub> seems to cover a lengthy period including F<sub>1</sub>, F<sub>2</sub>, and beyond, Nurse’s informant told him F<sub>5</sub> was ‘old-fashioned and synonymous with F<sub>4</sub>’, Rossel says nothing of meaning. All sources have three past degrees (today, yesterday and some time beyond, remote).

4 Aspect Hard to discuss aspects because the total data available suggests widespread use of compounds for past and future aspects but Rossel does not show compounds. In the Present Rossel has PFV and ANT, and Past HAB: Nurse and Cordell have PFV, IPFV, PRG, PER, ANT, spread over different times. Differences can be seen by consulting the matrices. Cordell and Nurse show CNDs.

5 Negation All forms except SBJ (see 7) are negated by prefixing si-: c-ó-gula ‘We will buy’, NEG si-cógula. Gogo illustrates well the components of the form that occurs often synthetically in other languages: n-kali si-n-a-bitá ‘I haven’t gone yet’, lit. I (am)still not-I-Past-go.

6 Relatives All dialects use the demonstrative -ono: (subject REL) umunt<sup>h</sup>u m-ono ya-kutowa ‘Person who hits’, lit. person who he-hits (cf ya-kutowa ‘he is hitting’); (object REL) umunt<sup>h</sup>u m-ono n-a-mu-towa ‘Person who I hit’, lit. person whom I-Past-him-hit.

7 Subjunctive and Imperative Forms in -e are SBJ, others indicatives. Sg: gul-é ‘Buy’

(Cordell gula), vi-gul(aj)é 'Buy them', u-ka-mu-cem-e 'Go call him', u-gul-aj-e 'Buy at once'. Pl  
mu-gul-é (Cordell gul-e-nyi). NEG (u-)lec-é (ku)gula 'Don't buy', a-lec-é kubita 'He shouldn't  
go'.

G23 Ki-shamba(I)a

	Perfective	Imperfective -kí-	Habitual -ka-	Progressive -àà-	Persistentive -ke-	Completive -i- ... -ie	Anterior -zà-
P <sub>2</sub> -áá- / -à-	VF: n-á'á'-kááng-a <i>I fried</i> NF: n-a-kááng-a nyama <i>I fried meat</i>	(néé-)ú-kí-dík-a <i>you were cooking</i>	mu-ka-dik-e <i>you used to cook</i>	ne-t-aa-dik-a <i>we were cooking, used to cook</i>			
P <sub>1</sub> -té- / -ie	VF: a-té-dík-a <i>he cooked</i> NF: a-dík-íé nyáma <i>he cooked meat</i>  ne-ti-dik-ie <i>we had cooked</i>	ne-wá-kí-dík-a <i>they were cooking, they sometimes cooked</i>			a-ke-gosh-ize <i>he is still asleep</i>	ne-ní-í-dík-íe <i>I had cooked</i>	
-tà- / -Ø-	VF: ní-ta-dík-a NF: ni-Ø-dík-a nyama <i>I cook, am cooking meat</i>  N: nke-ti-dik-a  ne-ti-Ø-dík-a <i>we used to cook</i>	ní-kí-chí-j-á <i>if I eat it, if I ate it, when I eat/ate it</i>  N: ti-ki-she-dik-a <i>if we do not cook</i>		VF: n-aa-dik-a NF: n-a-dik-a <i>I am cooking</i>	mu-ke-dik-a <i>you are still cooking</i>	ni-i-dík-íe <i>I cooked (finished)</i>	ni-za-dik-a <i>I have cooked</i>  N: nke-ti-dik-ie  í-za-f-á <i>it died = it is dead</i>
F <sub>1</sub> ne- ... -Ø- ... -e	ne-ní-Ø-dík-e <i>I will cook</i>  N: nke-ti-dik-e						
F <sub>2</sub> néé- ... -Ø- ... -e néze- ... -Ø- ... -e	néé-ní-Ø-dík-e néze-ní-Ø-dík-e <i>I will cook</i>						

## G23 Ki-shamba(l)a

1 General Main source Besha (1989). Subsidiary sources Nurse (1979), Odden (1982), Wald (1997). Roehl (1911) was read. Available data inadequate for a total analysis of TAM, as the gaps in the matrix suggest. Some 550,000 speakers in and around the Usambara Mts in NE Tanzania. Three dialect areas (N, C, S) with seemingly minor variation. 5x1, although at least one aspect (-aa PRG) and maybe one tense (P<sub>2</sub>) marker are apparently long. The [aa] in [kaanga] results from recent loss of intervocalic [i]. Odden says certain tone phenomena point to probable 7 vowels in the not-too-distant past. Tones, where available, from Odden, who deals with underlying tones and processes: underlying H and L. Some verb forms have imposed H. Odden sets out underlying tones on many, but not all, TA markers.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TAM – OM – root – FV – Post-FV

Pre-SM: nke NEG<sub>1</sub>; ne shifter; ne(z)e distal shifter; te ‘entreaty’; anga CND.

SM: n(i); u; a; ti; mu; wa.

NEG<sub>2</sub>: she SBJ/IMP; shi REL. This NEG sometimes precedes (u-she-za-sheka ‘Do not laugh’), sometimes follows TAM (ati t-a-she-wa-ona ‘If we do not see them’).

TAM: Up to four (more?) formatives may co-occur here (ni-za-há-ka-na-mu-ítánga ‘I sometimes used to call her with no purpose’. From the sparse available data it is impossible to predict their order, so they are merely listed here. They are many: áá P<sub>2</sub> VF (see 9); aa ([a]?) PRG; a P<sub>2</sub> NF; té P<sub>1</sub> VF; ta Present VF and certainty; Ø Present NF and co-occurs with e and ie; kí IPFV (has a very wide range of reference); ka HAB; ke PER; za ANT; na ‘first...’; vya ‘simultaneity’; ma ‘if’ (?); he ‘when’; anga CND. Related to ta, za, na, vya, respectively are te, ze, ne, and vye.

FV: a NEU; e SBJ, FUT; ie P<sub>1</sub>, CMP.

Post-FV: i IMP pl.

3 Tense, aspect, mood The two degrees of past and future have relative time reference. In one of Besha’s stories (p. 294), an elder talking of events beyond his life time uses the Near Past, because for him they are immediate. A young man talking of the same events uses the Far Past, because for him they are remote.

A large set of aspects is grammaticalised: PFV, IPFV (?), HAB, PRG, PER, ANT, CMP. The difference between Perfective, Anterior, and Completive can be seen in triplets such as e.g. Near Past ni-dik-ie ‘I cooked’, Anterior ni-za-dik-a ‘I have cooked (and here's the meal)’, PFV ni-i-dík-íe ‘I cooked (it's over, I'm not cooking any more)’. Also, as Besha (1989b) points out, there is a set of formatives with modal function (ta/te, na/ne, vya/vye, ma/me, maybe za/ze, ka/ke, ha/he). A conservative estimate suggests a single regular verb may have upwards of 80 TAM combinations.

The Shamba(l)a system is more elaborate than that of its siblings (G24-31-32), suggesting Shamba(l)a has developed this complicated TAM system fairly recently. This is supported by the fact that some of the TAM markers are still relatable to auxiliaries and further supported by a remark of Odden's (p.c.) that the anomalous behaviour of some of the TAM markers could be explained if they were considered to be (independent) auxiliary verbs. Following, and unlike the format in the rest of these notes, I examine briefly the behaviour of two TAM morphemes, -kí- and -ne-.

4 Use of -ki- (H-toned, and the preceding SM also H) The matrix labels -ki- IPFV. Comparing this beautifully simple paradigmatic use with its practical use in discourse, as in Besha's stories, illustrates vividly the gap between the narrow systemic and the wide practical.

Shamba(l)a -ki-, as Swahili -ki-, is always subordinate. In both languages it can precede the main verb (Sw. a-ki-la, ... 'If he eats, ...') or follow (Sw. nilimwona a-ki-la 'I saw him eating'). That said, Shamba(l)a -ki- is wider in its use than Swahili. In Swahili, when the subordinate -ki- precedes, what follows in the main clause can be 'present' (= hypothetical) or future: that is, -ki- in Swahili deals with imaginary time. (H. Muzale (p.c.) has pointed out that in Swahili sentences such tu-ki-wa bado pale, a-ka-ja Musa, lit. We-ki-be still there, he-NAR-come Musa, 'While we were still there Musa came', while both -ki- and -ka- seem to mark past, they do not really, the past being in fact indicated by what precedes the sentence. Shamba(l)a -ki- can be followed by any time and tends to be translated by 'when' in the Past, and 'when' or 'if' in the Non-Past.

A second difference between Shamba(l)a and Swahili -ki- is that, in Shamba(l)a narratives, the distinction between subordination and coordination fades. Shamba(l)a has no NAR, such as Swahili -ka-, and -ki- appears to take on some of the functions of Swahili -ka-. One (oral) story in Besha (1989: 289–93) has strings of verbs with -ki-, and examination of both the logical sequencing of the events and of the English translations suggests it is hard to tell whether the actions are co- or sub-ordinate. In discourse the use of connectors in a rather loose way is well known. This use of Shamba(l)a -ki- bears further examination but it is clearly wider in its functions than Swahili -ki-.

5 Use of ne- The matrix gives the impression that ne- is a future formative while in 2 it is labelled 'shifter'. F<sub>1</sub> is formed by initial ne- and final (SBJ) -e, F<sub>2</sub> by initial née-/néze- and final -e. The future differs only from the SBJ by the presence of ne- and its tonal properties. But these two are not restricted to future use. Consider the following (tones are not available for some so are ignored for all, but ne-/née- seem to be added to the base forms without special tonal adjustment):

ti-dik-e	'Let's cook'	ne-ti-dik-e	'We will cook (F <sub>1</sub> )'
ti-dik-a	'We cook'	ne-ti-dik-a	'We used to cook'
ti-dik-ie	'We cooked (P <sub>1</sub> )'	ne-ti-dik-ie	'We had cooked' (?)
t-aa-dik-a	'We are cooking'	nee-t-aa-dik-a	'We used to be cooking'
ti-i-dik-ie	'We cooked (CMP)'	ne-ti-i-dik-ie	'We had cooked' (?)
wa-ki-dik-a	'We-IPFV-cook'	ne-wa-ki-dik-a	'They sometimes cooked'
mu-ze-dik-a	'You should cook'	ne-mu-ze-dika	'Will you be cooking..?'

There may be more such forms, although only these occur in the data. This mainly exemplifies ne-. A few examples suggest née-/néze- can also be added in the same way, but the data is scanty. This data suggests that use of the clitic(s) modifies the time reference of the form to which it attaches. SBJ represents imaginary time and use of ne- with SBJ also represents imaginary (future) time: ne- pushes the event one stage into the future, née-/néze- pushes it a step further. When these initials are used with forms referring to real time, they push the events further away in real time, that is, one or two stages into the past. My use of (?) two translations above, which are taken from the sources, suggests I think the 'had' may not be necessary – they simply refer to even earlier action.

The morphosyntactic status of *ne-/née-* is not clear from the sources. While they are mostly written as prefixes, they are occasionally written separately, that is, as clitics or independent words. Their ambivalent status can be seen in the following single sentence from one of Besha's stories, where they refer to the same time but one *ne-* is clearly prefix, while the other is a separate word:

*ne-a-ho-kund-wa na Bumbui ne Mbegha a-ho-ita na Bumbui*  
*ne-he-then-want-passive by Bumbuli and Mbegha he-then-go to Bumbuli*  
'He was then wanted by (the people of) Bumbuli and Mbegha then went to Bumbuli'

6 Negation Three negative formatives. One, *nke-*, in apparent free variation with *he-*, is the primary form, occurring in most contexts: dialectally *nke-*, *ke-*, *he-*. 1s is *si-*. Secondary *-she-* (dialectal *-se-*) occurs in IMPs and SBJs (*u-she-hita* 'Don't go'); *-shi-* occurs in NEG RELs.

7 Relatives Three constructions. With futures, PFV, *-ki-*, pre-verbal *ndí-* is used (*wantu ndí-wo wá-kí-twângâ...* 'People who were pounding'; cf *wantu né-wá-kí-twângâ...* 'People were pounding'). With the Past a verbal suffix occurs (*mbúzi zi-j-ie-zo manga zí-za-fa* 'Goats which ate cassava are dead'). The third relativizer is *-e*: *luvi w-é-ikála Nwázi...* 'A door that stays open...' (cf *luvi ú-ikála Nwázi* 'A door stays open'). RELs use a restricted subset of the regular TAM markers.

8 Subjunctive and Imperative 'Go', Sg: *hítá*, *uhite* '(You should) go', *te-hita* 'Please go', 1s *ni-hite*, *ne-ni-hite* 'Let me go'; pl *nita-i*, *(ne-)ti-hit-e* 'Let's go'. See Roehl and Besha 1989b.

9 Focus Non-future tenses have two focus-oriented forms. One focuses on the verb (VF), the other on the following predicate (most obviously object) (NF). Wald (1997) claims a third focus form for the 'present'. NF forms are tonally or segmentally simpler than VF forms. The first downstep in the P<sub>2</sub> VF probably implies the loss of a former (unidentified) segment.

G33 Ki-zalamo

	Perfective	Progressive AUX + VERB	Habitual -aga	Persistentive -ha-li + VERB	Anterior -ile
Past -Ø-	tu-Ø-gul-a <i>we bought</i>  N: ha-tu-Ø-gul-ile	tu-Ø-kal-a tu-Ø-gul-a <i>or</i> tu-Ø-law-a ku-gul-a <i>we were buying</i>  N: tu-Ø-kal-a ha-tu-Ø-gul-a	tu-Ø-kal-aga tu-Ø-gul-a <i>we used to buy</i>		tu-Ø-kal-a tu-Ø-gul-ile <i>we had bought</i>
Non-Past	t-o-gul-a <i>we buy, are buying, will buy</i>  N: ha-tu-Ø-gul-a		tu-Ø-gul-aga <i>we buy (regularly)</i>	tu-ha-li tu-Ø-gul-a <i>we are still buying</i>	tu-Ø-gul-ile <i>we have bought</i>  N: ha-tu-na-gul-a <i>we have not bought (yet)</i>

## G33 Ki-zalamo

1 General Stretching 150 miles west from Dar es Salaam is a line of mostly small communities speaking the closely related G30 ('East Ruvu') languages. All under- or un-described and except for brief sketches in Tucker & Bryan (1959) and Nurse (1979a), all existing work is a century or more old. Most are toneless, having penultimate stress (tonelessness starts with G40 and G30, curves SW, through G50 and N10, into N20 in Malawi). Sources: own notes (most seen in Nurse 1979a), Meinhof (1907). 1968 census has 230,000 speakers but only old people are said to speak it now. G30 languages are severely threatened by the spread of Swahili. 5x1.

2 Structure NEG<sub>1</sub> – SM – TA – OM – root – EXT – FV – Post-FV

NEG<sub>1</sub>: ha.

SM: n(i); u/ku; a/ka/ya; tu; m; wa. 2/3s u/a occur with NEG/SBJ/ile; u/ya with ha/ka; ku/ka with Ø/o. 3s ya is local. 2/3s ku/ka is in E70, G10-30-40-50 and a few others.

TA: Ø Past/NAR, also non-independent with ile and aga; o Non-Past; ka/ha 'if', CND; na 'not yet'; ki 'if'; si NEG<sub>2</sub>. (Some other East Ruvu languages have -a- as Future or Present).

FV: e SBJ; ile ANT; aga HAB (also ege < ag + e); a NEU; a or i can be used in the Non-Past NEG, the i probably being an import from Swahili, as it is absent from other G30.

Post-FV: (e)ni IMP pl.

3 Tense Past and Non-Past. This is typical of eastern East Ruvu. Number of degrees of past and future increases steadily to the west and into related West Ruvu (see G11).

4 Aspect and other categories Only grammaticalised (one-word) aspects are Non-Past PFV (t-o-gula), HAB (tu-gul-aga), and ANT (tu-gul-ile). Past PRGs, HABs, and ANTs involve compounds: the first verb is mostly an inflected form of 'be' (-kala), followed by an inflected lexical verb. Another compound consists of inflected -lawa ('go/come out') plus INF: thus tu-lawa ku-gula 'We were buying' (possibly from 'We have just bought', as in G36, from 'We come from...'). Neighbouring East Ruvu languages form compounds with 'come' (mainly Future) and 'go' (Past and Future) for synthetic tenses to compensate for the simplicity of tense reference. PER involves a compound, with -li- 'be' as first member. CNDs involve -ka- or -ha- (interchangeable): tu-ha-gula 'We-if-buy', tu-ha-gul-ile 'We'd have bought'.

5 Negation Primary NEG<sub>1</sub> ha- (1s si-) versus secondary -si- at NEG<sub>2</sub>. Secondary NEG occurs in SBJ and REL. Some G30 have it in the IMP NEG, others use leka + INF.

6 Relatives Biki di-gwa 'The tree it-fell', Subject REL dino ndo di-biki di-gw-ile 'This is the-tree which/it-fall-ANT', Object REL dino ndo di-dibwe tu-di-gulus-e 'This is the-stone we-which-throw-ANT'. RELs involving a pre-prefix on the noun (definite) and, at least in the Past, the use of the ANT for PFV. RELs (also probably NEGs) are statements about states, rather than acts.

7 Subjunctive and Imperative 'Buy' gula, pl gul-eni, NEG u-si-gul-e, m-si-gul-e, tu-gul-e 'Let's buy', tu-gul-eg-e 'We should buy' (< tugulaga + SBJ). E-Forms are SBJ.

G42d Standard Swahili, Ki-swahili

	Perfective	Situative <b>-ki-</b>	Habitual <b>hu-</b>	Progressive <b>-na(-ku)-</b>	Anterior <b>-me(ku)-</b>
Past <b>-li(ku)-</b>	tu- <b>li</b> -lim-a <i>we hoed</i>  tu- <b>li</b> -ku-j-a <i>we came</i>  N: ha-tu-ku-lim-a <i>we did not hoe</i>	tu- <b>li</b> -ku-w-a tu- <b>ki</b> -lim-a <i>we were hoeing</i> <i>(over a longer time,</i> <i>habitually)</i>	<i>as Imperfective</i>	tu- <b>li</b> -ku-w-a tu- <b>na</b> -lim-a <i>we were hoeing</i> <i>(at a particular time)</i>	a- <b>li</b> -ku-w-a a- <b>me</b> -lim-a <i>he had hoed</i>
		tu- <b>ki</b> -lim-a <i>we hoeing, if we hoe</i>  hu-wa tu- <b>ki</b> -lim-a <i>we hoe (HABITUAL)</i>  N: ha-tu-lim- <b>i</b> <i>we are not hoeing,</i> <i>do not hoe</i>	sisi <b>hu</b> -lim-a <i>we hoe</i>  <b>hu</b> -wa tu- <b>ki</b> -lim-a <i>we hoe (HABITUAL)</i>  N: ha-tu-lim- <b>i</b> <i>we are not hoeing,</i> <i>do not hoe</i>	tu- <b>na</b> -lim-a <i>we are hoeing, hoe</i>  tu- <b>na</b> -ku-j-a  N: ha-tu-lim- <b>i</b> <i>we are not hoeing,</i> <i>do not hoe</i>	tu- <b>me</b> -lim-a <i>we have hoed</i>  tu- <b>me</b> -ku-j-a <i>we have come</i>  tu- <b>me</b> -ka-a <i>we are sitting</i>  N: ha-tu-ja-lim-a (bado) <i>we have not hoed (yet)</i>
Future <b>-ta(-ku)-</b>	tu- <b>ta</b> -lim-a <i>we will hoe</i>  tu- <b>ta</b> -ku-j-a <i>we will come</i>  N: ha-tu-ta-lim-a	tu- <b>ta</b> -ku-w-a tu- <b>ki</b> -lim-a <i>we will hoe, be hoeing</i>	<i>as Imperfective</i>	tu- <b>ta</b> -ku-w-a tu- <b>na</b> -lim-a <i>we will be hoeing</i> <i>(at a particular time)</i>	tu- <b>ta</b> -ku-w-a tu- <b>me</b> -lim-a <i>we will have hoed</i>

## G42d Standard Swahili

1 General Ashton (1944), supplemented by other sources and author's own knowledge. Swahili spoken by most in Tanzania and Kenya (total population 60,000,000) and a few million in Uganda, Rwanda, Burundi, DRC, Malawi, Mozambique, Somalia, Socotra. Most are second language speakers. Matrix represents standard form, based originally mostly on Unguja, the main Zanzibar variety. 5x1 (but see Batibo 1990), penultimate stress.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – REL – OM – root – EXT – FV – Post-FV

Pre-SM: ha (si 1s) NEG<sub>1</sub>; hu HAB (no SM after or before hu).

SM: n(i); u; a; tu; mu; wa.

For NEG<sub>2</sub> (si) and REL, see 6 and 7, below, respectively.

TA: li Past; ta Future; ki SIT (not independent); na PRG; me ANT; ku Past NEG; ja Past ANT; ka Itive, NAR; nga 'although'; nge/ngali CND; japo 'although'; sipo 'unless'; si NEG<sub>2</sub>. Some speakers distinguish PRG -na- from General Present -a- (not shown in the matrix).

OM: Only one allowed.

FV: a NEU; e SBJ; i present NEG.

Post-FV: (e)ni IMP pl.

3 Tense One Past and Future. 'Present' provided by PRG (aspect) -na-. Also -ka-NAR.

4 Aspect PFV, SIT (?) -ki-, PRG -na-, HAB hu-, ANT -me-. *Ki* never stands alone, occurring either as the second member of compounds or in dependent clauses, translating clauses such as 'If you see him (u-ki-mw-ona)...'. While other aspects can be named on the basis of their referential function, a description of -ki- needs to mention its morphosyntactic functions such as subordination.

*Hu* HAB (from an older ni+ku (copular 'be'+INF)) is anomalous, representing HAB not by suffixal -a(n)ga, but by a prefix; not co-occurring with a verbal SM; not occurring as the second member of compounds. So it cannot be made to refer to past or future habitual situations, for which compounds involving -ki- in the second verb are used (see matrix). It can occur as the first member of compounds where the second verb has another aspect (na, me).

Speakers differ in use of PRG -na-. For some it is a real PRG, representing a situation ongoing at reference time (see matrix), for others it encompasses a situation of longer duration.

Aspects can co-occur: hu-wa tu-me-lima 'We used to have hoed'.

5 Compounds, other categories Many compounds, involving 'be'. PER is lexical: bado tunafanya kazi 'Still we are working', replacing older verbal tungali tunafanya kazi.

6 Negation (a) INF (ku-to-enda 'to-not-go') (b) SBJs, CNDs, RELs (a-si-end-e 'He should not go', lit. he-not-go-SBJ) (c) ha- in all other forms (ha-tu-imb-i 'We don't go').

7 Relatives (a) In one form a Post-FV REL occurs: wa-penda-o 'Those who like' (lit. they-like-REL) (b) REL is encoded at RM after a small set of TA markers (na, li, ta): wa-li-o-penda 'Those who liked' (they-Past-REL-like) (c) In most forms, (including (b) as an

alternative), REL attaches to pre-verbal amba: watu amba-o wa-me-imba ‘People who-REL they-have-sung’.

8      Subjunctive and Imperative    Imba ‘Sing, sg’, imb-eni pl SBJ -e in typical morpho-syntactic range, including IMPs: alone as politer IMP (u-imb-e ‘Please sing’), + objects (m-pig-e ‘Hit him’) + NEGs (u-si-m-pig-e ‘Don’t hit him’). With Itive (u-ka-mw-one ‘Go and see him’).

G44d Shi-maore (Comorian)

	Perfective	Habitual	Progressive
P <sub>2</sub> 'be' + P <sub>1</sub>	tsi-Ø-ka tsi-Ø-lim-í <i>I (have) cultivated</i> N: ts-a-ka ts-a-lim-a		
P <sub>1</sub> -VC	tsi-Ø-lim-í <i>I (have) cultivated</i> N: ts-a-lim-a <i>I did not cultivate</i> R: gini l-a-la <i>devil which ate</i>		ri-(a-)ko-lim-a <i>we were cultivating</i> N: ka-ri-(a-)ko-lim-a
	ni-Ø-lim-a <i>I cultivate</i>	(wasi) u-lim-a <i>we cultivate (regularly)</i> N: tsi-lím-i R: <i>as right</i>	a-si-réng-a <i>she is taking</i> N: tsi-si-som-a R: a-si-renga-o
Future -tso-	ni-tso-l-á <i>I will eat</i> N: tsi-tso-l-a R: ni-tso-la-o <i>I who will come</i>		

## G44d Shi-maore

1 General Rombo (1983), Full (2001), Philippson (1988, 1993, p.c.). 100,000 people speak Maore on the southern island of Mayotte in the Comoro Islands. One of four Comorian varieties, total population 630,000. Maore (Ma) is very similar to Ndzwani (Nz): forms marked Nz show surface pitch from Philippson (1988). 5x1. No word may surface without a surface H pitch; pitch not known for unmarked forms.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM: u HAB; ka NEG<sub>1</sub>; na in some SBJs.

SM: 1s tsi in P<sub>1</sub>, otherwise ni; u; a; ri; mu; wa.

TA: Ø Present, HAB, P<sub>1</sub>, REL, NEG; si/su PRG; a Past NEG/REL, also Itive (\*k deletes regularly); tso FUT; hi SIT; atso CND; li RELs; (a)ko Past PRG; lo NAR; mo ‘when’; rasa ‘not yet’; several others, from AUXs (see 4); si NEG<sub>2</sub> (but copula is tsi). Frequent [o] is from AUX-final -a plus INF u-.

OM: Only one allowed. If two objects, then DO at Post-FV: a-mu-β-a-zo ‘She-him-give-FV-them’.

FV: a NEU; e SBJ; vowel copy (VC) past positive and NEG HAB.

Post-FV: o REL; ni 2p object; ní ‘what?’; zhe ‘how?’; class marker + o OM (DO).

3 Tense Most analysts see one past, one future, one anterior. We follow Full and have two pasts, one future, and no anterior. As Full shows, these pasts have relative, not absolute reference.

4 Aspect and other categories The three clearest – and not relatable to any auxiliary source – aspects are PFV, PRG, HAB. Several other AUXs are more or less grammaticalised, still transparent, and provide the basis for other categories. Taking Ma and Nz data together: tsi-paro-imba ‘I have already sung’ (CMP, para ‘get’); enda/ondo ‘go to’ (< ‘go’); venzo CND (< ‘like’); zho ‘come to’ (< ‘come’), etc. Not surprisingly, some of these can be combined, with each and with PFV, PRG, HAB. Because this analysis has no ANT, Future and Past PFV can combine: ri-tso-ka ri-limi ‘We will have cultivated’, lit. we-will-be we-cultivated.

5 Negation Primary (ka-) versus secondary (-si-) negative, the latter in SBJs.

6 Relatives Two REL strategies. One (most obvious in Non-Past positives) with suffixal o: ri-tsimb-a-o ‘We who are digging’, lit. we-dig-FV-REL, gari ni-li-βendz-a-o ‘Car which I want’, car I-it-want-FV-REL. The other, in the past, has no -o- but the TA marker -a-, and possibly a different pitch from the absolutive: gini l-a-la ‘Devil which ate’. As in Swahili, amba- is possible.

7 Subjunctive and Imperative Forms with -e are SBJs. Hira ‘Call, sg’, na-mu-hir-e pl, na-ri-hir-e ‘Let’s call’, n-a-hir-e ‘He should dig’, mu-hir-e ‘Call him’. With -a- (Itive): nisenda n-a-nunu-e ‘I am going to call him’, lit. I am going I-Itive-call-SBJ.

G51 Sh-pogolu

	Perfective	Imperfective -aga	Progressive -aṅku-	Persistentive -aka-	Anterior -Ø-
Past -iti	tu-Ø-hemer- <b>iti</b> <i>we bought</i> N: tu-hemer- <b>iti</b> ndiri	tu-Ø-hemer- <b>aga</b> <i>we used to buy, were buying, bought</i>	tu-Ø-wer- <b>iti</b> tw- <b>aṅku</b> -hemer-a <i>we were buying</i>		
	tu-Ø-hemer-a <i>we buy</i> N: tu-hemer-a ndiri <i>or</i> ha-pa-tu-hemer-a		tw- <b>aṅku</b> -hemer-a <i>we are buying</i> N: tw- <b>aṅku</b> -hemer-a ndiri <i>or</i> nda	(tw- <b>aka-li</b> ) tw- <b>aka</b> -hemer-a <i>we are still buying</i>	tu-Ø-hemer-a <i>we have bought</i> N: ha-tw- <b>eni</b> -hemer-i <i>we have not bought yet</i>
Future ha- ... -Ø- ... -i	<b>ha</b> -tu-Ø-hemer- <b>i</b> <i>we will buy</i> N: <b>ha</b> -tu-hemer- <b>i</b> ndiri <i>or</i> ha-pa-tu-hemer- <b>i</b>				

## G51 Sh-pogolu (Pogoro)

1 General Some 185,000 speakers in SC Tanzania, in an area where once there were large sugar plantations, suggesting possible outside influence. Own notes and student paper by B.S.N. Kizee. Limited data but adequate coverage. G51 and G52 are quite similar. Widespread (universal?) bilingualism in Swahili. G51 gives the impression of considerable restructuring. 5x2. Pogolu once raised final vowels (Pogolu for Pogoro, SBJ -i for -e, etc). Penultimate stress, no tones: how to differentiate *tuhemera* 'We buy' and *tuhemera* 'We have bought'?

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV

Pre-SM: ha(pa) NEG; na NEG SBJ; ha FUT; pa 'when, if'; zi 'when'; i 'impossible condition'.

SM: ni and nu (distribution unclear); gu; ka (in all contexts); tu; m(u); wa.

TA: anku (< am(u)ku PRG: a + LOC + INF); aka PER; eni NEG ANT.

OM: li includes reflexive and reciprocal function.

FV: a NEU; i SBJ, FUT; iti Pasts, aga (Past) IPFV. Post-verbal, *nda* or *ndiri*, may occur.

3 Tense One degree of past (-Ø- ... -iti) and of future (ha- ... -Ø-... -i), and 'present'.

4 Aspect PFV and (Present) ANT (both unmarked), PRG, IPFV, PER. As only PFV was recorded for all tenses, I cannot be sure all distinctions are maintained in all tenses. The AUXs appearing in compounds are both forms of 'be' (-li, -wer-iti, where -wer- < \*ba).

5 Negation Several negativizers. Na appears in the SBJ: na-tu-sh-kola 'Let's not touch it (Cl. 7)', na-k-iz-a (hera) 'He had better not come'. 2s has alternative surface forms: na-gu-genda, nu-gu-genda, naggenda 'Don't go'. Kizee says initial na- in IMPs can be replaced by initial hapa-, as in hapa-m-gendi 'You will not go' – 'Used especially', he says, 'by a man of authority speaking to subordinates'. Tempting to relate this Swahili-based (?) form (and the restructuring of Pogolu?) to the former presence of colonial sugar plantations in the area.

In Non-Pasts initial (ha)pa- predominates: *tuhemera* 'We buy', NEG *hapatuhemera*, *hamgendi* 'You will go', NEG *hapamgendi*. In Pasts post verbal *ndiri* (or *nda*) occurs: tu-mw-on-iti 'We saw the teacher', NEG tu-mw-on-iti *ndiri* mwalimu.

All RELs appear (?) to be negated by *ndiri*: muntu ga-nu-mw-on-a ganja gwangu 'Man I see is my friend', muntu ya-nu-mw-on-a *ndiri* 'Man I don't see...' (ga/ya from the same speaker).

6 Relatives Subject and object RELs both involve prefixing prefix + a to the verb. So (subject) mdala y-a-k-iza mhacha gwangu 'Woman who is coming (prefix-a-3s-come)'; (object) shgemi sh-a-gu-sh-fir-iti 'Knife (Cl. 7) which you wanted (Cl. 7-a-you-it-want -Past)'. See 5.

7 Subjunctive and Imperative Two IMPs shown. First uses the SBJ suffix -i (gw-iz-i 'Come', pl mw-izi-I; tu-gend-i 'Let's go', ka-gend-i 'Let her go', etc). Second involves the fixed shape *mleki* (lek- 'let') plus SBJ: *mleki kagendi* 'Let her go', *mleki tugendi* 'Let's go', etc.

## G62 Iki-hehe

	Perfective	Imperfective -aga	Persistentive pé:-	Iterative -Ø- + REDUPLICATION	Anterior -ile
P <sub>4</sub> -a:- ... -ile	tw-a:-gus-ile <i>we bought</i>	tw-a:-gul-í:ge <i>we were buying, used to buy</i>			tw-é:-tu-Ø-gús-ile <i>we had bought</i>
P <sub>3</sub> -ká:- ... -ile	tu-ká:-gus-ile <i>we bought</i>				
P <sub>2</sub> -Ø- ... -ile	tu-Ø-gús-ile <i>we (have) bought</i>	tu-Ø-gúl-i:gé <i>we were buying</i>			
P <sub>1</sub>	tu-Ø-ke: kú-gul-a <i>we just bought</i>				tu-ké tu-Ø-gús-ile <i>or</i> ngé tu-gús-ile <i>we had bought</i>
	tw-í-gul-a <i>we are buying</i>	(?) tw-á: tw-í-gul-a <i>we buy sometimes (certain)</i>  (?) tw-á tw-í-gul-ága <i>we buy sometimes (not regular)</i>	pé:-tu-Ø-gúl-a <i>we are still buying</i>	tu-Ø-gula-gúla <i>we buy, will buy (repeatedly)</i>	ye-tu-Ø-gús-ile <i>we have (already) bought</i>
F <sub>1</sub> -sa + kú-	tu-sa kú-gul-a <i>we are going to buy (today)</i>				
F <sub>2</sub> -Ø-	tu-Ø-gúl-a <i>we will buy</i>	tu-Ø-gul-ága <i>we will be buying</i>			pé-tu-Ø-gús-ile <i>we will have bought</i>
F <sub>3</sub> sá:-	sá:-tu-Ø-gúl-a <i>we will buy (distant)</i>	tu-la:-gúl-aga <i>we might be buying</i>			sá:-tu-vá tu-Ø-gús-ile <i>we will have bought</i>

## G62 Iki-hehe

1 General Nearly two million speakers of G60 varieties (Hehe 750,000, Bena 570,000), in SW Tanzania. Bena (G63) and Hehe very similar, a high level of similarity among all G60 languages (including N11, Nurse 1988). G60 fairly well served for basic descriptions (see Bibliography). I have field notes on all eight languages. Main source is a paper written in 1975 by Dr. I.A.M. Makombe, then a student at Dar es Salaam University (summarised in Nurse 1979: 114–8). I also had access to an unpublished overview of Bena verb structures, compiled by three students and myself in the 1970's. 5x2. Tones in verbs appear linked to vowel length, number of stem syllables, and to whether the verb is V- or C-initial. Limited tonal data available for this dialect: absence of tone marking on a form in this data indicates ignorance.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – ag – FV

Pre-SM: All G60 has an elaborate set of formatives here. Beside si NEG<sub>1</sub> and REL, their status is unclear: independent items, clitics, prefixes? Some seem selfstanding, e.g: sá: F<sub>3</sub>; pé: PER; pé F<sub>2</sub>; nge: CND; ngé P<sub>1</sub> ANT; péké when (Past); ye 'have already'; néke (tugúle) 'if' (we buy). Others inflect, as: tw-á: twígula 'We sometimes buy (certain)', tw-á twígulaga 'We sometimes buy (not regular)', tu-ké tugúsile 'We had bought P<sub>1</sub>', tw-é: tugúsile 'We had bought P<sub>4</sub>', tw-é: tugúle 'If we had bought P<sub>4</sub>', tu-ke: kugúla 'We just bought P<sub>1</sub>', tu-Ø-vésigé tugule 'Just when we had bought P<sub>1</sub>' (also in other tenses); (ké: < kali, nge(:) < ngali, twé: < tw+a+li, etc).

SM: n (before C) and nd (before V); u; a; tu; mu; va. Nd- before -i- suggests an original \*-li-.

NEG<sub>2</sub>: láá IMP; si REL.

TM: a: P<sub>4</sub>; ká: P<sub>3</sub>; Ø F<sub>2</sub> and P<sub>2</sub>; í PRG; la: F<sub>3</sub> IPFV.

ag/FV: a NEU; e SBJ; ag-a IPFV, IMP; ile Past, ANT. In most Hehe -ile induces a modified base (gula 'buy', gus-ile), in most Bena base is unchanging. Ag(a) + ile = [-i:ge] in Past IPFVs. Certain NEG formatives may follow the verb, semantic role and morphological status unclear.

3 Tense Four pasts, three futures. P<sub>1</sub> and two futures involve an auxiliary. Dr. Makombe tended to think of three pasts: P<sub>4</sub> Far, P<sub>3</sub> Middle/Hesternal, P<sub>2</sub> Near/Hodiernal. P<sub>1</sub> likely of recent origin, partly because of its only partly grammaticalised status, partly because in G60 it only appears in Hehe and Bena. For similar reasons the two futures based on 'come' also likely recent innovations. A presumably older marker of (distant?) future (la:) occurs in the IPFV. If we assume it has been recently ousted by the sa:-based form, that would support those who maintain that morphological change occurs first in simpler, less marked forms such as the PFV.

4 Aspect and other categories The range of aspects can best be seen in the Present in the matrix: PFV (-í-), two kinds of IPFV (both with a pre-verbal element involving -a(:), one with -a, the other with -aga), PER (pé:-), ITR (reduplication), ANT (Ø-...-ile, which doubles as P<sub>2</sub>). It remains to be seen whether the lack of corresponding forms in other tenses is due to incomplete data, or reflects the phenomenon that often tense contrasts are neutralised in non-present aspects. Several 'CNDs' – use unclear, as they come from paradigms with simple English translations.

5 Negation A single major negativizer, si- (si-tw-í-gul-a 'We aren't buying'). In RELs -si- is used (avanu a-va-si-ka-ts-ile 'People who-they-not-Past-come-Past'). For IMP, see 7.

6 Relatives Data not complete. At least for subject RELs, a pre-prefix appears. So Bena: *avanu va-ka-ts-ile* ‘People came’ versus *avanu a-va-ka-ts-ile* ‘People who came’.

7 Subjunctive and Imperative SBJ -e can be seen in: *gúl-e* ‘Hit (s)’, *mu-gúl-e* ‘Buy him’, or ‘Buy (pl)’, *tu-gúl-e* ‘Let’s buy’, etc. NEG: *u-láá-gula* ‘Don’t buy’, *tu-láá-gula* ‘Let’s buy’. Suffixal -ag- may appear in IMPs: *gul-ag-e* (sg) ‘Go and buy’.

G403 Ki-mwani

	Perfective -Ø-	Imperfective -ki-	Habitual -anga	Progressive 'be' + LOC	Persistent (-)angari	Anterior -Ø-
Past -Ø-	ká-Ø-fis-a <i>he hid</i>  N: a-á-fis-ire <i>he did not hide</i>  R: á-Ø-fis-ire  NR: sá-a-Ø-fis-ire	á-ki-fis-a <i>he was hiding</i>  N: a-á-ki-fis-a  R: a-fis-ire  NR: a-a-ki-si-fis-a	á-kí-fis-a- <b>anga</b> <i>he hid regularly</i>  N: a-a-ki-fis- <b>anga</b>	á-ki-w-a kw-a-n-ku-fis-a <i>he was hiding</i>		
Non-Past -Ø-	á-Ø-fis-a <i>he hides, will hide</i>  a-kû-ry-a <i>he eats</i>  N: a-a-Ø-fis-a  R: a-Ø-fis-a  NR: sá-á-Ø-fis-a	a-ki-fis-a <i>if he hides, when he hides, he hiding, and he hid</i>	á-Ø-fis- <b>anga</b> <i>he hides regularly</i>  N: a-á-fis- <b>anga</b>  R: a-Ø-fis- <b>anga</b>  NR: sa-a-Ø-fis- <b>anga</b>	ka-Ø-w-a-n-kú-fis-a <i>he is hiding</i>  N: a-a-Ø-ri ku-fis-a  R: a-Ø-ri ku-fis-a  NR: sá-a-Ø-rí ku-fis-a	<b>angari</b> ku-fis-a <i>he is still hiding</i>  N: a-Ø- <b>angari</b> ku-fis-a	ka-Ø-fis-a <i>he has hidden</i>  N <sub>1</sub> : a-a-Ø-fis-ire <i>he has not hidden</i> N <sub>2</sub> : a-a-námba ku-fis-a <i>he has not hidden yet</i>  R: a-Ø-fis-ire  NR: a-a-Ø-fis-ire

## G403 Ki-mwani

1 Source and community Some 80,000 speakers on coast of Cabo Delgado Province, Mozambique. Data kindly provided by Sebastian Floor (SIL), who worked on Mwani for over a decade. Also Petzell (2002). 5x2 (some vowel nasalization, status unclear). Movable pitch accent, marked by acute (´). No marking in the affirmative ANT indicates all L, but in other forms in the matrix an absence of marking reflects lack of knowledge. Accent crucial in TA distinctions.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM: a NEG<sub>1</sub> (1s si); sá NEG REL; class marker + a in object RELs.

SM: ni; u/ku; a/ka; ti; mu; wa. Ku/ka only occurs with past positive, otherwise u/a.

TA: Ø Past PFV, Non-Past PFV, ANT (all with diff. pitch patterns) and with ire and anga; ki IPFV (with diff. pitch patterns); ka SBJ IMPs; si NEG<sub>2</sub> (after ki). Other markers of uncertain status.

OM: Only one allowed.

FV: a NEU; e SBJ; ire Past NEG and REL.

Post-FV: ni IMPs pl and objects (pluractional?); class marker (+ o) in some RELs; anga HAB; (V)ngV ‘completely’ (ni-kaarib-ungu ‘I completely ruined’, ni-m-pondepond-enge ‘Let me destroy him utterly’).

3 Tense Past and Non-Past. Anterior can also refer to recent past events, to past events relevant to or persisting into the present, and is used in the story line in narratives.

PFV Non-Past refers, inter alia, to (probable) future events, which can also be represented by use of any of the three auxiliaries ‘want, come, go’, thus: á-Ø-saka kufisa ‘He will hide’ (less probable: the -ka- can drop), or a-Ø-k-uka kufisa, or a-Ø-ku-ja kufisa; tí-Ø-sa(ka) ku-úza ‘We will buy’ (N: a-tí-Ø-sáka kufisa) or tí-Ø-saka tí-Ø-m-on-e ‘We will see him’. These are not included in the matrix as they are not yet fully grammaticalised. The -ku- appearing in this (southern) dialect only with monosyllables and vowel stem verbs appears with all verbs in northern dialects.

4 Aspect PFV, IPFV (-ki- has a wider range than in Standard Swahili: represents a range of backgrounded events, has replaced -ka- in NARs for the unmarked/secondary story line; HAB (-anga), PRG (wa-mu-ku ‘be-in-INF’), PER (anga-ri + INF). *Ri* ‘be’ occurs in PER/PRG.

5 Negation Primary (a-, in independent predications) versus secondary NEG (-si-, as SBJ). Ti-si-fúlat-e ‘We shouldn’t follow’: we-NEG-follow-SBJ; sá- in NEG RELs (sá-wá-físa ‘They who don’t hide’) (see 6). Two NEGs appear in the ANT negative box. First suggests ‘could still happen’, second implies ‘is likely to happen’. One or other may be in the wrong box.

6 Relatives Positive RELs differ tonally and/or structurally from absolutes. Past positive wá-físa ‘They hid’ (null-form, H on SM), wá-fis-íre ‘They who hid’ (ire-form, H on SM), wa-fis-îre ‘They who have hidden’ (ANT). Wá-físa ‘They hide’, wa-físa ‘They who hide’.

7 Subjunctive and Imperative Forms with -e are SBJs. Fyoma (L) ‘Read’, i-fyom-e ‘Read it’, ka-fyom-e ‘Read over there’. Pl fyom-e-ni (H).

H10A (Kongo) Ki-tuba

	Perfective	Habitual AUX + VERB + <b>-áka</b>	Progressive AUX + VERB	Anterior <b>mé(ne)</b> + VERB
Past <b>-á(k)a</b>	béto di- <b>á(k)a</b> <i>we ate</i>	béto <b>vandá</b> di- <b>á(k)a</b> <i>we used to eat</i>	béto <b>vand-á(k)a</b> (kú-)di-a <i>we were eating</i>	betó <b>mé(ne)</b> di- <b>á(k)a</b> <i>we have eaten, we ate</i> <i>(further past)</i>
	béto món-a béno <i>"we see you"</i>	béto <b>ké</b> di- <b>á(k)a</b> <i>we usually eat</i>	béto <b>ké(le)</b> (kú-)di-a <i>we are eating</i>	béto <b>mé(ne)</b> (kú-)di-a <i>we have eaten, we ate (recently)</i>
Future <b>(a)ta</b>	béto <b>(a)ta</b> 'di-a <i>we will eat</i>	béto <b>ta</b> di- <b>á(k)a</b> <i>we will eat (usually)</i>		

## H10A Ki-túba

1 General Sources: Swift and Zola (1963), Mufwene (1990, 1997). Swift and Zola (western) and Mufwene (eastern) treat somewhat different Kituba dialects. Swift and Zola contains most data. Fehderau (1962) and Hochegger (1981) were inaccessible. Some five million speakers, including second language speakers, mainly in DRC's southern Bandundu Province. Kituba arose as a contact language, is used as a lingua franca, and has a visibly simplified morphosyntax (Mufwene 2003). In this way it differs from most other languages in this book. 5x(?)<sup>2</sup>. Most words have a pitch rise on the penult. Data in 6 and 8, below, from Swift and Zola, the rest from Mufwene.

2 Structure The structure of Kituba is not like that of most other languages surveyed. It has a limited set of FVs inherited from PB, and a small set of pre-stem analytic morphemes, deriving not from PB tense-aspect markers, but from AUXs. The basic structure is:

subject # TA # (ku-) root – EXT – FV # object # NEG

Subject: Includes pronouns: *mono*, *ngé*, *yánda*, *béto*, *beno*, *bô*. They serve as subject or object pronouns and have dialect (e.g. *munu*) and short (*mo*, *mu*) variants. REL (-*na*) also occurs here. TA: Ø NAR, other (see 4); (*a*)*ta* FUT; *ke(le)* Imperfective Present; *vanda* Imperfective Past; *me(ne)* ANT. Swift and Zola have *ke(le)* + *na* for PRG, and *ke(le)* for Future ((*a*)*ta* is absent). FV: *a* NEU; *a(k)a* Imperfective (HAB, Past PRG) and Past.

3 Tense One past, 'present', one future.

4 Aspect The matrix shows clear PFV, HAB, PRG, and ANT. Past and HAB are both marked suffixally by inflectional -*a(k)a*. All other forms are analytic. Future is marked by pre-stem (*a*)*ta*, of unknown origin. Non-future HAB and PRG involve suppletive pre-stem forms of AUX 'be', *kele* in the 'present', *vanda* in the Past. PFV is unmarked for aspect. ANT involves a pre-stem form of AUX *mana* 'finish'. The phonetics of *ke(le)* (< *kala*) and *me(ne)* (< *mana*) most likely results from imbrication of former suffixal -*ile*. In some contexts INF *ku-* follows.

The Present PFV has neither suffix nor pre-stem material, so is a real null form. Mufwene shows it only as a NAR/CNS, while Swift and Zola have it as that and in two other uses: (1) with Non-Past meaning with verbs of perception and volition (*mono* Ø *zola* 'I want') and in phrases which translate by 'when, if, etc' in English. Swift and Zola say (p. 147): 'wherever the time and aspect of the action is clear from preceding context the verb may be used in its simple (= null) form'.

Mufwene also shows a POT, as in *móno tond-á(k)a* 'dia 'I would have eaten'.

5 Negation No primary-secondary distinction. All structures negated by utterance-final *ve* (e.g. *yánda ké kwikíla ngé vé* 'He doesn't believe you', lit. He HAB believe you NEG). A similar NEG particle occurs in A40-50, A70, B30-40-50, B70, C80, but in no H-language.

6 Relatives Subject and object RELs work identically. Relative and absolutes are tonally and structurally identical: any verb form can be relativised by putting a form of the demonstrative (?) pronoun -*na* before it. Thus (from Swift and Zola): *kompani ina ke tungaka*

bainzo ‘A company which builds houses’; mambu ina benu zona zaba ‘Things which you want to know’.

7     Subjunctive   In typical contexts where other Bantu languages show a form differing structurally (-e) or tonally (H on SM and FV) from indicatives, Kituba shows no such form. Kituba therefore appears to have no subjunctive. So in many IMPs (e.g. béto ‘dia ‘Let’s eat’) and in verbs used after commands or wishes, the indicative appears.

8     Imperative   Pesa ‘Give’; pesa nge (sg)/pesa benu (pl), ditto, polite; pes-aka, ditto, but ‘softer’; kwenda ‘Go’, kwend-aka ‘Go occasionally’. NEG ku-dia dimpa ve ‘Don’t eat bread’.

H16 Ki-kongo (Zombo)

	Perfective	Imperfective <b>-ang</b>	'Emphatic' <b>-(a)ku-</b>
P <sub>3</sub> <b>-a- ... -ile</b>	<b>tw-a-y-ele</b> <i>we went, had gone</i>	<b>tw-a-y-el-eng-e</b> <i>we used to go</i>	
P <sub>2</sub> <b>-a-</b>	<b>tw-a-y-end-a</b> <i>we went</i>	<b>tw-a-y-end-ang-a</b> <i>we used to go</i>	<b>tu-a-kw-end-a</b> <i>we actually went</i>  <b>tu-a-kw-end-a-nga</b> <i>we actually used to go</i>
P <sub>1</sub> <b>-ile</b>	<b>tw-e-ele</b> <i>we went, have gone, are going, are about to go</i>	<b>tw-e-el-eng-e</b> <i>we had gone, were going, have been going</i>	
Non-Past <b>(-ku-)</b>	<b>tu-ku-end-a</b> <i>we will go</i>  <b>tu-m-monek-a</b> <i>we will appear</i>	<b>tu-kw-end-ang-a</b> <i>we go</i>  <b>tu-m-monek-a</b> <i>we are visible</i>	

## H16 Ki-zombo, a variety of Kongo

1 General Nearly five million people speak Kongo with considerable dialect variation in the area where DRC, Angola, and Congo meet, on the lower Congo River and adjacent Atlantic coast. Nearly 20 items in the Bibliography treat Kongo varieties. None has texts or discourse, so it is hard to make judgements about crucial issues. The varieties in Carter, Bentley, Dereau, and Laman are similar, though not identical. This is based on Carter (1973), who covers syntax/tone in Zombo, a variety of northern Angola and southern DRC, so TA necessarily incomplete. 5x2.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM: ke- NEG; object REL; maybe others. Is ke- particle, clitic, or pre-SM prefix?

SM: i; o; 3g o, ka in REL/IMP; tu; lu; ba. Is the 3s *ka* a remnant of the Itive?

TA: a P<sub>2</sub>, P<sub>3</sub> (tonally different); Ø P<sub>1</sub>, Non-Past; aku ‘emphatic’. Non-Past, emphatic P<sub>2</sub> have ku [kw] before V-initial stems and objects but doubling of stem-initial C for C-initial stems.

OM: Only one and only classes 1 and 2. If DO and IO called for, IO here and DO post-verbally.

FV: a NEU; i (> -e after CV) ‘Hortative/Imperative’; idi P<sub>1</sub>, P<sub>3</sub>; anga IPFV (vowel harmony from idi, so a > e). Also nasal harmony. So idi/ele/ine/ene, idi-ingi, ele-enge, etc.

Post-FV: ko NEG. Status unclear (affix, clitic, particle?). See 5.

3 Tense The null form apparently operates as Future, the -ang equivalent as a ‘present’. Systemically, the two are easily combined as one, as in the matrix. Number of pasts unclear because status of P<sub>1</sub> is unclear: P<sub>1</sub> or ANT? Arguments for ANT are: Carter calls it ‘Present Perfect’, it occurs with statives as expected (e.g. tu-zol-ele ‘We want’), and, judging by the translations, it covers the range of meanings expected from an ANT (it also covers reference to immediate future, a feature seen elsewhere in Bantu: the decision has been taken (in the near past) about future action, it is as good as done). Against that are the apparent semantics: the other two pasts do not refer to today, and Carter does not say that P<sub>1</sub> regularly refers to earlier actions, as would be expected from ANT. Without more data, it is hard to decide. It is included as P<sub>1</sub> which also functions as an ANT.

4 Aspect IPF versus some IPFV is clear, as it runs through the paradigm. How many other aspects does Kongo have? Carter shows one-word verbs but not compounds in a systematic way, though some appear haphazardly exemplifying tone patterns or in the appendix on AUXs (p. 337–8). Is there a systematic ANT running through all tenses? What is the semantic range of -anga? Carter calls it ‘continuous’. For the past she translates it as ‘were...ing, (always) used to’. It is the only morphological difference between Future (no -anga) and General (timeless) Present (-anga). Can it cover ongoing action at time of reference? No clear data but one or two examples imply a PRG involving locatives: w-ina mü-ddya ‘He is (in-)eating’, mü-ddya kenă lit. in-eating he-is ‘He is eating’, waaüna ka-kédi ddy-ángá ‘While he was eating’ (-kedi is the -ile form of -kala ‘be’).

Carter also has ‘Emphatic’, ‘used when the listener has expressed or implied contradiction, or disbelief is expected ... in this sense it contrasts with the IPV and IPFV P<sub>2</sub>...’. Carter mentions Bentley labels this ‘NAR’. Desirable to see if the contrast extends to tenses other than P<sub>2</sub>.

5     Negation     Few negatives shown involve ke-...-ko. In other dialects initial ke- occurs in all categories, and the ko- may be verb- or clause-final, depending on focus.

6     Relatives     RELs and absolutes differ tonally. Some object RELs marked at Pre-SM and/or involve a demonstrative. Subject RELs agree with antecedent. 3s ka vs absolute o/w.

7     Hortative/Imperative/Subjunctive     Carter distinguishes: (a) HOR/IMP I, e.g. ka-kot-i 'Let him enter', nu-vaang-i 'Do (pl)' (b) HOR/IMP II, e.g. vaang-a 'Do (sg)', ka-end-a 'Let him go', nw-eenda (L) 'Go' (c) SBJ, e.g. tw-a-m-mon-a 'That we may see you', dy-a-monek-a 'That it may appear'. Carter cannot differentiate (a) and (b), except that (a) does not apparently include 2s or 1p.

H21 Ki-mbundu

	Perfective	Progressive / Imperfective “be” + mu-	Habitual -ene +	‘Absolute’ -a- ... -VC
P <sub>2</sub> -a-	tw-a-rim-a <i>we tilled</i>			
P <sub>1</sub> -a- ... -ile	tw-a-rim-ine N: (ki-)tw-a-rim- <b>ini-etu</b>	tw-a-kesh-ile mu-rim-a <i>we were tilling</i> N: (ki-)tw-a-kesh- <b>iri-etu mu-rim-a</b>		
	tu-Ø-rima <i>we till, will till</i> N: (ki-)tu-Ø-rim(i)- <b>etu</b>	tw-olo-rim-a <i>we are tilling</i> N: (ki-)tw-olo-rim- <b>etu</b>	tw-ene mu-rim-a <i>or</i> tw-enio-rim-a <i>we till</i> N: (ki-)tw- <b>enio-rim-etu</b> (ki-)tw- <b>eni-etu mu-rim-a</b>	tw-a-rim-i <i>we have tilled</i> tw-a-sumb-u <i>I have bought</i> N: (ki-)tw-a-rim- <b>i-etu</b>
F <sub>x</sub> -ondo-	tw-ondo-rim-a N: (ki-)tw- <b>ondo-rim-etu</b>	tw-ondo-kal-a mu-rim-a <i>we will be tilling</i>		
F <sub>z</sub> -a-	tw-a-rim-a N: (ki-)tw-a-rim- <b>etu</b>	tw-a-kal-a mu-rim-a		
F <sub>2</sub> -aka-	tw-aka-rim-a N: (ki-)tw- <b>aka-rim-etu</b>	tw-aka-kal-a mu-rim-a		

## H21 Ki-mbundu

1 General Chatelain (1888–9 original, 1964 reprint), 50 (small) pages on the verb. Chatelain's model apparently his own, based on prevailing European principles. More data and a better analysis needed. Chatelain omits tone, except to say some pairs of words are tonally distinct. Three million speak Mbundu, mostly in NW Angola. Degree of dialect differentiation not known. 5x2.

2 Structure Pre-SM – SM – TA – itive – OM – root – EXT – FV – Post-FV

Pre-SM: ki NEG (> ku in 2s, ka in 3s/p); object REL. No examples of these co-occurring.

SM: ngi; u- 2/3s; tu; nu; ba. No tonal correlates given (2/3s forms sometimes different).

TA: Ø General Present; a ANT, all pasts, F<sub>1</sub>; olo PRG; ondo F<sub>1</sub>; aka F<sub>2</sub> and the distant SBJ; ojo CND. ANT and F<sub>1</sub> are structurally identical (-a/-a-) but tonally different. (n-golo-rima 'I am (at) tilling'; almost certainly from n-kala 'be' + u (ku-mu-)rima; F<sub>x</sub> ondo < andala 'want'; -kesh- in the Past PRG is the past of -kala 'be'; HAB -ene < 'have=be with').

Itive: ka.

OM: Only one allowed. When IO and DO co-occur, IO occurs at OM, DO at Post-FV (Chatelain, fn 119).

FV: a NEU; e SBJ; ile P<sub>1</sub>; -VC (-e, -i, -o, -u, with -a in extended verbs).

Post-FV: (a) enu 2p (b) subject pronouns for persons in NEG and emphatic subjunctives (ngi-bang-i-ami 'Let me do') (c) OM and locatives. Insufficient data to judge the order of these three.

3 Tense Chatelain shows three 'preteritos' and three 'futuros'. He says of the first preterite that it refers to an action or state completely finished but whose effects live on: I take that to describe an ANT. He says of the other two that they refer to past actions or states which are over and done with, his third preterite (my P<sub>2</sub>) being more remote than his second (P<sub>1</sub>). Chatelain says Futures X and Z refer to the same, close, time, while F<sub>2</sub> refers to a more distant time. He says in Future<sub>x</sub> the subject does not move its location, whereas in Future<sub>z</sub> (and F<sub>2</sub>) it does. I take this to imply that F<sub>1</sub> and F<sub>2</sub> indicate motion away from the deictic centre, which would be consonant with the -ka- in F<sub>2</sub>, at least. See 7, for the structural parallel between two indicatives and SBJs.

Also Itive -ka-.

4 Aspect and other categories The data shows, for the Present at least, a contrast between PFV, PRG (or IPFV), a partly grammaticalised HAB, and ANT. Beside the three FUT PRGs shown, Chatelain shows another, based on the null present of -kala 'be': tu-Ø-kala mu-rima 'We will be tilling'. Chatelain also shows a CND -ojo-: tw-ojo-rima 'We should (have) till(ed)'.

5 Negation General NEG: optional Pre-SM ki- and suffix at Post-FV (ami, etu, enu, a, e for 1s, 1p, 2p, 3p, other persons/classes, respectively). (Ki-)ngi-bang-ami 'I don't do', k-u-bang-é 'You...', k-a-bangê 'He...', nu-bang-etu 'Ye...', etc. SBJ identical, REL not given.

6 Relatives U-ngi-zola: 'She-me-loves', 'She who loves me', or 'She who I love' (lit. she-I-love). These must be tonally distinct but Chatelain gives no details. Verb agrees with

antecedent if subject of REL clause is a noun: o kima ki banga tat'etu 'The thing which gives father-my'.

7 Subjunctive SBJ -e has the usual range of use, as far as can be judged. All IMPs in 8 except the first are SBJs. Chatelain shows three SBJs (his translations): tu-bang-e 'That we do', tw-a-bang-e 'That we shall do (FUT<sub>2</sub>)', tw-aka-bang-e 'ditto (FUT<sub>3</sub>)'. There is a structural parallel between F<sub>2</sub> and F<sub>3</sub>, IND and SBJ (IND -a/-a and -aka/-a vs SBJ -a/-e and -aka/-e).

8 Imperative Sg: banga 'Do', u-bang-i-e 'Please do', nde ka-bang-e 'Go and do', ki-k-u-bang-e 'Don't do', a-bang-e 'Let him do'. Pl: bang-enu 'Do', nu-bang-i-enu 'Please do', nde-nu ka-bang-i-enu 'Go and do', tu-bang-e 'Let's do', ki-tu-bang-e 'Let's not do', tw-a-bang-e/tw-aka-bang-e 'That we will do (FUTs)', ki-tw-a-bang-e/ki-tw-aka-bang-e NEGs.

H32 Ki-suku

	Perfective	Imperfective -ak
P <sub>3</sub> ´-a- ... -í	ká-lòs- <b>i</b> <i>he threw, had thrown</i>	ká-lòs- <b>iki</b> <i>he was throwing, used to throw</i>
P <sub>2</sub> -á- ... -i	tw-á-lòs- <b>i</b>	tu-á-lòs- <b>iki</b>
P <sub>1</sub> -´Ø´ - ... -i´	tú-Ø-lòs- <b>i</b> <i>we throw, have thrown</i>	tú-Ø-lòs- <b>iki</b> <i>we were throwing</i>
	k- <b>i</b> -lòs-a <i>or</i> tú-Ø-lòs-a <i>he throws, is throwing</i>  N: tú-kú-sál-a <i>we do not work</i>	tw-á-lòs- <b>ák-a</b> <i>we throw (habitually)</i>
Future ´-a-	tw-á-lòs- <b>a</b> <i>we will throw</i>	

## H32 Ki-suku

1 Source Spoken 50,000+ speakers in SW DRC. Source is Piper (1977), who focusses on tone and structure, recognises systems and paradigms, but says little of meaning.

2 Structure Pre-SM – SM – TA – NEG<sub>2</sub> – OM – root – EXT – FV – Post-FV

Pre-SM: Floating L NEG<sub>1</sub>; RELs (L).

SM: 1s N in P<sub>1</sub>, NAR, otherwise yi; 2s wu before C, w before V; 3s wu/w in P<sub>1</sub>, NAR, otherwise ka; tu; lu; ba. In most TA forms all SMs behave tonally identically and are underlyingly L. But SMs are H in a few, and in a few others participants behave differently from classes.

TA: Ø P<sub>1</sub>, NAR; í PRES; á P<sub>2</sub>; ‘a P<sub>3</sub>, FUT, Pres IPFV; ísí Emphatic.

NEG<sub>2</sub>: ku only for two forms. Distinct from TA?

OM: Normally only one allowed, and only 1-2-3 s or p. Two allowed if one is 1s N-. Because of these restrictions, other OMs are represented as Post-FV enclitics or as post-verbal pronouns.

FV: a NEU; i in all Pasts, ‘resultative, NAR, gerundium’; í NEG IMP; aka Non-Past IPFV; iki Past IPFV (< ak-i); é-ti ‘Inceptive’; é-nu IMP pl.

Post-FV: OM enclitics, which precede ‘ku NEG.

3 Tense One future, present, three pasts (P<sub>3</sub> -‘a-/-í, P<sub>2</sub> -á-/-í, P<sub>1</sub> -‘Ø’-/-í). P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> are said to refer to today, yesterday, before yesterday, respectively. The [í], which encodes Present PFV, deletes after the vowels of many SMs and is thus invisible segmentally.

4 Aspect and other categories Piper uses the terms: Habitual (-aka; only for the timeless HAB), Continuative (-iki; for P<sub>2</sub>, P<sub>3</sub>), Antecessive (-iki; for P<sub>1</sub>), Confirmative (P<sub>3</sub>), Emphatic (-isi- ‘Er wirft tatsächlich’), Inceptive (-(-e)ti occurs at very end of verb, co-occurs with and after -ak(a)), Resultative (almost but not quite the same form as P<sub>2</sub>, P<sub>3</sub>; ‘Er hat nun geworfen’), NAR ‘Nun wirft er’. He shows many pairs, members distinguished only by +/- -aka/-iki. So, despite the labels, there is an apparent simple consistent contrast of +/- IPFV. The only pair with apparently divergent meaning – but identical tonal behaviour – is -á- Future versus -á-/-áka-HAB (cf H16). The matrix shows only +/- IPFV.

Is there an ANT? Some P<sub>1</sub> verbs always have stative meaning but that does not prove P<sub>1</sub> is an ANT, as other pasts may also have a stative interpretation. Perhaps Piper’s Resultative (‘Er hat nun geworfen’) is a kind of stative or ANT, but it is not shown to co-occur with other tenses.

Absent from the matrix are: ká-lòs-a P<sub>3</sub> Confirmative; ká-lòs-aka P<sub>3</sub> Confirmative IPFV; k-ísí-los-a Emphatic (‘Er wirft doch’); wu-lósi, tu-losí Narrative; ka-lós-éti Inceptive; ka-lós-ák-éti Inceptive IPFV; w-a-losí Resultative; lòsi (floating H preceding) Gerundive.

Piper has a form labelled SBJ (see 7). In most Bantu languages SBJs are so labelled because of their semantic-syntactic behaviour, [e] suffix, and tonal behaviour. This one seems to be so labelled because of its meaning (‘wants to, should, etc’) and tonality (final H). The syntactic evidence and the [e]-shape are missing. The [-i] and [-e] in some IMPs may be relics of the SBJ.

5 Negation Most conjugated forms, and the IMP, are negated by a floating L at Pre-SM, and Post-FV *ku*, preceded by a floating H. The NEG<sub>1</sub>s of the *í* Present and the *ísí*

Emphatic Present, are *iku* and *ísiku*, respectively, that is, the *ku* precedes the root. No data for RELs.

6 Relatives RELs, subject and object, have a L prefix at Pre-SM: bakhaaká ba-bá-zómbáka ‘Elders who hunt’, lit. ...who-they-hunt, bakhaaka ba-y-á-búka ‘Elders who-I-will-cure’.

7 Subjunctive and Imperative IMP: los-á ‘Throw’, los-ák-a IPFV ‘Wirf weiter’, mu-lós-a ‘Throw him’, los-é-ti ‘First throw’, NEG lós-í-ku; pl los-é-nu, los-ak-é-nu, lu-lós-í-kú. Lós-é-ti-ku ‘Don’t throw yet’; ‘SBJ’ (?): ka-lós-a (underlying kalosá) ‘He should throw’, IPFV ‘SBJ’ ka-lós-ák-a, NEG ‘SBJ’ ka-lósis-ó-ku ‘He shouldn’t have it thrown’ (-losis- is a causative).

### H33 Di-hungu

	Perfective	Progressive	Habitual
P <sub>2</sub> -a- ... -idi	tw-a-sumb- <b>idi</b> <i>we bought (before yesterday)</i>	(?) tw-a-kele ku-sumb-a <i>we were buying</i>	
P <sub>1</sub> -Ø- ... -idi-	tu-Ø-sumb- <b>idi</b> <i>we bought</i>	(?) tu-Ø-sumb- <b>idi-ngi</b> <i>we were buying</i>	
	tw-a-sumb-a <i>we buy</i>  N: tu-Ø-sumb- <b>ang-etu</b>  mbwa i-Ø-lunz-a <i>the dog bites</i>	tu- <b>na-ku</b> -sumb-a <i>we are buying</i>	tu- <b>na-ngku</b> -sumb-a <i>we buy (usually)</i>
Future -ku-	tu- <b>ku</b> -sumb-a <i>we will buy</i>		

## H33 Di-hungu

1. General Atkins (1954). Admittedly based on a short tour in 1953, no tones, just six pages on the verb, Atkins says ‘it was not possible to make a full study of the tense system’. The system described is similar to that of Kongo and Atkins says Hungu is similar to Kongo. Atkins estimates numbers at more than 60,000 people, in the centre north of Angola. Missing from Gordon (2005).

## 2 Structure

(complete?) Pre-SM – SM – TA – itive – OM – root – EXT – FV – Post-FV

Pre-SM: ka NEG; e of uncertain function (‘sometimes replaces the SM’), including negation.

SM: i-/N-/ngi- (depending on TA); u; u (ka- ‘before’ -a-); tu; nu; a.

TA: Ø Present; a P<sub>2</sub>, Present; ku FUT; naku PRG; nangku HAB. Naku has (phonological, dialectal?) variants [no:, no, nu]. Nangku- has (phonological, dialectal?) variants [nko:, nkoku].

Itive: ka (alone or after a).

OM: Only one allowed at OM (IO or DO): when two objects co-occur, IO at OM, and DO at Post-FV: u-ku-tu-la:mb-il-a-yo ‘He will kill it (chicken) for us’ (he-future-us-kill-applicative-FV-it).

FV: a (indicative, many ‘subjunctives’ – tonally distinct?); i SBJ (in some IMPs); enu Imperative pl; idi Past; ang in human NEG; -id-ing-i (= -idi + ang-) past IPFV. Ang/ing splits id-i.

Post-FV: OM and locative; a set of negative markers (see 5).

3 Tense Two degrees of past (today and yesterday vs before yesterday) and one of future. Anterior is not mentioned. A synthetic future is shown (ngombe i-kw-enda ku-fwa ‘The cow will die’ (future + go + infinitive): unclear whether it is synonymous with the ku-Future.

4 Aspect For Present, three forms are shown: unmarked/PFV, HAB, PRG. For the past Atkins shows tu-sumb-id-ing-i and tw-a-kele kusumba, both glossed ‘We were buying’. Not clear if they represent different tenses or different aspects. Exemplifying negatives, Atkins also shows a null present form: mbwa i-Ø-lunza ‘The dog bites’.

5 Negation Single universal ka- and a set of Post-FV clitics: kulu ka-ku-vimb-id-ingi-andi ‘Leg did not swell’ (NEG-class-swell-FVs), ka-tu-kel-engi-etu ‘We were not’ (NEG-we-be-FV-PostFV). This ka- apparently often drops but the final morphemes remain: -me 1s, -ku 2s, -(e)tu 1p, -(e)nu 2p, -au 3p, -andi 3s and other classes. Reminiscent of H21.

6 Relatives Not shown.

7 Subjunctive In many situations where it might be expected, there is no SBJ in final -e/-i, so tu-sumb-a ‘Let’s buy’, (u-m-kamba) ka-kinga ‘(Tell him) to wait’ (Atkins says nothing of tones). In certain IMPs a Subjunctive (-e raised to -i, as in -idi Past) occurs: u-tu-kamb-i ‘Tell us’.

8      Imperative      Several ways of giving commands. (1) regular 'Push' nungun-a (sg), nungun-enu (pl), tu-dy-enu 'Let's eat' (2) with Itive (nda:) ka-tsukidila... '(Go) and-wash' (3) with objects m-songid-i-yo him-show-SBJ-it (4) with na-, ze:nu na-tu-bandakana 'Come and help us' (5) NEG ku-kot-i-mo 'Don't go in there', ka-nu-mbe:t-i 'Don't hit me'. Dual vs plural, tu-swek-i... 'Let's (two) hide...' vs tu-swek-i-enu... 'Let's (three or more) hide...'.

H41 Gi-mbala

	Perfective	?	Habitual <b>-aanga</b>	Progressive <b>-baa-</b>
P <sub>3</sub> <b>-ga-</b>	ga- <b>gá</b> -lóomb-ulul-a gilúùngu <i>she asked for the calabash again</i>	ga- <b>ga</b> -lòomb- <b>idi</b> gilúùngu <i>she asked for the calabash</i>  mu-ga- <b>gá</b> -lóomb- <b>idi</b> gilúùngu <i>she asked for the calabash</i>	ga-Ø-loomb- <b>aanga</b> gilúùngu <i>she used to ask for ...</i>	
P <sub>2</sub> (-a) ... <b>-idi</b>	ga-Ø-lóomb-ulud- <b>idí</b> gilúùngu	ga-Ø-loomb- <b>idi</b> gilúùngu <i>she asked for the calabash</i>  mu-ga-lóomb- <b>idi</b> ... <i>she asked ...</i>	ga-Ø-loomb- <b>aànga</b> gilúùngu <i>she was asking for the calabash</i>  mu-ga-lóomb- <b>aànga</b> ... <i>she was asking ...</i>	
P <sub>1</sub> ? (-a)	ga-Ø-lóomb-ulul-à ... <i>she is asking ... again</i>	ga-Ø-loomb-ulul-a <b>gilúùngu</b> <i>she has just asked for the calabash</i>  mu-ga-Ø-lóomb-ulul-a gilúùngu <i>she has ...</i>		
Hodiernal <b>-gu-</b>		ga- <b>gu</b> -loomb-ulul-a ... <i>she will ask again ...</i>	ga- <b>gu</b> -loomb- <b>aànga</b> gilúùngu <i>she was asking for the calabash</i>  mu-ga- <b>gu</b> -lóomb- <b>aànga</b> ...	
				ga- <b>baa</b> -lóomb-ulul-à <i>she is asking for ...</i>
Future <b>-ga-</b>	ga- <b>ga</b> -loomb-ulul-a <i>which she will ask for again</i>	ga- <b>ga</b> -loomb-ulul-a <b>gilúùngu</b> <i>she will ask again for the calabash</i>  mu-ga- <b>ga</b> -lóomb-ulul-a ...		

## H41 Gi-mbala (also Lu-mbala)

1 Source 200,000 speakers in westcentral DRC's Bandundu Province. Considerable bilingualism in Kituba. Source is Ndolo (1972). Ndolo's admittedly partial analysis is structural/ tonal, not semantic/categorial. Accompanying data and short text do not allow an adequate analysis of TA. Ndolo's table with verbal categories needs semantic reinterpretation. As the data is limited, my (reinterpreted) matrix should be taken as tentative. 5x2. H and L are distinctive. Unmarked tones have the tones of the last preceding marked tone, so a new mark means a change.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM: mu 'disjunctive'; object relative.

SM: i/n/ngi; u/gu; a/u; du; nu; a. Participants and non-participants differ tonally in 'gradual' forms.

TA: baa/badi/banji PRG (< 'begin'); gu Hodiernal (Past, Future); ga P<sub>3</sub>, F; a P<sub>1</sub>, P<sub>2</sub>.

OM: Only one allowed.

FV: a NEU; i SBJ; anga IPFV; engi SBJ IPFV; idi in non-gradual P<sub>2</sub>/P<sub>3</sub> and gradual P<sub>2</sub>.

Post-FV: Locatives (e.g. -mwo) are shown; (e)nu IMP pl; others?

3 Tense Ndolo shows three pasts, hodiernal, future. P<sub>2</sub> and P<sub>3</sub> represent today/yesterday and remote, respectively. P<sub>1</sub> refers to today/recent 'par ailleurs complètement achevée' but 'se déroulant actuellement', so sometimes translates as 'have just verbed', sometimes 'be verbing': P<sub>1</sub> or ANT? P<sub>1</sub> PFV widely used in Narratives. Optional pre-stem formative a- for P<sub>2</sub>/P<sub>1</sub> graduals, a- for non-graduals. Optional a only appears in vowel-initial verbs (yéeshídi < y-a-is-idi 'I have just arrived'). Ga encodes Far Past and Future. With final -a, -gu- refers to today future, with -anga to today past IPFV.

4 Aspect and other categories Ndolo's non-tense categories are: gradual ('perfectif') versus non-gradual, the latter dividing into Conjunctive (requiring a complement), Disjunctive (marked by initial mu-, may or may not have a complement, although Ndolo's examples do not always show this), IPFV (anga), PRG (baa), three RELs (subjective, objective, circumstantial). Graduals only exist for Pasts. They are defined by (a) having participant SM's H, class SM's L, and (b) expressing a situation completed at the time of speech (contradicted by his definition of P<sub>1</sub>): these appear in the PFV column of the matrix. The next column in the matrix (Ndolo's Conjunctives) have all SM's H, are not defined semantically (hence the ? in the matrix), and have the same translation as the graduals.

PRG apparently in the final stages of grammaticalisation as the 1s SM is a form of the independent pronoun, not the regular verbal prefix, and besides the reduced -báa-, Ndolo shows *bádi/bánji*, from 'begin'. The two past IPFVs differ tonally but as they have no pre-stem morpheme, it is not clear they are in the correct rows in the matrix.

5 Negation RELs negate by using -goonda 'lack, miss'. All other NEG's use /lo/. This precedes or follows the IMP. In all other cases, -lo- precedes the regular affirmative. Mbala has therefore no real negative verb forms. IMPs also dispose of other possible negative structures.

6 Relatives Gágòsuna ga-gá-lóombulula gilùngu ‘The woman she-P<sub>3</sub>-request (again) the calabash’ (gradual), gagonusa ga-ga-lòombidi gilùngu ‘It’s calabash that woman she-P<sub>3</sub>-request’ (non-gradual non-REL (?)), gágòsuna ga-ga-lóombidi gilùngu ‘Woman who/she-P<sub>3</sub>-request calabash’ (non-gradual subject REL), gílungu gi-ga-lóombidi gágòsuna ‘Calabash that-P<sub>3</sub>-request woman’ (nongradual object REL). RELs are indicated tonally, object REL is marked at Pre-SM, verb always agrees with antecedent, nominal subject of the REL clause follows the verb.

7 Subjunctive (-i) and Imperative Loombulá ‘Ask again’, mú-lòombulud-í ‘Ask him again’, loomb-énù ‘Ask (pl)’. Gú-lóombulà ló ‘Don’t ask again’, gú-hósh-i gù ‘Don’t talk (gu- = 2s in these), ló gu-lóomba ‘Don’t ask’, gya gú-lóomba ‘Don’t ask/Stop asking’ (gu- = INF in these).

K13 Lucazi

	Perfective	Habitual -êku-	Progressive -(li)ku-	Persistentive -ci-	'Continuative' -kwánaku-	Anterior
P <sub>2</sub> -a-	tw-a-ím-b-ile <i>we sang</i> N: ká-tw-a-ím-b-ile	tw-êku-ím-b-a <i>or</i> tw-âku-ím-b-a <i>we used to sing</i>	(tu-naku-ím-b-ile) <i>we were singing</i> N: ká-tu-naku-ím-b-ile	tw-a-ci-kel-e naku-ím-b-a <i>we were still singing</i>		tw-a-ím-b-a <i>we sang, have sung</i>
P <sub>1</sub> -na-	tu-na-ím-b-ile <i>we sang</i>		tu-naku-lím-a <i>we were cultivating</i> N: ká-tu-naku-lím-a		tu-na-kwánaku-ím-b-a <i>we were singing, kept on singing</i>	tu-(a)na-ím-b-i <i>we sang, have sung</i> N: kanda tu-Ø-ím-b-a <i>we have not sung yet</i>
	tu-Ø-lím-a <i>we cultivate</i> N: ká-tu-lím-i	tw-êku-lím-a <i>we usually cultivate</i> N: ká-tw-êku-lím-a	tu-(li)ku-lím-a <i>we are cultivating, will cultivate</i> N: ká-tu-ku-lím-a	tu-ci-li ku-ím-b-a <i>we are still singing</i>	tu-kwánaku-ím-b-a <i>we are singing, keep on singing</i> N: ká-tu-kwánaku-ím-b-a	tw-a-fúm-u ... <i>we come from, have come from, are from ...</i>
F <sub>1</sub> -kwaku-	tu-kwáku-y-a <i>we will definitely go</i> N: ká-tu-kwáku-y-a					
F <sub>2</sub> -ka-	tu-ka-ím-b-a <i>we will sing</i> N: ká-tu-ka-ím-b-a					
F <sub>3</sub> -aku-	tw-âku-y-a <i>we will go</i> N: ka-tw-âku-y-a					

## K13 Lucazi (Luchazi)

1 General Based on Fleisch (2000), White (1947): there are several competent monographs of other K10 languages. Spoken in SE Angola and into Zambia and Namibia. Gordon (2005) suggests 294,000 speakers but omits Namibia, so the figure may be an underestimate. Fleisch says all K10 varieties except Cokwe are similar and could be regarded as dialects. 5x(?)2.

2 Structure Pre-stem – SM – TA – itive – mood – OM – root – EXT – FV – Post-FV

Pre-stem: (1) object REL prefix agreeing with nominal referent of the main clause, then (2) ngá- 'if', then (3) ká- NEG. White has ha/hi, which makes an Immediate Future, if added to the Present PRG.

SM: nji; u; 3s a in SBJ/NEG/CND, and most indicative Non-Pasts, 3s u often deletes in most Pasts; tu; mu; va.

TA: Ø General Present; (li)ku PRG, (a)na P<sub>1</sub>; êku HAB; êku/âku PAST HAB; ka F<sub>1</sub>; kwáku F<sub>2</sub>; âku F<sub>3</sub>; kwánaku CNT; a P<sub>2</sub>; (aka CNS = a + ka Itive), nêku Counterexpectative. Tense markers (e.g. a, na) are followed by aspect or Itive in some cases. Tonal results are predictable.

Itive: ka.

Mood: ci 'first (this and then...').

FV: a NEU; e SBJ; ile (also ele, ine, ene) Past PFV; VC P<sub>1</sub>/Present ANT. The VC suffix consists of a single vowel, which after CVC roots copies the root vowel if it is e, i, o, or u. After /a/ it is sometimes a, sometimes e. Lucazi alone in K10 has no IPFV -anga.

Post-FV: (1) (-e)nu in 1/2p IMPs and HORs, then (2) DO: if two pronominal objects co-occur, the IO occurs at OM, and the DO here: in principle, all classes, including locatives, can occur here.

3 Tense Two pasts (P<sub>2</sub>, P<sub>1</sub>). P<sub>2</sub> ('Hesternal') may refer to situations beyond yesterday, and conversely, situations occurring yesterday are not always referred to by it. Based on the meagre data, P<sub>1</sub> refers to situations nearer than those indicated by P<sub>2</sub>. Beside the (Present) Progressive, which can refer to Near Future, Fleisch has three futures, but White four, because White has ha- prefixable to the Progressive to produce an Immediate Future. White interprets the three futures as degrees of distance from the present, whereas for Fleisch all share temporal reference with degrees of certainty and obligation. Absolute time reference cannot be the main factor as Fleisch's examples show all occurring with the 'tomorrow'. It is unclear how they should be ranked relative to one another, so my numbering (F<sub>1</sub>, F<sub>2</sub>, ...) is just a taxonomic device, without temporal implications. Itive -ka- is widely used.

4 Aspect and other categories PFV, PRG, 'Continuative', HAB, as in Fleisch; PER comes from White; my ANT combines Fleisch's Perfective and Anterior. Fleisch also has: a Counterexpectative: an Irrealis: and four Potentials/Conditionals, all involving 'If...'. Fleisch shows an 'almost archaic' Past PRG, mostly replaced by the Present PRG. Fleisch and White show -ci- markers, but it is not clear if they are the same: White's -ci- (not in Fleisch) is in the PER column in the matrix, Fleisch's -ci- (not in White) represents the first of a series of actions ('First you do this, then...').

5 Negation One NEG formative *ká-*. NEGs are fewer than positives, so P<sub>1</sub>/P<sub>2</sub> PFV and ANT have the same NEG. REL and IMP NEGs are not dealt with in detail but involve periphrasis.

Fleisch's text implies P<sub>1</sub> ANT has two NEGs, the one shown in brackets and that under P<sub>2</sub> PFV. The Continuative positive is glossed as a situation 'gradually advancing' but the NEG is glossed as 'not still doing, not doing any more', where the NEG but not the positive implies PER.

6 Relatives REL verbs and clauses differ from absolutes tonally, although Fleisch (p. 201) and White (p. 12) do not completely agree on details. 3s *a-*, not *u-*. Object RELs also optionally have a Pre-SM marker and an explicit subject following the predicate: *w-a-túng-ile (zi-ndívo)* 'He built (houses)'; *zi-ndívö zi-a-(a)-túng-ile ikéye...* 'Houses which-he-(P<sub>2</sub>)-build-Past he'.

7 Subjunctive and Imperative Forms in *-e* are SBJs. Sg: *tálá* 'Look', *mu-tal-e* 'Look at him', *a-tál-e* 'Let him look'. Pl: *tál-énu*, *mu-tál-enu*, *tu-tál-enu* 'Let's look'.

K21 Si-lozi

	Perfective	Imperfective -Ø-	Habitual -ang-	Persistentive -sa(a)-	Anterior -ile	Persistentive + Anterior
Past <b>ne-</b>	<b>ne-ni-nop-ile</b> <i>I picked up</i> N: <b>ne-ni-si-kaa-bón-a</b> <i>I did not see</i>	<b>ne-ní-Ø-nop-a</b> <i>I was picking up</i> N: <b>ne-ni-saa-nóp-i</b>	<b>ne-ní-Ø-bon-áng-a</b> <i>I used to see</i> N: <b>ne-ní-saa-bon-áng-i</b>	<b>ne-ni-sáá-nop-a</b> <i>I was still picking up</i> N: <b>ne-ni-saa-nóp-i</b>	<b>né-se ni-nop-ile</b> <i>I had picked up</i>	<b>ne-ni-sáá-f-ile</b>
	<b>ni-Ø-lek-á nama</b> <i>I buy, am buying meat</i>  <b>lw-aa-c-a</b> <i>we are eating</i>  N: <b>(h)a-lu-c-í</b> <i>we do not eat, are not eating</i>	<b>ni-Ø-bon-áng-a</b>  <b>n-(a)a-bon-áng-a</b> <i>I see regularly</i>  N: <b>(h)a-ni-bon-áng-i</b>	<b>ni-sáá-nop-a</b> <i>I am still picking up</i>  N: <b>(h)a-ní-saa-bon-a</b> <i>I do not see anymore</i>	<b>ni-nop-ile</b> <i>I have picked up</i>  N: <b>(h)a-ni-si-kaa-nóp-a</b> <i>I have not picked up</i>	<b>bá-sá-lobez-i</b> <i>they are still asleep</i>  <b>lu-sa-c-ile</b> <i>we have had enough to eat and have still eaten</i>	
Future <b>-ka(a)- / -ta(a)-</b>	<b>u-tá-lek-á nama</b> <i>she will buy meat</i> N: <b>a-ká-si-y-i</b> <i>he will not go</i>	<b>lu-taa-b-e</b> <b>lu-Ø-lop-a</b> <i>we will be picking up</i> N: <b>lu-taa-b-e</b> <b>lú-sa-lop-i</b>	<b>ni-kaa-bon-ang-a</b> <i>I will see regularly</i> N: <b>(h)a-ni-naku-e-áng-a</b> <i>I will not eat regularly</i>	<b>u-sá-ta-fól-a</b> <i>she will still recover</i>	<b>ni-kaa-b-e ni-f-ile</b> <i>I will have given</i> N: <b>ni-kaa-b-e</b> <b>ni-sí-ka-fik-a</b> <i>I will not have arrived</i>	<b>ni-kaa-b-e ni-sáá-f-ile</b> <i>I will still have given</i>

## K21 Si-lozi

1 General Gowlett (1967), also Yukawa (1987). They describe slightly different variants. 557,000 speakers, most in SW Zambia, also Botswana, Namibia, Zimbabwe. One of Zambia's seven national/official languages. Lozi originally an S33 language; community came north from South Africa early in C19, said to have been used by more non-native than native speakers. 5x1. (Partial) nasal harmony.

2 Structure Pre-SM – SM – NEG – TA – OM – root – EXT – FV – Post-FV

Pre-SM: (h)a NEG<sub>1</sub>; (h)á 'HOR'; (h)á 'when, if'; ne Past; se 'already' (ne precedes se).

SM: n(i); 2s ku after á- HOR, otherwise u; 3s a NEG/SBJ/CND/SIT/REL, otherwise u; lu; mu; ba. Participants L, others (all?) H.

NEG<sub>2</sub>: si NEG IMP/SBJ/CND; sí many other NEG<sub>s</sub>; síka(:) ANT NEG; sa(a) INF NEG.

TA: Ø Conjunctive PRES, and in others; aa Disjunctive PRES; a 'past subjunctive' (I think rather a sort of narrative, see exs in 5); ka(a) or ta(a) FUT; ká or tá 'might'; sa(a)(ka(a)) PER; nze PER; no(o) 'must, should'; ne 'sometimes'; ne CNT; to Ventive; tiló: 'come to'; yo Itive; iló: 'go to'; sázo 'have just verbed'; manó: 'after...'; sinó: after...'

OM: Only one allowed.

FV: a (also i) NEU; e SBJ; ile (allomorphs) ANT, Past; i NEG PRES, Past, CND, IMP sg; also ang (not strictly a FV) HAB, also ak 'extensively, repeatedly, violently, suddenly'.

Post-FV: η(i) IMP pl.

3 Tense Gowlett and Yukawa agree on a past, present, future. Past consists of inflected auxiliary ne- plus inflected main verb, but most often the initial inflection drops, leaving initial ne-. Present contrasts Conjunctive (pre-stem Ø) and Disjunctive (a).

4 Aspect and other categories By contrast with the simple tense system, Lozi has a set of aspects and moods too extensive to treat here or in the matrix (Gowlett 119-28, 180-218). Those in the matrix are: PFV, PRG, HAB, PER, ANT. Not in the matrix are series representing 'might' (structurally but not tonally identical to FUT); 'must/should', 'sometimes', Continuative, Ventive, Itive, 'have just verbed', 'after/as soon as', and probably NAR. There are over 50 possible combinations of TAM for positive indicatives. Some of the markers under 2, above, may co-occur. The last column in the matrix, combining PER and ANT, expresses that 'the result of an action remains unchanged' ('I lent something to someone and he has not returned it yet). Gowlett has a 'past future': ne-ni-tá-mata 'I would have run', lit. Past-I-FUT-run.

Finally, Gowlett has participials. They occur in subordinate clauses or as the second member of compounds, and differ from regular indicatives by using -sa-, not ha-, for negation, by having 3s a-, not u-, and by only having the CNJ (null) Present. They only occur in the Present, ANT, and FUT.

5 Negation Three NEG<sub>s</sub>. (1) primary (h)a- (2) SBJ/IMP, some RELs have -si:- ANT -síka(:)- (3) Yukawa shows a third NEG, with an AUX verb -sika, so IMP sg ú-sik-é w-aa-c-a 'Don't eat', and kuli bana báaka bá-sik-é ba(a)-shwá tala 'So kids my they-may-not (they)-feel hunger'.

6 Relatives Systematic prefix, in subject and object RELs, e.g. (Yukawa) u-káa-bóna 'He will see' vs mutu yá-a-káa-bóna 'Person who-he-will-see'.

7 Subjunctive and Imperative C-á 'Eat', lék-a 'Buy', mat-a 'Run', lí-c-e 'Eat it', pl mat-e-ŋi or mat-a-ŋi, mu-mát-e (Yukawa), si-w-i 'Don't fall', si-lekéŋi 'Don't buy (pl)', (h)ât-e 'Let him come', (h)á-lu-y-e 'Let's go (2 people)', (h)aluyenŋi 'Let's go (3)', lú-si-zwéŋi 'Let's not go out', (u)tó-bíne 'Come and dance', (u)yó-bapala 'Go and play'.

## K31 Si-luyana

	Perfective	Habitual <b>-kú-</b>	Progressive <b>-li-á-</b>	Persistentive <b>-sí-</b>	(?)	(?) <b>-ile</b>
P <sub>2</sub> <b>-ná-ka-</b>	tu- <b>ná-ka</b> -kél-é <i>or</i> tu- <b>ná-ka</b> -kél-á <i>we came</i>  N: ka-tw-á-sí-kél-á <i>we did not come</i>				tu- <b>ná</b> -kél-é <i>we have come</i> i- <b>ná-máib-á</b> <i>I have been and am</i> <i>still unlucky</i>  N: ka-tw-á-sí-kél-á	tw-á-kél-- <b>ilé</b> <i>we have/had arrived</i>  N: ka-tw- <b>a-sí-kél-ilé</b>
P <sub>1</sub> <b>-ná-kú-</b>	tu- <b>ná-kú</b> -kél-á <i>we came</i>  N: ka-tw-á-sí-kél-á <i>we did not come</i>				<b>náá</b> -tu-kél-á <i>we have come</i> <i>(very recently)</i> <b>náá-ni-máib-á</b> <i>I have been and am</i> <i>still unlucky</i>  N: ka-tw-áá-kél-á	
	tu- <b>Ø</b> -kél-é <i>or</i> tw- <b>à</b> -kél-á  N: ka-tu- <b>Ø</b> -kél-á	tu- <b>kú</b> -kél-á <i>we come (regularly)</i>  N: ka-tú- <b>kú</b> -kél-é	tu- <b>li-á</b> -kél-á <i>we are coming</i>  N: ka-tu- <b>Ø</b> -kél-é	tu- <b>sí</b> -kél-á <i>we are still arriving</i>  N: ka-tu- <b>sí</b> -kél-á		tu- <b>Ø</b> -kél- <b>ilé</b> <i>“we are in the state of</i> <i>having arrived”</i>
‘Close Future’	tu- <b>ká</b> -kél-á <i>we will come</i>  N: ka-tu- <b>ká</b> -kél-á					
‘Simple Future’	<b>mba</b> -tu- <b>Ø</b> -kél-á <i>we will come</i>  N: ka-tu- <b>ká</b> -kél-é			<b>mba</b> -tu- <b>sí</b> -kél-á <i>we will still be</i> <i>arriving</i>		

## K31 Si-luyana

1 General While Gordon (2005) says 75,000+ speak Luyana in W Zambia, others in Angola and Namibia, Givón (1970: 1) says ‘today spoken by only a few older people around the Lozi court ... may indeed be nearly extinct within a decade ... the old language spoken by the Lozi people prior to the Makololo conquest of Buluzi ...’. Givón and Gordon seem to be talking of different communities and language varieties; Givón’s appears to be a western variety. All Luyana varieties have been declining since the Lozi arrived. Source is Givón. By Givón’s own admission, tones and meanings of verbal forms not always reliable. Participants L, 3s/p SMs (and probably other classes) H. Relatives and absolutes differ tonally, as do statements and questions. Tones as in Givón. 5x1. Fisch (1977), Möhlig (1967), Yukawa (1987) describe other K30 languages.

2 Structure Pre-SM – SM – TA – NEG<sub>2</sub> – root – EXT – FV – Post-FV

Pre-SM: ka (apparently L) NEG<sub>1</sub>; náá ‘very near past’; mba (L) ‘simple future’.

SM: 1s (s)i in a very few tenses (all VH pasts), otherwise ni; u; ú 3s positive, a 3s NEG; tu; mu; á. Participants (and 3s a?) L, others H.

TA: náku P<sub>1</sub>; náka P<sub>2</sub>; ná ANT?; a (apparently H), occurs in ‘have/ed’, ‘be in the middle of’, one ‘unmarked present’; li occurs in two forms glossed as PRGs; sí PER; kú HAB; Ø General Present; ká ‘close future’.

FV: a NEU; e SBJ; vowel copy suffix occurs in (a) two Past positives (b) two Present negatives; ile occurs in what appear to be ANTs.

Post-FV: ni, which occurs only in IMP pl, as [eni].

Although there is no OM in this structure from Givón, data from other K30 languages suggests an OM.

3 Tense Givón has three futures: Close and Simple Future (as in the matrix, meanings not explained) and a Might-Should Future: tu-támbá kukela, NEG ka-tú-sing-i kukela ‘We may/might/should come’. We ignore this because though Givón says it is common, it visibly consists of AUX (-tamba ‘continue’) and INF, is hardly grammaticalised, and is more modal than tense.

Givón has six forms referring to past actions: the two Past PFVs and the four forms in the last two columns in the matrix. The matrix is my interpretation of Givón’s data. As I am unsure of the semantic difference between the forms in the last two columns, they are left without label.

Several forms refer to timeless or present actions (see matrix). On the basis of Givón’s data it is hard to judge how they differ aspectually (in one place some are said not to occur independently, in another ‘mostly in subordinate constructions’). Givón cites one other purely dependent form: tu-ku-ténd-ile ‘(We) working’, glossed as ‘Gerundive-participial’, shown co-occurring with Past and Futures in the main verb (‘We stayed/Will stay in the village working’).

4 Aspect It seems clear that Luyana can be interpreted as having PFV, PRG, PER, and HAB. The four past forms in the last two columns are ANTs or ANT-like.

Givón has a few other categories, such as conditionals, if- and when-clauses, and the Gerundive-Participial mentioned above.

5     Negation     IMP NEG uses -lesa ‘Let be’. Traces of ta- and -sa- in a copula NEG. Traces of si (a-si) in some Pasts. Otherwise NEG ka- (L). 1s si- in some forms, mainly ‘presents’.

6     Relatives     Most RELs shown are structurally the same as, but tonally different from, the corresponding absolutes. Most may also involve demonstratives. Exs: munu ú-ná-kútenda ‘Man worked’, munu (oyo) u-ná-ku-tenda ‘Man (who) worked’, mwana uyu munu u-na-ku-fula ‘Boy whom man hit’. Other K30 languages work similarly (e.g. Möhlig (1967)).

7     Subjunctive and Imperative     Abrupt IMP consists of the stem (sg fúla, pl fúleni ‘Hit’). Politer IMP uses the SBJ: u-fúle, tu-fúle ‘Let’s hit’. NEG: u-lése kufúla ‘Don’t hit’.

K42 Ci-ikuhane (Endresen)

	Perfective	Imperfective	Habitual <b>-anga</b>	Anterior <b>-a-</b>
Past <b>-ba-</b>	ní- <b>ba</b> -bal-í <i>I read</i> N: keená ní- <b>ba</b> -bal-í	ní- <b>bá</b> -lí ku-bal-a <i>I was reading</i>	ni- <b>ba</b> -li ku-bal- <b>anga</b> <i>I used to read</i>	
	ú- <b>Ø</b> -bal-a <i>she reads</i> N: ka-u-nyw-í <i>she does not drink</i>	ni- <b>Ø</b> -kwête ni- <b>Ø</b> -ly-á <i>I am eating</i>	tu- <b>Ø</b> -bal- <b>anga</b> <i>we read (regularly)</i>	tw- <b>á</b> -ly-a <i>we have eaten</i> N: keeni kú-sik-a <i>has he not arrived?</i>
Future	ká-tú- <b>Ø</b> -nyw-e <i>we will drink</i> N: ketiní tu-nyw-e			

K42 Ci-ikuhane (Jacottet)

	Perfective	Imperfective	Habitual	Persistentive <b>-chi-</b>	Anterior <b>-ite</b>
Past <b>-Ø- / -ba-</b>	ni-Ø-zak-i <i>I built</i>  N: kana ni-zak-i  ni-ba-zak-i <i>I built</i>  N: kana ni-ba-zak-i  ni-Ø-kus-i <i>I am full (food)</i>	ni-ba-zak-a <i>I was building</i>  N: kana ni-ba-zak-a	ni-ba-di ku-zak-a <i>I used to build</i>  N: kana ni-ba-di ku-zak-a		ni-ba-zak-ite <i>I have/had built</i>  N: kana ni-ba-zak-ite
	ni-Ø-zak-a <i>I build, am building</i>  N: ka-ni-zak-i <i>or</i> si-Ø-zak-i		ni-Ø-kwête ni-ly-á <i>I am eating</i>	ni-chi-end-a <i>I am still going</i>  N: k-a-chi-mu-sak-i <i>he does not like him any more</i>	n-a-zak-a  N: kana n-a-zak-a <i>or</i>  ni-Ø-zak-ite <i>I have built</i>  N: kana ni-zak-ite
Future	ni-Ø-za ku-zak-a <i>or</i> mbo ni-Ø-zak-e <i>I will build</i>  N: keti u-zak-e <i>you will not build</i>	mbo ba-b-e ku-sak-e <i>they will be loving</i>			

## K42 Ci-ikuhane (also Echi-subia)

1 General K40 is underdescribed. Main sources for K42 are Jacottet (1896: 50–73, and texts) and Endresen (1983: 34–56, 97–107). Ohly (1994), Baumbach (1997), Sommer (2003) were also consulted. Jacottet’s and Endresen’s descriptions are quite discrepant. Unclear whether this is due to geographical or temporal factors (the main sources are nearly a century apart) or to the length of stay of the authors (Endresen did four weeks’ fieldwork, Jacottet much longer). 42,000 speak Ikuhane, mainly in Namibia’s Eastern Caprivi, but also Botswana and Zambia. (Maho (1998) has 24,000.)

2 Structure Pre-SM – SM – TA – LIM – OM – root – EXT – FV

Pre-SM: ka NEG<sub>1</sub>; Object REL; ha ‘when, if’; chi ‘then/when/PER’; ká FUT (Endresen).

SM: ni; u 2/3 s; a 3s; tu; mu; ba. Tones unknown (Jacottet has none, Endresen’s are sparse). Both agree on 3s u in Present/ANT/SBJ; a in SBJ and before -ba, but otherwise disagree.

TA: Ø General Present (also in Past and one ANT (Jacottet), in HAB (Endresen)); a ANT; ba Past; sa NEG<sub>2</sub> only in ha-ni-sa-sak-i ‘If-I-not-like’, ku-sa-bon-i ‘To not see’ (Jacottet), and the REL.

LIM: ka Itive, with all tenses (Jacottet); the few examples do not make it clear whether -chi- PER (Jacottet) fits here but facts from other Bantu languages suggest it does.

OM: Subiya allows two OMs, apparently in the order DO IO.

FV: a NEU; e SBJ and FUT; i Past; anga HAB (only Endresen), ite ANT (only Jacottet).

3 Tense Endresen has one future, Jacottet two, one visibly not yet grammaticalised (‘come’). As the matrices show, Endresen has a simple and transparent one past, present and one future system. Past reference differs: whereas in Endresen -ba- is the marker of Past, in Jacottet -ba- can be added to existing Past, Present, and Anterior forms. Present plus -ba- gives a Past Imperfective, but Jacottet says little conclusive about the meaning of the other two (the Past and ANT with -ba- ‘could be called pluperfect but often have the sense of a Past and ANT further in the past’). This needs clarification.

The null Present can be used participially as in (Jacottet): ba-mu-bon-i u-Ø-enda ‘They saw him going’ (lit. They saw him he-goes).

4 Aspect Endresen and Jacottet show the same basic aspects (PFV, IPFV, HAB, ANT) with almost identical marking. Additionally, Jacottet has a PER, and what he calls a second ANT in -ite: unclear how this differs semantically from the first ANT in -a-. Endresen has -anga for HAB.

5 Negation Endresen and Jacottet agree on having several NEG markers and on their general distribution but do not agree on shapes or exact distribution. Both have ka- in the Present, and a set of pre-verbal particles apparently based on ka- in other forms (for some examples and differences, see matrix). Jacottet shows -sa- as in 2, above, and Endresen has saku-, as in 7, below .

6 Relatives Sparse data suggests that, except in the 3s, subject RELs are segmentally as subject absolutes, but tonally different, while object RELs are marked at Pre-SM. Tonal

correlates are unknown. Ex: w-éhaayá úmbwa w-â-lya ínyama ‘He-killed dog which/it-Past-eat meat’, úmbwa w-a-lyá ínyama i-tw-â-mu-há ‘Dog it-Past-eat meat which-we-ANT-it-give’.

7      Subjunctive and Imperative For the IMP both Jacottet and Endresen show only forms clearly SBJ such as: sg nyw-ě menzi ‘Drink water’, ni-h-é ímbuka ‘Give me a book’, yi-ni-h-é ‘Give me it’, kánzi ú-ni-haay-i ‘Don’t kill me’. Pl: mu-nyw-é menzi. Jacottet also has tu-ku-y-a ‘Let’s go’, mu-ku-hwil-a ‘Adore (pl)’ and (kuti) ba-ku-zana naye ‘(So that) they play with him’. The status of these last forms is unclear. Endresen has one NEG IMP sáku-ni-kátaza ‘Not-me-disturb’.

## L13 Gi-kwezo

	Perfective	Progressive <b>be + (LOC) + INF</b>	Stative (?)
P <sub>3</sub> -à- ... -ile	dw-á-swěg-ile <i>we hid</i>	w-a-gěs-ile mu-gu-swěl-a <i>he was hiding</i>	
P <sub>2</sub> -à- ... -i	dw-á-swěg-i <i>we hid</i>		
P <sub>1</sub> = Anterior -à-	dw-á-swěg-a <i>we hid/has hidden, so are hiding</i>  w-a-swěg-a <i>he hid, etc.</i>	w-a-gěsa mu-gu-swěl-a <i>he was hiding</i>	
	dú-Ø-swěg-a <i>we hide, are hiding, will hide</i>	u-Ø-di mu-gu-swěl-a <i>he is hiding</i>	w-a-swěg-a <i>he hides, he has hidden, knows how to hide</i>
Future ma-	ma-dú-Ø-swěg-a <i>we will hide</i>		

## L13 Gi-kwezo

1 General Some 60,000 speak Kwezo, in SW DRC, eastern Bandundu Province, west of Kikwit. Forges (1983) has 130 detailed pages on the verb, another 80 of transcribed stories and completed questionnaires, and bits scattered in the earlier pages. 5x(?)1.

2 Structure Pre-SM – SM – TM – OM – root – EXT – FV – Post-FV

Pre-SM: Object REL, which precedes ma FUT; mu and di can occur optionally with P<sub>1</sub> and stative, not apparently changing their meaning (see H41 for mu); gi (Cl. 7) ‘when, if’ (\*ki > Kwezo gi).

SM: ngú; ú; 3s a (SBJ), otherwise u; dú; mú; a. Also lu ‘thee and s/he’.

TM: a ‘past’ (all Past/stative, further meaning by adding tones and FVs); Ø Present, Future.

OM: Only one allowed. If two called for, then IO at OM, and DO as an independent post-verbal.

FV: a NEU; e SBJ; i P<sub>2</sub> and ‘Hypothetical’; ile P<sub>3</sub>. This -i also occurs in L11 and corresponds systemically to VH in other languages. Many final vowels are devoiced (similar to L21, L53, etc).

Post-FV: énú IMP pl.

3 Tense One degree of future, three (two?) of past reference: is P<sub>1</sub> Past tense or ANT? Stative verbs co-occurring with it typically translate as presents (‘be sitting’), while active verbs translate as Pasts, usually recent, suggesting Anterior. I have interpreted it as P<sub>1</sub> as it occurs as the first verb in compounds: w-a-gêsa mu-gu-swêla ‘He was hiding’ (lit. he-P<sub>1</sub>-be loc-infin-hide).

Past reference is relative. Many examples show all three pasts referring to today’s actions, although P<sub>2</sub> and P<sub>1</sub> refer less often to more remote actions. When actions are sequenced (‘When they had done X, they did Y’), the more remote action is typically in P<sub>3</sub> or P<sub>2</sub>, the nearer in P<sub>1</sub>.

4 Aspect Beside the PRG shown in the matrix, Forges shows a few examples of another PRG, based on ‘have’: mbwa ná gu-zonda ‘Dog is losing weight (lit. dog with to-thin)’, dw-â-na gú-dãmega ‘We call (it)’. Forges does not explain how this differs semantically from the main PRG.

The stative (Forges ‘intemporel’) is segmentally identical to but tonally distinct from P<sub>1</sub> and they are probably related historically. Most statives are affected by a rule which replaces the lexical tone of the root by a H and so on the surface have a H or rising tone. Meaning and function are unclear, it occurs mainly with stative verbs (‘love, hate, know, stay, be swollen/tall/red’) but not exclusively (‘abandon’). It expresses general states (‘Fathers beget daughters’), results, knowledge, and ability.

5 Negation Negative Imperative is expressed by post-verbal *lo*. Elsewhere, it is encoded by (a) pre-verbal, compulsory *lo-* with gw + class pronoun (b) post-verbal and optionally, again *lo*, and (c) an associated tone pattern. All main positive patterns shown can be negated.

6 Relatives Kwezo distinguishes a subject REL and two kinds of object REL, one which puts the lexical subject after the verb, the other which puts a lexical or grammatical subject before the verb. The object REL puts a pronominal prefix at Pre-SM. Most RELs are also tonally distinct from absolutes. Exs: ng-a-swěgá 'I who hid (lit. I-P<sub>1</sub>-hide)', (pot) í-ng-a-swěgá 'which I hid (lit. REL-I-P<sub>1</sub>-hide)', vs ng-á-swěga 'I hid' ('I-P<sub>1</sub>-hide'); gw-a-beg-ele gámbùlugu gěmbo 'When (the) antelope stayed (in the) village' (lit. when-P<sub>3</sub>-stay-P<sub>3</sub> antelope village).

7 Subjunctive Forges has Present and Remote SBJ (both in -e), each characterised by a specific tonal pattern. Present SBJ conveys a wish/order to be realised in the present, the Remote conveys the same, to be realised in the future. Forges admits the line between the two is not always clear. Forges also includes as subjunctive a Hypothetical, which translates as French 'when' and a Past, consisting of gi- and -i. I think this is simply P<sub>2</sub> plus gi- 'if', and not a subjunctive.

8 Imperative Sg 'Hide', swêg-a or u-swěg-e, í-swěg-e 'Hide it'. Pl swêg-ěnu, du-swěg-e 'Let's hide'. These involve substituting for the lexical tone a tone which is its opposite.

## L21 Ki-kete (south)

	Perfective	Habitual (?) -ang	Progressive /ná + ó/ /ná + ó/	Persistent -tsi-	Inceptive -tsa-	Anterior -il(-ing)-
Past -a(ká)-	cw-a:ká-tand-il <i>we (had) burned</i> N: ts-aká-tand-il-end <i>I did not burn, had not burned</i>	cw-a:ká-tand-ang <i>we were burning</i>	cwu-r-ing nó-tand <i>we were burning</i>		cwú-tsa:-ka-tand-il <i>we had already burned</i>	cwú-Ø-tand-il-ing <i>we have/had burned</i> N: k-u-tand-il-ing-end <i>you have not/ had not burned</i>
	cwú-Ø-tand <i>we burn</i> N: kí-tsi-pát-end <i>it (door) is not closed</i>	cwú-Ø-tand-ang <i>we burn</i> (HABITUAL)	cwu-nó-tand <i>we are burning</i>	cwú-tsi-nó-tand <i>we are still burning</i>	cwú-tsa-nó-tand <i>we are about to burn</i>	cwú-Ø-tand-il <i>we have burned</i> N: k-a-tand-il-end <i>he has not burned</i>
Future -tsa-	ó-tsa-tând <i>you will burn</i> N: tsi-tsa-tând-end <i>I will not burn</i>	cwú-tsa-tand-ang <i>we will always burn</i>				

## L21 Ki-kete, Ru-kete

1 General Spoken in southcentral DRC's Kasai Occidental Province. Kamba Muzenga (1980) has 40+ detailed pages on the verb, and other bits under Morphophonology and Phonology. Kamba Muzenga probably influenced by Stappers (1964). Kamba Muzenga mentions four earlier treatments, including Stappers' notes. Gordon (2005) has no figure for the Kete, treating them as a subset of Songye, for which the population is given as one million. 5x2, metatony, nasal harmony. Both classified as L20, Songye and Kete are apparently quite discrepant verbally.

## 2 Structure

Pre-SM – SM – NEG<sub>2</sub> – TA – LIM – OM – root – EXT – FV – Post-FV – OM

Pre-SM: ká NEG<sub>1</sub> (tsi 1s (L)); object REL ('augment'). These NEG and REL do not co-occur.

SM: n; o 2/3 s; a 3s SBJ; cwu; m; a. Participants L, classes H (KM: 83).

NEG<sub>2</sub>: ká, only in RELs. Is this a distinct category from TA?

TA: a(ká) Past; a NAR; tsa FUT; nó PRG (('be+)/ná 'and' + infinitive ó-/).

Two TAs can co-occur, the first being always INCE tsa. (Is this -tsa- the same as -tsa- FUT?)

Limitative: tsi PER, ká Itive.

FV: a NEU; íl(e) Past and ANT; íling Past ANT; ang HAB (IPFV?). As Kete has no final surface vowels, the bracketed Vs are underlying. Kamba Muzenga does not include (-e) SBJ, but I see no reason why (-a) and (-e) should not be allowed.

Post-FV: (1) ny 'SBJ/IMP pl' (2) átsw 'where' (3) object (4) end NEG. KM says -end NEG occurs last but shows few examples so the order is unclear. Kete allows a single object at OM, so a second (IO) is marked here, e.g. w-a:ka-m-shwumbi:l-ig 'He bought him it' (he-Past-him-buy-it)

3 Tense Kamba Muzenga has two degrees of Past (Near, Far) in the Perfect, not the PFV, which is strange. I have interpreted his Near Perfect as Present Anterior ('We have burned'), his Far Perfect as a (Past) Anterior. This gives one past and one future. Whether this or Kamba Muzenga's analysis is adopted, the morphological marking is asymmetrical (Past marked by -aka- in some cases but by -(il-)ing- in others).

4 Aspect and other categories The six aspects in the matrix are clear enough, although some details are unclear. Thus, for example, Kamba Muzenga posits an underlying 'be + infinitive' in all PRGs: while that is true for the Past, there is no evidence for 'be' in the Present. Cross-Bantu evidence suggests an unmarked present here ('I with X', but 'I was with X (Past)'). Kamba Muzenga refers to -ang forms as HAB, but some translations suggest a general IPFV might be more appropriate.

Other categories are NAR (-a-) and CND ('if', structurally as the Present, but tonally different). These need more analysis, as some examples point to other uses, thus compare ing n-á-pet 'If I-NAR-receive', hardly a NAR, with cwú-tand-ang 'If we burn' and ing ín-jip-el 'I could kill' (lit. if I-kill-ANT').

5 Negation Most NEGs have ká- (1s tsi). In REL ká- moves to Post-SM. A third NEG mentioned: ó-ká-ry ó-mon ‘He hasn’t seen’ (he-NEG-be connector INF-see, ‘He not with seeing’).

6 Relatives RELs differ from absolutes tonally, and in some contexts by an augment at Pre-SM: ó-tand ‘(Person) who-burns’, ó-cwu-tând ‘Who-we-burn’ (REL-we-burn), í-chw-a:ka-tand-âng ‘Which we burned’ (REL-we-Past-burn-HAB).

7 Subjunctive Kete has two SBJs. The present SBJ, seen in the plural IMPs below, consists of SM – root + /a/ (?) and a specific tone pattern. The ‘future’ SBJ has a similar (but not identical) tone pattern plus TA /a(ka)/: w-à-n-letel ‘You should bring me’.

8 Imperative Sg témesh ‘Light’, NEG ku-témesh-end (ku < ka+u), ó-mw-ambil ‘Tell him’, also tso:-r ‘Eat’ (-r- ‘eat). Pl témesh-a:ny ‘Light’, ká-shumba:ny ‘Go buy’, cwu-(ka-)shûmb ‘Let’s (go) buy’, cwu-shûmb-a:ny ‘Let’s buy’. The plurals here are SBJs.

## L32 Ciin-kanyok

	P <sub>2</sub> -baa- ... -il´	P <sub>1</sub> -Ø- ... -il	-Ø- (largely)	Future -ci-
Perfective	tú-báa-túm-ín <i>we sent (long ago)</i> N: ká-tú-báa- túm-ín	tú-Ø-túm-in N: ká-tú-tum-ín	tú-Ø-túm <i>we send</i> N: ká-tú-tum	tú-ci-tum <i>we will send</i> N: ka-tu-ka-tum
Habitual -dyaa-	tú-baa-dyáá kúzáb <i>we used to play</i> N: ká-tu-báa-dyáá-kúzáb-óh bend		tú-dyáa kútúm <i>we send (regularly)</i> tú-dyaa-kál túdím <i>we cultivate (regularly)</i> N: ká-tú-dyaa kútúm	
Progressive REDUPLICATION	tú-baa-kú-díi-dím <i>we were hoeing</i>	tú-túu-tum-in <i>we were sending</i> N: ká-tú-tuu-tum-in	tú-túu-túm´ <i>we are sending, will send</i> N: ká-tú-tuu-túm	
Persistent -ci- + RED		tw-áaka-dy tú-ci-díi-dím <i>we were still cultivating</i>	tú-ci-díi-dím <i>we are still hoeing</i>	
Inceptive -kaa-			tú-kaa-díi-dím <i>we are already cultivating</i> tú-kaa-dy tútúm <i>wir schicken schon</i>	
(?)	tú-báa-dy tú-Ø-túm <i>we were sending</i>	tw-áaka-dy tú-dím <i>we were hoeing, used to hoe</i> N: tw-aaká-dy-óh bend tú-dí	tú-Ø-dy tú-Ø-túm <i>we are sending</i>	tw-ii-kaa-kal tu-dim <i>we will be hoeing</i>
‘Immediate’ -baa-		tw-áaka-dy tú-baa-dím <i>we had just hoed</i>	tú-báa-túm´ <i>we (have) just sent</i> N: ká-tú-baa-túm	tw-íi-káa-kál tú-baa-dím <i>we will have hoed</i>
Anterior <sub>1</sub> -baa- ... -ku-		tú-baa-kú-túm-in <i>we had sent</i>	tú-baa-kú-záb <i>we have played</i>	
Anterior <sub>2</sub> PARTICIPLE	tú-báa-dy bá-túm <i>we have/had (?) sent</i>	tw-áaká-dy bá-túm <i>we had sent</i>	tú-dy bá-túm <i>we have sent</i> N: ká-tw-ii-sy tú-dím	

## L32 Ciin-kanyok

1 Sources Mukash-Kalel (1982), with 120 pages on the verb, Weier (1986), 40 pages on the verb. Weier is a German amalgam of two earlier manuscripts of Stappers', one in French, one in Dutch. Weier is at pains to point out that the data should be considered provisional. This is true for the many verb forms, which are well described tonally and structurally, but whose conjugational values leave a lot to guesswork (Weier glosses five forms as 'wir schicken', four each as 'wir schickten' and 'wir hatten geschickt', three as 'wir haben geschickt'; Mukash-Kalel has at least five forms glossed as 'nous avons cultivé'). Mukash-Kalel and Weier share a common set of verb forms, and each has a set not shared by the other. So not only is the data not identical but the analysis and the labels are also different. Neither source has texts to elucidate the meanings of tenses/aspects. The matrix represents an amalgamated set of forms faithfully and the joint system imaginatively (examples with -tum- 'send' are from Weier, all others from Mukash-Kalel). Mukash-Kalel has more verbal data, Weier more tonal analysis. The matrix should be understood as a general indicator of the major points of the system – details may need adjustment. As other languages in L30/L60, Kanyok has tone reversal. 5x2.

Spoken by 200,000 people in Kasai Oriental Province, Mwene-Ditu Territory, in DRC.

2 Structure (Weier, p. 74, very slightly modified)

Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV – Post-FV (bend = NEG, see 7)

Pre-SM: Object REL markers (H); NEG ká-, both followed by L on the SM. Kii Inceptive and kaay, a specialised NEG, can occur before the Pre-SM, apparently as independent morphemes.

SM: ná; ú; u; tú; nú; ba. Subject REL SMs are H in classes 1, 3, 9, otherwise L.

NEG<sub>2</sub>: ka.

TA: There are in fact four slots here, in order: (1) ci PER or 'first' (2) a 'subsecutive'; baa (tonally contrastive with the SM) P<sub>2</sub>; baa (low-toned) Immediate (3) kú, associated with either baa (and pushing the action further back), and (4) ká Itive; kaa Inceptive ('already', 'not yet'). There is also aka Past, only occurring with 'be'.

OM: kú 2s, mú 3s, and other classes. Cl. 1, 3, 9 are H, the others L.

FV: Ø (with two tonal shapes) and -il (three tonal shapes). Ø is L in IMP and SBJ, and the L appears on the next vowel: Ø is H elsewhere, the H appearing on the next vowel; -il is all H in P<sub>2</sub>, all L in the affirmative P<sub>1</sub> and HL in the negative P<sub>1</sub>.

Post-FV: Six sets of morphemes can occur here: SMs in some RELs; object markers (also at OM); LOCs; oh NEG, which resembles one of the LOCs; aak in the polite IMP (and INF); aay pluralizer. Two independent morphemes may occur after the Post-FV: kal 'already', bend NEG.

3 Tense Unclear whether Kanyok has two or three degrees of past reference, as neither author talks in those terms or in the same terms. The main difficulty lies in how to interpret the simple -baa- form (Mukash-Kalel 'immédiat', Weier 'recent perfect'). After some wavering I opted to treat it as an aspect because it occurs as the second member of compounds where the first word is tense-marked. Treating it like this leaves a two-member past system – Weier has a whole conjugation for 'be', and it only shows two Pasts (Far Past -baa-, Near Past -aka-): Mukash-Kalel shows 'be' with only one past. Asymmetrical past and future reference is typical of L30 languages.

The point is made (Weier p.78) that -kú- is a shifter, that is, the addition of -kú- to either baa- pushes the action further back. So Immediate -baa- normally translates as ‘have just done/just did’ but the same -baa- with -ku- refers to today. Since this claim is based on two examples alone, it should be treated with care, and needs more examination.

4 Aspect The structural and tonal properties of the forms in the columns are fairly clear, but the accuracy of their meaning varies from column to column. I would say the labels ‘PFV, PRG, PER, INCE, HAB’ are reasonably accurate, while the other four are not. I do not know how the two ‘Anteriors’ differ semantically, nor how PRG differs semantically from the forms in the (?) row. PRG, PER, INCE, and some futures involve partial reduplication. There are examples of combined aspects, e.g. ‘PRG’ and ‘INCE’ (tú-káa-túú-túm ‘Wir schicken schon’).

More is needed here, on the meaning of these aspects, and others shown in Mukash-Kalel.

5 Other categories Beside the categories shown in the matrix, Kanyok also has at least: ‘Potential’ (tw-áákâ-dy mwa kú-túm ‘We could send’); Itive (tú-báa-dy bá-ká-túm (H on ba and ka are downstepped) ‘We went to send/went and sent’); ‘Subsecutive’ (tw-á-túm ‘And we sent’).

6 Compounds As can be seen in the matrix, three types of compound occur. All have an inflected form of ‘be’ as their first component (see 11), followed by either the infinitive, or an inflected form of the main verb, or what the authors refer to as a participial form of the verb (with mu- for singular subject persons, and ba- for the plural).

7 Negation Relatives and the infinitive have -ka- at NEG<sub>2</sub>. Otherwise, indicatives and subjunctives have ká- at Pre-SM, followed by a L at SM, and accompanied by Post-FV -oh and post-verbal -bend in some forms. For reasons of space, the -bend are omitted in the matrix.

8 Relatives Object RELs marked at Pre-SM, subject RELs at SM (tonally different from other SMs).

9 Subjunctive Having deleted final vowels, Kanyok has no segmental trace of \*-e, but Weier shows ‘Konjunktiv’ with L on SM and on FV: given tone reversal in Kanyok, this is what one expects from the subjunctive. The few translations suggest a typical functional range, including 1p Imperative, following.

10	<u>Imperative</u>	Singular	Plural
	positive	túm’ ‘Send’	túm-aay ‘Send’, tu-túm ‘Let’s send’
	polite	túm-aak ‘Please send’	
	Itive	ká-túm ‘Go and send’	ká-túm-aay, tu-ká-túm

11 Auxiliaries Beside -dy (reduced to -i in familiar language) and -ikal positive, and -isy negative, all ‘be’, Mukash-Kalel also shows ‘say’ (‘soon’), ‘refuse’ (NEG), ‘go’ (simultaneous), ‘come’ (future), search (‘want’), play (possibility), resemble ‘hypothetical’, and ‘finish’.

L41 Ki-kaonde

	Perfective	Imperfective -anga	Progressive -benakú-	Persistentive -ki-	Anterior -a-
P <sub>2</sub> -á- ... -ile	tw-á-keb- <b>ele</b> <i>we sought</i>	tú-báá-keb- <b>anga</b> <i>we were seeking</i>			
P <sub>1</sub> -ajikú-	w- <b>ajikú</b> -leet-a(w) <i>he brought</i>				
	tu-Ø-keb-a <i>we seek, will seek</i>		u- <b>benakú</b> -let-a(w) <i>he is bringing</i>	u- <b>ki</b> -y-a(w) <i>he is still going</i>	tw-á-keb-a(w) <i>we have sought</i>
F <sub>1</sub> -sakú-	u- <b>sakú</b> -let-a(w) <i>you will bring</i>				
F <sub>2</sub> -ka-	tu- <b>ká</b> -keb-a <i>we will seek</i>				

## L41 Ki-kaonde

1 General Stappers (1968), Wright (1977: 134–45). Stappers is a 7-page analysis of the surface tones presented in Foster's (1960) 91-page sketch. Foster was not consulted. Stappers and Wright are short, covering some topics between them but saying little about others, e.g. compounds, negatives, and aspects. 5x2. Except where indicated ('Wright'), tones indicated in 2 below and column 1 of the matrix are Stappers' underlying tones; in 8 below and columns 2 and 3 of the matrix are the surface tones shown in Stappers: *keb-* 'seek' is underlyingly H. The main Kaonde community (240,000) lives in northwestern Zambia, with another 36,000 across the border in DRC's Katanga Province. Not sure if Stappers and Wright are treating the same dialect.

2 Structure Pre-SM – SM – TA – ka – ki – OM – root – EXT – FV – Post-FV

Pre-SM: Object REL (clitic or independent pronoun?); *ná* 'when' (Wright).

SM: *n*; *u*, 3s a REL, SBJ, otherwise *u*; *tu*; *mu*; *ba*. Stappers says SMs for participants are L, for all others are H. Wright says commonest verbal pattern is for participants to be H, all others L.

TA: Ø Present; *a* P<sub>1</sub> (Stappers), ANT (Wright); *á* P<sub>2</sub>; *jiku* P<sub>1</sub> (Wright); *ka* Future; *báa* P<sub>2</sub> IPFV; *benakú* Present PRG (Wright); *sakú* F<sub>1</sub> (Wright). Wright has *nákáloba* 'Unless I catch' vs *nakáloba* 'I went and caught'.

*ka*: Itive, NAR.

*ki*: PER.

OM: Singular persons OM associated with L, all others with H. One allowed, second at Post-FV.

FV: *a* NEU; *á* IMP; *é* SBJ; *íle* P<sub>2</sub>; *énga* P<sub>2</sub> IPFV (Wright has some *ainga*); *ééé* in some IMPs after OM. So tone combinations (TA/FV) are *á/íle* P<sub>2</sub>; *a/á* P<sub>1</sub>; *báa/énga* P<sub>1</sub> IPFV; *ka/a* F<sub>2</sub>; *saku* F<sub>1</sub>.

Post-FV: OM (class + o): locative (e.g. *-ko*, maybe same as OM); *nyi* question marker.

3 Tense Stappers has P<sub>1</sub> 'récent' ('Nous venons de verber': [a]) and P<sub>2</sub> 'passé éloigné' ('Nous avions verbé': *á/íle*). Wright also has P<sub>1</sub> and P<sub>2</sub>, Hodiernal vs Pre-Hodiernal, marked by *-ajiku-* and *-á/-íle-*, respectively. For Wright, Stappers' P<sub>1</sub> [a] encodes Anterior. The Ø Present covers some portion of the future. There is a separate F<sub>2</sub> 'futur éloigné' (Stappers, Wright), and a F<sub>1</sub> (Wright) (< 'come').

4 Aspect Besides the Perfective forms in column 2, Stappers also shows a 'recent past continuel', which we have here labelled IPFV. Wright's interpretation adds HAB (< 'be with'), PER, and ANT. Wright's ANT is Stappers' P<sub>1</sub>, Wright's P<sub>1</sub> */-a-jiku/* deriving from 'Past + be + at').

5 Negation (from Wright) NEG IMPs involve post-verbal *né*: *Kwiya kunó né* 'Don't come here'. NEG RELs use AUX *-bula*: *w-á-bula kw-iyá* 'He who has not come'. Indicatives and SBJs have pre-verbal *kéchi* and sentence-final *né*: *bányike kéchi bámona múkulumpé né* '(The) youngsters haven't seen (the) elder'.

6 Relatives (from Wright, 'underlining = stress') Subject *muntú w-a-leet-ele búpe* 'Man brought gift' vs *muntú w-a-leet-elé* 'Man who brought gift'. Object *búpe bo a-leetelé* 'Gift which he-brought'. Nominal subject of REL clause is postposed and the verb agrees with the

antecedent: mambó awámá a-nembelé Mako ‘Good news which-brought Mark’ (= Mark’s Gospel).

7      Subjunctive      Suffixal -e, associated with underlying H, is attested.

8      Imperative      Keb-a ‘Seek’, lam-a ‘Keep’, tu-kéb-e ‘Let’s seek’ (tú- and -é associated with H in the IMP), tu-lám-e ‘Let’s keep’, mú-keb-e ‘Seek him’, mu-lám-é ‘Keep him’, tu-mú-keb-e ‘Let’s seek him’, tu-mu-lám-e ‘Let’s keep him’ (tú- and -é associated with H), léetangá-tu ‘Just go on bringing’ (Wright). Pl léet-a-i ‘Bring’ (Wright), léet-a-i-nga ‘Keep on bringing’ (Wright).

## L52 Lunda

	Perfective	Imperfective -aŋa	Progressive 'be' (+ IPFV) + na- ... -ku-	Persistentive -chi- (+ IPFV) + na- ... -ku-	Anterior
P <sub>3</sub> -a- ... -ili	w-a-shik-ili <i>she arrived</i>	w-a-y-ili-aŋa [wayilé:ŋa] <i>she was going, used to go</i>	n-á-dí-ŋ-ili na-ku-zat-a <i>I was working</i>	n-a-dii-ŋa ni-chi-di na-ku-zát-a <i>I was still working</i>	(w-a-shík-il-aŋa-hu dehi <i>he had already arrived</i> )
P <sub>2</sub> -a-	w-a-telek-a <i>she cooked</i> w-á-telek-a <i>you cooked</i>	(hi)n-a-na-y-aŋa <i>(when) I was going</i>	n-a-dí-ŋa na-ku-zat-a <i>I was working</i>	n-a-chi-dii-ŋa na-ku-zát-a	w-a-témuk-a <i>she has run away</i> w-a-món-a-hu dehi <i>she once saw</i>
P <sub>1</sub> -na- ... -i	tu-na-shik-i <i>we arrived, have arrived</i>	tu-na-dim-eŋa <i>we have been cultivating</i>			
	(tu-Ø-dim-a) <i>if we cultivate, we cultivating</i>	w-a-zat-aŋa <i>he works</i>	tú-dí na-ku-lw-a tú-ná-ku-lw-a <i>we are fighting</i>	ní-chi-di na-kú-d-a <i>I am still eating</i>	
F <sub>1</sub> (AUX + P <sub>1</sub> )	kéeŋa ni-y-i <i>I will go (very soon)</i>				
F <sub>2</sub> hi- ... -ku-	hi-ni-ku-y-a <i>I will go (soon)</i>				
F <sub>3</sub> -ku-	ni-ku-land-a <i>I will buy (today)</i>	(tu-ku-dim-aŋa) <i>we will cultivate, be cultivating</i>			
F <sub>4</sub> -(a)ka-	n-(a)ka-shik-a <i>I will arrive (after today)</i>	w-áka-yá-aŋa <i>he will be going</i>			(a-aka-y-aŋa-hu dehi <i>they will have already gone</i> )
F <sub>5</sub> (AUX + F <sub>4</sub> )	n-amba-ka-y-a <i>I will go (time uncertain)</i>				

## L52 Lunda

1 General Main source Kawasha (2000, unpublished), complemented by White (1947), Kawasha (p.c.), Hyman (notes). Dialect variation: Kawasha from Mwinilunga, a monolingual area, whereas White treats Lunda of Zambezi, where four languages are spoken and have influenced each other. Tone marked as per Hyman (occasionally Kawasha). 5x2. No data for relatives. 310,000+ speakers in Angola, DRC, Zambia. Guthrie (1971) incorrectly classifies Lunda as L52, Lunda is different from L53, similar to K10. Guthrie has other small errors about Lunda, e.g. he (1948: 56) attributes four past tenses to it, denied by Kawasha and White.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM: hí NEG; hí FUT<sub>2</sub>; hí ‘when’ (tonal correlates?).

SM: ní; ú; 3s a SBJ, otherwise u; tú; mú; a. Participants H, others L.

TA: a P<sub>2</sub>, P<sub>3</sub>, ANTs; ku PRG, PER, F<sub>2</sub>, F<sub>3</sub>; (a)ka F<sub>4</sub>, F<sub>5</sub>; na P<sub>1</sub> and P<sub>2</sub> IPFV; chi PER; ka Itive (at least in IMPs). Hyman has another past (tú-náa-y-i ‘We have gone’), which he thinks might derive from P<sub>1</sub> (tú-ná-ka-y-i ‘We have gone’).

FV: a NEU; i SBJ; i P<sub>1</sub>, F<sub>1</sub>; ang’a in nearly all PFV and ANT forms; ili P<sub>3</sub>. -ili and -ang’a can co-occur in both orders, with different semantic results. White (1947: 5) has VC instead of i P<sub>1</sub>, F<sub>1</sub>.

Post-FV: éenu IMP 1 and 2p; OM including locatives (see 7, below); ku NEG. Enu precedes OM/locative, e.g. tal-éenu-ku ‘Look-ye-there’, NEG occurs last. If two pronominal objects occur, IO at OM, DO at Post-FV (n-a-mw-ink-a-wu ‘I-Past-him-give-FV-it = I gave him it’ (also 6, below)).

3 Tense This is one of a handful of Bantu languages with five futures and more degrees of future than past reference. F<sub>1</sub> refers to the next few minutes, F<sub>2</sub> the next couple of hours, F<sub>3</sub> today, F<sub>4</sub> any time after today, and about F<sub>5</sub> Kawasha (p.c.) says ‘We know it is future but we don’t know when’. F<sub>1</sub> seems to be a semantic extension of Anterior and to also involve ‘want’, the next two futures involve -ku-, originally a marker of present IPFV, F<sub>4</sub> and F<sub>5</sub> involve -(a)ka-, presumably the original future marker, the latter deriving from the former by the addition of auxiliary -amba- (= ?).

Kawasha and I disagree about the status of P<sub>1</sub>. He regards it as ANT whereas I see it as PFV P<sub>1</sub> (very recently). It is a defective part of the paradigm as it only occurs with a limited set of verbs. Many are Inceptives/statives, but not all (e.g. ‘go, run, build’). I prefer to regard it as Perfective Past because, like the two other Perfective Pasts and unlike the ANTs, it refers to something which is over and done with, even though recent. P<sub>2</sub> refers to today and yesterday, P<sub>3</sub> to prior events.

4 Aspect PFV, IPFV, PRG, PER are clear. Kawasha says the bracketed form at Future IPFV is uncommon, simple tu-ku-dima being preferred. ANT means ‘happened in the past, results still in effect’ (w-a-témuk-a ‘She has run away (and is still away)’, or with stative verbs, w-a-súmbul-a ‘He is married (because he got married in the past)’, or w-a-kátala ‘He is lazy (because he got lazy in the past)’). The other two bracketed forms in the ANT column are relative forms, representing the situation as prior to something else. The role of -hu is unclear: in some contexts it represents locative, e.g. n-a-chi-tentek-a-hu ‘I put it there’ but it has other ill-

defined uses. It derives from Cl. 16 \*pa+o (final mid vowels are raised, thus *po* and *ile* > [pu] and [ili]).

The bracketed null Present PFV is a dependent form, translating as ‘If we cultivate’ or ‘As we were cultivating’, or occurring in narratives: in these cases the time is established elsewhere.

5     Negation     No data for RELs. SBJs negated by using AUXs, e.g. *bá-y-i wu-lw-í ku* ‘Don’t fight’ (also White: 18). Otherwise a universal NEG (*hi-* and Post-FV *ku*) can apparently be added to any positive, with no change at TAM. With compounds, *hi/ku* brackets the whole form.

6     Subjunctive and Imperative     SBJ -i (by final vowel raising). It occurs (White 1947: 14) in the usual contexts, including ‘mild concessive’ IMPs. IMP sg *temuka* ‘Run’, pl *temuk-enu*, pl plus locative *temuk-enu-ku* ‘Run there’. Monosyllables always have -ang’a in the singular: *y-ang’a* ‘Go’. SBJ used with pre-stem OM or *ka-* Itive, or in polite IMPs: *ka-lej-i* ‘Please tell’.

## L53 Uru-wund

	Perfective	Imperfective -ang-	Persistentive -ci-
P <sub>3</sub> -aa- ... -aa	n-a-lèèt-a w-a-lèèt-a n-a-d-à w-a-d-à  N: ki-n-a-lèèt-a-àp ki-n-a-d-à-àp	<i>I brought</i> <i>he brought</i> <i>I ate</i> <i>he ate</i>	n-a-lèèt-aang-à <i>I used to bring</i>  n-a-ci-lèèt-aang-à <i>I was still bringing</i>
P <sub>2</sub> -a- ... -il(-v)	n-a-leet-il w-à-leet-il n-a-d-iil w-à-d-iil  N: ki-n-à-leet-il-à-àp ki-n-à-d-iil-à-àp	<i>I brought</i> <i>he brought</i> <i>I ate</i> <i>he ate</i>	
P <sub>1</sub> -a- ... -ang(-v)	n-a-lèèt-aang w-à-lèèt-aang n-a-d-àang w-à-d-aang		
-Ø- ... -il(-v)	ni-Ø-lèèt-il wù-Ø-lèèt-il ni-Ø-d-iil wù-Ø-d-iil  N: ki-ni-leet-il-àp ki-ni-d-iil-àp		
Future -ku- ... (-v)	ni-ku-leet wù-kù-leet ni-ku-d-à wù-ku-d-à  N: ki-ni-kù-leet-àp ki-ni-ku-d-à-àp	<i>I will bring</i> <i>he will bring</i> <i>I will eat</i> <i>he will eat</i>	

## L53 U-ru-wund (also (U)ruund)

1 Sources and community N'landu and Vincke (1986), Nash (1992–4), Philippon (p.c.). Nash does not mention and seems completely unaware of N'landu and Vincke. Carvalho (1890), Vincke (1966), Nash (1992) not consulted. Spoken in two areas on the Angola/DRC border. 238,000 speakers. As other languages in zone L (e.g. L10, L20, L30, L60), Ruund has undergone tone reversal, so historical H is typically found in Ruund as L, and vice versa. L is the underlying value, H the default. Many but not all surface word-final vowels delete. Underlying tones of some final vowels delete, others associate to the left. Verbs have no lexical tone. Underlying tonal patterns in 2 and in the matrix in the first column proposed by G. Philippon, based on N'landu and Vincke; in the second column are the phonetic tones in N'landu and Vincke; in the other columns are those of Nash. 5x?. The structure in 2 may be incomplete (e.g. is there a NEG<sub>2</sub> after SM?).

2 Structure Pre-SM – SM – TA – LIM – OM – root – FV – Post-FV

Pre-SM: ki NEG; object REL.

SM: ni; u; ù; tu; u; à. u- serves for second person singular and plural, adding anyà.

TA: Ø PRES; à NAR and P<sub>1</sub>; á P<sub>2</sub>; áá P<sub>3</sub>; ku FUT.

LIM: ka Itive; ci PER.

OM: At least two allowed.

FV (underlying): V; V (L) IMP, SBJ, P<sub>3</sub>; áá P<sub>3</sub>; ang-V P<sub>1</sub>; ang-à Past IPFV; il-V PRES, P<sub>2</sub>. See also under REL.

Post-FV: any-V (L) 2p; ap NEG.

3 Tense Three pasts: Remote (P<sub>3</sub>), Recent (P<sub>2</sub>), Hodiernal (P<sub>1</sub>) but since N'landu and Vincke and Nash do not mention Anterior, it is impossible to know whether P<sub>1</sub> is P<sub>1</sub>, or ANT, or both. Exact semantic range of the Past not mentioned. One future. Itive -ka- can be added to various TA markers.

The recycling of aspect suffixes as tense markers leads to this past system:

NAR	-à- ... (-á)
P <sub>1</sub>	-à- ... -ang(á)
P <sub>2</sub>	-á- ... -il(é)
P <sub>3</sub>	-áá-... -á(á)

An identical or similar innovated pattern is found also in F20, F30, K10, and parts of it in D28, D43, M11, and M12.

4 Aspect Only PFVs are discussed in detail but stray examples show IPFV (ang), PER (ci), and Itive (ka).

5 Negation Primary NEG is marked by Pre-SM [ki] and Post-FV [ap]. No REL, IMP, or SBJs NEG<sub>s</sub> are shown, we cannot know whether there is a primary : secondary contrast.

6     Relatives     At least the RELs visible (PRES, NAR, P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>) are segmentally identical to their absolutes, but they have low-toned SMs and a final surface [a], which presumably means a long underlying /aa/, with a tone on the first vowel which is that of the absolute but variable on the second. Object RELs are marked by a REL marker at Pre-SM.

7     Subjunctive and Imperative   IMPs consist of a stem and underlying final vowel (L). When there is an OM, the root is L and the final vowel H. Two SBJs, both with low-toned underlying SMs, one with L root and H final vowel, the other with H root and L final vowel.

## L62 Shi-nkoya

	Perfective	Imperfective -nga	Progressive -naku-	Persistentive -shi-ji-ku-	Anterior (?) -a-
P <sub>3</sub> -á- ... -ile	n-á-mon-ene <i>I saw/looked</i> w-a-mon-ene <i>she saw</i> R: w-á-mon-ene  N: (ki-)n-á-mon-eně-ha	n-á-mon-ene-nga <i>I looked, was looking,</i> <i>used to look</i> w-a-mon-ene-nga R: w-á-mon-ene-nga  N: n-á-mon-ene-ngă-ha			
P <sub>2</sub> -á-	n-á-mon-a w-a-mon-a R: w-á-mon-a  N: (ki-)n-á-mon-ă-ha	n-á-mon-a-nga w-a-mon-a-nga R: w-á-mon-a-nga  N: (ki-)n-á-mon-a-ngă-ha			enga n-a-môn-a <i>I had already seen</i>
P <sub>1</sub> -na- ... -VC	ní-(n)á-môn-o u-(n)a-môn-o R: ú-ná-môn-o  N: (ki-)ní-ná-món-ó-ha	ní-ná-món-o-nga u-na-món-o-nga R: ú-ná-món-ó-nga  N: ní-ná-món-o-ngă-ha			
	(tú-Ø-mon-á <i>we looking, if we look</i> )	n-a-món-a-nga <i>I see/look (habitually)</i> R: w-á-món-a-nga  N: (ki-)n-a-j-á-ngá-ha <i>I do not eat</i>			
-kú-	ní-kú-môn-a <i>I look, am looking,</i> <i>will look (today)</i> u-ku-môn-a R: ú-kú-môn-a  N: (ki-)ní-kú-món-á-ha	ní-kú-món-a-nga <i>I am looking (now),</i> <i>will be looking (today)</i> u-ku-món-a-nga R: ú-kú-món-a-nga  N: ní-kú-món-a-nga-ha	ní-naku-môn-a <i>I am looking</i> u-naku-môn-a <i>he is looking</i> R: ú-naku-môn-a	ní-shi-ji-ku-môn-a <i>I am still looking</i> á-shi-ji-ku-môn-a R: ú-shi-ji-ku-môn-a N: nífwakó kumóna háya <i>I am not looking any</i> <i>longer</i>	N: shí-loló ni-môn-e <i>I have not seen yet</i>
F <sub>1</sub> -ká-	ní-ká-môn-a u-ka-môn-a R: ú-ká-môn-a  N: (ki-)ní-ká-món-á-ha	ní-ká-món-a-nga u-ka-món-a-nga R: ú-ká-món-a-nga  N: ní-ká-món-a-nga-ha			

## L62 Shi-nkoya

1 General Yukawa (1987: 129–84) has a fairly complete analysis of the tonal and structural characteristics of verbs. Statements about the reference of the various TA forms rarely exceed a single sentence and no texts are given, so some parts of this sketch is informed guesswork, partly based on Yukawa, partly based on knowledge of patterns in adjacent languages. Nkoya has undergone tone reversal in some areas of the grammar: while H and L verb roots are as in Proto-Bantu, tones of SM are reversed, participants being H, classes L. 5x(?)1. 70,000 speakers in Southern Province and in the northeastern corner of Western Province in Zambia.

2 Structure NEG – SM – TA – itive – OM – root – EXT – FV – Post-FV

NEG: ki, which often deletes, leaving only the -ha to encode negative.

SM: ní; ú; 3s a in PER, most (but not all) NEGs, SBJ, and object REL, otherwise u/w; tú; mú; ba. 2p indicates plural or respect.

TA: á P<sub>3</sub>, P<sub>2</sub>; a PRES, Past ANT?; ku F<sub>1</sub>/PRES PRG; ká F<sub>2</sub>; ka Itive; na P<sub>1</sub>; naku (or jaku) PRES PRG, not same as ku (Yukawa unclear about semantic difference); Ø (see 4), shi + ji + INF PER (ji probably ‘be’). Yukawa has an example with two morphemes at TA, the second being the Itive.

FV: a NEU; e SBJ (‘not yet’); ile P<sub>3</sub>; anga IPFV; ile-nga P<sub>3</sub> IPFV; VC P<sub>1</sub>; VCnga P<sub>1</sub> IPFV.

Post-final: (1) enu IMP pl (2) object marker: all classes except 1-2 can occur here in IMPs or if the verb has two pronominal objects: IMP monã-sho ‘Look at it (class 7)’, w-a-m-pánikilě-sho ‘He gave it (sho) to me (m)’ ((3) NEG -ha (L), see Negative, below).

3 Tense Four forms are past and non-imperfective, P<sub>3</sub> (saw at least a month ago), P<sub>2</sub> (a few days before today, could be further if result ‘still remains at time of speaking’), P<sub>1</sub> (‘today’), and the Past ANT of the matrix (‘already seen by a certain time in the past’). How many degrees of past reference are there? P<sub>3</sub>, P<sub>2</sub>, P<sub>1</sub> each has a set of NEG and REL forms, morphologically identical, tonally similar, tone differences being due to negation and relativization. The anomaly is the Past ANT, which looks like P<sub>2</sub> structurally but not tonally. It stands alone, with no NEG, REL, or PRES forms. Provisionally, I assume, as Yukawa, three degrees of past and a Past Anterior. Possibly P<sub>2</sub> and the anterior are related systemically, forming an Anterior, in which case there are only two pasts.

4 Aspect PFV, PER, IPFV, PRG. Assume also ANT. Yukawa has two PRGs (-ku- vs -naku-) but it is unclear how they differ. Yukawa also mentions a null form but apparently only in a dependent clause: ‘Let’s-eat while he-reading’ tujé ohó á-belengá (ámoná, túmoná, etc). Systemically, that could also fit in the vacant present PFV slot, except that it is a dependent form.

Unclear how to reconcile the two PRES IPFV forms (a/anga and ku/anga) with each other and with the system.

6 Negation REL, SBJ, INF, and a few other forms take -bula (‘lack, not to’) + ku-. All other NEGs have post-clausal -ha, sometimes post-verb, sometimes post-object noun. Most forms optionally have Pre-SM ki- : affix, clitic, or particle? Yukawa has an isolated ‘Present Perfect NEG’, e.g. shíloló ni-mön-e/ni-j-é, ‘I haven’t seen/eaten yet’, based on the SBJ.

7 Relatives RELs and absolutes structurally identical (3s differs morphologically) but tonally different. Exs: banamôno ‘They saw’, bánámónó ‘They who saw’, nínámôno ‘I-saw’, muntu nínámónó ‘Person I-saw’, u-namôno ‘He saw’, muntu á-námónó ‘Person he saw’.

8 Subjunctive and Imperative SBJ (-é) covers broadly the usual range of contexts. IMP sg (-móna ‘see = look at’), mona ‘See’, já ‘Eat’, mu-món-é ‘See him (1)’, mon-ă-sho ‘See it (7)’, mu-lék-é a-mön-e ‘Let him see’, Itive u-ka-môn-é ‘Go and see’, NEG enga ú-mon-á or bula ku-mön-a ‘Don’t see’. Pl mon-enu, j-ênu, mu-môn-ênu, món-enŭ-sho; tu-y-é ‘Let’s go’.

M11 Eci-pimbwe

	Perfective	Habitual (-anga)	Progressive	Persistent -tali +	Anterior (?) -a- ... -anga	'Have just' -ana-
P <sub>3</sub> -ali-	tw- <b>áli</b> to-gód- <b>ile</b> <i>we bought</i>	tw- <b>ali</b> -gol- <b>anga</b> <i>we used to buy</i>	tw- <b>ali</b> -gol-a <i>we were buying</i>			tw- <b>ali</b> tw- <b>ana</b> -gol-a <i>we had just bought</i>
P <sub>2</sub> -ka-	(tw- <b>áli</b> ) to- <b>ká</b> -god- <b>ile</b> N: to- <b>tá</b> -ka-god- <b>ile</b>		tw- <b>áli</b> -ka-gol-a <i>or</i> to- <b>ku</b> -ka-gol-a			tw- <b>ali</b> tw- <b>ana</b> -ka-gol-a <i>we had just bought</i>
P <sub>1</sub> -ati	(tw- <b>ati</b> ) to-god- <b>ile</b>				tw- <b>ati</b> tw- <b>a</b> -gol- <b>anga</b> <i>we have bought (today)</i>	tw- <b>ati</b> tw- <b>ana</b> -gol-a <i>we have/had bought (today)</i>
		to- <b>ku</b> - <b>lu</b> -gol-a <i>we usually buy</i>	tó- <b>ku</b> -gol-a <i>we are buying</i> N: to- <b>ta</b> - <b>ku</b> -gol-a	to- <b>tali</b> to- <b>ku</b> -gol-a <i>we are still buying</i>	tw- <b>a</b> -gol- <b>anga</b> <i>we have bought</i>	tw- <b>ána</b> -gol-a <i>we (have) just bought</i>
F <sub>1</sub> -ku-	to- <b>kú</b> -gol-a <i>we will buy</i> N: to-si-gol-a	to- <b>ku</b> -gol- <b>anga</b> <i>we will be buying (today)</i>			to- <b>ku</b> - <b>β</b> -a tw- <b>a</b> -gol- <b>anga</b> <i>we will have bought</i>	
F <sub>2</sub> -lu-	to- <b>lu</b> -gol- <b>á</b> N: to- <b>ta</b> - <b>lu</b> -gol-a				to- <b>lu</b> - <b>β</b> -a tw- <b>a</b> -gol- <b>anga</b> <i>we will have bought</i>	
F <sub>3</sub> -lu- ... -anga	to- <b>lu</b> -gol- <b>ánga</b>		to- <b>lu</b> - <b>β</b> - <b>anga</b> to- <b>ku</b> -gol-a <i>we will be buying</i>			

## M11 Eci-pimbwe

1 General 29,000 speakers in W Tanzania, northwest of Lake Rukwa. It (and Rungwa) give the impression of being mixed, with features from M10/20, F20, and an unidentified source. Despite this, it is chosen because it offers the best material. Main source is an essay by Ms. D.S. Chomba (1975). Nurse/Philipson have notes from the 1970's for most languages, including another Pimbwe dialect and Rungwa. I tried not to mix the dialects. 7x2. Chomba did not always write the seven consistently, which the matrix may reflect. She omitted tones, so details are lacking: but 2s and 3s clearly differ tonally (Rungwa, very similar to Pimbwe, has *w-áná-kal-á* 'You just bought', but *w-aná-kal-a* 'He just bought'), and some TAM forms contrast tonally, so *tó-ku-gol-a* Present but *tó-kú-gol-a* F<sub>1</sub>.

2 Structure SM – NEG – TA – OM – root – EXT – FV

SM: n; u; a; tó; m(u); a. Participants probably H, others L.

NEG: ta, si.

TA: á(li) P<sub>3</sub>; ka P<sub>2</sub>; a(ti) P<sub>1</sub>; kú F<sub>1</sub>; ku Present; aná 'have just'; lu (maybe lu:) F<sub>2</sub>/F<sub>3</sub>; ta(li) PER; máa a Future (in one dialect only).

FV: a NEU; anga F<sub>3</sub>, ANT; ile Past PFV; e SBJ; i IMP pl (other dialect mi).

3 Tense Three degrees of future ('today', 'tomorrow to next month', 'next month to infinity'). Number of discrete pasts less clear, because Chomba and Nurse/Philipson list forms and give approximate glosses, but have no texts for checking real usage. Both admit the data is incomplete. At least three degrees of past ('today', 'yesterday to last month', 'beyond last month'). Two other forms consistently refer to actions which occurred prior to the time of reference: those shown in the last two columns (Anterior, 'Just Past'). I treat them as aspects because they behave systemically as such, consistently occurring as the second member of compounds, where the first carries tense.

4 Aspect, other categories, compounds The only fully contrastive aspect which is the PFV. PRG (IPFV?) and HAB contrast in the 'present' and at least one past context (P<sub>3</sub>) but no forms showing a future contrast were elicited, and the -anga suffix shapes suggest HAB (on the basis of the P<sub>3</sub>) while the glosses suggest IPFV: perhaps there is no contrast in the future? The forms in columns 5 and 6 need more investigation. There is only one (Present) PER form on which to base the column. While at first glance this looks as if it might involve a negative (ta), it also looks very like the PER seen in F21 and F22, which runs through the whole paradigm.

Several forms translate as CNDs: *ngaβa tw-a-god-ile* 'We'd have bought (P<sub>3</sub> ago)', *ngaβa tó-ka-god-ile* 'ditto (P<sub>2</sub>)', *ngaβa tw-a-gol-anga* 'ditto (P<sub>1</sub>)', *tw-a-li tó-gól-e* 'We'd buy'.

Compounds are common, as are pre-verbal elements (clitics? independent words?): *ngaβa* 'would = CND', *pano* 'when, usually Past', *ndi* 'if, usually Non-Past'. *Ngaβa/pano* may co-occur with many of the tense forms of the matrix. *Ndi* seems to only occur with verb forms containing -a-: *ndi tw-á-gul-a...* 'If we buy... (today)', *ndi tw-a-sya tw-a-gul-a...* 'If we buy... (after today)'.

5 Negation Most forms (incl RELs) use -ta-, a few (e.g. F<sub>1</sub>) have -si-. For IMPs, see 7.

6 Relatives Skimpy data has -no in all RELs: *umuntu wi-no akidile* ‘Man who came’, *umuntu wi-no m-manyile* ‘Man who I know’, *umuntu n-ta-bwine* ‘Man I-NEG-have seen’.

7 Subjunctive (-e) and Imperative Sg *gola* ‘Buy’, pl *gol-i*, *gulmi* (other dialect). Two possible NEG: *kunsi ku-gola* or *u-tida u-maa-gola*. *Tu-gol-e* ‘Let’s buy’. ‘Go’ alone contrasts exclusive and inclusive in 1p: *tu-y-i* ‘Let’s go (you and I)’ versus *tu-y-e* ‘Let’s go (all of us)’, and ‘Go’ alone has suffixal -ang-: *y-ang-a* ‘Go’, *y-ang-i* ‘Go (pl)’.

M14 Ci-lungu

	Perfective	Imperfective <b>-ku- or -anga</b>	Persistentive <b>-cí- + -ku-</b>	Anterior <sub>1</sub> <b>-Ø-</b>	Anterior <sub>2</sub>
P <sub>4</sub> <b>-a- ... (-ilé)</b>	tw- <b>áá</b> -lim- <b>ilé</b> <i>we farmed</i> N: tu-tá-á-lim- <b>ilé</b>	tw- <b>áá</b> -lim- <b>áángá</b> <i>we were farming, used to farm</i> N: tu-tá-á-lim- <b>áángá</b>	<b>a-l-á</b> tú-cí-lí tú-kú-lím-a <i>we were still farming</i> N: <b>á-l-á</b> tú- <sup>1</sup> tá-á-cí-lí tú-kú-lím-a	<b>á-á-l-aáng íí-</b> <sup>1</sup> tú-Ø-lím- <sup>1</sup> á <i>we had already farmed</i> N: <b>á-á-l-aángá</b> <sup>1</sup> tú-tá-lí tú-Ø-lím- <b>e</b>	tw- <b>áá</b> -lim-á <i>we have already farmed (remote)</i>
P <sub>3</sub> <b>-á- ... (-ilé)</b>	tw- <b>áá</b> -lim- <b>ilé</b> N: tu-tá-á-lím- <b>ilé</b>	tw- <b>áá</b> -lím- <b>aangá</b> N: tu-tá-á-lím- <b>aangá</b>		<b>á-lí-</b> <sup>1</sup> ilé í-tú-Ø-lím- <sup>1</sup> a N: <b>á-lí-</b> <sup>1</sup> ilé tú- <sup>1</sup> tá-lí <sup>1</sup> tú-Ø-lím- <sup>1</sup> é	N: tu-tá-á-lím- <b>ilé</b>
P <sub>2</sub> <b>íí- + P<sub>1</sub></b>	<b>íí</b> -tw- <b>áá</b> -lim- <sup>1</sup> á N: tu-tá-á-lí tú-Ø-lím- <sup>1</sup> ilé	tw- <b>áá</b> -lí tú-kú-lím-a N: tu-tá-á-lí tú-kú-lím-a			tw- <b>áá-tí</b> <sup>1</sup> tú-Ø-lím- <sup>1</sup> á N: tu-tá-lí <sup>1</sup> tú-Ø-lím- <sup>1</sup> é
P <sub>1</sub> <b>-á-</b>	tw- <b>áá</b> -lím- <sup>1</sup> á N: tu-tá-lím- <sup>1</sup> ilé	<b>íí</b> -tú-kú-lím-a <i>we were just farming</i> N: <i>as above</i>	<b>íí</b> -tú-cí-lí tú-kú-lím-a <i>we were still farming</i> N: tu-tá-á-lí tú-kú-lím-a	<b>íí</b> -tú-Ø-lím- <sup>1</sup> á N: tu-tá-lí <sup>1</sup> tú-Ø-lím- <sup>1</sup> é	N: tu-tá-lím- <sup>1</sup> ilé
	tú- <b>káa</b> -lím-a <i>we (always) farm</i> N: tu-síi-lím-a	tú- <b>kú</b> -lím-a <i>we are farming</i> N: tu-táa- <b>ku</b> -lím-a tu-síi- <b>ku</b> -lím-a	tú- <b>cí</b> -lí tú-kú-lím-a <i>or</i> tú- <b>cí-l-íí</b> -lím-a N: tu-táa- <sup>1</sup> cí-lím- <sup>1</sup> á	(tú-Ø-lím- <sup>1</sup> á) <i>various uses</i>	
F? <b>-ka-áa-</b>	tú- <sup>1</sup> <b>káa</b> -lím-a <i>we continue to farm</i> N: <i>as above</i>	tú- <sup>1</sup> <b>kaá</b> -lím- <b>áángá</b> N: <i>as F<sub>1</sub></i>			
F <sub>1</sub> <b>-máa-</b>	tú- <b>máa</b> -lím-a <i>we will farm</i> N: tu-táa- <b>ku</b> -lím-a tu-síi- <b>ku</b> -lím-a	tú- <b>máa</b> -lím- <b>aanga</b> N: tu-táa- <b>ku</b> -lím- <b>aanga</b>	<b>á-l-é</b> <sup>1</sup> tú-cí-lí tú-kú-lím-a N: <b>á-l-é</b> <sup>1</sup> tú-cí-lí tú- <sup>1</sup> taá- <b>ku</b> -lím-a	<b>á-l-í</b> <sup>1</sup> i-tú-Ø-lím- <sup>1</sup> á <i>we will have farmed</i> N: <b>á-l-é</b> tú-tá-lí <sup>1</sup> tú-Ø-lím- <sup>1</sup> é	
F <sub>2</sub> <b>-lá-(áa)-</b>	tú- <b>lá</b> -lím-á N: tu-tá- <b>lá</b> -lím-á	tu- <sup>1</sup> <b>laá</b> -lím-a N: tu-tá- <sup>1</sup> <b>laá</b> -lím-a			

## M14 Ci-lungu

1 General Major source Bickmore (p.c.), but comparison made with Kagaya (1987). Forms quoted result from intense co-operation with Bickmore and his consultant, both of whom I thank profusely. Bickmore and Kagaya are of Zambia, own notes from 1970's of SE Tanzania show slight dialect differences. Some 260,000 Mambwe-Lungu speakers in N Zambia, 100,000 in SE Tanzania. We are confident that all or nearly all Lungu forms are included, and that the tones are reliable. As the data is abundant and the system complicated, I devote two pages instead of the usual one. 5x2.

2 Structure Pre-SM – SM – NEG – TA – OM – root – EXT – FV

Pre-SM: íí (Kagaya uu) appears in Hodiernal Pasts; nga 'if'; in Tanzanian Lungu at least (pre-verbal or Pre-SM) pano 'when', nga 'if' and ndi 'if' occur.

SM: n'; ú; 3s u/\_V, otherwise a-; tú; mú; yá. 3s apparently L, others H.

NEG: síí, tá(á).

TA: Ø (with -a NAR, not independent), also with ile, e; áa 'Hortative'; a P<sub>4</sub>; á P<sub>3</sub>, P<sub>2</sub>, P<sub>1</sub>; aa Remote NAR; máa F<sub>1</sub>; another ma-áa 'contrastive HAB'; lá F<sub>2</sub> PFV; la-áa F<sub>2</sub> IPFV; ku PRG; káa General Present: another -ka-áa, F?, different tone and meaning (a vow to 'keep on -ing'); cí Persistent, 'just past' (follows /a/) (not in Kagaya); -ku-lu-kú 'Continuative'; ka Itive (in SBJ); ngá POT.

FV: a NEU (various tones); é SBJ, in NEG ANTs; anga IPFV; ile P<sub>4</sub>, P<sub>3</sub>, and with pre-stem Ø; ííní IMP pl.

3 Tense Bickmore has four pasts: within the last hour or two, today, yesterday and a few days preceding, remote. Kagaya shows three pasts. Most M10-20 languages have multiple pasts (three, four). Two clear futures: today, beyond today. I have added a third 'future' ('F?') because it fits systemically, but the meaning is not exclusively temporal: the translation is something like 'Despite what has happened, we will continue to...'. It is used to reassure the listener that what happened regularly in the past will continue in the future. It is marked by -kaa-, as in the simple Present, from which, at least semantically, it seems to derive: a promise of future continuity.

There is a fine example of a Recent Past (P<sub>1</sub>) used with future reference: tw-áá-shá tw-áa-lim-a 'We will soon be farming', and tw-áá-shá tú-lím-<sup>1</sup>é 'We will soon farm'. In these the auxiliary verb is -si- 'leave', the first verb in both is in the Recent/P<sub>1</sub> Past, and the second verb in the first case is apparently in the Hortative form.

Although systemically correct and formally distinct, P<sub>1</sub> and P<sub>2</sub> ANT<sub>1</sub> seem to be synonymous. The addition of prefixal íí- to any Present or Near Past form usually pushes its reference one degree further back in time.

The addition of -ci- to at least P<sub>1</sub>, P<sub>2</sub>, and P<sub>3</sub> says that the situation had occurred just prior to some other action. Thus P<sub>3</sub> tw-áá-límlé 'We farmed' but tw-áá-cí-límlé 'We just farmed (same time), prior to something else happening'.

4 Aspect PFV, IPFV, and PER are clear. The PER has only one future, the number of PER pasts appears restricted, and most PER's are built on the IPFV. I show two ANTs but am not sure about their semantic parameters, esp. those of ANT<sub>1</sub>. ANT<sub>2</sub> forms indicate that we

bought something in the past (far or near) and still have it, or the results of it, in the present. ANT<sub>1</sub> clearly exists as a coherent set, the forms relate to a time of reference which might or might not be the present, and seem to combine ANT and PFV (see E22 and Chapter 4, 4.11).

Other combinations of tense and aspect occur, thus twáálí (P<sub>1</sub>) túlím<sup>1</sup>ílé (P<sub>1</sub> ANT) ‘We had farmed’, where the reference time is recent and the farming was quite soon before it; and áá-<sup>1</sup>l-áángá (P<sub>4</sub>) twáálím<sup>1</sup>á (P<sub>1</sub>) ‘We had farmed’, where the reference time is distant, the farming quite soon before it, and both parts are Perfective.

There are seemingly isolated aspectual forms, whose place in the system is unclear. So a sort of Habitual (?), tú-máá-lím-a ‘We may not have farmed earlier but we do now’, and a ‘Continuative’ tú-kú-lukú-líma ‘We keep on farming’, which appears to derive from tu-ku-l-a ukulima.

The null form (tú-Ø-lím-<sup>1</sup>á) is anomalous in that it occurs by itself as a NAR but also in the second member of ANT<sub>1</sub> forms.

5. Modal There is a set of forms, not shown in the matrix, translating as ‘...have to...’, based on ‘have (= ‘be with’) plus INF’. Thus tw-áa-lí n-ú-<sup>1</sup>kú-lím-a (NEG tu-táa-lí n-ú-<sup>1</sup>kú-lím-a) ‘We had to farm (P<sub>4</sub>)’, tw-áa-lí tú-lí n-ú-<sup>1</sup>kú-lím-a (NEG tu-táa-lí tú-lí n-ú-<sup>1</sup>kú-lím-a) ‘We had to farm (P<sub>1</sub>)’, tú-Ø-lí n-ú-<sup>1</sup>kú-lím-a ‘We have to farm’, etc. Kagaya has a whole set of such forms.

Besides, there are POTs (‘can...’), ‘must’ (e.g. tú-l-é <sup>1</sup>tú-lím-e ‘We must farm, let’s farm’), ‘ought to’ (e.g. tú-fw-ííl(e) ú-kú-líma ‘We ought to farm’), and a ‘Hortative’ (see 2, 3, and 10).

6 Extrasystemic After working out the intersection of T and A, some forms remained. They are: (a) ‘Far Past Narrative’ (twáálíma /sa/ ‘...and we started to farm’, suggesting a change of action in the dialogue, semantically and tonally different from the two other pasts with -a- and FV -a) (b) the form (there may be others) twáálí (P<sub>1</sub>) twáálím<sup>1</sup>á (P<sub>1</sub>) ni ng’ombe ‘We (have) farmed with oxen (not with hoes because of some objection to their use)’, where the inclusion of the auxiliary appears to focus the verb on the post-verbal constituent.

7 Auxiliaries Lungu has many compounds, consisting of two (three in some NEGs) verbs, usually both inflected, sometimes with the second as infinitive. The identifiable AUXs are: -li ‘be’, -ti (judging by neighbouring languages, ‘say’), and -si ‘leave’ (see 3). Unidentified AUXs are: -fw- (see 5), and a string of AUXs based on [-l-]: a-l-anga, a-li-ile, a-l-a, a-l-e. An informed guess about the latter would say they are derivatives of -li ‘be’. Finally, several compounds referring to recent past involve Pre-SM íí-. An informed guess would derive them from an AUX such as -ti or -li (cf tú-cí-lí tú-kú-líma, which gives túcílílima, both ‘We are still farming’). The longer forms with the full AUX are also attested synchronically.

8 Negation Two NEG formatives: -síí- and -tá(á)-. Bickmore and Kagaya do not totally agree on distribution but in general -síí- is restricted to a small number of forms (two presents and futures), otherwise -tá(á)- everywhere, including SBJ, IMP, HOR, and REL.

9 Relatives (Í)vííntú <sup>1</sup>ví-kú-<sup>1</sup>póna ‘Things are falling’, Subject REL: ívííntú <sup>1</sup>í-ví-ku-póna ‘Things which are falling’, NEG ívííntú <sup>1</sup>í-ví-taa-ku-póna ‘Things which are not falling’. Object REL: (á)álímí <sup>1</sup>yá-á-zíís-il úmúúntu ‘The farmers buried (P<sub>3</sub>) someone (a

person)’, úmúúntu wino áálímí <sup>1</sup>yá-á-zíís-ilé ‘Person who the farmers buried’, úmúúntu wino yá-á-zíís-ilé ‘Person who they buried’, úmúúntu wino yá-tá-á-zíís-ilé ‘Person who they didn’t bury’.

So RELs are tonally identical to absolutes. The verb in the subject REL clause has a pre-prefix. A demonstrative reflecting class and number of the head of the clause intervenes between head and verb in object RELs. RELs and absolutes are otherwise structurally identical – in some cases absolute contrasts are reduced in RELs. In object REL clauses there is no reversal of subject and verb, nor any agreement between verb and head of clause.

10     Subjunctive (-e) and Imperative     ‘Farm’ sg limá, NEG u-tá-lím<sup>1</sup>á, yá-lím-<sup>1</sup>íl-é ‘Farm for them’, ka-lím-é ‘Go and farm’, lim-ááng-á ‘Be farming’, mu-lím-íl-ááng-é ‘Be farming for him’. Pl limííní, NEG mu-tá-lím<sup>1</sup>á, tú-lím-<sup>1</sup>é ‘Let’s farm, that we farm’, NEG tu-tá-lím-<sup>1</sup>é. Also a ‘Hortative’: tw-áa-lima ‘Let us start farming’, NEG tu-táá-líma (see also 3).

## M25 Ishi-safwa

	Perfective	Imperfective <b>-aga</b>	Progressive <b>'be' + INF</b>	Persistent	?
P <sub>2</sub> <b>-(a)(h)a- ... -ile</b>	tw- <b>ahá-aj-ile</b> <i>or</i> tu- <b>há-aj-ile</b> <i>we found</i>  N: tu- <b>sa-a-bál-ile</b> <i>we did not go</i>	ba- <b>a-bál-aga</b> <i>(and) they were going,</i> <i>used to go</i>	in- <b>háa-lí-siimb-e</b> <i>I was writing</i>		
P <sub>1</sub> <b>-Ø- ... -ilé</b>	ú- <b>Ø-goj-ile</b> <i>you (have) killed</i>  N: tu- <b>si-gaa-guzy-á</b> <i>we have not sold</i>  N: <b>si-ga</b> ú-xiit- <b>e</b> <i>have you not carried?</i>	ba- <b>bál-aga</b>	u- <b>mwii-bal-a</b> hwí <i>where were you going?</i>		
<b>(-hu-)</b>	tú- <b>Ø-bal-a</b> <i>we are going, go, will go</i>  a- <b>hw-iímb-a</b> <i>she sings</i>  N: tu- <b>sí-zi-fis-a</b> <i>we are not hiding them</i>	(tu- <b>Ø-bál-aga</b> ) <i>we are going,</i> <i>keep on going</i>	tu- <b>lí-lim-e</b> <i>we are cultivating</i>	(tu- <b>li-sh-a</b> tu-bal-a) <i>we are still going</i>	
F <sub>1</sub> <b>'go' + INF</b>  <b>'come' + INF</b>	u- <b>ba-áhu-umv-e</b> <i>you will go to hear (today)</i>  tu- <b>unz-á-lim-e</b> <i>we will soon cultivate</i>				
F <sub>2</sub> <b>-(h)ayí-</b>	in- <b>hayí-bal-a</b> <i>I will go</i>  N: in- <b>sa-ayí-bal-a</b> <i>I will not go</i>	(tw- <b>ayí-kal-aga</b> ) <i>we will be buying</i>	in- <b>hayí-b-amam-e</b> <i>I will be sewing</i>		

## M25 Ishi-safwa

1 General Though Safwa is the most deviant member of M20, it is used because it has the best data: a student paper by Mr. B. Mbanga (1976), Voorhoeve's (n.d.) unpublished sketch, own notes, Labroussi (1998). Voorhoeve spent three weeks in situ but used the grammar of Van Sambeek, who had spent a long time in the area. Some dialect differences apparent. Voorhoeve chosen as the basis but some Mbanga material included. 160,000+ Safwa live in SW Tanzania. Voorhoeve could not decide between 7 and 5 distinctive vowels (see Labroussi (1998) for similar with Wungu). We show 5x2. Verbal prominence expressed by counting vocalic segments from final word boundary: with SMs of Cl. 1, 9, prominence occurs two segments from the end; with others three segments.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV

Pre-SM: siga (or saga) NEG<sub>1</sub>; REL (see 6, below); other prefixes/clitics such as lye, kuti, inga.

SM: in; u; a; tu; mu; ba.

NEG<sub>2</sub>: si (has a variant *sa*, only when the vowel following is [a]).

TA: (a)(h)a P<sub>2</sub>; há FUT SBJ; (hu) PRES and INF (only before vowel stems); a Past CNS; mwii P<sub>1</sub> PRG; (h)ayi F<sub>2</sub>; gaa POT.

FV: a NEU; e SBJ; ile PAST; i IMP pl; ang with monosyllables, otherwise ag IPFV.

3 Tense Voorhoeve has two clear pasts (Hodiernal, Pre-Hodiernal). Mbanga and my notes suggest the possibility (unclear) of a third, middle past (-a- ... -ile). Present is shown in Voorhoeve's texts referring to future, though his analysis does not mention it, and F<sub>2</sub> ('beyond today') is clear enough. The two forms shown as F<sub>1</sub> in the matrix are unclear: Voorhoeve calls the one based on -(i)nz- 'come' an 'immediate future/soon', the other based on -ba(l)- 'go' a 'Hodiernal future', but says that 'the difference in meaning between them is not clear'.

4 Aspect and other categories PFV, IPFV, PRG. Present IPFV bracketed because Voorhoeve says it only occurs in certain dialects, PER and FUT IPFV because they are in Mbanga and my notes, not Voorhoeve.

Voorhoeve shows a Potential (-gaa:- a-gaá-fw-a 'He can die', a-ga-fw-aánga 'He may die') and 'Consecutives' (1. a-(h)á-bala '(and) he went (P<sub>2</sub>)', ba-a-bál-aga '(and) they used to go', a-sa-a-guzy-aága '(and) he didn't sell', 2. a-a-bála '(and) he went (P<sub>1</sub>)', ba-bál-aga '(and) they were going', a-sa-guzy-aagá '(and) he didn't sell'). These so-called CNS's are apparently always dependent but are in fact wider than consecutives. They may occur in a sequence, or precede the main clause and have the same tense as the verb in the main clause, or precede the main clause but have a different tense, e.g. sha zí-sil-ile, úyise a-ha-m'-péela indálama 'After they had finished, his father gave him money', lit. 'after they-finish-ed (P<sub>1</sub>), father he-P<sub>2</sub>+CNS-him-give money').

The INF is /á-(hu-)stem-e/ ([hu] only occurs before vowel). Four forms are based on AUX plus this INF: tw-á-gan-á-bal-e 'We went at once' (-gana 'want, like'); tu-unz-á-bal-e 'We'll go soon'; ba-ba-á-buuzy-e 'They'll go today to ask' (-ba(l)a 'go'); tu-lí-im-e 'We're cultivating'.

5 Negation INF (3 shapes) and SBJ are anomalous by using what seem to be grammaticalised AUXs. Voorhoeve says most finite forms have two NEGs, one with *si-ga* + positive, the other with Post-SM *si*. Any semantic difference not discussed. Examples show predominantly *si*.

6 Relatives Sparse data available. Nothing known for object RELs, and the very few examples for subject RELs suggest it includes an augment (with 3s o): '(Person) who bought' *ow-a-gul-ile*, NEG *ow-a-saga-gil-ile*. '(People) who bought' *a-ba-gul-ile*, NEG *a-ba-saga-gul-ile*.

7 Subjunctive and Imperative Three 'SBJs' with *-e*: *tú-zi-fis-e* 'Let's hide them' (*zi* 'them'), NEG *tu-gandé-hw-iiw-e* 'Let's not forget'; Hodiernal FUT: *nza-tú-zi-fis-e* 'We may hide them' (*-(i)nza* 'come'); Post-Hodiernal FUT: *tu-há-zi-fis-e* 'Shall we hide them?'. IMP sg *-a*, pl *-í*. Objects need *-é*. IMPs of CV verbs all have *-anga*, others may have *-aga* IPFV: *bóomba* 'Work', *ly-aánga* 'Eat', *góg-aga* 'Always kill', *n-daanj-é* 'Show me'. Pl: *sesh-í* 'Laugh', *bal-aj-í* 'Keep going'.

M42 Chi-bemba

	Perfective	Imperfective	Progressive 'be' + LOC	Persistent -cili	Anterior
P <sub>4</sub> -aa-	CONJ: ba-a-bomb-élé DIS: ba- <b>alí</b> -bomb-élé <i>they worked</i>  N: ta-bá-á-bomb- <b>ele</b>	ba-a-lée-bomb-a <i>they were working, used to work</i>  N: ta-bá-a-lée-bomb-a	tw-a-li pa-kuly-a <i>we were eating</i>	ba-a-cili ba-a-lée-bomb-a <i>they were still working</i>	CONJ: bá-a-bomb-á DIS: bá- <b>alí</b> -bómb-a <i>they have worked</i>  N: ta-bá-á-bómb-a
P <sub>3</sub> -á-	CONJ: bá-á-bómb- <b>ele</b> DIS: bá-á-líi-bomb-a  N: ta-bá-á-bomb-a	bá-á- <sup>1</sup> lée-bómb-a  N: ta-bá-á- <sup>1</sup> lée-bómb-a		ba-á-cili ba-á-lée-bomb-a	
P <sub>2</sub> -áci-	bá-áci-bómb-a  N: ta-bá-áci-bómb-a	bá-áci-láá-bómb-a  N: ta-bá-áci-láá-bómb-a	tw-áci-ba pa-kuly-a	ba-á-cili ba-áci-láa-bomb-a	
P <sub>1</sub> -á-	CONJ: bá-á-bómb-a DIS: bá-á-bomb-a <i>they just worked</i>  N: ta-bá-Ø-bomb- <b>ele</b>			ba-a-lí ba-a-cili ba-lée-bomb-a	
	CONJ: bá-Ø-bómb-a DIS: bá-lá-bomb-a <i>they work</i>  N: ta-bá-Ø-bomb-á	bá-lée-bómb-a <i>they are working</i>  N: ta-bá-lee-bómb-a	tu-Ø-li pa-kuly-a <i>we are about to eat</i>	CONJ: ba-Ø-cili ba-Ø-bomb-a DIS: ba-Ø-cili ba-la-bomb-a <i>they still work</i>  N: ba-Ø-cili ba-lée-bomb-a	CONJ: bá-Ø-bomb-élé DIS: <b>náa</b> -bá-Ø-bomb-á <i>they have worked</i> N <sub>1</sub> : ta-bá-Ø-bómb- <b>ele</b> N <sub>2</sub> : ta-bá- <b>laa</b> -bómb-a <i>they have not yet worked</i>
F <sub>1</sub> -aláa-	bá-áláa-bómb-a <i>they will work (today, immediate)</i>  N: ta-ba-a-bomb-é	bá-á-ku-láa-bómb-a <i>they will be working (more certain)</i>  N: ta-ba-a-ku-laa-bomb-a	tw-áláa-ba pa-kuly-a	ba-cili ba-á-ku-láa-bomb-a	
F <sub>2</sub> -lée-	bá-lée-bómb-a <i>they will work (today, not immediate)</i>				
F <sub>3</sub> -ka-	bá-ká-bomb-a  N: ta-ba-a-ka-bomb-é	bá-ka-láa-bómb-a <i>(less certain)</i>  N: ta-ba-a-ka-lée-bómb-a	tu-ka-ba pa-kuly-a	ba-Ø-cili ba-ka-láa-bomb-a	

## M42 Chi-bemba

1 General Sharman (1956), Givón (1969), Kula (p.c.). An initial matrix, largely based on Sharman, was adjusted after email discussions with Nancy C. Kula, Bemba native speaker. Tones shown are more or less underlying (Sharman/Meeussen 1955). 2,000,000+ first language speakers, most in Zambia, some in Botswana, DRC, Malawi, Tanzania, and Zimbabwe. Kula feels this is low and the same number again use Bemba as second language. 5x2.

2 Structure Pre-SM – SM – NEG – TA – OM – root – EXT – FV (complete?)

Pre-SM: Object REL; ta NEG<sub>1</sub>; náa ANT; a ‘if/CND’. REL precedes NEG<sub>1</sub>.

SM: n; u; á; tu; mu; bá. Participants are tonally underlyingly L, others H.

NEG<sub>2</sub>: i (SBJ, IMP); sha (REL, and 1s). Unclear whether NEG<sub>2</sub> and TA are distinct.

TA: aa P<sub>4</sub>; á P<sub>1</sub>, P<sub>3</sub> (length of /a/?; alí P<sub>4</sub> DIS; álii?; áci P<sub>2</sub>; la DIS Present; (á)láa F<sub>1</sub>, F<sub>3</sub>; léé IPFV, F<sub>2</sub>; ka<sub>1</sub> F<sub>3</sub>; ka<sub>2</sub> Itive; possibly ká<sub>3</sub> another future (Givón); aku in F<sub>1</sub> (precedes laa); cíli PER; inga CND; Ø CNJ Present. As can be seen, several of these are at least bimorphemic.

FV: a NEU; e SBJ and NEG Futures; ile Past/ANT, with different tone patterns.

3 Tense Four pasts, referring respectively, in neutral context, to events immediately past, earlier today, yesterday and maybe a little before, and remote. Past and future reference is not absolute, ‘attitude of the speaker is the deciding factor’. Three futures, immediate (Sharman á/a, Kula aláa), later today, and beyond that. F<sub>2</sub> formative -léé- is that of the temporally unmarked/present IPFV: presumably this has extended itself to refer to all today: the F<sub>2</sub> row could be deleted, as it is identical to the Present IPFV. Unlike other futures, F<sub>2</sub> does not co-occur with any of the aspects. Kula characterizes F<sub>1</sub> as of greater, and F<sub>3</sub> as of lesser, certainty. Givón adds a fourth, more remote, future, involving high-toned -ká- (versus low-toned F<sub>3</sub>). Sharman calls this a Future SBJ, saying it may ‘be regarded as timeless, though normally referring to an event which, if it were to occur at all, would be in the future. (Any future, not necessarily the full future.)’. F<sub>1</sub> -áláa- alternates with á-ku-láa: (ba-cíli) ba-á-ku-láa-bomb-a ‘They will (still) be working’. Sharman sees these as ‘Inceptive and Completive’.

4 Aspect, other categories, focus PFV, IPFV, PER, ANT. Kula doubts PRG is a real aspect, because not fully grammaticalised. Some aspects combine, e.g. a-a-li a-a-bombá ‘He had worked’ (P<sub>4</sub> PFV + P<sub>4</sub> ANT), a-á-li a-á-bombele ‘He had worked’ (P<sub>3</sub> PFV + P<sub>3</sub> PFV), tw-a-lí náa-tu-y-a ‘We’d already gone’, a-b-e náa-samb-a ‘He should already have bathed’, tu-ba tu-lée-bomba ‘We’re working’. The latter has the same translation as the equivalent AUX-less IPFV form in the matrix. They seem to differ in the degree of pragmatic emphasis on time/place of the action.

Morphemes rendered as ‘if’/CND are in: a-n-samba nga tu-a-ya boonse ‘If I’d bathed, we’d have all gone’, lit. if-I-bathe, nga we-Past-go all, nga chakuti tw-inga-senda aya malata ‘If we could take these roofing materials...’, lit. CND if it-were-that we-can-take..., nga tw-a-senda... ‘If we take’. Ka<sub>2</sub> Itive appears in tu-ka-bomb-e ‘Let’s work (time removed from now)’.

Bemba has verb (DIS) and predicate (CNJ) forms for many tenses. E.g. ba-á-bombele mwi bala lelo (PF) means ‘They worked in the garden (nowhere else) today’, whereas kwena abalumendo ba-áli-bombele (VF) means ‘The boys really worked’.

5     Negation     Three NEG formatives. Main one is ta-. SBJ/IMPs have -i. *Sha* occurs in NEG RELs (8) and all 1s NEGs, e.g. n-sha-bomb-e ‘I won’t work (versus ta-tu-a-bomb-e)’.

6     Relatives     A sketch: umuntu u-a-tw-iishiba ‘Person who-T-us-know’, umuntu uu-sha-tw-iishiba ‘Person who-not-us-knows’, umuntu uo-tw-a-ishiba ‘Person who-we-T-know’, umuntu uo-ta-tu-sha-ishiba/ta-tw-a-ishiba ‘Person who-not-us-not-know/ not-us-T-know’.

7     Imperative     Sg bomb-a ‘Work’, pl bomb-eni, NEGs w-i-bomba and mw-i-bomba. In the singular, the SBJ can also be used (bomb-e), as a politer form.

M54 Uwu-lamba

	Perfective	Imperfective <b>-luku-</b>	Persistentive <b>-ci-</b>	Anterior
P <sub>2</sub> <b>-a:(li)- ... -ile</b>	<b>tw-a:li-cit-ile</b> <i>we did</i> N: <b>ta-tw-a:-cit-ile</b>	<b>tw-a:-luku-cit-a</b> <i>we were doing, used to do</i>	<b>ka-tu-ci-cit-a</b> <i>we were still doing</i>	
P <sub>1</sub> <b>-a:-</b>	<b>tw-a:li tw-a:-cit-a</b> <i>we did</i> N: <b>ta-tu-cit-ile</b>	N: <b>ta-tw-a:-luku-cit-a</b>		<b>tw-a:-cit-a</b> <i>we have done</i>
	<b>tu-la-cit-a</b> <i>we do</i> N: <b>ta-tu-cit-a</b> R: <b>tu-cit-a</b> <i>we who sleep</i>	<b>tu-luku-cit-a</b> <i>we are doing</i> N: <b>ta-tu-luku-cit-a</b>	<b>tu-ci-cit-a</b> <i>we still do, are still doing</i>	
F <sub>1</sub> <b>-aku-</b>	<b>tw-aku-cit-a</b> <i>we will do</i> N: <b>te:si tu-cit-e</b>	<b>tw-aku-luku-cit-a</b> <i>we will be doing</i> N: <b>te:si tu-luku-cit-a</b>	<b>tw-aku-luku-ci-cit-a</b> <i>we will still be doing</i>	
F <sub>2</sub> <b>-ka-</b>	<b>tu-ka-cit-a</b> <i>we will do</i> N: <b>ta-tu-ka-cit-a</b>	<b>tu-ka-luku-cit-a</b> N: <b>ta-tu-ka-luku-cit-a</b> <b>te:si tu-ka-luku-cit-a</b>	<b>tu-ka-luku-ci-cit-a</b>	

## M54 Uwu-lamba (Chi-lamba)

1     General       Source is Doke (1938), who exemplifies tones but does not mark them in the text. 211,000+ Lamba live in Zambia's Copperbelt, Central, and Northwestern Provinces and adjacent parts of southeastern DRC. 5x2.

2     Structure       Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV – Post-FV

Pre-SM: REL (see 9); ta NEG; ka 'NAR, etc'; nga in some IMPs (Hortative?). When REL and NEG co-occur, they do so in that order. No examples of the others.

SM: 1s nsi NEG, otherwise n; u; 3s u REL, otherwise a; tu; mu; wa.

NEG: i: CND and SBJ.

TA: Ø REL Present; a:(li) P<sub>2</sub> (li disappears in REL and NEG, so is Disjunctive); a: P<sub>1</sub>; la General Present (Doke calls it HAB); aku F<sub>1</sub>; ka<sub>2</sub> F<sub>2</sub>; ka Itive; luku PRG; ci PER; nga CND. More than one morpheme may occur in the TAM slot, e.g tu-ka<sub>2</sub>-luku-ci-cita.

FV: a NEU; e SBJ and NEG Future; ile P<sub>2</sub> positive and Past NEG.

Post-FV: e:ni 1 and 2p; locative (po, ko, mo); interrogative markers.

3     Tense       Two pasts, two futures. Systematic semantics: today versus beyond today. Doke does not say whether reference is fixed or flexible. There is a problem in the difference between what the matrix refers to as P<sub>1</sub> PFV versus ANT (both Hodiernal). Doke shows my Anterior as a straight Past, but later says that what I have shown as P<sub>1</sub> PFV is a 'very important form', meaning 'action completed and done with on the same day as speaking', omitted from his initial paradigms because it is a compound. The few clear examples strongly suggest the compound form is the PFV and the a:-form is the Anterior. If that is correct, it is unusual to have a PFV more marked than the Anterior.

4     Aspect       PFV, IPFV, PER, ANT. Some can be combined.

(5     Focus?)       Positive and negative (also REL) forms are broadly similar in markedness. Obvious exceptions are the PFV forms for Pasts and Present, where the marker for absolute Pasts include a [li] and for Present have [la], but NEG<sub>s</sub> (and REL<sub>s</sub>) do not. Across Bantu it is unusual to have [la] marking Present. Güldemann (1996: 236) compares Lamba with Tonga (Bemba is similar), in which -la- and null co-exist for present, [la] representing verb focus and null lack of such focus. Lamba has no such focus any more. Güldemann suggests Lamba has generalised the focus variant at the expense of the non-focus variant. That seems a good suggestion for [la], but less good for [li], which is easily explained as deriving from copular/AUX -li.

6     Other categories     Doke has a lot of details, of which these seem most noteworthy.

A conditional marker -nga- co-occurs with several TA markers, e.g. tu-nga-cita 'We should do, should have done', NEG tw-i:-nga-cita, tu-nga-luku-cita 'We should be doing'.

As elsewhere in Bantu, a 'not yet' NEG occurs: ta-tu-nga-cita 'We have not done yet'.

Lamba makes massive use of the distinction stative (versus dynamic) verb. Stative verbs are e.g. 'sit, stand, sleep, be tired, be angry, be satisfied, be happy, etc'. The paradigm shown in the matrix works fully for dynamic but only partly for stative verbs. Stative verbs have a paradigm which partly overlaps with the matrix, because they are mainly based on the use of

ANT -ile. So tu-luku-cita ‘We are doing’ versus tu-li-le:le/tu-luku-le:le ‘We are asleep/sleeping’, ka-tu-luku-cita ‘We were doing’ versus ka-tu-le:le, tu-ci-cita ‘We are still doing’ versus tu-ci-le:le.

Finally, besides the P<sub>1</sub> PFV compound, discussed above in 3, Doke shows a compound with ‘say’ -ti, meaning unfulfilled purpose in immediate past time. This use of -ti is an areal feature affecting most languages in zones M and N, and also P20. Example: tw-a:-ti tu-(ka-)cit-e ‘We were about to do (but didn’t)’.

8 Negation Doke shows five NEG formatives, four minor. One occurs with the INF (the INF has no single NEG formative) and is an AUX -wula ‘to omit, be lacking’, so uku-wulo-ku-fwaya ‘To not want’. Another, te:-, occurs in a few forms before [ku], as in te:-ku-kaka ‘Don’t tie’, te:-kulu-seka ‘Don’t go on laughing’. Third is -i:-, occurring in ‘subjunctives’ (w-i:-fi-kaka ‘Don’t tie them’) and CNDs. Fourth is *te:si* plus SBJ, occurring in Futures (see matrix). General NEG is ta-, from which the second and the fourth formatives just described seem to derive.

9 Relatives Subject relatives are indicated by use of the pre-prefix. Full object relatives involve use of two demonstrative and the relativised verb (which does not differ structurally in most cases from the absolute verb): one or both demonstratives may drop, in which case the pre-prefix form of the object is left on the noun, and even that may delete, thus:

(Subject) awantu wa-la-pinta ifipinto ‘People they-HAB-carry loads’  
 awantu a-wa-pinta ifipinto ‘People who carry loads’ (lit. REL-they-carry loads)  
 awantu awa-ta-wa-pinta-po ifipinto ‘People who don’t carry loads there’  
 (lit. who-NEG-they-carry-there loads)

(Object) awantu awo awa-tu-lukufwaya ‘The people we want’  
 (lit. people those they who-we-want’)  
 (or awantu awo tulukufwaya,  
 or awantu awa-tulukufwaya)  
 tw-a:isendule nama tw-a:londa ‘We found the animal we were following’  
 (lit. we-found animal we-followed) (no pronoun  
 or pre-prefix)

10 Subjunctive The subjunctive, marked by -e, has the typical range of use. Beside this regular subjunctive, Doke has a set of six other forms, which he calls negative Subjunctives, not marked by FV -e. One can be seen below (w-i:-cita ‘Don’t do’. He has several corresponding positive Subjunctives, most in FV -a, two in FV -e. This needs further examination.

11	<u>Imperative</u>	<u>Singular</u>	<u>Plural</u>
	Second person	cit-a ‘Do’	cit-e:ni
	With Itive	ka-cit-a ‘Go and do’	ka-mu-cit-a (two people) ka-mu-cit-e:ni (three people)
	With locative	ya-ko ‘Go there’	y-e:ni-ko
	1plural		ka-tu-y-a ‘Let’s go (two people)’ ka-tu-y-e:ni (three or more)

With SBJ	ka-kak-e ‘Go and tie’	ka-w-e:t-e:ni ‘Go and them-call’
With object (+ SBJ)	mu-kak-e ‘Tie him’	mu-kak-e:ni ‘Tie ye him’ (3+)
With SBJ	u-cit-e ‘(Please) do’	mu-cit-e
NEG	w-i:-cit-a ‘Don’t do’	mw-i:-cit-a
SBJ, Itive	u-ka-cit-e ‘(Please) go do’	mu-ka-cit-e
First person	n-cit-e ‘Let me do’	tu-cit-e ‘Let’s do’, tu-ka-cit-e

## M63 Ci-ila

	Perfective	Imperfective <b>-aku-</b>	Persistentive <b>-ci-</b>	Anterior <b>-ile</b>
P <sub>2</sub> <b>-aká-</b>	nd-aká-p-a <i>I gave</i> N: ndi-i-ná-ú-ká-p-a	tu-aká-ákú-p-a <i>we were giving</i>	tu-aká-ákú-ci-p-a <i>we were still giving</i>	tu-aká-ákú-p-ele <i>we have given</i>
P <sub>1</sub> <b>-a-</b>	nd-a-p-â <i>I gave</i> N: ndi-i-ná-kú-p-a	tu-a-ákú-p-a <i>we were giving</i>	tu-a-ákú-ci-p-a <i>we were still giving</i>	tu-a-ákú-p-ele <i>we have given</i>
'Past' <b>ka-</b>	N: ka-tu-tá-na-ku-p-á	ka-p-â <i>he was giving</i> ka-ba-p-â <i>they were giving</i> N: ka-tu-tá-p-í <i>we were not giving</i>	ka-ci-p-â <i>he was still giving</i> N: ka-tu-tá-ci-p-í	ka-bá-p-élé <i>they have given</i> N: ka-tu-tá-zhím-íné <i>we were not standing</i>
	nd-a-p-á u-lá-p-a <i>he gives, is giving, will give</i>	tu-li-aku-p-a <i>we are giving</i> N: ta-tu-li-aku-p-a	tu-ci-p-á <i>we are still giving</i> N: ta-tu-ci-p-i	tu-li-zhím-íné <i>we are standing</i> N: ta-tu-zhím-íné
F <sub>1</sub> <b>-la-</b>	u-lá-p-a <i>he will give, etc.</i> N: ta-tu-p-í <i>we will not give</i>	tu-la-aku-p-á <i>we will be giving</i>	tu-la-aku-ci-p-á <i>we will still be giving</i>	tu-la-aku-p-elé <i>we will have given</i> N: ta-tu-ákú-na-kú-p-a <i>we will not have given</i>
F <sub>2</sub> <b>-la-ka-</b>	tu-la-ka-p-á <i>we will give</i> N: ta-tu-ká-p-i	tu-la-ka-aku-p-á <i>we will be giving</i>	tu-la-ka-aku-ci-p-á <i>we will still be giving</i>	tu-la-ka-aku-p-elé <i>we will have given</i> N: ta-tu-ká-ákú-na-kú-p-a <i>we will not have given</i>

## M63 Ci-ila

1 General Yukawa (1987). Focus on tones. Labels and meanings of forms may be unreliable, and unverifiable because no textual examples. 61,000+ speakers in northern Southern Province, Zambia. Ila, Tonga, Soli, Lenje are called Bantu Botatwe ('three peoples'). 5x1.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV (complete?)

Pre-SM: NEG<sub>1</sub>; Object REL; ka 'Past'; a HOR pl; ní 'when (Past)' (ní-twakápa 'When we gave').

SM: 1s (i)n SBJ, otherwise nd; u; 3s a in SBJ, some RELs, otherwise ú; tu; mu; bá.

NEG<sub>2</sub>: ta INF; tá REL and SBJ.

TA: Ø SBJ, some NEG<sub>1</sub>s; a P<sub>1</sub>; aká P<sub>2</sub>; la Present, F<sub>1</sub>; laka F<sub>2</sub>; aku IPFV, ANT; ci PER; ka Itive; na in several NEG<sub>1</sub>s; naku in some Past PFVs; li in IPFV Present; kalá 'expect to'. Note ndapâ 'I gave' vs ndápâ 'When I give' – unclear whether two /a/ or underlying ni- in the second.

OM: Only one visible.

FV: a NEU; e SBJ; i in some NEG<sub>1</sub>s, allomorphic with a; ile (vowel and nasal harmony) ANT.

3 Tense Two futures, F<sub>1</sub> 'hodiernal', F<sub>2</sub> 'posthodiernal'. Pasts less clear. Yukawa has a 'prehodiernal past' (aká positive, ka NEG), 'hodiernal' (a), and 'simple past' (ka). *Ka* attested in the IPFV, PER, ANT but not the PFV, although he gives a form which on the basis of its shape appears to be a NEG ka-. Yukawa says the prehodiernal and hodiernal are mainly used only with participants, and that otherwise the simple past is used. Examples for Anterior support this but the examples for the other aspects and NEG<sub>1</sub>s for these three pasts do not consistently support this claim. Since there is an almost complete paradigm of ka-forms, with the PFV exception mentioned, an alternative hypothesis would be that -ka- is a third sort of past, meaning unclear.

4 Aspect PFV, IPFV (Yukawa 'PRG'), PER, ANT. Little evidence to support the labels PFV and ANT (positive or NEG): I follow Yukawa's interpretation. Yukawa says the Present ANT forms only occur with statives, but as no other positive forms are given, they are perforce used.

5 Negation INF, REL, SBJ -ta-. Present and future indicatives have t-a (1s nshi), Past indicatives have either ka- or are associated with -na-ku- (no ta or ka). Some NEG<sub>1</sub>s are given by Yukawa but not put in the matrix as it is unclear where they fit: ta-tu-ná-p-ele 'We've never given', ta-tu-ná-ku-p-a 'We've not yet given'. Maybe one of these should replace the negative Present ANT of the matrix? These are Non-Pasts because both involve ta-, which only appears in Non-Pasts.

6 Relatives Subject REL has (H) prefix at Pre-SM, object REL has pronoun between head noun and verb: múntú ú-(w)akáákúwile 'Person who-dropped', múntú ngú in-zánda 'Person whom I-love'. Verbs otherwise tonally and mostly structurally identical to absolutes.

7 Subjunctive and IMP Sg pâ 'Give', tánda 'Chase away', zhóla 'Return', mu-p-é 'Give him', muleké a-p-ê 'Let him give', (koyá) u-ká-p-e 'Go and give (Itive)', NEG u-tá-p-í 'Don't

give'. Pl á-mu-p-ê 'Give', á-mu-mú-p-e 'Give him', ka-mu-pé 'Go and give', ka-tu-p-â 'Let's give'. Also a form labelled SBJ (ati ba-ta-ákú-fwa 'So they may not die') but unclear why so labelled.

8 Problems (a) Not shown in the matrix are: tu-ka-la-p-a 'We'll give', NEG ta-tú-ka-p-i. Yukawa says they 'express an expectation that someone will do some action in the future' but this 'might not be very exact'. A FUT interpretation is supported by the -la-. Since the meaning is unclear, and no aspectual variants are given, they are omitted from the matrix. (b) Present IPFV is shown as li-a-ku, 'confirmed only for one village'. The la-form shown as Present PFV 'gives, is giving, will (HOD) give' is geographically more general, and its negative shown under F<sub>1</sub>. Since it is unusual for a future (la) to be generalised to present, the explanation given in Lamba 5 is more likely – it is an old focus form (la) that has been generalised to all Present, and then to F<sub>1</sub> forms.

## M301 Chi-ndali

	Perfective	‘Habitual’ -ag-	Progressive “be” + paku-	Anterior (?) -ite
P <sub>3</sub> -ka-	n-gá-bal-a <i>I counted</i> N: n-dá-ka-bal-a	n-ga-bál-ag-a <i>I counted, was counting, used to count</i> N: n-dá-ka-bal-ag-a	n-gá-b-a ndi pakú-bal-a <i>I was counting</i> N: n-dá-b-a ndi pakú-bal-a	n-gá-ba m-Ø-bál-ite <i>I had counted</i> N: n-dá-ka-ba m-Ø-bál-ite
P <sub>2</sub> -a- ... -ite	[n-aa-bál-ite] <i>I counted</i> N: n-dá-á-bal-ite	n-aa-bál-ag-a <i>I counted, was counting, used to count</i> N: n-dá-á-bal-ag-a	[n-áá-li] pakú-bal-a <i>I was counting</i> N: [n-dá-á-li] pakú-bal-a	n-áá-li m-Ø-bál-ite <i>I had counted</i>
P <sub>1</sub> -a-	[n-áá-bal-a] <i>I counted</i> N: [n-dá-á-bal-a]			
	n-gú-bal-a <i>I am counting, I count</i> N: n-dá-ku-bal-a	n-gú-bál-ag-a <i>I count</i> N: n-dá-ku-bal-ag-a	ú-li pakú-bal-a <i>you are counting</i> N: n-da pakú-bal-a <i>I am not counting</i>	m-Ø-bál-ite <i>I (have) counted</i> N: n-dá-bal-ite
F <sub>1</sub> -Ø- ... -e	(gwíse) m-Ø-bál-e <i>I will count</i> N: n-dá m-Ø-bál-e			
F <sub>2</sub> -ka- ... -e	(gwíse) n-gá-bal-e <i>I will count</i> N: n-dá n-gá-bal-e	(gwíse) n-gá-bal-ag-e <i>I will count (as ...), I will be counting</i> N: n-dá n-gá-bal-ag-e	(gwíse) n-gá-b-e pakú-bal-a <i>I will be counting</i> N: n-dá n-gá-b-e pakú-bal-a	

## M301 Chi-ndali

1 General Some 150,000 speakers in SW Tanzania and adjacent Malawi. Main source Swilla (1998), supplemented by Botne (2003b, 2007), Labroussi (1998), own notes. (Also aware of Nyakyusa (M31): sources Nurse (1979a), own notes and two student papers from 1970's, Hawkinson (1976), Labroussi (1998)). Some dialect differences apparent. Botne deals with Malawian, the others with Tanzanian Ndali. 5x2, 'restricted tone system', but some lexical role in nouns (*ísala* 'hour, clock', *isála* 'hunger'). Swilla's material is tone-marked, Botne's is not.

2 Structure Pre-SM – SM – NEG – TA – OM – root – EXT – FV – Post-FV

Pre-SM: A set of items of uncertain status (prefix, clitic?); bwe 'when'; linga 'if'; ngali CND.

SM: N; 2s gu (before V?), u (before C?); a; tu; mu; ba.

NEG: ta, ti.

TA: ka P<sub>4</sub>, F<sub>2</sub>, 'if', Itive; a P<sub>1</sub>, P<sub>3</sub>; Ø with e, ite; ku Present; -kaa- PER; -anga- CND. [k] > g/N\_. Impossible to distinguish the various -ka- and -a- tonally because prominence is a function of the word, not of morphemes.

OM: Only one visible.

FV: a NEU; e SBJ, F<sub>1</sub>/F<sub>2</sub>; agha HAB (allomorphs include -anga, in certain contexts, including after CV stems); ite (and allomorphs) P<sub>2</sub>, P<sub>3</sub> (and ANT?).

Post-FV: po LOC; ki 'what', etc.

3 Tense Future may be referred to in four ways, by using: the null present (today, tomorrow); the null present of 'go' + LOC + Infinitive (n-gú-j-a pa-kú-bala 'I am going to count, today or later'; gwiise (you-come-SBJ) + Subjunctive form (gwiis-e m-bál-e 'I will count (today)', lit. you-will-come I-count-SBJ); and gwiise + Future Subjunctive (gwiise n-gá-bal-e, tomorrow or later). I view the first as an extension of the Present, ignore the second, as it is not grammaticalised and transparent, the third as a Hodiernal Future, and the last as a Post-Hodiernal. Other forms of Ndali have -(ku)ti- or -ndi- instead of -gwiise-.

All sources agree that P<sub>1</sub>, P<sub>3</sub>, and P<sub>4</sub> often refer to immediately past, hesternal, and remote events, respectively. Botne describes P<sub>2</sub> as Hodiernal, whereas Swilla (1998: 100) describes it as referring to anywhere from earlier today to last month. This may be resolved by Swilla's statement that P<sub>3</sub> events are earlier than P<sub>2</sub> ones, which in turn precede those of P<sub>1</sub>, and some of Botne's examples point in the same direction: the reference of at least P<sub>2</sub> and P<sub>3</sub> is relative, not absolute.

4 Aspect PFV, HAB (or IPFV? -ag-), PRG ('be' + LOC + verbal noun), PER (-kali-, an areal feature). In Swilla's article it seems as if the Ø/ite form might be an ANT, because she gives it with a wide range of past reference, from quite recent to a year ago, overlapping with that of adjacent pasts, because it appears with statives, indicating present state (a-Ø-fw-iile 'He is dead'), a typical function of ANTs, and because it seems to be the only form to appear as the second member of a non-imperfective compound (n-gá-ba m-Ø-bal-ite 'I had counted'). While the first two claims remain true, further enquiry revealed other past forms as the second member of compounds: n-gá-ba n-gá-bala 'I had counted', n-gá-ba n-áá-bala 'ditto'. It remains to be investigated whether these represent tense (prior to the past reference point) or aspect. Other

non-past formatives also occur in the second verb (ba-ka-ti ba-kw-ambuka ‘As they were crossing’).

5     Negation     All the conjugated forms in Swilla are negated by having -tá- after the SM. Relatives involve Post-SM -ti-. For IMP, see below.

6     Relatives     Sparse data, but a pre-prefix involved.

7     Subjunctive    -e in IMP pl and OM + IMP.

8     Imperative     Manye ubale ‘Don’t count’.

N21 Chi-tumbuka

	Perfective	Imperfective <b>-anga</b>	Persistentive <b>-chali + ku-</b>	Anterior (?) <b>-ri + ku-</b>
P <sub>3</sub> <b>-ka-</b>	ti- <b>ka</b> -timb-a <i>we struck</i>	ti- <b>ka</b> -timb- <b>anga</b> <i>we were striking, used to strike</i>  N: ti- <b>ka</b> -timb- <b>anga</b> chara	ti- <b>ka</b> -wa ti- <b>chali ku</b> -timb-a <i>we were still striking</i>	
P <sub>2</sub> <b>-angu-</b>	tu- <b>angu</b> -timb-a <i>we struck</i>			
P <sub>1</sub> <b>-a-</b>	t- <b>a</b> -timb-a <i>we (have) struck</i>	t- <b>a</b> -timb- <b>anga</b> <i>we were striking</i>  N: t- <b>a</b> -timb- <b>anga</b> chara		
	ti- <b>ku</b> -timb-a <i>we strike, are striking, will strike (immediate future)</i>		ti- <b>chali ku</b> -timb-a <i>we are still striking</i>	ti- <b>ri ku</b> -poker-a <i>we have received (and still have ...)</i>  wa- <b>ri ku</b> -f-w-a <i>he died, is dead</i>  (?) N: wa-nda-rut- <b>e</b> <i>he has not gone yet</i>
Future <b>-enge</b>	ti- <b>Ø</b> -timb- <b>enge</b> <i>we will strike</i>			

## N21 Chi-tumbuka

1 Sources 662,000 speakers in NW Malawi, 406,000 in NE Zambia. Main source is an undated anonymous ms, with no texts, provided by Dr. Mwakanandi, of Zomba, Malawi. Also consulted Güldemann (1999), whose source seems to be Young (1932). Although I have not seen Young, I guess it and the anonymous source are not the same. Penultimate stress. 5x2.

2 Structure Pre-stem – SM – TA – OM – root – EXT – FV – Post-FV

Pre-stem: nta NEG; locative/Irrealis.

SM: ni; u; 3s u or wa; ti; mu; ba.

TA: ka P<sub>3</sub>; angu P<sub>2</sub>; a P<sub>1</sub>; ku Present; Ø (with FV e, enge); chali (< ki+a+li) + ku PER; ka Itive; nda ‘not yet’; nga ‘may, must’, and various more or less grammaticalised futures.

FV: a NEU; e SBJ, (Future); anga IPFV Past, strong IMP; enge Future.

Post-FV: Locatives; interrogatives; ni IMP pl; so ‘again’, etc.

3 Tense There appear to be three degrees of past: ka P<sub>3</sub> (before today), angu P<sub>2</sub> (today), a P<sub>1</sub> (just now). The examples suggest the past reference of these tenses is relative, not absolute. I have treated -a- as P<sub>1</sub> because it fits best with the examples and combines with -anga, but it has ANT functions also. So with statives, it has a present/resultative reading, even though the original action might be some distance in the past. Similarly with a verb such as ‘go’, ba-a-luta means ‘They went and are still away’, whereas ba-angu-luta or ba-ka-luta means ‘They went but have come back’.

The anonymous source shows nine structures involved in future reference, although only one degree of future reference. The commonest and the apparently neutral one is that in the matrix. The meaning of the others apparently has to do with other features such as emphasis, certainty, distance from speakers, Itive, Ventive, thus: ti-lut-e ‘We may/might/should/will go’ (SBJ), ti-lut-enge ‘We’ll go’ (‘very common’), ti-ti ti-lut-e ‘Ditto, strong future’ (second -ti- of AUX is < ‘say’), ti-ti ti-lut-enge ‘We’ll go, similar to preceding, but emphatic’, t-a-m-(ku-)gul-a ‘We’ll buy (elsewhere)’, t-iza-m-(ku-)gul-a ‘We’ll (come here to) buy’ (-iza ‘come’), ti-za-ka-gezy-a ‘We’ll (come and) try (in a sequence of events)’, t-a-ya-m-(ku-)sang-a ‘We’ll (go and) find’ (-ya ‘go’), ti-enda-m-(ku-)pereka ‘We’ll hand over (on our way to...)’. Compare Sena, section 3.

4 Aspect and other categories PFV, IPFV, PER (-chali + ku), ANT (-li + ku), although no single tense shows all these distinctions – more data needed? My ANT (-li + ku) is described as Stative Past, ‘refers to a state of affairs begun in the past and still continuing at the moment of speaking’: ba-li ku-luta ku Mzomba ‘They have (lit. are) gone to Mzomba (and are not back)’.

English irrealis notions such as ‘when, if’ are mainly rendered by separate words, but a widespread category is marked by -nga-: ni-nga-chita ‘I can do’, mu-nga-luta ‘You may go’, mu-nga-lut-anga ‘You shall not steal (strong IMP)’, ngi-nga-timb-anga ‘I mustn’t strike’ (Young 1932: 40). Ignoring the issue of how negation is rendered in the last example, -nga- translates mood.

Itive -ka- can be seen in the seventh Future form above, and it is common in Subjunctives such as: ti-ka-tol-e ‘Let’s go and take’, lut-a-ni ku-ya ka-tol-a (or mu-ka-tol-e) ‘Go and take’.

5      Negation      Several NEG structures are shown. The commonest involves Pre-SM *kuti-* and post-verbal/clausal *chara* (or *yayi*): *kuti n-khu-khumb-a chara* ‘I don’t want’. An alternative is *-lije/-liv(y)e* (li ‘be’): *ni-lije ku-manya* ‘I don’t know’. Two others involve AUXs (*leka* ‘forbid’, *bura* ‘be without’): *wa-ka-leka kuluta ku-sukulu* ‘He didn’t want to go to school’, *leka-ni kuluta* ‘Don’t go’, *ni-ka-bura kumanya* ‘I didn’t know’, *wa-ku-bura kukhumba* ‘He doesn’t want’. The only inherited NEG is *nta-*: *nta-wa-ku-khumba kuluta* ‘He doesn’t want to go’.

6      Subjunctive (-e) and Imperative      *Luta* ‘Go’, *lut-ang-a* (emphatic), NEG *leka ku-luta*, *u-nga-lut-anga* (strong prohibition). Plural of foregoing: *luta-ni*, *lut-a-ni-nge*, *leka-ni kuluta*, *mu-nga-lut-anga*. *Ba-lek-e kuluta* ‘They shouldn’t go’.

N30 Ci-nyanja

	Perfective	Habitual <b>-ma-</b>	Progressive <b>-(li)ku-</b>	Persistent <b>-daka-</b>	Anterior <b>-a-</b>
Past <b>-na-</b>	ti- <b>ná</b> -gúl-a <i>or</i> ti- <b>ná</b> -gul-a <i>we bought</i>  N: sí-ndí- <b>na</b> -pít-a sí-ndí- <b>ná</b> -pít-e <i>I did not go</i>		ti- <b>na-lí kú</b> -gúl-a <i>we were buying</i>  N: sí-ndí- <b>na-lí ku</b> -dzíw-a <i>I was not knowing</i>		tí- <b>ná-a</b> -thamang-a <i>we had run</i>
	tí- <b>Ø</b> -pít-a <i>or</i> tí- <b>Ø</b> -pit-a <i>we go, will go</i>  N: sí-tí- <b>Ø</b> -pit-a	á- <b>ma</b> -vín-a <i>she dances (regularly)</i>  N: s-á- <b>ma</b> -óc-a <i>they do not roast</i>	ti- <b>(li)ku</b> -gúl-a <i>we are buying</i>  ndi- <b>ku</b> -pít-á <i>I am going</i>  N: s-á- <b>(li)ku</b> -gwíl-a ncito <i>he is not working</i>	ndi- <b>daka</b> -gwíl-a ncito <i>I am still working</i>	mw- <b>a</b> -gón-a <i>you have slept, are asleep</i>  mw- <b>a</b> -swel-a <i>you have passed the day</i>  (?) N: s-a- <b>na</b> -pít-e <i>he has not gone yet</i>
Future <b>-dza-</b>	a- <b>dzá</b> -fik-a <i>they will arrive</i>  N: si-ti- <b>dza</b> -pít-a <i>we will not go</i>				

## N30 Ci-nyanja

1 General Nyanja spoken as first language by 4 million in Malawi, 1.6 million in Botswana, Mozambique, Tanzania, Zambia, Zimbabwe, and some 400,000 as second language. Despite this, no modern comprehensive reference grammar. Three sources consulted: Botne and Kulemeka (1995), Price (1966), Stevick (1965). None complete but together they give a reasonable picture. Stevick relied on most as it has more data (most tone-marked) and some discourse. There are pitfalls in using different sources, maybe based on different dialects, but major agreement between the sources on at least the forms they show in common. I do not know the range of dialect variation in Nyanja. Older sources not consulted (e.g. Bulley 1915, Henry 1904, Hetherwick 1920, Sanderson and Bithrey 1939). 5x1. Some tonal variation in the data. Stevick suggests two tonal classes of verb stems, H vs L: most inflected forms and the infinitive neutralise this.

## 2 Structure

NEG<sub>1</sub> – SM – NEG<sub>2</sub> – TA – REL – OM – root – EXT – FV – plural – LOC

NEG: si ([s] before vowels), predominantly H, except in a few forms, e.g. before -dza-.

SM: ndi; u; a; ti; mu; a. All behave tonally identically.

TA: Ø Present, Near Future; ná Past; dzá FUT; (li)ku PRG; ma<sub>1</sub> HAB; ma<sub>2</sub> Past HAB (?); a ANT; ka ‘when, if’; ká Itive; dza Ventive; daka PER; ta ‘first...’; sana ‘then...’ (<sa + na?); nga ‘may’; ngo ‘just...’, (d)zi ‘must...’, to ‘just...’, sa NEG<sub>2</sub>. Some TAs co-occur (mu-ka-dzá-ngo-fik-a ‘When you arrive’), possibly in the order: (1) ka, probably dzi (2) na, ma, nga, dzá, (li)ku (3) ká, probably dza (4) (?) ngo. Tonal behaviour of TAs often varies from positives to NEG<sub>2</sub>s (and RELs?).

FV: a NEU; e SBJ; ile see under Aspect, below.

Plural: ni. Locative: po, ko, mo. Also a suffix -be (PER or NEG, see 5, below). Since it is not shown co-occurring with plural or locative, it is uncertain whether it occurs at plural or locative.

3 Tense One past, present, one future. Two surface tone patterns for Past and Present PERF are given (and shown in the matrix).

4 Aspect PFV, PRG (full form *liku*, reduced *ku*: [linku] also heard: [n] presumably < LOC [mu]), HAB, PER, ANT. Present PFV represents universal (‘Dogs chase cats’) and near future events. Only Botne/Kulemeka show the Past ANT in the matrix. Stevick gives only the (timeless) HAB of the matrix. Botne/Kulemeka have three HABs: Past á-ma-vín-a ‘He used to dance’, Present a-má-vín-a ‘He HAB dances’, Future a-zi-dza-wereng-a (tones?) ‘They’ll study (regularly)’. The three sources give different PER forms. Botne/Kulemeka ndi-daka-gwila ncito ‘I’m still working’ (as matrix). Price has forms with ci- (wodwala ci-gon-ele ‘Sick man is still lying down’, ci-fik-ile iye sindinamuona ‘Since arriving, I haven’t seen him’ (lit. something like ‘still-having-arrived he I have not seen him’)). Note use of -ile here, a suffix not otherwise seen in the data. Other categories can be seen at TA in 2.

5 Negation Two NEG formatives: -sa- in SBJs, IMPs, INFs; si- in all other situations. NEG of -li- ‘have’ is -be (kulí-be ‘There is not’). Two apparent Past NEG<sub>2</sub>s (si-ndi-na-nen-a,

si-ndi-na-nen-e (no tones marked)). Most sources suggest the first represents ‘I didn’t speak’ (PFV NEG), the second ‘I haven’t spoken (yet)’. Some of Stevick’s examples do not entirely support this.

6     Relatives     Two strategies: (a) -mene, as in njila i-méné ímapíta ku-Mwánza ‘Path which goes to Mwanza’ (subject), malálánje a-méné mú-nágulá ‘Oranges which you-bought’ (object) (b) -o-, only shown for subjects: njila y-ô-píta ku-Mwanza ‘Path which goes to Mwanza’.

7     Subjunctive and Imperative     SBJ suffixal -e, the few tone-marked examples have final or penultimate H. Commands can be given in any of three ways: (1) the bare stem (ima ‘Stand’, pl (and polite sg) ima-ní) (2) ta- and bare stem (ta-íma, ta-íma-ni; Price says these ta-forms are synonymous with those without) (3) use of SBJ, less blunt than use of the straight Imperative.

N44 Ci-sena

	Perfective	Imperfective	Persistentive -ci-	Anterior -da-	(?) -dza-
Past -a- / -kha-	nd-a-dy-a <i>I ate, have eaten</i> N: si-da-dy-a	ndi-kha-dy-a <i>I used to eat, was (still) eating</i> N: si-kha-dy-a		ndi-kha-da-dy-a <i>I had eaten</i> N: si-kha-da-dy-a	ndi-kha-da-dza-dy-a <i>I had already eaten</i> (?) N: ndi-kha-da-dza-ti ku-dy-a
	ndi-sa-dy-a <i>I eat</i> N: n-kha-be ku-dy-a	ndi-Ø-ri ku-dy-a <i>I am eating</i> N: si-ri ku-dy-a	ndi-ci-ri ku-dy-a <i>I am still eating</i> N: si-ci-ri ku-dy-a	(ndi-da-dy-a <i>I who have eaten</i> ) N: si-da-dy-a	nd-a-dza-dy-a <i>I have already eaten</i> N <sub>1</sub> : (ha)nd-a-dza-ti ku-dy-a <i>I have not eaten yet</i> N <sub>2</sub> : ndi-dza-ti ku-mu-on-e <i>I do not see him yet</i>
Future -na-	ndi-na-dy-a <i>(I eat,) I will eat</i> <i>(certain, near future)</i> N: si-na-dy-a	ndi-na-khala ku-dy-a <i>I will (still) be eating</i> N: si-na-khala ku-dy-a			ndi-na-dza ku-dy-a <i>I will eat (remote, uncertain)</i> N <sub>1</sub> : n-kha-be ku-dza ku-dy-a N <sub>2</sub> : si-na-dza-dy-a <i>I will not/never eat</i> ndi-na-dza-khala ku-dy-a <i>I will be eating</i> <i>(remote, uncertain)</i>

N44 Ci-sena

1 General Just over a million speakers in (mainly) Mozambique and Malawi. Considerable dialect variation. No modern grammar. Source is B. Heins (SIL field worker, Mozambique). 5x1, no tones.

2 Structure Pre-SM – SM – NEG<sub>2</sub>? – TA – OM – root – EXT – FV – Post-FV

Pre-SM: ha NEG (1s si); mba ‘participial’, NAR.

SM: ndi; u; a; ti; mu; a.

TA: Really three positions here: (1) nga Irrealis ‘when, if’ (2) a PFV Past; kha non-PFV Past; na Non-Past; ka Itive; sa HAB/gnomic; null present only with ‘be’, SBJ, or after mba; ci PER; da ANT, when alone, only occurs in RELs or after mba (3) dza ‘already, not yet, come to’.

FV: a NEU; e SBJ.

Post-FV: ni IMP pl (also respect); be and di ‘truly’; tu Iterative, etc; mbo ‘also’.

3 Tense One past, one future. *Na* mainly refers to (near, certain) future, occurs with apparently present meaning in a few contexts (‘I praise God, say to you, call on brother John’). Probably once represented Present, took on future reference, now the present meaning is fading.

In an unpublished paper B. Heins underlines the multiple possibilities for future reference. They are: ndi-na-dya ‘I will eat (near, more certain)’, ndi-na-ti ndi-dy-e (remote, more certain: auxiliary -ti with Subjunctive -e in second verb), ndi-sa-funa ku-dya (near, less certain: funa ‘want’), ndi-na-dza ka-dya (far, less certain: 3s SM dropped on second verb: -dza from ‘come’).

The TA system gives the impression of having undergone much change, and fairly recently, because several of the formatives occur in full and bleached shape, e.g. -khala ‘be’ is only partly grammaticalised as can be seen from its shape: full form in ndi-na-khala ku-dya ‘I-Future-be to-eat’ vs reduced form in ndi-kha-dya ‘I-Past/ing-eat’.

4 Aspect and other categories ‘Present’ distinguishes PFV, IPFV, ANT (da), PER, and -dza-. The underlying reference of -dza- is not clear from the limited data: in some cases there is a suggestion of counter-expectation. The dza-forms are put together on the basis of shared morphology but perhaps there are two *dza*? IPFV and PER appear to be neutralised in the Past.

Data shows evidence for two other categories, which might be termed modal or syntactic. They occur in slots other than the common TA slots shown in the matrix. Both based on inadequate discourse data and need further examination. One is -nga-, which translates as ‘if’, occurs before the TA marker, and appears to occur only in subordinate clauses. Examples: ndi-nga-da-dya ‘If I ate, have eaten (past), ndi-nga-dya ‘If I eat, when I eat, eating’ (unspecified for time), ndi-nga-dza-dya ‘If I eat (future, low probability)’ (for -dza- see below) (‘future?’).

The other is mba-, also only in subordinate clauses, meaning unclear – glosses below are just glosses, but the underlying meaning needs more work. Examples: mba-ndi-da-dya ‘Having eaten, if I had eaten’ (Past ANT?), mba-ndi-dya ‘Eating, when I eat, and I ate’ (unspecified for time), mba-ndi-kha-dya ‘Being in the process of eating, I used to eat’ (Past IPFV), mba-ndi-dza-dya ‘Having already eaten’, mba-ndi-dza-ti ‘Having not already eaten = before I eat, ate’.

5 Negation No evidence on NEG<sub>1</sub> vs NEG<sub>2</sub>. Ha- can apparently be added to most (all?) inflected positives. For IMP, see 7.

6 Relatives The few available are structurally and prosodically identical to non-relatives.

7 Subjunctive (-e) and Imperative 'Buy', gula (only with children), gula-ni (pl and respectful singular), ci-gul-e-ni 'Buy it', ndoko-ni mu-ka-on-e 'Go and see', bwera-ni mu-dza-on-e 'Come and see'. NEG leka kugula (to child), leka-ni kugula (pl or respectful sg). In a dependent clause 2p is mu-gul-e 'That you buy, you should buy'. Use of plural for respect common in the area.

N101 Ki-ndendeule

	Perfective	Imperfective -á	Habitual REDUPLICATION	Anterior -ite
Past -a(ki)-	t-aki-telek-a <i>we cooked</i>	t-a-hip-á <i>we were smoking (before today)</i>	t-aki-hipahipa <i>we used to smoke</i>	t-a-hik-ite <i>we had arrived</i>
-i- / -Ø-	t-i-telek-a <i>we cook, are cooking</i>	t-i-hip-it-á <i>we were smoking (today)</i>	t-i-hipahipa <i>we smoke regularly</i>	ti-Ø-hip-ite <i>we have smoked</i>
Future ca-	ca-ti-telek-a <i>we will cook</i>		ca-ti-hipahipa <i>we will smoke regularly</i>	

## N101 Ki-ndendeule

1 General The N10 languages are generally poorly described. They are also quite diverse, which I would attribute to their being spoken by small communities, bounded by larger and more influential communities, resulting in their having absorbed material from their neighbors. Ndendeule is chosen because of the availability of Ngonyani's (2001a) manuscript. Also Ngonyani (2001c) for negation. Gordon (2005) estimates 80,000 speakers, Ngonyani more like 100,000. Ngonyani says Ndendeule's closest relative is P14. 7x1. Largely predictable tone – other N10 languages have penultimate stress. Ngonyani does not always mark suprasegmentals, I follow him.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM: REL (subject and object); ca or ci Future; nga 'then', Irrealis. REL precedes Future.

SM: ni; u; a; ti (most other N10 languages have tu); mu; βa.

TA: i PRES (often deletes); a/aki Past; Ø with some FV or Pre-SM markers; aka Itive; anga NEG.

OM: Only one (IO) allowed.

FV: a NEU; á IPFV; i SBJ; iti ANT (this has at least ili as an allomorph); itá Past IPFV. In the Present, monosyllabic verbs take -ega (bana b-i-ly-ega 'Children are eating' vs b-i-telek-a 'They are cooking').

Post-FV: ye 'exhortation' (?), as in m-butuka-ye 'Run'.

3 Tense Unlike most other N10 varieties, which have three pasts, Ndendeule has but a single past and future.

4 Aspect and other categories The data may not be complete here. There is a fairly consistent contrast across the tenses between Perfective, Imperfective, Habitual, and Anterior. Imperfective is encoded by final (H) á, presumably a left-over from -anga. Habitual is represented by reduplication. The interpretation ANT is taken from Ngonyani, there being no supporting texts. Statives use the ANT in a present/resultative reading: a-many-ite 'She knows'. IMPF and ANT may combine as in tihipitá < ti-hip-ite-á 'We had been/were smoking earlier today'. This combination refers to recent past situations.

A Narrative is formed with nga- (nga-ti-a-hipa 'Then we smoked'). The same prefix appears in conditionals: bageni nga-ba-hika yé leleno, nga-ti-l-i yé mbuhi 'Had the guests not arrived today, we would not have eaten a goat'.

A persistent derivative of the reduplicated habitual occurs (t-a-m'béla ti-hemalahemala matoke 'We're still buying bananas').

5 Negation The main negative formative is yé, which follows the constituent to be negated, verb or noun. It occurs in main clauses, subordinate clauses, SBJs, RELs. Bana yé bakihika 'It is not children who came', lit. children NEG came, bana bakihika yé 'Children didn't come', ugembe gwa-a-ki-gega yé ngeni 'Beer which the guest did not carry'. Minor strategies are use of: -nga- (a-nga-tola ugembe 'She hasn't taken the beer yet'; AUX -koto (full form -kotoka) 'stop' (n'koto ku-yenda, or ku-yenda yé 'Don't go'); na-ku (li-himba na-ku-luma bandu 'Lion is not going to bite people').

6 Relatives RELs, subject and object, are formed by prefixing a pronominal element plus -a-: mwana ywa-a-(a)ki-kayula kibega ‘Child who broke pot’, lit. child who-she-Past-break pot; kibega cha-a-(a)ki kayula mwana ‘Pot which child broke’ lit. Pot which-she-Past-break child’.

7 Subjunctive (-e) and Imperative Péngula ‘Cut’, u-péngula ‘Cut it (tree)’, pl mpéngula. Ti-péngul-e ‘Let’s cut’, ba-péngul-e ‘Let them cut’, t-aka-n-tol-e ‘Let’s go get her’. See NEGs in 5.

P13 Ki-matumbi

	Perfective	Imperfective	Anterior (?)	(?)
P <sub>2</sub> -a- ... -ite	n- <b>aa</b> -túombw- <b>iike</b> neutral focus  n- <b>aa-tí</b> -tuombók-á verb focus  <i>I fell</i>	n- <b>aa-b-íle</b> ka-ni- <b>Ø</b> -tuumbúk-a neutral focus  n-endée-tuumbúk-a verb focus  ni- <b>Ø</b> -tuumbuka-e noun focus  <i>I was falling</i>		n- <b>aa-ká</b> -ba ka-ni- <b>Ø</b> -tuombók-á neutral focus  <i>I was falling</i>
P <sub>1</sub> -Ø- ... -ite	ni- <b>Ø</b> -túombw- <b>iike</b> neutral focus  ni- <b>tí</b> -tuombók-á verb focus  <i>I just fell</i>	<i>as above ?</i>		
	ni- <b>b-ile</b> ká-ni- <b>Ø</b> -tuombók-a neutral focus  n-eendá-tuombók-á verb focus  ni- <b>Ø</b> -tuombók-a noun focus  <i>I am falling</i>	tu- <b>Ø</b> -pim-agma <i>we ... habitually</i> focus ...?		ni- <b>ká</b> -ba ká-ni-tuombók-a neutral focus  <i>I am falling</i>
F <sub>1</sub> -luwa-	ni- <b>luwa</b> -túombók-a <i>I will fall</i>	ni- <b>luwa</b> -bá ka-ni- <b>Ø</b> -tuumbúk-a <i>I will be falling</i>		
F <sub>2</sub> -a-luwa-	n- <b>aa-lúwa</b> -túombók-a <i>I will fall</i>	n- <b>aa-lúwa</b> -bá ka-ni- <b>Ø</b> -tuumbúk-a <i>I will be falling</i>  <i>The following is probably a reduced form</i> n- <b>aa</b> -túombók-a		<i>There is another future imperfective; reference unclear</i>  n- <b>aa</b> -bá ka-ni- <b>Ø</b> -tuumbúk-a <i>I will be falling</i>

## P13 Ki-matumbi

1 General 72,000+ speakers, along SE Tanzania's Ruvuma River. Odden (1996), supplemented by Nurse (field notes, 1970's). 7x2. Odden has heavy emphasis on phonology and tonology, only 20 of 300 pages treat TA directly. Verb stems, SMs, most TA markers do not have own tone: placement of H in verb based on syllabic structure and morphological information.

## 2 Structure

[Pre-SM – [SM – NEG – TA – FM – [OM – [[root – EXT] – FV]]]] – Post-FV

Working out from the innermost, brackets enclose derivational stem, inflectional stem, superstem, simple verb, and verb, respectively.

Pre-SM: REL; pa 'when'; ka SIT ('if', -ing); cha Ventive; ngaku/naku NAR.

SM: n(i); u; a; tu; m; ba.

TA: Ø Present and with ile, e, aga, a(g)e; a P<sub>2</sub>, F<sub>2</sub>; luwa Futures; several ka (Itive, 'if', PER?, etc), tonally different; ná 'not yet'; anga (?) NEG. Also nga, ngali, nge, of which little is known.

FM: Some focus markers occur here: ti, endá, endeé, tinoo, endanoo.

OM: Maximum of one visible.

FV: a NEU; e SBJ; ile (several alloforms, imbrication, ite, iiCe, iiye, irregulars) Pasts; my data has Ø/aga 'HAB', my data and Odden's have Past 'was/ing', depending on dialect.

3 Tense Odden shows a balanced two past-two future system, remote differing from near in both cases by insertion of (toneless) -a-. P<sub>2</sub>/F<sub>2</sub> refer to further ('remote') time, exact time reference not specified by Odden. N-aa-tóumboka is probably a reduced form of F<sub>2</sub> n-aa-lúwa-tóumboka.

4 Aspect and other categories While the analysis of tense (above) and focus (below) is adequate, I am less happy with the aspects: only PFV and IPFV. Why so many forms rendered as 'I am verbing' but none as 'I verb', and why no category ANT/perfect? There are probably more aspects than the matrix shows, hence the question marks.

5 Focus Odden recognises three focus types: noun focus, verb focus, neutral focus. Noun focus forms require a nonverb to be the pragmatic focus of the clause and to appear in the immediately post-verbal position. Verb focus puts contrastive focus on the verb. Neutral forms do not assert that any element of the clause is focussed. Focus results from several factors: certain TA forms impose particular requirements, as do some syntactic operations and certain words (e.g. wh-words). Unlike P22, where one marker (ku) marks focus, several markers play a role in Matumbi.

6 Negation Conjugated verbs are negated by post-posing -lí or -lílí, the main negator. Minor formatives are: -na- in 'not yet' (ní-na-kalaanga lí 'I haven't fried yet'), -anga- in w-anga-tó mboka 'Without falling', the AUX *kana* in IMPs (kaná upíme 'Don't buy', pl kaná mpíme), and the use of AUX *kotoka* in the REL NEG (also in neighbouring languages).

7 Relatives REL clauses, subject or non-subject, involve prefixing a REL marker which agrees with the head of the clause: a-tóumbwiike ‘He fell’ vs ywa-á-tóumbwiiké ‘he who fell’.

8 Subjunctive (-e) and Imperative As in neighbouring languages, Matumbi rarely uses the real IMP (Buuka ‘Return’, all syllables H), preferring the SBJ, which has the typical range of uses found in the Bantu SBJ. So as command/request: u-lim-é ‘(You should) cultivate’, u-ka-lim-é ‘Go and cultivate’, w-aa-lim-é ‘Cultivate (Remote Future)’, cha-mu-lim-é ‘Come and cultivate’.

P22 Ci-mwera

	Perfective	Imperfective -aga	Progressive -li-	Anterior -ile
P <sub>2</sub> -a:(ci)-	tw- <b>a:ci</b> -lim-a <i>we hoed</i>  N: tu-ka- <b>ci</b> -um-a  DfO: tw- <b>a:ci</b> -ku-um-a  N: tu-ka- <b>ci</b> -ku-um-a	tw- <b>a:</b> -lim- <b>aga</b> <i>or</i> tw- <b>a:</b> -tenda-um- <b>aga</b> <i>we were buying, we used to buy</i>  N: tu-ka:-um- <b>aga</b>	tw- <b>a:-li</b> ci-pwel-ele <i>we were giving</i>	tw- <b>a:</b> -lim- <b>ile</b>  N: tu-ka:-um- <b>ile</b>  tu-li tu-um- <b>ile</b> <i>we had bought</i>
P <sub>1</sub> -Ø- / -ci-	tu- <b>ci</b> -lim-a <i>we (have) hoed</i>  tu- <b>ci</b> -kw-a-pa <i>we gave to them</i>  N: as P <sub>2</sub>			tu-Ø-lim- <b>ile</b> <i>we (have) hoed</i>  N: as below
	tu- <b>na:</b> -lim-a <i>we are hoeing</i> tu-(ku-)lim-a <i>we cultivate</i>  N: tu-ka-( <b>na:</b> -)lima-a  DfO: tu-( <b>na:</b> -)ku-ga-ly-a <i>we eat them</i>  N: tu-ka-( <b>na:</b> -)ku-lim-a	tu- <b>na:</b> -lim- <b>aga</b> <i>we hoe (HABITUAL)</i>  tu-Ø-lim- <b>aga</b> <i>if we hoe</i>	tu- <b>li</b> -ik-a <i>they are coming</i>  u- <b>li</b> -ku-ci-ly-a <i>you are eating it</i>  N: tu-ka- <b>li</b> -lim-a  DfO: tu-ka- <b>li</b> -ku-ci-ly-a <i>we are not eating it</i>	tu-Ø-lim- <b>ile</b> <i>we have hoed</i>  N: tu-ka:-lim- <b>ile</b>
F <sub>1</sub> ci- ... -Ø- ... -e	ci-tu-Ø-lim- <b>e</b> <i>we will hoe</i>  N: tu-ka-lim-a			ci-tu-Ø-lim- <b>ile</b>
F <sub>2</sub> cika- ... -Ø- ... -e	cika-tu-Ø-lim- <b>e</b>  N: as above			cika-tu-Ø-lim- <b>ile</b>
F <sub>3</sub> ci + 'come' ... -e	ci-tu- <b>jie</b> -lim-a  N: tu-ka- <b>jia</b> -lim-a		tu- <b>li</b> tu-lim- <b>e</b> <i>we will be hoeing</i>	

## P22 Ci-mwera

1 General Some 400,000 people in SE Tanzania speak Mwera. Source Harries (1950), supplemented by own notes. Harries says Mwera has tones and penultimate stress. 5x2.

2 Structure Pre-SM – SM – NEG – TA – OM – root – EXT – FV – Post-FV

Pre-SM: ci F<sub>1</sub>, (F<sub>3</sub>); cika F<sub>2</sub>; niku ‘if’, COND, Past Narrative; naku Future Narrative; i-ka-li ‘if, although’; pu ‘when’; Object REL.

SM: 1s ngu/\_ na: and Ø Present, otherwise n(i); 2s gw/\_ a:, otherwise u; a; tu; mu; wa.

NEG: ka, na, (anga).

TA: Ø Present, also with aga, ile, e, Past NAR; a: P<sub>2</sub> non-PFV; a:ci P<sub>2</sub> PFV; ci P<sub>1</sub>; na: Present IPFV; li PRG; ka Itive.

FV: a NEU; e SBJ, Futures; ile (allomorphs include ite, e, i) ANT, maybe P<sub>2</sub>; aga IPFV (ej-e IMP IPFV): also anj-e IMP pl.

Post-FV: Locatives (ko, mo).

3 Tense Two pasts, ‘immediate’ (P<sub>1</sub>), ‘remote’ (P<sub>2</sub>). In one place Harries says P<sub>1</sub> refers to today, in another to today, yesterday, and maybe the day before, P<sub>2</sub> to preceding time. So the line between them appears fuzzy. Not clear if reference is absolute or relative. Three futures: F<sub>1</sub> today, tomorrow, F<sub>2</sub> a short period after tomorrow, F<sub>3</sub> ‘remote’ future. F<sub>3</sub> may be relative as examples show it not confined to remote future.

4 Aspect and other categories PFV, IPFV, PRG, ANT. Harries says IPFV -aga may be added to ‘all’ Present and Past forms. Harries has three ‘present continuous’ forms (all ‘We hoe, are hoeing’) in -na:-, Ø, and -li- (or *limuku*), the difference between which is not clear from Harries’ description.

Harries gives examples (p. 108) of aspects used participially. All are IPFVs, PRGs, ANTs, or Presents. Most are positive but a few negative. Most are structurally identical but tonally different from regular forms but a few also differ structurally. The tonal differences are not exemplified.

Harries has several compounds not in the matrix. Most based on AUXs ‘be’ or -ci-/-ti-. Some apparently synonymous with matrix forms (twa:umaga ‘We used to buy, we were buying’ or tw-a:-liji twa:uma; -liji apparently the -ile form of ‘be’), some not (tu-ka-na-we-uma ‘We’ve not bought yet’ (-wa ‘be’), twa:-li tukanaweuma ‘We hadn’t bought yet’, twa:ci mukuwapa ‘We gave them’, tu-ci mukumukoma ‘We’ve beaten him’, twa:ti tujawula ‘We were about to go’).

5 Focus Most present and past tenses, positive and negative, may take ‘definite object’ focus (DO in matrix): Harries defines this as ‘can be followed by a definite object, and so takes the objectival concord’ (OM). This definition is likely incomplete. DO forms are regular forms followed by -ku (*na:ku, liku*, etc).

6 Negation *Anga* occurs in one P<sub>2</sub> NEG, *na* in most SBJs/IMPs, otherwise *ka*. No examples of REL NEGs, but probably *ka*.

7 Relatives Wandu wa-wil-ile 'Black people/People who are black' (stative verb), mikongo ji-ogola 'Trees which bear' (mikongo ja-na:ogola 'Trees bear'), imaje i-tu-ongola 'Trees which-we-sharpen'. Subject RELs are much as absolutes (tones?), object RELs are verb-initial.

8 Subjunctive (-e) and Imperative 'The normal way of expressing the IMP is by using tenses of the subjunctive'. Straight IMP only used to inferiors ('Do' tenda (sg), tenda-ni or tend-anga-ni (pl); 'Keep on doing' tend-aga, tend-aga-ni). As in many Southern Tanzanian and Mozambican languages, respect is required, expressed by use of plural or third person forms, so possible IMP forms are many: 'Do' u-tend-e (sg), m-tend-e/m-tend-anj-e (pl), u-tend-ej-e 'Continue doing', ka-tend-(je-)e 'Go do', wa-kom-e-ni 'Beat them'. NEG 'Don't do' u-na-tend-e (sg), n-na-tend-anj-e (pl).

P311 E-koti

	Perfective	'Habitual' 'be' / -a(ka)	Progressive 'go' + INF
P <sub>2</sub> -aa- ... -iye	k-aa-xic-íyé puúzi <i>I killed a goat</i>  PF: k-aa-xic-íyé puuzi <i>I killed a goat</i>  R: k-aa-xic-íyée-yo <i>I who killed</i>  N: kha-n-aa-vir-íye <i>we did not pass</i>	n-aa-rí w-íip-á(ka) osíkhú woóxi <i>we used to sing all night</i> <i>we were singing all night</i>  N: kha-n-aa-rí w-íip-a(ka)	n-eett-íyé o-lim-á maxápa <i>we were cultivating fields</i>
P <sub>1</sub> = Anterior -a-	k-a-khol-á warákha <i>I took the letter</i>  PF: k-a-khol-a wárákha <i>I took the letter</i>  R: ki-vír-íye <i>I who passed</i>  N: kha-ni-vír-eén-i <i>we did not pass</i>		n-eétt'óo-lim-á maxápa <i>we were cultivating fields</i>
Non-Past -ni-	ki-n-c-á laázu <i>I eat bananas</i>  PF: ki-n-c-a laazu <i>I eat bananas</i>  R: ntthu a-n-sómís-áá-ye diini <i>person who teaches religion</i>  N: kha-ni-ní-vír-a <i>we do not pass</i>	akótí a-n-lim-áka maxápá ... <i>the Koti usually farm ...</i>	ni-n-tta w-iip-a <i>we are singing, about to sing</i>

## P311 E-koti

1 General 5,000,000 speak Makhuwa (Gordon 2005), or ‘as many as 8,000,000’ (Kisseberth 2003). Most live in NE Mozambique and adjacent Tanzania and Malawi, with emigré communities in Madagascar, South Africa and maybe still in the Comoros. No modern comprehensive grammar of Makhuwa. It is one of the least well described larger Bantu languages. I chose Schadeberg and Mucanheia (2000), a quite comprehensive and detailed grammar of Koti, spoken by 61,000 people (Schadeberg/Mucanheia 2000; but 41,000 (Gordon 2005)), on Koti Island and the adjacent coast and town of Angoche in NC Mozambique. Koti is acknowledged to be a quite divergent variety, if not a separate language. Schadeberg/Mucanheia suggest it is a swahiliised version of Makhuwa and that this influence is mainly lexical. I compared the verbal facts of Koti, spoken in the south of the Makhuwa area, with those in other accounts, mainly describing northern varieties: while the phonology, vocabulary, and verbal morphemes differed somewhat, the morphological structure of the verb was similar, and the verbal categories almost identical. Thus what follows and what the matrix shows is Koti, with some comments on differences to other varieties. 5x2.

2 Structure NEG<sub>1</sub> – SM – NEG<sub>2</sub> – TA – [OM – root – EXT – FV] – Post-FV

Schadeberg/Mucanheia refer to the [bracketed] stretch from OM to FV as the macrostem, justified on tonal grounds.

NEG<sub>1</sub>: kha (kha + ki- 1s > aki-).

SM: ki; o; 3s o ‘nonpast’, otherwise a; ni; mu; a.

NEG<sub>2</sub>: hi.

TA: a P<sub>1</sub> and Itive (diff. tones); aa P<sub>2</sub>; ni Non-Past; na as part of Counterexpectational (‘not yet’).

FV: a NEU; e SBJ; aka HAB; i NEG<sub>2</sub>, represents NEG in INFs and some SITs; iye P<sub>2</sub> and one SIT; eeni occurs in two Past NEG<sub>2</sub>s.

Post-FV: ni plural addressee; locatives (vo, wo, mo); ru punctual (‘when, if, as’). These may co-occur, in the order given. Also ye REL, in all non-locative classes.

3 Tense P<sub>2</sub>, P<sub>1</sub>, Non-Past. P<sub>1</sub> and P<sub>2</sub> most often refer to near and far events, respectively, but are relative tenses, so P<sub>2</sub> may refer to quite recent events, if they are over and irrelevant, while P<sub>1</sub> may refer to distant ones, if somehow relevant to the discourse. The Non-Past may refer to future or to ‘general facts of life’. As in some other Bantu languages, ‘general facts of life’ (i.e. people eat bananas) may include ongoing activities (‘people are eating...’). These three (and one other) are the only tenses which occur independently – for dependent forms, see 5. The Makhuwa varieties in other sources have the same set of tense contrasts but the morphemes involved are not always the same. So Kisseberth (2003) for southern Tanzanian dialects has, for non-focal forms: Non-Past ki-nóó-lím’ é-mátta ‘I am/will cultivate the field’, P<sub>1</sub> ki-ho-lím’ é-mátta ‘I (have) cultivated...’, P<sub>2</sub> k-á-hó-lím’ é-mátta ‘I cultivated...’, Past PRG k-aá-nó-lím’ é-mátta ‘I was cultivating...’.

4 Aspect Beside the single-word PFV forms, the only aspects with an apparently fairly complete set of forms are the two shown in the matrix, which are compounds in Koti. HAB involves ‘be’ (-ri) plus INF in the past and -aka- in all tenses, while PRG consists of ‘go’ (-eetta, partly grammaticalised in form) plus INF. Schadeberg/Mucanheia show other aspectual

compounds, echoed elsewhere in Makhuwa: a form based on ‘come’, indicating future intention or possibility; forms based on ‘remain’, indicating Inchoative or Proximative; a form based on ‘begin’, indicating ‘have already’, etc. Woodward (1926: 303) shows a range of be-based forms absent from Koti. As seen in the last example in 3, aspects are not necessarily expressed the same way in other Makhuwa varieties. All exemplified compounds consist of AUX and INF. No compounds with both parts inflected.

5 Other categories Schadeberg and Mucanheia show five other forms, all dependent (their labels):

Subsecutive á	khuláwá k-á-kátipuhkisa puúzi ‘And then I went and made the goat angry’ This á presumably derives from *ka.
Situative Ø	maná á-Ø-viráwo... ‘When they pass here...’ khusálá ki-Ø-ta ‘and then I came’
Punctual situative	a-Ø-virá-ru... ‘When they pass...’
Durative situative	(a-ki-sikaná) kí-Ø-lal-áka ‘(She found) me sleeping’
Perfective situative	a-ni-sikaná ni-Ø-c-íye ‘He found us when we had already eaten’ (lit. he found us we-have-already eaten)

‘Situatives’ only occur in dependent, backgrounded situations and are aspectual, time being established elsewhere. Structure mirrors this – no pre-stem tense markers, only aspectual FVs.

6 Focus Characteristic of all Makhuwa varieties is a set of predicate focus (PF in the matrix) forms, for positive and negative Non-Past, P<sub>1</sub>, P<sub>2</sub> (and also for the negative counter-expectational), e.g. k-a-mú-uzányél-a laázu ‘I bought her bananas’ but k-a-mú-uzányél-a laazu ‘I bought her bananas’. Koti expresses PF by deleting the first primary H of the noun or adjective following the verb. In Kisseberth’s southern Tanzanian varieties, focus is expressed tonally and segmentally. Compare the following with the matrix and with the non-focal examples in 3, above:

ki-n-lím’ é-matta ‘I am cultivating the field’	Non-Past
ki-lim-alé é-matta ‘I cultivated the field’	P <sub>1</sub>
k-aa-limál’ é-matta ‘ditto’	P <sub>2</sub>
k-aa-lím’ é-matta ‘I was cultivating the field’	Past Progressive

7 Negation Initial Negative kha- is used only with the independent forms (see 3), while the Post-SM Negative -hi- occurs with all other, dependent, forms (see 5).

8 Relatives There are relative tenses for Non-Past, P<sub>1</sub>, P<sub>2</sub>, and Counterexpectational (negative), all with a lengthened FV and a Post-FV agreement morpheme. In some cases their structural shape is that of the absolutes, in others it is not. Where structural shapes are identical, so are the tonal profiles. Non-Past: ti-míyó ki-hi-níviráá-ye ‘It is me who does not pass’ (a-ki-ní-víra ‘I don’t pass’), P<sub>2</sub> ti-míyó k-aa-vir-íyée-yo ‘It is me who passed’ (k-aa-vir-iyé ‘I passed’).

9 Subjunctive SBJ expressed by -e, with a H on the second mora of the macrostem, lowered in phrase final position (the forms here and in 10 are underlying forms). Schadeberg/Mucanheia use the term optative, not subjunctive, as it expresses an event ‘the speaker wishes to happen’: ni-vir-é ‘Let me pass, I want to pass’, o-vir-é ‘Pass’, a-vir-é ‘Let him pass, he wants to pass’.

10 Imperative Sg vir-á ‘Pass’, pl vir-aní, with a H on the final mora, deleted in phrase final position. When an OM is present, the FV is -é. The SBJ also expresses a politer Imperative.

11 Sources of auxiliaries The set of pre-stem TA markers includes -ni- and -na-, which presumably derive from (?) ‘be’ (\*-ri: \*r/l > n) and ‘have’, respectively. Other auxiliaries, barely or not at all grammaticalised, are ‘be’ (HAB), ‘go’ (PRG), ‘come’ (FUT, or intention), ‘remain’ (Inchoative or Proximative), ‘begin’ (‘have ready’), etc.

R11 Ú-mbundu

	Perfective	Imperfective (?)	Habitual -ika + INF	Progressive 'have' + INF
P <sub>2</sub> -a- ... -ilè	tw-a-land-élè <i>we (have) bought</i>  N <sub>1</sub> : ka-tw-á-land-ís-ilé <i>we have not sold, we did not sell</i>  N <sub>2</sub> : ha-tw-álá-cilinga <i>we have not done this yet</i>	tw-a-kálelè (I)óku-táng-a <i>we were reading</i>  N: ha-tw-â-land-is-a <i>we were not selling</i>		
P <sub>1</sub> -a-	tw-a-land-á <i>we (have) bought</i>  N: ha-tw-á-land-is-ile <i>we have not sold, we did not sell</i>	nd-a-kála (I)óku-túng-a <i>I was (just) building</i>		
-Ø-	tu-Ø-land-a <i>we buy</i>  N: ka-vá-lim-í <i>they do not cultivate</i>	v-óku-land-à  vó-vá-land-à  vá-á-land-à <i>they are buying</i>  N: ka-v-ókù land-is-a <i>they are not selling</i>	alúme cé-v-eka okw-end-a <i>men travel</i>	ó-ka-sí (I)óku-yw-á <i>she is having a bath</i>  N: ha-ví-lí (I')óku-kol-à <i>they are not growing</i>
Future -ka-	tu-ka-land-a <i>we will buy</i>  N: ka-tú-ka-lim-à <i>we will not cultivate</i>			

## R11 Ú-mbundù

1 General Schadeberg (1990a or 1986), Valente (1966): Schadeberg marks tones. 4.3 million speakers (two million, Schadeberg), most in W Angola, Benguela District, fewer in adjacent Namibia. Different from Ki-mbundu. 5x1, five nasal vowels. Verbs used are -landa ‘buy’ L, -tánga ‘read’ H.

2 Structure Pre-SM – SM – TA – itive – OM – root – FV – plural – LOC

Pre-SM: ka or ha NEG<sub>1</sub> (sí 1s), ka is L, following SM is H; vo in one PRG; object REL.

SM: 1s nd(i)/\_ C or n(i)/\_ C or V; o; 3s á NEG and object REL, otherwise ó; tu; (v)u; vá. Participants L, classes H.

TA: Ø Present, Near Future, and with -i and -e; ka FUT; oku IPFV; a<sub>1</sub> Past (a has same tone as SM); a<sub>2</sub> IPFV; á-lá ‘not yet’; ka NEG<sub>2</sub>.

Itive: ka.

OM: Up to two shown.

FV: a NEU; e SBJ; i (Present) NEG; ile P<sub>2</sub>.

Plural: i 2p subject or object.

LOC: po, ko, mo. Some interrogative (‘who, what’) and other markers can also be cliticised.

3 Tense Two pasts, present, future. Little said of the reference of the forms.

4 Aspect Schadeberg’s work is avowedly a sketch, Valente is much more diffuse, but they cover the same ground. Other descriptions are few, older, hard to get, in Portuguese and not consulted. Schadeberg and Valente give the impression that Umbundu has a very sparse aspect system. The categories given are not always transparent. There is a PFV set, as in the matrix, but its semantic and pragmatic parameters are not clear. There is ‘PRG’, which I have called by the wider term IPFV (?), because its reference is not clear. There may be a HAB but only given for the ‘present’ (ce-v-eka okwenda ‘They travel’ < ci-va-ika + okw-enda 7-they-dohabitually + to travel): Valente also has va-kwa-ku-nhwa/va-kw-oku-nhwa ‘They regularly drink’. The forms in the last column, more Progressives, are all based on ‘have’ (= ‘be’ plus l(a) ‘with’), and it is unclear how, if at all, they differ from the forms in the second column. Schadeberg says the first two Present PRGs (v-óku-landa, vó-vá-landa) are synonymous. With participants only the oku-form occurs. Another Present PRG, not in the matrix, is only used in the 3s (yóo-landa ‘He is buying’, yó-tánga ‘He is reading’).

5 Negation All NEGS have ka/ha at Pre-SM. The SBJ has a second -ka in the Post-SM position, and the present has FV -i with non-extended verbs, either -i or -a with verbs with one extension, and -a with verbs with two or more extensions.

6 Relatives RELs are marked tonally, by H on the SM (except 3s o L) and tone of the FV is that of the SM. Optional demonstrative. RELs structurally identical to absolutes. Subject REL: omunu (una) w-a-lim-a ‘Person who hoed’ (omunu w-á-lim-á ‘Person hoed’), omanu vá-lim-á ‘People who hoe’ (omunu vá-lim-a ‘People hoe’). Several object REL options: tánga úkánda á-soneHa ‘Read letter she-wrote’ (H represents a nasalised h), ‘Read letter which my friend wrote’ tánga úkánda kamba lyángé á-soneHa (read letter friend my she-(Past-)write) or

tánga úkánda ekamba lyángé ly-á-soneHa (read letter friend my who-Past-write) or tánga úkánda w-á-soneHa ekamba lyánge (read letter which-Past-write friend my). 3s SM is o/w for relativised subjects, otherwise a (Wald (1970)).

7      Subjunctive (-e) and Imperative      Landá ‘Buy’, tánga ‘Read’ (FV underlyingly H),  
ci-lándísa ‘Sell it’, tu-land-isé ‘Sell us’, á-land-e ‘He should buy’, á-ci-land-é ‘He should buy it’.  
NEGs: hú-ka-táng-e ‘Don’t read (sg)’, ha-ú-ka-ly-é, ha-ú-ka-l-í ‘Don’t eat (pl)’, ka-vá-ka-land-é  
‘They shouldn’t buy’.

R22 Oshi-ndonga

	Perfective	Habitual <b>-ha- ... -VC</b>	Progressive <b>-VC</b>	Anterior <b>-a-</b>
P <sub>2</sub> <b>-à-</b>	o-nd- <b>a</b> -lánd- <b>elé</b> <i>I bought</i>  N: ka-ndí-lánd- <b>éle</b>	o-nd- <b>a</b> -lí <b>ha</b> -ndi-mon- <b>ó</b> <i>I used to see, was seeing</i>  N: ?	o-nd- <b>a</b> -lí ta-ndi-lánd-a <i>I was buying</i> o-nd- <b>a</b> -lí ta-ndí-mon- <b>ó</b> <i>I was seeing</i>  N: ka-nd- <b>a</b> -lí tá-ndi-lánd-a ka-nd- <b>a</b> -lí tá-ndi-mon- <b>ó</b>	o-nd- <b>a</b> -món-a <i>I had seen</i> o-nd- <b>a</b> -lánd-a <i>I had bought</i> o-nd- <b>a</b> -kút-a <i>I was full</i>  N: i-na-ndí-lánd-a i-na-ndí-món-a
P <sub>1</sub> <b>-á-</b>	o-nd- <b>á</b> -land- <b>éle</b>  N: ka-ndi-lánd- <b>éle</b>	o-nd- <b>á</b> -li <b>ha</b> -ndi-mon- <b>ó</b>  N: i- <b>ha</b> -ndí-món- <b>ó</b>	o-nd- <b>á</b> -li ta-ndi-lánd-a o-nd- <b>á</b> -li ta-ndi-mon- <b>ó</b>  N: ka-nd- <b>a</b> -lí tá-ndi-lánd-a ka-nd- <b>a</b> -lí tá-ndi-mon- <b>ó</b>	o-nd- <b>á</b> -mon- <b>ó</b> <i>I have seen</i>  o-kw- <b>á</b> -li a-ly-a <i>he had eaten</i> o-kw- <b>á</b> -li a-kut- <b>á</b> <i>he was full</i> o-nd- <b>á</b> -li nd- <b>a</b> -vulw- <b>á</b> <i>I was tired</i>
		o- <b>ha</b> -ndí-món- <b>ó</b> <i>I see (regularly)</i>  N: i- <b>ha</b> -ndí-món- <b>ó</b>	o- <b>tá</b> -ndi-lánd-a <i>I am buying</i> o- <b>tá</b> -ndi-mon- <b>ó</b> <i>I am seeing</i>  N: i- <b>ta</b> -ndi-lánd-a i- <b>ta</b> -ndí-mon- <b>ó</b>	
F <sub>1</sub> <b>-ka-</b>	o- <b>tá</b> -ndi- <b>ká</b> -lánd-a <i>I will buy</i>  N: i- <b>ta</b> -ndí- <b>ka</b> -lánd-a	o- <b>tá</b> -ndi- <b>ká</b> -kalá <b>ha</b> -ndí-mon- <b>ó</b> <i>I will see regularly</i>  N: i- <b>ta</b> -ndi- <b>ká</b> -kála <b>ha</b> -ndí-mon- <b>ó</b>	o- <b>tá</b> -ndi- <b>ká</b> -kalá <b>ta</b> -ndí-mon- <b>ó</b> <i>I will be seeing</i>  N: i- <b>ta</b> -ndí- <b>ká</b> -kála <b>ta</b> -ndí-mon- <b>ó</b>	o- <b>tá</b> -ndi- <b>ká</b> -kalá nd- <b>a</b> -mon- <b>á</b> <i>I will have seen</i>  N: i- <b>ta</b> -ndi- <b>ká</b> -kalá nd- <b>a</b> -mon- <b>á</b>
F <sub>2</sub> (?) <b>-na- ... -VC</b>	o- <b>na</b> -ndi-land-a <i>I will (definitely) buy</i> o- <b>na</b> -ndi-mon- <b>o</b> <i>I will see (tones?)</i>  N: ka-ndi-mon- <b>o</b> <i>I will never see (tones?)</i>			

## R22 Oshi-ndonga

1 General 240,000+ speakers, most in N. Namibia's Ovamboland, some in SW Angola. Source Fivaz (1986). Data presented not adequate to verify parts of the analysis. 5x1. Verbs used are -landa 'buy' L, -móna 'see' H.

2 Structure Pre-SM – SM – TA – OM – root – EXT – FV – Post-FV

Pre-SM has, in order: (1) o positive main clause predicator; ka (mainly) Past NEG; i (mainly) NonPast NEG, or e NAR (2) ha HAB; na occurring in ANT NEG and F<sub>2</sub> positive, or ta occurring in most IMPF/Futures. Also na- in 3s 'Hortative' (see 8, below).

SM: nd(i); u; a SBJ (and others?), otherwise o; tu; mu; a.

TA: Ø PRES/F<sub>2</sub>, and with ile, e, VC; á P<sub>1</sub>; a P<sub>2</sub>; a after TA in REL NEG; aa INF and SBJ NEG; ká F<sub>1</sub>, Itive (SBJs).

OM: Fivaz shows up to two (DO, IO). 1s and classes 16–18 occur as independent post-verbal pronouns.

FV: a NEU; e SBJ; ile Past PFV; VC in PRG, HAB, F<sub>2</sub> and some ANT. A small discrete set of forms have -e. One with more than [-e] is *-wete* 'saw', contrasting with *mon-o* and *mon-ene*. As Fivaz says, these behave as statives and are most similar in behaviour to current PRGs.

3 Tense Fivaz shows one past, with two consistent variants: *one* 'PFV' ('He worked, will not again': low-toned -a-), *one* IPFV ('He worked, may again': hightoned -á-). I interpret these as P<sub>2</sub> and P<sub>1</sub>, respectively. From the few clear cases given, they have relative past reference. Fivaz shows two Futures. The ká-Future is unobjectionable, as it combines with all aspects. F<sub>2</sub> may not be a full tense as it (1) does not co-occur with other forms, and (2) has heavy modal ('definitely') implications.

4 Aspect The analysis of Past and ANT in the matrix differs from Fivaz's. His matrix interprets H -á-...-ile and -á-...-a as PFV ('did something, won't again') and their L congeners as IPFV ('did something, may again'). Both ile-forms are interpreted as Completive ('finished doing X') while the two -a/VH have no label but are translated as straight pasts ('he worked'). The labelling, if not the analysis, does not seem consistent since in the examples (p. 120-4) -a/a is called Past Completive with -á/VH as Past Incompletive. Further, there are forms in the text and examples that do not seem to form part of Fivaz's formal analysis. It is hard to support or falsify this analysis because (a) the terms used are not defined/discussed at any length, and (b) there are few examples that clearly disambiguate the meaning. Examples with -ile are clearly fewer than those with -a/VH.

I interpret this differently. I reinterpret the contrast between L and H forms as one between Far and Near Past, and the ile-forms as straight PFV Past, while the two -a/VH are ANTs. That is, both translate as English 'He has worked' but in one case (-á...VH) the 'work' is recent, while in the other (-a...a) it is more distant. There is also a compound form, apparently P<sub>1</sub> in shape. This whole analysis, if correct, differs from Schadeberg's interpretation of closely related Umbundu.

Finally, I have relabelled Fivaz's 'Continuitive' as PRG (ongoing over a short period: 'We saw him at the time he was working'). More contextual examples are needed.

5      Negation      Three formatives: -ka- Pasts, F<sub>2</sub>; -i Non-Pasts, REL; -aa INF, SBJ.

6      Relatives, participials O-ta-a-long-o ‘They are working’, ...mb-oka ta-a-long-o ‘(they) who are working’, i-ta-á-lóng-o ‘They aren’t working’, ...mb-oká i-ta-a-lóng-o ‘(they) who aren’t working’. Any TA can be relativised, by adding a pronoun (class + oka) and changing the main clause predicator o- in the positive, and adding -a- after the TA marker in the negative. Fivaz also gives a set of participials, apparently indistinguishable from RELs (‘(I saw him) working’ t-a-long-ó).

7      Subjunctive (-é) and Imperative      ‘Buy’ lándá (sg), landení (pl), moná ‘See, find’, lyá ‘Eat’, landa embo ‘Buy the book’, landa ndje ‘Buy me’, li lándá ‘Buy it’. Ndi-landé ‘I should buy’, NEG nd-áa-lánd-e, a-landé ‘He should buy’, a-ká-fudh-é ‘He should vacation’, tu-land-é ‘Let’s buy’, na-landé ‘Let him buy’, NEG i-ná-land-á.

R31 Ochi-herero

	Perfective (?)	Imperfective (?)	Anterior (?) <b>a(a)-</b>
P <sub>2</sub> -à-	mb-à-hong-éré <i>I taught</i>  N: hi-mb-à-hóng-ere <i>I never taught</i>	tw-à-hóng-a <i>we taught</i>  N: ka-tú-Ø-hóng-éré <i>we did not teach</i>	à-tw-á-màn-à <i>we have/had/will have already finished (MMK)</i>  áa-tú-Ø-nyánd-á <i>we played once but do not now (E)</i>
P <sub>1</sub> -á-	mb-á-hóng-ere <i>I taught</i>  N: hi-mb-á-hóng-ere <i>I did not teach</i>	tw-á-hóng-o <i>we have taught</i>  N: ka-tú-Ø-hóng-eré <i>we have not/did not teach</i>	
-Ø-	tu-Ø-hong-a <i>we teach</i>  N: ká-tu-Ø-hóng-o	má-tú-Ø-hóng-o <i>we are teaching, will teach</i>  N: ka-tú-nakú-hong-a	
Future máa-	máa-tú-Ø-hóng-o <i>we will teach</i>  N: ka-máa-tú-Ø-hóng-o		

## R31 Ochi-herero

1 General Fleisch (1995), Elderkin (2003), Möhlig, Marten, Kavari (2002). Fleisch is based on older written sources, Elderkin and Möhlig et al are contemporary. The exact meaning of some tenses is elusive, despite texts in Fleisch and Möhlig et al. Examples here and matrix from Elderkin and Möhlig et al, who do not always agree on tonal interpretation (basic -honga LL ‘teach’, -múná HH ‘see’). 141,000 speakers (Möhlig et al) in Namibia (Damaraland, NW Ovamboland), 15,000 (Vossen) in Botswana (scattered around), total 150,000+. 5x2, ‘lexical long vowels are not frequent’.

2 Structure Pre-SM – SM – TA – cí – ka – OM – root – FV – Post-FV

Pre-SM has, in order: (1) n(u)- ‘connexive’ (Fleisch) < na ‘with, and’ (2) ka (1s hi) NEG<sub>1</sub>; REL (3) má Present/Near Future positive; máa ‘indefinite future’; various [a] (á optative NEG; a SBJ NEG; a NAR, tone unclear; áa (Elderkin), but a with variable tone (Möhlig et al), ANT (?)); amá ‘simultaneous’; nga, which co-occurs with -e in the ‘Hortative’ positive (see 7).

SM: mb(i); 2/3s u; tu; mu; ve.

TA: Ø Present; à P<sub>2</sub>; á P<sub>1</sub>, ANT (?); cí ‘indicates that referent of the verb happens before something else’ (Elderkin) (PER?); nakú in Present NEG; ka Itive, occurring by itself or after other TA markers; ha, hi NEG<sub>2</sub>.

FV: a NEU; e SBJ; ile PFV/ANT; VC in positive P<sub>1</sub>/Present/FUT, and negative Present.

Post-FV: Object ‘clitics’ (Elderkin) and locatives. Möhlig et al treat the object clitics as independent pronouns.

3 Tense Two degrees of past (P<sub>2</sub> a, P<sub>1</sub> á); reference appears to be relative, not absolute, P<sub>1</sub> situations being more recent. The IPFV Present (má) may also refer to near future. The null form refers to timeless situations. A discrete Future formed by prefixing máa-; sources refer to it as ‘indefinite, remote, vague’ (Möhlig et al), ‘probable’ (Elderkin). All sources have a frequent a- Narrative.

4 Aspect The aspectual analysis is less sure than that of tense. All sources agree the columns in the matrix are as they should be. That is, there is a formal and semantic contrast between the (Past) forms in -ile and those in -a/VC, and the same contrast between the (timeless) ‘habitual’ and the ‘IPFV’ forms (plus the forms based on the latter). It then seems reasonable to assume that the columns represent the same aspect, but what are the aspects?! Based partly on Fleisch's range of evidence, partly on his conclusions and labels, and partly on what happens in other R languages (but not K30), I judge the forms in column 1 to be PFV while those in column 2 are PRG and/or IPFV (called IPFV in the matrix). The absence of obviously Imperfective forms (be verb-ing, used to verb) and of compounds involving ‘be’, present in all neighbouring languages, suggests these may exist.

Both Elderkin and Möhlig et al have forms that appear to be ANTs (‘have already verbed’, ‘verbed once but not now’). However, as neither shape nor tones are identical, this needs more investigation.

5 Negation Apparently three NEG. A minor form ha-, in Narratives, INF, some RELs. Second minor form hi-, in other RELs. The third, major form, is ka- (1s hi-), tone of both of which varies according to TA form.

6 Relatives RELs, subject and object, consist of nasal plus emphatic demonstrative prefix plus verb, referring to the antecedent: w-éére 'He came' vs n+gw-éére 'He who came', omwáno m+bú-cí-hóngwa 'Method by which-it-is taught', kú-má-vé-vánga 'Where they want', n+gú-há-cíwá eráká '...who doesn't know (the) language'.

7 Subjunctive (-e) and Imperative 'Hit' ton-á (s), ton-é(y)é (pl), NEG 'Don't do' ó-cítí (o < á + u, sg) á-mu-cítí (pl). HOR nga-tú-hóng-e 'Let's teach', NEG á-tú-vi-úngúrá 'Let's not do it' (final -a). SBJ mbí-hóng-e 'I should teach', NEG a-tú-há-hong-ó 'We should not teach'. Both 'Hortative' and SBJ have positive -e but different FV (-a vs VC).

## R41 Shi-yeyi

	Perfective	Progressive (Imperfective) <b>-ati-</b>	Persistentive <b>-shi-</b>	Anterior <b>-a-</b>
P <sub>2</sub> <b>-ata-</b>	kw- <b>ata</b> -fu-á <i>there died</i>	nd-a-ruku-nw-a <i>I was drinking</i>		
P <sub>1</sub> <b>-a- ... -VC</b>	t-a-mon-o <i>we saw, have seen</i>			
Non-Past	ti-Ø-yis-a <i>we take</i>  ndi-Ø-kwénda <i>I will go</i>	nd- <b>ati</b> -mú-téy-a <i>I am telling him, tell him, will tell him</i>	ndi- <b>shi</b> -yivw-á <i>I still hear, feel</i>	nd-a-kwénda <i>I went, have gone</i>  nd-a-sik-imá <i>I sat, am sitting</i>

## R41 (Shi)Yeyi

1     Sources     Sommer 1995, 2000, 2003, Baumbach 1997, Seidel 2007, also Gowlett 1992, 1997 for phonology. Baumbach deals with Namibia (Caprivi Strip) Yeyi, Sommer with Botswana Yeyi. Baumbach and Sommer analyse the tense-aspect system rather differently. This analysis mainly follows Sommer, because her 1995 and 2000 are much more elaborated than Baumbach, and backed up by the texts in Sommer 1995. That said, Sommer herself admits that her analysis is not complete. We have also taken Seidel 2007 into account.

This needs some explanation. Sommer's major analysis is her 1995 book. As the title, *Ethnography of Language Change/Shift*, explains, she is concerned with change and variation, change in the linguistic behaviour of Yeyi speakers under the all pervasive influence of Tswana, variation within the Yeyi community to do with age, geography, and sex, and reduction in the set of inherited verbal distinctions. She emphasizes the general differences within Yeyi, and differences in the verbal system in particular. She doesn't assume a norm or a standard system. Our main technique in this book is different: it is to take a still shot of one variety of a language at a given point in time, while recognizing that this is partly an artificial procedure, because no language stands still. So her theoretical stance, with its emphasis on flux, and her supporting data do not lend themselves well to our kind of analysis, which its emphasis on firm structure.

Sommer relies on a twofold approach. On the one hand, she has many transcribed texts, with interlinear glosses. On the other hand, she conducted a questionnaire, in which she gave short Tswana sentences aimed at eliciting verbal categories and contrasts to a lot of Yeyi informants and asked them to give the Yeyi equivalents. The Tswana stimuli are given but for practical reasons, the Yeyi responses are not shown, only summarized. Her 1995 analysis is based on the text and the questionnaire. Her 2000 analysis has changed in certain respects, without showing new data. Seidel's approach is based on Botne & Kershner nd.

In this situation, we proceed differently. Instead of having the usual one-page matrix and a discussion based on it, we show a very tentative matrix and conversely, the discussion below is longer and more detailed than those for other languages. We take Sommer's 1995 and 2000 analyses and her 1995 data, and accept them by and large, but with some modifications, noted below. In her texts we considered primarily the data from the types of informants Sommer considers as having the least reduced set of distinctions, mostly older, mostly female.

Guthrie puts Yeyi in Zone R but contemporary observers think this is mainly a geographical, not a linguistic decision, as the language is quite unlike its neighbors.

2     Community     5000+ speakers in Namibia's Caprivi Strip and 27,000 in NW Botswana. Many bi- or multi-lingual, many have varying competence in Yeyi (Sommer 1995). There are also many thousands of Yeyi who do not speak Yeyi any more.

3     Vowels, tones, consonants     (Baumbach 1997: 417-51, Gowlett 1997)

Vowels     Baumbach and Gowlett both have 5 vowels. Gowlett (1997: 250-251) shows that PB items with long vowels have lost the inherited length distinction but all sources suggest that length is distinctive today. Baumbach also has three nasalized vowels (ɛ̃, ɔ̃, ũ).

Tones Little known, as Baumbach doesn't mention tones, Gowlett marks but doesn't discuss them, and Sommer's are not always reliable, by her own admission (p.c.) and by the fact that the same (verbal) form is sometimes transcribed differently.

Consonants The consonant system is complicated. Mainly for reasons of space, but also because there seems not to be total agreement on the details, we do not reproduce it here. Readers are referred to the sources, esp. Gowlett. The inventory is large and includes aspirated, palatalized, and ejective consonants. The inherited inventory has been supplemented by many extraneous units, including dental, alveolar, alveo-palatal, and palatal clicks, most of which occur voiceless and voiced, aspirated, prenasalized, ejective, and murmured (Sommer 1995: 366, Gowlett 1997: 257, Baumbach: 417-421).

4 Verb structure (Pre-SM -) (SM -) (TAM -) (- ka -) (OM -) root - (extension -) FV

Two general remarks are in order. Despite the small total population, there are dialect differences between the Botswana (Sommer) and Namibian (Baumbach) varieties and these include some differences in the verb system. It is possible that there are temporal beside geographical differences, Sommer's material being more recent than Baumbach's.

Secondly, the Yeyi TAM system gives the impression of having been quite radically disturbed at some point in the past. By this we mean disturbed by some influence prior to that of Tswana. Not only are there morphemes not attested in other Bantu languages, even neighboring ones, but also there are what seem to be several complex morphemes of the shape -VCV-, where the first V is (inherited) [a], and CV the remains of some grammaticalized element, an almost sure sign of disturbance. A similar situation exists in Ilwana in NE Kenya, where such forms are calqued on a non-Bantu language (Nurse 2000a).

4a Pre-SM Sommer shows five morphemes occurring here: 1. ka- NEG. 2. ka-, a discourse device, a Consecutive/Narrative, which replaces the SM of forms to which it is added. 3. nga-, which is preposed to SMs. Sommer 1995 characterizes ka- and nga- as being apparently semantically equivalent, but Sommer 2000 describes nga- as a foregrounding device. Our impression from the discourse texts is that they are roughly equivalent (narrative) and that some speakers prefer one, some the other. 4. nca-, co-occurring with a null marker at post-initial and (subjunctive) -e at FV, the whole representing potential (future). 5. relative markers.

Baumbach shows a preverbal inkye 'future'; Sommer and Baumbach have preverbal negatives.

4b SM Ndi-, u-, a-, ti- ni-, ba-/wa-. Ma- (mu- in some dialects) occurs in the 2/3s when a TAM marker starts with -a-: so ma-hing-i 'You/he went (/a-)', mati-lima 'He is hoeing' (/-(a)ti-/), and mata-lya 'she ate' (/-(a)ta(a)-/).

4c TAM At post-initial occur: null, -a- (co-occurs with the VC final, the whole functioning as P<sub>1</sub> and/or anterior: also independent, see section 7), -ka- 'narrative, inceptive' (?), -ku- (various: Seidel -aku-), -ati- '(present) imperfective', -ata- 'far past' (Seidel -ataa-), -shi- 'persistent', -ara- 'past reference', -ariku- 'past imperfective'. Some remarks are in order:

The null form is of low frequency, only used by certain speakers, and seems to be a form unmarked for tense ("I talk, he washes, etc").

The -(a)ku- has a wide range of functions, as evidenced by the translations: ati ndi-ku-támbuka ‘After I woke up (yesterday, starting a narrative)’, ti-ku-yá ‘and we come (in a discussion)’, wa-ku-kára ‘and they stayed’, tu-ku-yivw-á ‘We hear (that...)’. In a narrative it occurs in the main story line, mainly to refer to events viewed as complete, not to ongoing backgrounded forms. Some speakers omit the SM in a series of events. It is very common.

The -ara- seems to only occur with verbs that are visibly not of Bantu origin (other than -na ‘have, be’) and seems to be the past equivalent of a non-past -i-. It is not common.

Sommer’s 1995 analysis distinguishes two -ati-, one low-toned ‘progressive’, the other with a high second vowel ‘future’. We are skeptical about this distinction, partly because the texts show inconsistent and variable tone marking for the progressive (and almost no futures), partly because crosslinguistically progressives often come to refer to future. That is, we guess they are one and the same. Seidel has only one -ati-. The progressive is frequent in narratives (“We are/were walking along the road, we’re talking about...”). It is common.

The -ka- ‘narrative’ can co-occur with other markers, including pre-initial #ka- and #nga-. This then means that five markers occur often in narrative function: #ka, #nga-, -ka-, -ati-, -(a)ku-. Although we are not sure of the exact differences in function or meaning between them, it seems to us that the first three are straight narratives/consecutives/subsecutives, in that they simply order events (mainly past) (“I left the house, walked along the street, went to the market, bought a sandwich, met John, we chatted a while, then we caught the bus”). The difference between -ku- and -ati- contains at least some elements of IPFV versus PFV: “I’m walking (IPFV) and (Narrative) this guy comes (PFV) up to me and says...”

One notable feature characterizes the -a- co-occurring with the vowel copy suffix. When such a form has pre-initial #ka- or #nga-, these seem to preempt the need for -a-, so forms with #ka- or #nga- co-occur with the vowel copy suffix but no -a-. This is also true for the -a- of -ariku- in the compound, mentioned in 5, below: its main shape -ari- reduces to -ri- when nga- or the pre-initial relative occurs.

4d FV Three vowel suffixes occur actively: -a indicative, -e subjunctive, and the vowel copy suffix. In the latter suffix the FV copies that of the root and may thus be any of the five vowels (Sommer 1995):

-w-a ‘fall’	nd-a-w-ú	‘I fell, have fallen’
-sun-á ‘like’	nd-a-sun-ú	‘I loved, have loved’
-mwan-á ‘see’	nd-a-mon-ó	‘I saw, have seen’
-lim-á ‘hoe’	nd-a-lim-á	‘I hoed, have hoed’
-li-á ‘eat’	nga-ti-li	‘We ate, have eaten’

Suffix shape varies. While the vowel copy works well for stems with no extensions, the data for extended verbs is sparse, which is important, because Grégoire (1979) suggests that across Bantu, verbs with extensions predominantly have -a. The few verbs in the texts suggest that the FV may copy the last vowel of the stem, which is not necessarily that of the root. A few verbs seem never to have the vowel copy (unfamiliar looking verbs, maybe loans?), and other verbs alternate between -a and the copy vowel. The vowel copy suffix also occurs in some negatives (ka-zi-kur-u ‘They didn’t grow’). Younger speakers often replace the suffix with simple -a.

There are frozen remnants of a fourth suffix, -ire, visible only in one verb in the data: ‘to know’ can be either ku-yivwá or ku-yiiziré (most Bantu languages in the area have this suffix).

4e Combinations of positive morphemes As 4a, 4c, and 4d suggest, most TAM categories are carried by combinations of morphemes at pre-initial, post-initial, and final vowel. The following combinations occur (brackets mean optionally present). They are mainly taken from Sommer 1995: 347-8. These include common and less common combinations occurring right across Yeyi, and we have noted a few not in her compilation. We ignore -ara-.

<u>pre-initial</u>	(SM)	<u>post-initial</u>	<u>final vowel</u>
(nga- or (a)ka-)		(-ka-)	-e 'subjunctive'
((a)ka-)		-(a)ka-	-a 'narrative'
		-ku (-ka-)	-a
		-shi-	-a 'persistive'
(nga- or (a)ka-)		-ati (-ka-)	-a 'progressive' ( 'future' ...?)
		-ata (-ka-)	-a '(far) past'
(nga- or (a)ka-)		(-a)	vowel copy

5 Compound verbs A limited number of compounds occur in Sommer's data. Nearly all involve -re 'be'. The commonest consists of -re 'be' plus infinitive. On the basis of the Yeyi responses to Tswana stimuli, Sommer refers to this as a 'far past'. Only some informants, all older, used this in her questionnaire. Each of her historical texts, themselves nearly all from older informants, contains instances of this. The glosses in the historical texts are apparently to a degree of past beyond -ata-: a few glosses are to yesterday, a few are to far past + IPFV.

On the other hand, Seidel has overwhelming -ariku-, very often with explicit or implicit past imperfective meaning. Given this, we are inclined to regard -ariku- as a P<sub>2</sub> IPFV, thus analyzable as -a- 'past' plus locative 'be at'. This -a-re can be used to render 'X was, used to be', followed by a noun or adjective. There are constructions involving -a-re and other structures but they are too few to allow of generalization.

6 Tense In this section and the next we outline what we think are the essential components of the tense-aspect system and they are what appear in the matrix.

Most speakers today appear to have two Pasts, one Hodiernal/P<sub>1</sub> (-a...vowel copy suffix), referring to nearer events, mostly those of today, one farther (P<sub>2</sub>), referring mainly to events before today (-ata(a-)). Judging by the use of these two in the texts, their time reference is relative, that is, they can refer to the events of today versus before today, or they can simply relativise events, so both -ata- and a-/vowel copy may refer to today, one earlier, one later. P<sub>1</sub> can also function as an anterior (see next section).

Future reference is mainly carried by using the Imperfective -ati-, which carries reference to general events, events at or around the time of speech or reference, or to future events.

7 Aspect The two Past Perfectives are clear enough. P<sub>1</sub> may function as an Anterior. This can be seen with stative verbs, where it can represent the result of any past event (ma-fu 'He died, is dead'). Whether the non-past Perfective shown in the matrix is in general use is unclear.

IPFV -ati- functions as (present) Progressive and Future. Its past equivalent appears to be the -ariku- form.

Persistent -shi- only occurs as such, never in conjunction with any other marker, whether in the same single verb, or in a main verb preceded by an auxiliary.

We are uncertain about the status of -(a)ku-. Given what is said in 4c, we are inclined to view it as a narrative/discourse device.

Finally both Sommer and Seidel have a few forms with -a-...-a. For Sommer they have past (nd-a-téy-a ‘I said’, nd-a-<sup>1</sup>hós-á ‘I lit a fire’) or stative (nd-a-sikim-á ‘I sat down, am sitting’) reference. Seidel treats them as Experimentals (nd-a-mwan-a ‘I once saw a lion’). This suggests they may be anteriors, which is how they are treated in the matrix, but as the data is sparse and contradictory, this should be regarded as tentative.

8 Other categories Nga-, ka-, and -ka- serve as discourse, dependent markers, to chronologies events. Nga- maybe also serves as a focus marker.

9 Imperative

	<u>singular</u>		<u>plural</u>	
<u>positive</u>	yim-a	‘Stand’	ni-yim-e	‘Stand’
<u>negative</u>	siy-a ku-yima	‘Don’t stand’	n-siye ku-yima	‘Don’t stand’

10 Subjunctive Subjunctive -e can be seen in the plural imperative, preceding, in forms such as a-nw-e ‘Let him drink’, ba-nw-e ‘Let them drink’, ti-nw-e ‘Let’s drink’, and in the potential/future (ncà-ndi-yènd-é ‘I’ll probably go’). Whether it also occurs in the usual Bantu range of non-factuality and subordinate clauses is hard to determine from the sparse data.

11 Polarity Negation is marked in several ways. The principal negative marker is verb initial #ka-: ba-shi-yima ‘They are still standing’ versus ka-ba-shi-yima ‘They are not still standing’. Second, Sommer (1995: 349) says that in her texts the most frequent indicator of negative was the morpheme -!hu- (aspirated alveolar click) plus infinitive: wa-!hú ku-simururá ‘They-didn’t begin-like-that’. Third, Sommer and Baumbach show a preverbal element: Baumbach nd-ati-nwa ‘I am drinking’ versus yemwa nda kunwa ‘I am not drinking’ (Sommer yomwa). Fourth, Sommer occasionally shows another post-SM morpheme -ha-, as in ndi-ha-yiiziré. Finally in imperatives and hortatives, use is made of the verb -siya ‘leave off’ (see Imperative, above).

12 On change Sommer’s study is a useful study of longitudinal and latitudinal change. Her speakers range from around 20 to over 70: there is considerable variation and reduction within that range in the T/A system. So change can speed along quickly - note the circumstances - small community surrounded by large, so the role of the lesser language is increasingly limited.

At the same time Yeyi seems to offer insight into how much change is influenced by discourse circumstances in an oral, illiterate society. Yeyi has five markers which in one way or another have to do with narrative/consecutive.

## S10 Chi-shona

	Perfective	Habitual	Progressive 'be' + INF	Situative -chí-	Persistentive chí- + 'be' + INF	Anterior = P <sub>1</sub> AUX + -a-	AUX + -cha-
P <sub>2</sub> -aka-	nd-aká-énd-a <i>I went</i> N: ha-ndí-ná kú-bva <i>I did not come</i>	nd-ai-end-a <i>I used to go</i>	nd-aka-nga/e ndí-ri ku-end-a <i>I was going</i>	nd-aká-nga/e ndi-chi-énd-á <i>I was going</i> N: nd-a-ngá ndí-sí-ngá-end-í	nd-aká-nga/e ndi-chí-ri ku-end-a <i>I was still going</i>	nd-aká-nga/e nd-á-enda-á <i>I had gone</i> N: nd-aká-nga ndí-sí-ná kú-end-a	nd-aká-nga/e ndí-chá-end-á <i>I was about to go</i> N: nd-aká-nga/e ndí-sí-ngá-end-í
P <sub>1</sub> = Anterior -a-	nd-a-énd-a <i>I went</i> N: ha-ndí-ná kú-bva <i>I did not come</i>		nd-a-ngá ndí-ri ku-end-a	nd-a-ngá ndi-chi-énd-a N: as P <sub>2</sub>	nd-a-ngá ndi-chí-ri ku-end-a	nd-a-ngá nd-á-end-á <i>I had gone</i> N: nd-a-ngá ndí-sí-ná kú-end-a	nd-a-ngá ndí-chá-end-á <i>I was about to go</i> N: nd-a-ngá ndí-sí-ngá-end-í
		ndi-nó-end-a <i>I go (regularly)</i> N: ha-ndí-end-í	ndi-rí ku-end-a <i>I am going</i> N: ha-ndí-si ku-end-a	ndi-chi-énd-á <i>I going, if I go</i>	ndi-chí-ri ku-dy-á <i>I am still eating</i> N: ha-ndí-chí-sí-ri ku-dy-á	nd-a-énd-a <i>I have gone</i>	
Future -cha-	ndi-chá-énd-a <i>I will go</i> N: ha-ndí-chá-end-í		ndi-néngé ndi-rí ku-end-a <i>I will be going</i> N: ndi-néngé ndi-si-ri ku-end-a	ndi-néngé ndi-chi-énd-á <i>I will be going</i> N: ndi-néngé ndí-sí-ngá-end-í	ndi-néngé ndi-chí-ri ku-end-a <i>I will still be going</i>	ndi-néngé nd-á-end-á <i>I will have gone</i> N: ndi-néngé ndí-sí-ná kú-end-a	ndi-néngé ndí-chá-end-á <i>I will be about to sleep</i>

## S10 Chi-shona

1 General Dale (1991), Kahari and Carter (1972), Güldemann (1997), Schmidt n.d. Standard source (not consulted) is Fortune (1955). Seven million speakers, mainly in Zimbabwe, but also Botswana, Malawi, Zambia. Considerable dialect variation. 5x1. All verbs either H or L. H spreads right from first stem syllable. Tenses and aspects are distinctive – I am not sure whether the individual morphemes have their own tones or whether they are imposed patterns.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV (– Post-FV?)

Pre-SM: (h)a NEG<sub>1</sub>; nga Hortative; REL (class prefix + a).

SM: nd(i); u; á; ti; mu; vá. Participants L, others H.

NEG<sub>2</sub>: si, sa, s/\_ vowels. In a few forms these always follow the TA marker, e.g. -ka-sa, -o-sa.

TA: Ø as a dependent Present form occurs only in some dialects, e.g. Kalanga, but co-occurs with SBJ -e and remnants of -ile; a P<sub>1</sub> and in Present REL; aká P<sub>2</sub>; ka NAR; nó General Present, Near Future; chá Future; cházo/cháno uncertain future; aí Past HAB; chí PER; chi dependent IPFV, ‘if’; gó Itive; o exclusive; nga Potential. Some may combine, e.g. ndi-nó-chi-enda ‘I often go’.

OM: Only one visible.

FV: a NEU; e SBJ; i Future and General (‘HAB’) Present NEG<sub>s</sub>: remnants of \*-ile as imbrication in a handful of stative verbs (e.g. rara ‘lie down’ > rere).

3 Tense One future, two pasts, P<sub>1</sub> said to refer to today, P<sub>2</sub> to before today. The Present HAB -no- can also refer to future events. P<sub>1</sub> has Anterior features.

4 Aspect In the Present there are PFV, PRG, HAB, PER (chí), and chi, the latter, as in Swahili, only occurring dependently. P<sub>1</sub> acts as ANT. Although the matrix looks solid, there are places where the distinction between some of the IPFV forms (e.g. PRG vs -chi-) is not clear, because the sources do not always discuss meaning fully. Several of the aspects shown can also co-occur, so there are both two- and three-word compounds. The two right hand columns in the matrix show compounds with an apparent clash of tenses, where the first, AUX, verb may be Past or Future, followed by P<sub>1</sub> or Future, which is partly explained by the absence of a discrete ANT.

PRG/PER’s and some NEG<sub>s</sub> consist of compounds of AUX + INF (both underlined): ndi-rí ku-enda ‘I am going’, ha-ndí-si ku-enda ‘I am not going’, mu-chí-rí kú-gara Gwerú ‘You’re still living in Gwelo’, ndí-si-ná kú-enda ‘I hadn’t gone’, ha-ndí-ná kú-enda ‘I didn’t go’.

Dale has lists of many other aspectual and modal categories. Some replace other TA markers, most co-occur with, and modify, them. Some transparently derive from AUXs, others are opaque. The whole TA system is characterised by much replacement by material derived from AUXs.

5 Negation Primary ha-, secondary -si- and -sa-. Rules for the use of -si- versus -sa- obscured by sources (Dale, Güldemann) often showing forms from different dialects or as alternatives. Further, while -si-/-sa- alone occur in SBJs/subordinate forms, primary ha- and secondary -si-/-sa- often co-occur in independent forms. Si predominates before TA, -sa- is more

common when the NEG follows TA. Sa used in SBJ, -sí- (in -síná- or -síná-) in RELs. The two pasts have a single NEG.

6 Relatives In general, RELs and absolutes are structurally identical but differ tonally (SMs are all L in REL subjects, H in object RELs). Object RELs also involve a possessive prefix: hapana cha-ndí-no-ziwa ‘There is nothing that-I-present-know’. When the subject of the object REL clause is a noun, it follows the verb, which agrees with the antecedent: rukúkwe ru-nó-révá babá... ‘The mat which father means...’, lit. mat which-Present-mean father’.

7 Subjunctive (-e) and Imperative Sg endá ‘Go’, NEG u-sá-énd-e, mu-taur-ir-e ‘Tell him’, pl endá-i, mu-sá-énd-e. Polite alternative u-énd-é. Alternative NEG is rega ku-enda. Also chi-mu-pa-i chokudya ‘Now give him bread’, dz-yisa mvura u-go-bika, ‘Heat up water, and then cook’.

S20 Chi-venda

	Perfective	Situative <b>-chi-</b>	Progressive <b>-khou-</b>	Persistentive <b>-kha- ... -di-</b>	Anterior = Past <b>-o-</b>
Past = Anterior <b>-o-</b>	r- <b>ó</b> -rém-á N: a-r- <b>ó</b> -ngó-rém-a	r- <b>o</b> -vha ri- <b>chi</b> -lim-a <i>we were ploughing</i> N: r- <b>o</b> -vha ri-sa-lim- <b>i</b>		r- <b>o</b> -vha ri- <b>chi-kha-di</b> -lim-a <i>we were still ploughing</i> N: r- <b>o</b> -vha ri-sa-cha-lim-a	r- <b>o</b> -vha r- <b>o</b> -lim-a <i>I had ploughed</i> N: r- <b>o</b> -vha ri-songo-lim-a
	ri- <b>Ø</b> -rém-á <i>we chop + COMP</i> N: a-ri- <b>Ø</b> -rém- <b>i</b> ri- <b>a</b> -rém-á <i>we chop</i> N: a-ri- <b>Ø</b> -rém- <b>i</b>	ri- <b>chí</b> -rém-á <i>we chopping, while we chop</i> N: ri-sa-rém- <b>i</b>	ri- <b>khou</b> -rem-a <i>we are chopping</i> N: a-ri- <b>khou</b> -rém-a	ri- <b>kha-di</b> -rém-a <i>we are still chopping</i> N: a-ri- <b>chá</b> -rem-a	(as Past Perfective)
Future <b>-do-</b>	ri- <b>do</b> -rém-á <i>we will chop</i> N: a-ri-ngá(- <b>dó</b> )-rem-a	ri- <b>chi-do</b> -lim-a <i>we will be ploughing</i>		ri- <b>kha-di-dó</b> -rém-á <i>we will still chop</i> N: a-ri- <b>chá-do</b> -rém-á	

## S20 Chi-venda

1 General 750,000 speakers, most in South Africa's Northern Transvaal District, many fewer in Zimbabwe. Source is Ziervogel, Wentzel, Makuya (1981). 5x1.

2 Structure SM – TA – NEG<sub>2</sub> – OM – root – EXT – FV – Post-FV

Pre-SM: NEG<sub>1</sub> (h)a, mostly realised as [a], but [ha] in classes 1 and 6.

SM: ndi; u; 3s á NEG<sub>1</sub>/SBJs/chi/o/a few others, otherwise ú; ri; mu; á. Participants L, others H.

TA: Ø CNJ PRES; a DIS PRES; á NAR; a REL (tone?); o Past/ANT; do FUT; khou PRES PRG; chi IPFV (dep.); ch-a NEG PER; kha-di ('be at') PER; kha-di-do FUT PER, nga POT.

NEG<sub>2</sub>: nga, ngó, sóngo, si, sa. NEG<sub>2</sub> sometimes before, sometimes after, the TA, presumably reflecting the order of grammaticalisation of various TA markers from former AUXs (see 4, 5).

OM: Only one: the few examples with two pronominal objects have IO at OM and post-verbal DO.

FV: a NEU; e SBJ; i Present NEG.

Post-FV: i optional in IMP sg; ni IMP pl; ho REL.

3 Tense One past, which also functions as Anterior, present, one future. There is an -á- NAR. DIS (a)/CNJ (Ø) contrast in the Present. DIS/CNJ NEG<sub>1</sub>s differ tonally.

4 Aspect and other categories PFV, PRG, IPFV, PER, and ANT (?). Combinations of aspect occur. IPFV -chi- does not occur independently – hence the brackets in the matrix – and its total semantic range is unclear.

'Venda is known for its use of the contracted type of auxiliary verb' (Ziervogel et al: 127), so beside transparent -do- FUT (from da 'come' + INF o(ku)) and kha + di PER (from 'be at'), and opaque Past -o- and PRG -khou-, Venda has many other partially grammaticalised modal and aspectual compounds involving AUXs (Ziervogel et al: 125–6, they include 'sit, want, refuse (hana, cf zone K lgs), go away, stay behind, say, spend day, etc'). Some are semantically akin to the independent verbs, some no longer. All function still as AUXs.

As most Zone S languages, Venda is described as having SITs. The second verb contains either -chi- or -o-, differs from regular forms by having a H on the SM, and 3s a-, not u-.

As in other Zone S languages, Past(s) and Future may combine to form conditionals: nd-o-vha ndi-chi-do-lima 'I would have been ploughing', lit. I-Past-be I-IPFV-Future-plough 'I was I will be ploughing'. See S42 and S62.

5 Negation A sort of primary ((h)a-) versus secondary contrast. Several secondary markers: -nga- (FUT); -ngó- (Past); -sóngó- Past SIT and as alternative in SBJ/IMP; -si- POT, IMP, SIT PRES, and alternative in FUT SBJ; and -sa- in most SITs, all SBJ, INF, and in subordinate verbs (-ása- in REL). Position of NEG<sub>2</sub> varies, so -ngo- follows the TA in the Past, -sá- follows -á- in the NAR, but -nga- precedes the FUT TA marker. Pre-SM (h)a- co-occurs with -ngó-, Ø/-i, -ngá(do)-, -khou-, etc, so it is unclear whether the latter mark NEG or merely occur in NEG.

6 Relatives Two possibilities: either REL concord and -ho, or REL pronoun and REL concord on the verb. Present 'Tree which grows' muri u-mela-ho or muri u-ne w-a-mela-ho; Past

‘Tree which grew’ muri w-o-mela-ho or we w-a-mela; Future vhanna vh-ane vh-a-do-tshimbila  
‘Men who will walk’. Object REL: ‘Field which boy ploughs’ tsimu i-ne mutukana a-i-lima, lit.  
field which boy REL/he-it-ploughs. Tone of these/this (?) REL not given.

7      Subjunctive (-e) and Imperative      ‘Chop’ réma(-i) (sg), rémá-ni (pl); monosyllable  
ila(i) ‘Eat’, NEGs u-si-rém-e (or u-sóngó-rémá), ni-si-rém-e; with object (‘Chop it’) dzi-rém-e,  
dzi-rémé-ni, u-si-dzi-rém-e, ni-si-dzi-rém-e. Singular forms only used to children and those of  
lower rank.

S31a Se-tswana

	Perfective	Imperfective -Ø-	Habitual -tlé	Persistentive -sá-	Anterior -ile
Past (-a-)	re-ne r-a-lem-a tshimo <i>we cultivated the field</i>  N: ga-ré-aká r-á-lem-a tshimo	re-ne ré-tshamék-á fêla <i>we were only playing</i>  N: re-ne ré-sá-diré sépe <i>we were not doing anything</i>	re-nê re-tle re-dire <i>we used to do</i>  N: óna a-se-ke a-ithuta <i>he never used to study</i>		o-ne ó-rék-íle enj <i>what had you bought?</i>  N: báne bá-sá-tshog-á <i>they had not feared</i>
	re-rék-á qhomó <i>we buy, are buying a cow</i>  N: ga-ré-y-é ká teréna <i>we do not go by train</i>  <i>or</i>  ri-a-rék-a <i>we buy, are buying</i>  N: ga-ré-árab-e léroná <i>we do not answer either</i>	ré-rek-á <i>we buying, if we buy, we buy</i>  N: ré-sa-rék-e	re-a-tlé ré-diré máphakéla <i>or</i> re-tlé ré-dire <i>we usually work in the early morning</i>	re-sá-ítse ré-lém-á <i>or</i> re-sa-lem-a <i>we are still ploughing</i>  N: ga-ré-sá-tlhol-í ré-lém-á <i>we are no longer ploughing</i>	re-j-éle nabó <i>we have eaten, we ate with them</i>  N: ga-ré-á-rek-á <i>we have not bought</i>
Future -tlaa-	re-tlaa-j-á mmógo <i>we will eat together</i>  re-tlaa-bín-á léroná <i>we will dance too</i>  N: o-tlaa-seké ó-rek-é <i>or</i> ga-ó-ké-tlaa ó-rek-á <i>you will not buy</i>	ó-tlaa-bo á-rék-a <i>he will be buying (tones?)</i>  N: ré-tlaa-bo ré-sá-lem-é <i>we will not be ploughing</i>		re-sá-ítse ré-tlaa-rék-á dijó <i>we will still be buying food</i>  N: ga-ré-sá-tlhol-é ré-tlaa-rék-á dijó  ó-tlaa-bô a-sa-lem-a <i>he will still be ploughing</i>	ó-tlaa-bo á-rék-ile <i>she will have bought</i>  N: re-tlaa-bo ré-sá-rob-á <i>we will not have harvested</i>

## S31 Se-tswana

1 General Tswana speakers number some 4 million, the largest community being in South Africa, a smaller community in Botswana, and very small numbers in Namibia and Zimbabwe. Sotho speakers number 8.3 million, Lozi (Zambia, Namibia) 1.2 million, so S30 (including Lozi, K20) speakers total over 13.5 million. Unclear whether this includes those who use it as a second language. Main source is Chebanne, Creissels, Nkhwa (1997), supplemented by Creissels' other work. 9x1 /i, ɪ, e, ε, a, ɔ, o, u/. The matrix uses the conventional 5-vowel system.

2 Structure NEG – SM – TA – OM – root – EXT – FV – Post-FV

NEG: ga.

SM: kɪ; ʊ; 3s a NEG/SIT/SBJ/REL, otherwise ʊ; rɪ; lʊ; ba. These SM and those of the classes behave tonally in one of four ways (Chebanne et al 1997: 73), but most often participants are L, the rest H, or all are H (after NEG ga, and with SBJs and SITs).

TA: Ø PRES CNJ, and with ile, ε, and í; a PRES DIS, in compound Past, ANT NEG; a CNS; ká POT (a L variant may occur in the POT positive SIT and REL); sa and sɪ NEGs; tlaa FUT; tlaa-sɪ FUT NEG; ka-sɪ POT NEG; sá PER may follow some TAs or occur in AUX in a compound.

OM: Up to three allowed.

FV: a NEU (various tones, mainly L in IND); ε SBJ; í in e-CNS, NEG PRES; ile ANT.

Post-FV: η(i) REL; η(i) IMP pl; η H 'what?'

3 Tense One past, one future. Several forms (PRES, FUT, ANT, POT) distinguish DIS and CNJ. In most cases the only difference is in the tonal properties of the final vowel but in the Present there is a morphological difference, the DIS having -a- at TM, the CNJ having Ø. Also two CNS's, the a-CNS (mainly in Past and CND), and the e-CNS (FUT and HAB).

4 Aspect and other categories The most widely grammaticalised aspects are: PFV, IPFV, HAB, PER, and ANT. A POT is also common. Many other aspectual and modal qualities can be expressed by inflected AUXs plus INF or inflected main verb (see Creissels 2004). Those visible in the matrix are: -bo 'be'; -ne origin unknown, wide range of use; -ntsí ANT of -nna 'be, 'become', meaning 'continuity'; -aka 'build', meaning 'constantly'; -tle from -tla 'come', meaning 'sometimes'; -thlol- 'pass time', meaning 'spend time'; NEG 'no longer'.

Each regular indicative form has a corresponding participial (SIT) with the same meaning. All SITs have SMs tonally H.

5 Negation Three NEG morphemes: ga- at Pre-SM, -sa- and -sɪ- at TA. Sɪ occurs in the IMP, SBJ, and is in free variation with -sa- in the INF; -sa- in the INF, and the SIT and REL forms of Present and ANT, otherwise ga-. Ga may be accompanied by other indicators in the verb.

6 Relatives SITs and RELs differ from IND forms mainly by having a H on all SMs: RELs differ from SITs by Post-FV -η(i). SIT/REL negate by -sa-, IND by ga-. REL clauses are always introduced by a 'linker' agreeing with the head. Subj REL: baná bá bá-kwála-ńj 'Children

who write', lit. children who they-write-REL; object REL baná bá kí-ba-ísaŋ 'Children who I take', lit. children who I-them-take-REL.

7      Subjunctive (-ε) and Imperative      'Cultivate' lɪm-á (sg), lɪm-áŋ (pl), NEG sg sɪ-lɪm-í, SBJ ú-lɪm-ε 'You should cultivate', ú-sí-lɪm-í or ú-sɪ-ká w-á-lɪm-a 'You shouldn't cultivate', rɪ-lɪm-ε 'Let's cultivate, that we cultivate'.

S42 Isi-zulu

	Perfective	Imperfective (‘be’ +) -Ø-	Persistentive -sá-	Inceptive (?) se-	Anterior -é / -ê or (‘be’ +) -ile
P <sub>2</sub> -â:-	s-â:-dl-á <i>we ate</i> N: (k)a-si-dl-áng-a <i>we did not eat</i>	ng-â:-(be)ngi-Ø-bon-a <i>I was seeing</i> N: ng-â:-(be)ngi-nga-bôn-i	ng-á:-ngi-sá-hâmb-a <i>I was still going</i> N: ng-á:-ngi-nga-sa-hamb-i	sé-ng-â:-theng-a <i>I already bought</i> ng-â:-sé-ngi-Ø-dla <i>I was then eating</i>	ng-â:-ngi-Ø-hamb-ile <i>I had gone</i> N: ng-â:-ngi-nga-hamb-ang-a
P <sub>1</sub> -e / -ile	si-Ø-dl-ile <i>we ate</i> si-Ø-dl-ê inyama <i>we ate meat</i> N: <i>as above</i>	be-ngi-Ø-fünd-a <i>I was studying</i> N: be-ngi-nga-fund-í	bé-ngi-sá-hâmb-a <i>I was still going</i> N: bé-ngi-nga-sá-hamb-i	ba-sé:-ngi-Ø-bon-ile <i>they already saw me</i>	be-ngi-Ø-hamb-ile
	u-Ø-fün-a úkudlá <i>she wants food</i> u-ya-hâmb-a <i>she goes</i> N: (k)a-si-Ø-hâmb-i <i>we do not go, are not going</i>	e-Ø-hâmb-a <i>she going, if she goes</i> N: é-nga-hamb-í	si-sa-hâmb-a <i>we still go, are still going</i> N: a-si-sá-hamb-i <i>we no longer go</i>	sé-ngi-ya-hâmb-a <i>I am walking now</i> sé-sí-Ø-ya edolóbheni <i>we are going to town</i> u-sé:-fik-ile <i>he has already arrived</i> N: a-ba-ká-f-ik-í <i>they have not arrived yet</i>	ngi-Ø-bon-é abafana <i>I have seen, I saw boys</i> u-Ø-bon-ile <i>she saw, has seen</i> ú-Ø-lél-e <i>she is asleep</i> N: a-si-dl-áng-a <i>we have not eaten</i> a-si-ká-dl-i <i>we have not eaten yet</i>
F <sub>1</sub> -za(ku)-	ngi-zoku-dl-á <i>I will eat</i> N: a-ngi-zû:-dl-á	u-zo-be e-Ø-hâmb-a <i>or</i> e-zo-hamb-a <i>he will be going</i>	si-sá-zo-bon-án-a <i>we will still see each other</i> N: a-si-sá-zû:-bon-án-a	se-be-zo-hamb-a <i>they will soon go</i>	u-zo-be u-Ø-lamb-ile ntambama <i>you will be hungry</i> N: u-zo-be u-nga-lamb-ile
F <sub>2</sub> -ya(ku)-	ú-yo-hâmb-a <i>she will walk</i> N: a-ká-yû:-hâmb-a	ngi-yo-be ngi-Ø-thand-a <i>I will be loving</i> N: ngi-yo-be ngi-nga-thand-i	si-sá-yo-bon-án-a	se-be-yo-hamb-a	

## S42 Isi-zulu

1 General Doke (1968), Taaljord and Bosch (1988), Beuchat (1966). Several other good works not consulted. D. Gowlett gave valuable advice. 9,200,000 speakers (Gowlett (2003): 20,000,000+ speak S40 languages). Tones as Rycroft and Ngcobo (1976). 5x1.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TAM – OM – root – EXT – FV – Post-FV

Pre-SM: (k)a NEG (3s a-ka-); a REL; sé ‘now, already’ (Inceptive?), reduced form of AUX se; be, reduced CNJ ANT (‘stative perfect’) form of ba ‘be’; ma/ka/a in polite SBJ requests.

SM: ngi; u; 3s a SBJ/POT, o REL (<a+u), otherwise u; si; ni; bá. Participants L, classes H. NEG<sub>2</sub>: nga.

TAM: Ø CNJ PRES, SIT, ANT/P<sub>1</sub>, SBJ; â: Past; /á/ NAR (H not always realised on /a/; ya DIS PRES; yaku (yoku, yo) F<sub>2</sub>; zaku (zoku, zo) F<sub>1</sub> ([o:] gives an indefinite FUT); zû:ku FUT NEG; sa PER (precedes FUT); ká ‘not yet’; ngá POT (NEG ngê:); bó:(ku) ‘must’. Some TAM co-occur, sometimes in non-canonical order, reflecting the chronology of grammaticalisation?

OM: Either DO or IO here but not both at once. For emphasis, OM may be replaced by a (single) post-verbal pronoun.

FV: a NEU; i Present NEG; e SBJ; é CNJ ANT; ile DIS ANT; ánga NEG Past/ANT.

Post-FV: yo DIS REL (in Present, ANT); ni IMP pl; ní ‘what, why?’; phí ‘where?’; kho LOC.

3 Tense Present, two futures. F<sub>1</sub> and F<sub>2</sub> have relative time reference, and Ventive and Itive senses, respectively – unsurprising, as they derive from ‘come’ and ‘go’.

It is not easy to decide on the number of past tenses in Zulu. With most verbs, that is, with active, non-inchoative verbs, the -aa- form and the forms with Ø/e or Ø/ile have contrastive reference. So -aa- always refers to more remote situations, while the other refers to nearer situations. Where the dividing line comes is in general agreed on, but sometimes depends on variables such as individual, situation, and dialect. The two rarely overlap. So umfana u-dl-e amaswidi ‘The boy ate sweets’ would be interpreted by all listeners as referring to a recent time, where umfana w-aa-dl-a amaswidi would be interpreted as having occurred at a more remote time. Likewise in the formation of compounds: (ngi-Ø-)be ngi Ø-hamba ‘I was walking’ refers to a recent event, whereas ng-aa ngi-Ø-hamba invariably refers to walking further in the past. All this suggests the most appropriate labels would be Near and Far Past.

On the other hand, in Anterior forms, only the two suffixal forms (Ø/e or Ø/ile) can occur in the second member of the compound. Thus ngaa(be)ngiØhamb-ile/(ngi)bengihamb-ile ‘I had walked’, ngaa(be)ngihamb-e/(ngi)bengiØhamb-e edolóbheni ‘I had walked to town’ are all fine. They refer to any walking, near or far, that had occurred prior to some other action. Forms such as \*ngaa(be) ng-aa-hamba or \*(ngi)be ng-aa-hamba are simply unthinkable. As is clear from many other Bantu languages, we typically find tense, or tense and aspect in the first member of compounds, but we find only aspect in the second member. So what occurs in the second member of these compounds is apparently Anterior aspect. It behaves differently from Past -aa-, and it refers indifferently to near and far past.

So there are arguments for seeing these -e/ile forms as Near Past tense or as Anterior aspect. If Near Past tense, they behave in some contexts as Anterior aspect: if Anterior, they sometimes behave as Near Past. Many Zone S languages – not S10 or S20, which are structured differently – have these two main forms of past reference. The patterns, details, and interpretation differ from language to language.

D. Gowlett (p.c.) points out that for inchoative verbs, P<sub>1</sub> partly overlaps and partly contrasts with both P<sub>2</sub> and with Anterior.

P <sub>2</sub> :	inkunzi y-aa-fa ‘The bull died long ago’	NEG	inkunzi a-yi-f-anga
P <sub>1</sub> DIS	inkunzi i-f-ile ‘The bull died’		
P <sub>1</sub> CNJ	inkunzi i-f-e izolo ‘The bull died yesterday’	NEG	as above
ANT	inkunzi i-f-ile ‘The bull is dead’		
	inkunzi i-f-ile manje ‘The bull is dead now’	NEG	inkunzi a-yi-f-ile

Because the Ø/e or Ø/ile forms have more near past tense than anterior properties in Zulu, we treat them as P<sub>1</sub> forms which also function as ANTs.

Past in the auxiliary and future in the main verb give a conditional: (Ngi)be+ngi-zo-hamba ‘I would have talked’, lit., I was I will talk.

4 Aspect and other categories PERF, IPFV, PER, and ANT are the most obvious aspects. Many other aspects and modal notions, not shown, are expressed by AUX plus INF or SIT. Several combinations of aspects are also not shown.

The SIT occurs as the second member of compounds, the second of two verbs indicating concurrent action, after certain conjunctions and ‘deficient verbs’: it has a Ø TA marker, and differs from the Present tonally, by having [e] for [a] in Cl. 1, 2, 6, -nga- NEG, and in other minor ways. Present, ANT/P<sub>1</sub>, PER, FUT (at least) have SIT forms.

All compounds with -be are reductions of ‘be’ + SIT (-be is the CNJ P<sub>1</sub>/ANT form of -ba ‘be’), e.g. ng-a:-b-e ngifunda > ngá:ngifúnda ‘I was studying’, ngi-be ngi-hamb-ile > bengihambile ‘I had gone’, etc.

The forms in the penultimate column are tentatively labelled INCE (translated by positive ‘now, already’, NEG ‘not yet’). As with be-, sé-forms derive from earlier two-word forms (\*ngi-se ngi-Ø-funa > sengifuna): se- may be a reduced form of the ANT form (-sehke) of -sala ‘remain’. *Be* precedes *sé-* in compounds.

CNJ and DIS alternatives exist for Present and P<sub>1</sub>/ANT, both REL and absolutive.

5 Negation Primary (k)a- versus secondary -nga-. *Nga* occurs in INFs, SBJs, RELs, SITs, a range of subordinate clauses and the second verb of compounds. Otherwise (k)a-. Note a-si-ká-dl-i ‘We have not eaten yet’ versus a-si-Ø-dl-ánga ‘We have not eaten’.

6 Relatives RELs have Pre-stem á- (á+u > ó, á+i > é). DIS -yo may occur at Post-FV: umfana o-lele-yo ‘Boy who was asleep’, ikhuba umfana a-li-lungisa-yo ‘Plough which boy repairs’, lit. plough boy REL/he-it-repair. Otherwise, RELs and absolutives structurally similar but differ tonally. Some REL may follow or precede the antecedent (úmfána ó-khála-yó, or vice versa, ‘Boy who cries’: preposing = focus). If subject of object REL clause is a noun, it may follow the verb, which agrees with the antecedent: umfazi a-m-siza-yo umfana ‘Woman whom boy helps’.

7 Subjunctive (-e) and Imperative Sg létha ‘Bring’, monosyllabic yi-dlá or dl-ána ‘Eat’, músa úku-hám-ba ‘Don’t go’, mu-ph-é ‘Give him (it)’. Pl lethá-ni, musá-ni ukudla. Also únga-dl-í ‘You mustn’t eat’. Si-(nga-)hamb-e ‘Let’s (not) go’. Politer requests have ma-, ka-, or a-

S53 Xi-tsonga (Xi-gaza)

	Perfective	'Inceptive-Continuative' -se-	Persistentive -(a)ha-	Anterior -ile	'Potential' -nga-
Past a-	<p>á-hí-dy-á <i>we ate</i> a-hí-rím-á <i>we ploughed</i></p> <p>R: vafana lava a-va-dy-a <i>the boy who ate</i></p> <p>N: á-hí-nga-dy-í</p>	<p>a-se-hi-dy-ile <i>we were already eating</i></p> <p>R: vana lava se-a-va-dy-a <i>children who were eating</i></p> <p>N: a-hi-nga-si-dy-a</p>		<p>a-hi-rim-ile <i>we have/had ploughed</i></p> <p>R: vana lava a-va-rim-ile</p> <p>N: a-hi-nga-rim-ang-i</p>	
	<p>CONJ: hi-dy-a vuswa <i>we eat, are eating porridge</i></p> <p>DIS: h-a-dy-á <i>we eat, are eating</i></p> <p>R: vafana lava tirh-aka <i>boys who work</i></p> <p>N: a-hi-dy-i vuswa <i>we do not eat porridge</i></p>	<p>CONJ: se-hi-dy-a (laha) <i>we are eating (here)</i></p> <p>DIS: se-h-a-dy-a</p> <p>R: vana lava se-va dy-aka <i>children who are eating</i></p> <p>N: a-hí-si-dy-a <i>we are not yet eating</i></p>	<p>h-ahá-dy-a <i>we are still eating</i></p> <p>R: vana lava va-(a)ha-dy-aka <i>children who are still eating</i></p> <p>N: a-h-áhá-dy-i <i>we are no longer eating</i></p>	<p>hi-dy-ilé <i>we have eaten</i></p> <p>R: vana lava-ri-mek-e <i>children who have ploughed</i></p> <p>N: a-hi-dy-á-ng-i</p>	<p>hi-ngá-dy-a <i>we can eat</i></p> <p>N: hi-ngê-dy-í <i>we cannot eat</i></p>
Future -ta-	<p>hi-ta-dy-á <i>we will eat, will be eating</i></p> <p>R: vafána lává-nga-tá-rim-a <i>boys who will plough</i></p> <p>N: a-hi-ngâ-dy-í</p>	<p>hi-ta-va se-hi-dy-a <i>we will be eating</i></p> <p>R: vana lava va-nga-ta-va-se-va-dy-a <i>girls who will be eating</i></p> <p>N: hi-ta-va hi-nga-si dy-a</p>	<p>hi-ta-(a)ha-dy-a <i>we will still be eating</i></p> <p>R: vana lava va-(a)ha-ta-dy-aka</p> <p>N: a-hi-nga-(a)ha-dy-i</p>	<p>hi-ta-va hi-rim-ile</p> <p>R: vana a-va-ta-va va-dy-ile</p> <p>N: hi-ta-va hi-nga-rim-ang-i</p>	

## S53 Xi-tsonga ([Xi-gaza])

1 General Baumbach (1987). 3,200,000 speakers, in Mozambique, Swaziland, Zimbabwe, and South Africa, the latter having the largest community. (Surface) tones marked when and as in Baumbach. 5x1.

2 Structure Pre-SM – SM – NEG<sub>2</sub> – TA – OM – root – EXT – FV – Post-FV

Pre-SM: a NEG (various tone patterns, depending on tense); a Past (H, SM also H); a 1st and 3rd person Hortatives (see 11, below; tones?); se ‘Inceptive-Continuative’.

SM: ndzi; u; 3s ú in PRES/FUT/ANT positives and forms built on them, otherwise a; hi; mi; vá.

NEG: nga.

TA: Ø CNJ PRES; a DIS PRES (apparently underlying L); ta FUT; aha PER; si ‘Inceptive-Continuative’ NEG; nga (nge NEG) Potential; o ‘be just/only doing something’; lo (\*li-o) Durative; nga appears in some relatives.

Two TAs are allowed: hi-ta-(a)ha-dy-a ‘We will still be eating’, lává-nga-tá-ríma ‘Who will plow?’.

FV: a NEU; e SBJ; ile ANT; i NEG; ang-i ANT NEG; aka/eke/iki (eke is aka+ile; iki is ak+i). Baumbach labels as Insistive the -aka- which appears in IMPs but does not link it to the -aka- occurring in several RELs (mainly Present), for which he has a different explanation. He describes (p. 293–4) \*ng > nk > k as regular: if so, then Tsonga appears to have two reflexes of \*ang (ak, ang).

Post-FV: ni 2p IMP and 1p Inclusive; vu Inducive.

3 Tense One past, (present), one future.

4 Aspect and other categories Baumbach shows – I have modified some labels – PFV, ANT, PER, Inceptive-Continuative (‘indicates beginning and subsequent continuation of a situation’). I am skeptical about Inceptive-Continuative. If Tsonga has this as an aspectual concept, it would be the only language surveyed with no basic IPFV/PRG, having replaced them all by Inceptive-Continuative. Baumbach also shows Potential (‘can, may’), exclusive, and Durative. I include Potential in the matrix, though it is really modal, and exclude the other two, for lack of space. Examples: Exclusive: h-o-rima ‘We just only/simply plough (nothing else)’, a-h-o-rima ‘We only ploughed’, Durative: hi-lo-yima laha ‘We are just merely standing here’. Exclusive is exemplified for all tenses, Durative only in the Present, and Potential is said to be used only in the Present.

As other Zone S languages (also P, M40, M60), Tsonga distinguishes Conjunctive (predicate focus) and Disjunctive. Baumbach only shows it for the Present PFV and Inceptive-Continuative.

5 Negation Three NEG formatives. A- in most absolutive INDs; -nga- in INF, IMPs, most non-present non-REL NEGs, and all REL NEGs (not shown in the matrix); and -si-, the NEG form of Inceptive-Continuative affirmative se-. Suffix -i in PFV, PER, and ANT (-ang-i) NEGs and in the IMP and INF. Compared to those in other Bantu languages, Tsonga NEGs are heavily marked. All inflected forms carry two of the three markers, and many have all three. See also S20.

6 Relatives Although the matrix shows only subject RELs, subject and object RELs involve the demonstrative pronoun, agreeing with head noun. It consists of deictic la- plus class/person affix. REL and non-REL forms are structurally identical. Unclear if tonally identical.

9 Subjunctive (-e) and Imperative Sg tirh-a 'Work', dy-an-a (monosyllable) 'Eat', va-b-e 'Give them', u-nga-dy-í 'Don't eat'. Pl tirh-a-ni, dy-an-a-ni, va-b-e-ni, mi-nga-dyí. Also a-a-dy-e 'Let him eat', 1p (excl) á-hí-tír-h-e 'Let us work (you and I)', NEG hi-nga-tír-h-i 'Let's not eat', 1p (incl) a-hi-tír-h-e-ni 'Let us eat (three or more)'.

S62 Gi-tonga

	Perfective	Imperfective <b>-ngu-</b> / <b>-gu-</b>	Anterior <b>-ile</b>
Past <b>-adi-</b> / <b>-a-</b>	ny- <b>adi</b> -sot-a <i>I hunted</i> N: k <sup>h</sup> a-ny-a-sot-a	ny- <b>adi</b> -(fa-)na nyi- <b>gu</b> -bah-a <i>I used to build</i> N: ny- <b>adi</b> -(fa-)na nyi-si-bah- <b>i</b>	ny- <b>adi</b> -fa-na nyi-pat- <b>ile</b> <i>or</i> ny- <b>adi</b> -pat- <b>ile</b> <i>I had collected</i> N: ny- <b>adi</b> -fa-na nyi-sa-pat-a
		hi- <b>ngu</b> -hoj-a <i>we eat, are eating</i> N: k <sup>h</sup> a-hi- <b>Ø</b> -hoj- <b>i</b>	u-nyi- <b>Ø</b> -won- <b>ile</b> <i>he has seen me, saw me</i> N: k <sup>h</sup> a-(a-)ny-a-won-a
Future <b>-na-</b>	hi- <b>na</b> -emb-a <i>we will sing</i> N: k <sup>h</sup> a-hi- <b>na</b> -emb-a	a- <b>na</b> -na a- <b>gu</b> -hoj-a a- <b>na</b> -ra-na a- <b>gu</b> -hoj-a a- <b>na</b> -fa-na a- <b>gu</b> -hoj-a <i>he will be eating</i> N: a- <b>na</b> -na a-si-hoj- <b>i</b>	a- <b>na</b> -na u-nyi-won- <b>ile</b> <i>he will have seen me</i> N: a- <b>na</b> -na a-sa-nyi-won-a

## S62 Gi-tonga

1     General       Some 225,000+ speakers in southeastern Mozambique's Sul do Save Province. Source is Lanham (1955). Tones indicated when and as Lanham does. 5x1.

### 2     Structure

Pre-SM – SM – NEG<sub>2</sub> – TA – directional – OM – root – EXT – FV – Post-FV

Pre-SM: k<sup>h</sup>á NEG; ngá polite IMP; a in 'Hortatives'; na in SITs.

SM: nyi; u; 3s u PRES/Past/ANT, a NEG/SBJ/FUT/SIT; hi; mu; ba.

NEG<sub>2</sub>: si, sa, ngà, mba.

TA: ngu General Present; gu SIT (in RELs, NAR); agu 'when, if'; nagu FUT SIT; na FUT (IND and SBJ); nanagu FUT IPFV; a Past/ANT NEG; adi Past; anga Past SIT NEG; ngá 'can, may'; ngà Past SIT. Ø occurs when FV is i, e, or ile.

Directional: ta Ventive; ya Itive.

FV: a NEU; e SBJ; ile ANT; i (General and SIT) Present NEG.

Post-FV: yi in monosyllabic IMPs; ni in plural IMPs and 1p (vs dual) Hortatives; go in SITs, esp. used in RELs, in which case it replaces gu.

3     Tense         One past, (present), one future.

4     Aspect and other categories       Beside PFVs, the only aspects shown for all tenses are IPFV (Lanham's 'continuous') and ANT (my interpretation of Lanham's 'immediate past').

As used for other Zone S languages, Lanham has categories Participial (abbrev. SIT) and Temporal (mw-agu-bweta 'If you want'). These do not occur independently in main clauses. Thus SIT occurs (a) in the aspect-marked main verb as the second part of compounds, following the tense-marked AUX -na, as in these Past and FUT IPFVs and ANTs:

hi-na-na hi-gu-lima 'We will be cultivating' (lit. we-will-be we-ing-cultivate)

hi-na-na hi-si-lim-i 'We won't be cultivating' (lit. we-will-be we-NEG-cultivate-NEG)

hi-na-na hi-won-ile 'We will have seen' (lit. we-will-be we-see-have)

hi-na-na hi-sa-wona 'We won't have seen' (lit. we-will-be we-haven't-see)

In these forms -gu-, -si-, and -sa- are SITs (b) in subordinate clauses (ny-adi-mu-wona n-a-gu-ambela... 'I saw him telling', lit. I saw him he-SIT-tell) (c) as NARs (a-na-hongola...a-gu-ambela 'He will go...and tell...and'), and (d) in RELs.

A Potential nga: nyi-nga-regera 'I can speak', ny-adi-nga-gir-a 'I was able to buy'.

English conditional is rendered by a Past + Future combination: a-(a)di-Bana a-na-gu-boha 'He would have arrived..if (the condition was not fulfilled)', lit. he-Past-be he-will-SIT-arrive.

5     Negation       Five NEG markers: -mba- in INFs (gu-mba-dwana 'to not fight'); -si...(-i) 'present SIT' (ba-si-lib-i 'If they don't pay'); -sa- REL, ANT SIT (ba-sa-gira 'If they have not done'); -ngà-...-i in SBJ/IMP; k<sup>h</sup>á- Future, Present, Past/ANT.

6 Relatives Not many relatives are shown but the few examples, and Lanham's comments, suggest that relatives use the SIT forms, often with -go at FV, and also with a demonstrative.

7 Subjunctive Marked by -e, it seems to have the usual range but is 'infrequent' compared to other Zone S languages. Lanham shows present ( $\emptyset$ /-e) and 'future' (na/-e) SBJs.

8 Imperative Sg rana mwanago 'Call your child', pwa-yi 'Hear' (-yi with monosyllabic stems), mu-ambel-e 'him-tell-SBJ', ngá-jeg-a 'Please take', u-nga-jeg-i 'Don't take', u-res-e 'Please bring'. Pl rana-ni 'Call', pwa-yi-ni 'Hear ye', hi-pw-e-ni 'Hear ye us', hi-βel-e 'Should we enter?', (a-)hi-hongol-e-ni 'Let's go (more than two)'.

## **Appendix 2**

**Matrices for some other languages from the larger database**

Kom, Centre (Ring) Grassfields

	Perfective	Imperfective <b>na</b>	Progressive <b>REDUPLICATION</b>	Inceptive <b>sú</b>	Repetitive <b>fi</b>	Anterior <b>men</b>
P <sub>4</sub> <b>nünlä</b>	wu <b>nünlä</b> yem <i>he sang</i>	wu <b>nünlä na</b> yem <i>he used to sing</i>				
P <sub>3</sub> <b>tí</b>	wu <b>tí</b> yem <i>he sang</i>	we <b>tí na</b> yem <i>he was singing</i>	wu tí na <b>yěmyěm</b> <i>he was singing</i>	wu <b>tí</b> na <b>sú</b> yem <i>he was starting to sing</i>	wu <b>tí fi</b> dzi <i>he cried again</i>	wu <b>tí men</b> gwí <i>he came (completely)</i>
P <sub>2</sub> <b>lä</b>	we <b>lä</b> yem <i>he sang</i>					
P <sub>1</sub> <b>ni-</b>	wu <b>ni-</b> yem <i>he sang</i>					
	wu nün yem-á <i>he is singing, he sings, he will sing</i>		wu nün <b>yěmyěm</b> <i>he is singing (now)</i>	wu <b>sú</b> gwí-a <i>he is starting to come</i>		wu gwí <b>men</b> <i>he has come</i>
F <sub>1</sub> <b>nî</b>	wu <b>nî</b> yem-á <i>he will sing</i>		wu <b>nî</b> na <b>yěmyěm</b> <i>he will be singing</i>			
F <sub>2</sub> <b>lä</b>	we <b>lä</b> yem-á		wu <b>lä</b> na <b>yěmyěm</b> <i>he will be singing</i>			wu <b>lä</b> gwí <b>men</b> <i>he will have come</i>
F <sub>3</sub> <b>nünlä</b>	we <b>nünlä</b> yem-á	we <b>nünlä na</b> yem <i>he will be singing</i>				

Aghem, Western (Ring) Grassfields

	Perfective	Imperfective -a	Habitual -a tsighà
P <sub>2</sub> `mó	ò <b>mò</b> bó fighâm <i>she hit (the) mat</i> N: ò káa bó ghâmfð <i>she did not hit ...</i>	ò <b>mò</b> bó-o fighâm <i>he was hitting ...</i> N: ghé <b>mò</b> bó-o 'yó ghâmfð <i>they were not ...</i>	ghé <b>mò</b> sú-'ú <b>tsighà</b> fighâm <i>he used to wash ...</i> N: ò <b>mò</b> sú-'ú <b>tsighà</b> 'yó ghâmfð
P <sub>1</sub> mò	ò <b>mò</b> bò fighâm <i>she hit (the) mat</i> N <sub>1</sub> : ò kàa bó ghâmfð <i>she did not hit ...</i> N <sub>2</sub> : ò kà bó ghâmfð <i>she did not hit ...</i>	ò <b>mò</b> bò-ó fighâm <i>he was hitting ...</i> N: ghé <b>mò</b> bò-ó 'yó ghâmfð <i>they were not ...</i>	
	ò bò fighâm <i>she has hit (the) mat</i> N <sub>1</sub> : ò kán bó ghâmfð <i>she has not hit yet</i> N <sub>2</sub> : ò kà bó ghâmfð <i>she did not hit ...</i>	ò bò-ó fighâm <i>he was hitting ...</i> N: ò bò-ó 'yó ghâmfð <i>he is not ...</i>	ò bò-ó <b>tsighà</b> fighâm <i>he hits (the) mat</i> N: ò bó-o <b>tsighà</b> yò ghâmfð
F <sub>1</sub> sà		ò <b>sà</b> bò-ó fighâm <i>she will hit (the) mat</i> N: ghé <b>sà</b> sù-u yò ghâmfð <i>he will not hit</i>	
F <sub>2</sub> ló`		ò <b>ló</b> 'bo-o fighâm <i>she will hit (the) mat</i> N: ò <b>ló</b> 'bó-o 'yó ghâmfð	ò <b>ló</b> sù-u <b>tsighà</b> fighâm <i>he will wash ... regularly</i>

A11 (Bà-)londo

	Perfective	Imperfective <b>-ak-</b>	Anterior <b>-má-</b>
P <sub>2</sub> <b>-mo-</b>	a- <b>mo</b> -sak-á <i>he sought</i> N: a-sí- <b>mo</b> -sak-a	a- <b>mo</b> -sak- <b>ák</b> -á <i>he sought, was seeking</i> N: a-sí- <b>mo</b> -sak- <b>ak</b> -a	
P <sub>1</sub> <b>-mo- ... -i</b>	a- <b>mo</b> -sak-í N: a-sí- <b>mo</b> -sak- <b>i</b>	(a- <b>mó</b> -sak- <b>ak</b> -a) N: <i>as above</i>	
Non-Past <b>-Ø-</b>	a- <b>Ø</b> -sak-í <i>he sought, he seeks</i> N: a-sá-sák- <b>i</b>	a- <b>Ø</b> -sak- <b>ak</b> -a <i>he seeks, he is seeking, he was seeking (today), he will seek</i> N: a-sá-sak- <b>ak</b> -a	a- <b>má</b> -sak-á <i>has he ever sought?</i> <i>he has (already) sought</i> N: a-sí-sak- <b>í</b> <i>he has not sought (yet)</i>



A46 Nomaande

	Perfective	Pluractional -vk-	Progressive	Habitual
P <sub>4</sub> -ŋa-	?	tɔ-ŋa-sɔ sɔmb-ák-a <i>we cut, were cutting</i>	(1) tɔ-ŋa-sɔ bá ɔ-ɔ-!nyí-a <i>we were eating</i> (2) bá-ŋa-bɔ bá bá-ŋa-bɔ nyí-á <i>they were eating</i>	bá-ŋa-bɔ bá bá-bɔ nyí-ak-a <i>they used to eat</i>
P <sub>3</sub> -ŋa-	ú-ŋa bét-á <i>he thought (yesterday)</i>	nɔ-ŋa-nɔ námb-ak-a <i>you hid, were hiding</i>	(2) nɔ-ŋa-nɔ bá nɔ-ŋa-nɔ ɔɔb-a <i>you were going</i>	nɔ-ŋa-nɔ bá nɔ-anɔ ɔɔ-ɔɔb-ak-a
P <sub>2</sub> -ŋa-	tu-ŋé-su ket-i <i>we believed (this morning)</i>  N: tɔ-te-ómó-sɔ hí-t-e <i>we did not take</i>	e-ŋá-me tán-ák-a <i>I talked, was talking</i>	(1) e-ŋá-am bá ɔ-ɔ-lát-a <i>I was sewing</i> (2) u-ŋá-a bá u-ŋá-a fan-a <i>they were reading</i>	u-ŋá-a bá w-aá fan-ak-a <i>he used to read</i>
P <sub>1</sub> -ma-	é-ma-é heŋ-a <i>I (just) replaced</i>	tɔ-ma-sɔ lón-ɔk-ɔ <i>we just called, were just calling</i>	(1) ú-má-á bá ɔ-ɔ-fán-a <i>he was just reading</i> (2) tɔ-ma-sɔ bá tɔ-asɔ fan-ak-a <i>we were just reading</i>	
-ŋa-	u-ŋa-á sɔmb-a <i>he cuts</i> tu-ŋe-sú kət-i <i>we believe</i>  N: tu-ti-ŋé-su ket-i		bá-bɔ-ŋa ɔ-ɔ-fán-a <i>they are reading</i>	u-na-ŋa w-aá nyí-ák-a <i>he eats (regularly)</i>
F <sub>1</sub> -ŋa-		nɔ-ŋa-nɔ cákɔn-ak-a <i>you will play, be playing (this evening)</i>  N: u-ti-ŋé-e ket-ik-i <i>we will not measure</i>	(1) tɔ-ŋa-sɔ bá ɔ-ɔ-!nyí-á <i>we will be eating</i> (2) bá-ŋa-bɔ bá bá-bɔ lat-ak-a <i>they will be sewing</i>	tu-ŋe-bul-asɔ lón-ɔ <i>we will call (them) (regularly)</i>
F <sub>2</sub> -ka-	ɔ-kɔ-ɔ lat-a <i>you will sew</i>  N: i-ti-ké-mi búm-e <i>I will not hunt (tomorrow)</i>	u-ká-a námb-ák-a <i>she will prepare (it)</i>	(1) tɔ-ká-sɔ bá ɔ-ɔ-fán-a <i>we will be reading</i> (2) tɔ-ká-sɔ bá tɔ-asɔ námb-ák-a <i>we will be preparing</i>	tu-ké-bul-esú kín-e <i>we will refuse (them) (regularly)</i>
F <sub>3</sub> -ka-		u-ka-á kɔc-ak-a <i>she will pick (them)</i>		

## A74 Bulu

	Perfective	Imperfective (?)	Progressive (?)	Anterior
P <sub>2</sub> -ngá-	mé-ngá-yénə nyě <i>I saw him</i>	bǐ-ngá-bó bǐ-já-ʔ-a <i>we were eating, used to eat</i>		bǐ-nga-man-ε dí <i>we had eaten</i>
P <sub>1</sub> -áté-	m-áté-tili <i>I wrote, have written</i>			
	o-Ø-bò esae jé <i>you do that job?</i>  N: mε-tè-bə <i>I do not work</i>	bé-ne bé-yi-ʔ-i biá <i>they are singing</i>	w-à-bò jé mú <i>what are you doing there?</i>  N: m-ǎ-ke <i>I am not going</i>	bǐ-man-eya dí <i>we have eaten</i>  e-byál-eya <i>he is/was born</i>
F <sub>1</sub> -N-	bi-ḥ-ke <i>we are about to go</i>  (?) N: bi-ǎ-ye-ke <i>we will not go</i>			
F <sub>2</sub> -é-	m-é-ke ámbam <i>I will go to Ambam</i>			

B11c Myene (Galwa)

	Perfective	Imperfective -ay-	Imperfective 'be' + VERB
P <sub>3</sub> -a- ... -í	a-Ø-yol-í <i>she bought</i>  a-Ø-yen-í <i>she saw</i>  R: w-á-yen-i <i>who saw</i>	a-Ø-yol-íy-í <i>he used to buy, was buying</i>	
P <sub>2</sub> -a-	a-Ø-kól-â <i>he bought</i>  w-a-kól-â <i>you bought</i>  N: eré-kó'l-é <i>he did not buy</i>	w-a-jén-áy-a <i>you used to see</i>	w-a- <b>díwó</b> w-e-bén-a <i>you were cultivating</i>
P <sub>1</sub> -a- ... -i	w-a-kól-î <i>you (have) bought</i>	w-a-pósw-íy-i <i>you were falling</i>	
-e-	w-e-kól-a <i>you buy</i>  N: w-eré-kol-e	w-e-kól-ay-a <i>you are always buying</i>	
Future -ebe-	w- <b>ebé</b> <sup>1</sup> -jén-á <i>you will see</i>  N: my <b>ézéle</b> -kól-é <i>I will not buy</i>	w- <b>ebé</b> <sup>1</sup> -jén-áy-á	

B51 Duma

	Perfective	Imperfective -anga	Progressive 'be' + LOC	Anterior be- + PASTS
Indef. Past -i	a-Ø-búm-í mǔtu <i>he killed a person</i>  N: ndé kabúm-i ve <i>he did not kill</i>	me-Ø-sid-ing-i <i>I used to do</i>		me <b>be-ngine</b> me-bɔn-i <i>I had seen</i>
P <sub>2</sub> -a-	besu l-a-sa <i>you did</i>			besu l-a <b>be</b> l-a-mɔn-ɔ <i>we had seen (long ago)</i>
P <sub>1</sub> -má-	ba-má-tom-á nde <i>they (just) sent him</i>			me- <b>be-ngine</b> mə-ma-mɔn-ɔ <i>I had seen (recently)</i>
	bésu lí-Ø-bom-a ... <i>we kill, are killing</i>  N: besú ka-lí-bom-a	me-Ø-sad-anga <i>I do (always, continually, etc.)</i>	a-Ø-ŋî mû-kén-a <i>he is dancing</i>	
F -sáa-	a-sǎ-yèmb-a <i>he will sing</i>  N: me ki-sǎ-ken-á ve <i>I will not dance</i>			

B87 Mbuun

	Perfective	Progressive -yé-	Habitual -wú-	Iterative -bé-	Inceptive (?) Anterior (?) -béná-
P <sub>2</sub> -u-	é-wú-dí-á (ákòn) <i>we ate (bananas)</i> N: ká-é-wú-dí-á				
P <sub>1</sub> -me-	á-mé-dí-á <i>they ate</i> N: ká-bá-mé-dí-á			é-mé-bé-túm <i>I just sent</i>	
	bá-Ø-dí-á <i>they eat, are eating</i> N: ká-bá-Ø-dí-à	á-yé-dí-á <i>they are eating</i>	bá-wú-tóm-á <i>they cry (regularly)</i>	bá-bé-tóm-á <i>they are crying again</i> N: ká-bá-bé-tóm-á	á-béná-dí-á <i>he had (has?) already eaten</i>
Future -ker-	á-kér-dí-á <i>they will eat</i> N: ká-bá-kér-dí-á		á-kér-wú-tóm-á <i>he'll have to cry again</i>	á-kér-bé-dí-á <i>you will eat again</i>	

C101 Babole

	Perfective (-ak-)	Imperfective -o- ... -ak-	Anterior
P <sub>2</sub> -á-	tw-á <sup>1</sup> -sál-ak-á <i>we did</i>	tw-á <sup>1</sup> -éké-o <sup>1</sup> -sál-ak-a <i>we were doing</i> N: to-ká <sup>1</sup> -éké-o <sup>1</sup> -sál-ak-a	tw-á <sup>1</sup> -sál-á <i>we have/had done</i> N: to-ká <sup>1</sup> -sál-ak-á
P <sub>1</sub> -í	to-Ø-sál-ak-í <i>we did</i> N: to-ká-Ø-sál-í		to-Ø-sál-í <i>we have done</i> N: to-ká-Ø-sál-í
		to-ó <sup>1</sup> -sál-ak-a <i>we are doing</i> N: to-εtí-ó <sup>1</sup> -sál-ak-a	
Future -pá- / -tá-	to-pá <sup>1</sup> -sál-a (or to-tá <sup>1</sup> -sál-a) <i>we will work</i> N: to-εtí të to-pá <sup>1</sup> -sál-á		

C53 Li-gesógo

	Perfective (?)	(?)	Progressive (?)	Persistentive -é-
P <sub>2</sub>	tw-á-tóng-ándé ligwa <i>we used to (do) work</i> tw-á-fang-ándé ligwa <i>we began work</i>  N: to-tí-tóng-e:			
P <sub>1</sub>	tw-e-tóng-éndé ligwa <i>we did work</i> tw-e-fang-éndé ligwa <i>we began work</i>  N: to-tí-tóng-e:			
		tw-á-tóng-á ligwa <i>we are doing work</i> tw-á-fang-á ligwa <i>we have begun work</i>  N <sub>1</sub> : tó-fa-tóng-é  N <sub>2</sub> : to-tí-mo-tóng-á	tw-émo-tóng-á ligwa <i>we are doing work, we will work, we work</i>  N <sub>1</sub> : to-ti-tong-e ligwa (PROGRESSIVE)  N <sub>2</sub> : to-tí-mo-tóng-a (HABITUAL)	tw-é-tóng-a ligwa <i>we still work</i>  N: tw-e-tóng-ité <i>we have not worked yet</i>
Future	tw-e-tóng-ándé <i>we will (do) work</i>  N: tó-fa-tóng-é			

## C76 Ómbó

	Perfective	Imperfective	Habitual <b>-aka</b>	Anterior (?)
P <sub>4</sub> (?) <b>-áka- ... -i</b>	t- <b>áka</b> -kóngól- <b>i</b> <i>we picked up</i>			
P <sub>3</sub>	t- <b>ámbo</b> -kóngól-á ... (M)	t- <b>átá</b> -kóngól-á ... (M) <i>we were picking up</i>		
P <sub>2</sub> <b>-á- ... -i</b>	t- <b>á</b> -kóngól- <b>i</b> N: to- <b>tá</b> -kóngól- <b>i</b>	t- <b>á</b> -kóngól- <b>ak-i</b>		
P <sub>1</sub> <b>-Ø- ... -í</b>	to- <b>Ø</b> -kóngól- <b>í</b> <i>we picked up</i> N: fa-t- <b>á</b> -kóngól- <b>i</b>	to- <b>Ø</b> -kóngól- <b>ak-i</b> <i>we were picking up</i>		
	to- <b>mbó</b> -kóngól-á ... (M) <i>we pick up (?)</i>	t- <b>átá-ndá</b> -kóngól-á <i>we are picking up (?)</i> <i>we will pick up</i> N: fa-t- <b>átá</b> -kóngól-á	to- <b>Ø</b> -kóngól- <b>aka</b> <i>we pick up (regularly)</i>	
Future <b>-ákondó- ... -á</b>	t- <b>ákondó</b> -kóngól-á ... (M) <i>we will pick up</i> N: fa-t- <b>á</b> -kóngól-á			

D27 Ki-bángubángu

	Perfective	Imperfective	Anterior
P <sub>2</sub> -bu-	tu- <b>bu</b> -vúndagany-a <i>we smashed</i> N: nda-tu- <b>bú</b> -vúndagány-á	tu- <b>bw</b> -a mú-u-nim-a <i>or</i> tu- <b>bw</b> -a kú-u-nim-a <i>we were hoeing</i>	
P <sub>1</sub> -fu-	tu- <b>fu</b> -sóbol-a <i>we chose</i>	tu- <b>fw</b> -a mú-u-nim-a <i>we were hoeing</i>	
	tu- <b>lu</b> -sáhul-a <i>we speak, are speaking</i>	tu- <b>li</b> mu-u-nim-a <i>we are hoeing</i>	t- <b>o</b> -lôndol-a <i>we have spoken</i>
Future -a- ... -ángá	tw- <b>a</b> -vund-agany- <b>ángá</b> <i>we will break</i>		

D311 Forest Bira

<p>P<sub>3</sub> -Ø- ... -í + do</p>	<p>bi-Ø-támb-í do <i>we walked (long ago)</i></p> <p>N: kí-bí-támb-íí</p>
<p>P<sub>2</sub> -Ø- ... -í + do</p>	<p>bi-Ø-támb-í do <i>we walked (recently)</i></p> <p>N: kí-bí-támb-í <i>we did not walk</i></p>
<p>P<sub>1</sub> -Ø- ... -í</p>	<p>bi-Ø-támb-í <i>we (have) walked</i></p> <p>N: kí-bí-támb-í <i>we have not walked</i></p>
<p>-ka + INFIN</p>	<p>bé-ká 'támb-á <i>we are walking</i></p> <p>N: bé-ńnda-ká 'támb-á</p>
<p>Future -Ø- ... -a + nó</p>	<p>bi-Ø-támb-a nó <i>we will walk</i></p> <p>N: kí-bí-támb-a nó</p>

## D43 Ki-nyanga

	Perfective	Imperfective <b>-áŋge</b>	Habitual <b>-áŋga</b>	Anterior <sub>1</sub> <b>-a- ... -á</b>	Anterior <sub>2</sub> <b>-are-</b>
P <sub>4</sub> <b>-a- ... -áŋgá</b>	tw- <b>a-tím-áŋgá</b> <i>we dug</i> N: n-tí-tw- <b>a-tím-áŋgá</b>				
P <sub>3</sub> <b>-a- ... -áyò</b>	tw- <b>a-tím-áyò</b> <i>we dug</i> N: n-tí-tw- <b>a-tím-áyò</b>				
P <sub>2</sub> <b>-áku- ... -á</b>	tw- <b>áku-tím-á</b> <i>we dug</i> N: n-tí-tw- <b>áku-tím-á</b>	w- <b>áku-bése</b> w- <b>eb-áŋge</b> <i>he was digging</i>			
P <sub>1</sub> <b>-ama- ... -à</b>	tw- <b>ama-tím-a</b> <i>we dug</i> N: n-tí-tw- <b>ama-tím-a</b>				
		tu- <b>tím-áŋge</b> <i>we are digging</i> N: n-tí-tu- <b>tím-áŋge</b>	tu- <b>tím-áŋga</b> <i>we dig (regularly)</i> N: tu- <b>tá-tím-áŋga</b>	tw- <b>a-tím-á</b> <i>we have dug (recently)</i> N: n-tí-tw- <b>a-tím-á</b>	tw- <b>aré-tím-a</b> <i>we have dug (long ago)</i> N: n-tí-tw- <b>aré-tím-a</b>
F <sub>1</sub> <b>-ǎ:- ... -á</b>	tw- <b>ǎ:-tím-á</b> <i>we will dig</i> N: tu- <b>tâ-tím-í</b>				
F <sub>2</sub> <b>-a- ... -áyò</b>	tw- <b>ǎ-tím-áyò</b> <i>we will dig</i> N: tu- <b>tâ-tím-íyo</b>				
F <sub>3</sub> <b>-a- ... -ayo</b>	tw- <b>ǎ-tím-ayo</b> <i>we will dig</i> N: tu- <b>tâ-tím-íyo</b>				
F <sub>4</sub> <b>-à- ... -ì</b>	tw- <b>a-tím-ì</b> <i>we will dig</i>				

D61 Ki-nya-rwanda

	Perfective	Habitual -Ø-	Progressive 'be' + -ho + -Ø-	Persistive -ki(a-)	Anterior -a- ... -ie
P <sub>2</sub> -á-	tu-á-guz-e + COMP tu-á-ra-gúz-e <i>we bought</i> N <sub>1</sub> : ntabwo tu-á-guz-e N <sub>2</sub> : nti-tu-á-guz-e	tu-á-jya tú-gur-a + COMP tu-á-ra-gúr-a tu-á-hora tu-gur-a <i>we used to buy</i> N <sub>1</sub> : ntabwo tu-á-jya tú-gur-a N <sub>2</sub> : nti-tu-á-jya tú-gur-a	tu-á-ri-ho tú-Ø-gur-a + COMP tu-á-ri-ho tú-ra-gur-a <i>we were buying</i> N <sub>1</sub> : ntabwo tu-á-ri-ho tú-gur-a N <sub>2</sub> : nti-tu-á-ri-ho tú-gur-a	tu-á-ri tú-ki-gur-a <i>we were still buying</i> N: ntabwo tu-á-ri tú-ki-gur-a	tu-á-ri tú-aa-guz-e + COMP tu-á-ri tu-á-ra-gúz-e <i>we had bought long ago</i> N <sub>1</sub> : ntabwo (tu-á-ri) tu-á-ra-gúz-e N <sub>2</sub> : nti-tu-á-ri tu-á-(ra-)gúz-e
P <sub>1</sub> -aa-	tu-aa-guz-e + COMP tu-aa-guz-e <i>we bought</i> N <sub>1</sub> : ntabwo tu-aa-gúz-e N <sub>2</sub> : nti-tu-aa-guz-e	tu-aa-jya tú-gur-a + COMP tu-aa-hoze tú-gur-a <i>we were buying</i> N <sub>1</sub> : ntabwo tu-aa-jya tú-gur-a N <sub>2</sub> : nti-tu-aa-jya tú-gur-a	tu-aa-ri-ho tú-Ø-gur-a + COMP tu-aa-ri-ho tú-ra-gur-a <i>we were buying</i> N <sub>1</sub> : ntabwo tu-aa-ri-ho tú-gur-a N <sub>2</sub> : nti-tu-aa-ri-ho tú-gur-a	tu-aa-ri tú-ki-gur-a <i>we were still buying</i> N: ntabwo tu-aa-ri tú-ki-gur-a	tu-aa-ri tú-aa-guz-e tu-aa-ri tú-aa-ra-guz-e <i>we had bought</i> N <sub>1</sub> : ntabwo tu-aa-ri tú-aa-guz-e N <sub>2</sub> : nti-tu-aa-ri tú-aa-guz-e
-Ø-		(tu-jya) tú-gur-a + COMP tu-ra-gur-a <i>we buy regularly</i> tu-gur-a + COMP tu-ra-gur-a <i>we buy (nowadays)</i>	(tu-ri-hó) tu-Ø-gur-a + COMP (tu-ri-hó) tu-ra-gur-a tu-ri ku-gur-a <i>(also found in some dialect)</i> <i>we are buying</i> N <sub>1</sub> : ntabwo tu-rí-ho tu-gur-a N <sub>2</sub> : nti-tu-rí-ho tú-(ra-)gur-a N <sub>3</sub> : ntabwo tu-rí-ku-gur-a N <sub>4</sub> : nti-tu-ri-ku-gur-a	tu-ki-gur-a tu-ra-kí-a-gur-a <i>we are still buying</i> N <sub>1</sub> : nti-tu-ki-gur-a N <sub>2</sub> : ntabwo tu-ki-gúr-a N <sub>3</sub> : ntabwo tu-ráa-gur-a	tu-guz-e + COMP tu-ra-guz-e tú-aa-guz-e tu-aa-ra-guz-e <i>we have bought</i> N <sub>1</sub> : ntabwo tu-gúz-e N <sub>2</sub> : nti-tu-gúz-e
F <sub>1</sub> -ra-	tu-ra-gur-a <i>we will buy</i> N: ntabwo tu-ra-gur-a	N <sub>1</sub> : ntabwo (tu-jya) tu-gur-a N <sub>2</sub> : ntabwo tu-gur-á N <sub>3</sub> : nti-tu-gur-á	tu-ra-ba tú-rí-ho tu-ra-gur-a <i>we will be buying</i> N: ntabwo tu-ra-ba tú-rí-ho tu-ra-gura	tu-ra-ba tú-ki-gur-a <i>we will be still buying</i> N: tu-ra-ba tú-ta-ki-gur-a	tu-ra-ba tu-aa-guz-e tu-ra-ba tú-guz-e <i>we will have bought</i> N: ntabwo tu-ra-ba tu-aa-guz-e
F <sub>2</sub> -zaa-	tu-zaa-gur-a <i>we will buy</i> N <sub>1</sub> : ntabwo tu-zaa-gur-a N <sub>2</sub> : nti-tu-záa-gur-a	tu-zaa-jya tú-gur-a tu-zaa-hora tú-gur-a <i>we will buy</i> N <sub>1</sub> : ntabwo tu-záa-jya tú-gur-a N <sub>2</sub> : nti-tu-záa-jya tú-gur-a	tu-zaa-ba tú-Ø-gur-a tu-zaa-ba tu-ri-ho tu-(ra-)gur-a <i>we will be buying</i> N <sub>1</sub> : ntabwo tu-zaa-ba tu-gur-a N <sub>2</sub> : nti-tu-zaa-ba tu-ri-ho tu-gur-a	tu-zaa-ba tú-ki-gur-a <i>we will be still buying</i> N <sub>1</sub> : ntabwo tu-záa-ba tú-ki-gur-a N <sub>2</sub> : nti-tu-záa-ba tú-ki-gur-a	tu-zaa-ba tú-aa-guz-e tu-zaa-ba tú-aa-ra-guz-e <i>we will have bought</i> N <sub>1</sub> : ntabwo tu-zaa-ba tú-a-guz-e N <sub>2</sub> : nti-tu-zaa-ba tú-aa-guz-e

## D65 Ki-hangaza

	Perfective	Habitual <b>-ra-</b>	Progressive <b>'be' + LOC ... -ra-</b>	Persistentive <b>-ki-</b>	Anterior <b>-a- ... -ie</b>
P <sub>2</sub> <b>-á-</b>	tu- <b>á-guz-e</b> (+ COMP) tu- <b>á-ra-guz-e</b> <i>we bought</i> N: nti-tu- <b>á-guz-e</b>	tu- <b>á-gur-a</b> tu- <b>á-ra-gur-a</b> <i>we used to buy</i> N: nti-tu- <b>a-gur-a</b>	tu- <b>á-ri-mwó</b> tu- <b>ra-gur-a</b> <i>we were buying</i> N: nti-tu- <b>á-ri-mwó</b> tu- <b>ra-gur-a</b>	tu- <b>á-ri</b> tú- <b>ki-gur-a</b> <i>we were still buying</i> N: nti-tu- <b>á-ri</b> tú- <b>ki-gur-a</b>	tu- <b>á-ri</b> tu- <b>á-guz-e</b> <i>we had bought</i> N: nti-tu- <b>á-ri</b> tu- <b>a-gúz-e</b>
P <sub>1</sub> <b>-a-</b>	tu- <b>a-guz-e</b> (+ COMP) tu- <b>á-rá-guz-e</b> <i>we bought</i> N: nti-tu- <b>á-guz-e</b>	tu- <b>ra-gur-a</b> <i>we buy</i>	tu- <b>a-ri-mwo</b> tu- <b>ra-gur-a</b> <i>we were buying</i> N: nti-tu- <b>a-ri-mwo</b> tu- <b>ra-gur-a</b>	tu- <b>a-ri</b> tú- <b>ki-gur-a</b> <i>we were still buying</i> N: nti-tu- <b>a-ri</b> tú- <b>ki-gur-a</b>	tu- <b>a-ri</b> tu- <b>á-guz-e</b> <i>we had bought</i> N: nti-tu- <b>a-ri</b> tu- <b>á-guz-e</b>
<b>-Ø-</b>		N: nti-tu- <b>ráà-gur-a</b>	tu- <b>ri-mwó</b> tu- <b>ra-gur-a</b> <i>we are buying</i> N: nti-tú- <b>ri-mwó</b> tu- <b>ra-gur-a</b>	tu- <b>ra-cáá-gur-a</b> <i>we are still buying</i> N: nti-tu- <b>ki-gur-a</b>	tu- <b>(r)a-guz-e</b> <i>we have just bought</i> N: nti-tu- <b>a-guz-e</b>
Future <b>-zo-</b>	tu- <b>zo-gur-a</b> <i>we will buy</i> N: nti-tú- <b>zo-gur-a</b>	tu- <b>zo-za</b> tu- <b>ra-gur-a</b> <i>we will be buying regularly</i> N: nti-tú- <b>zó-za</b> tu- <b>ra-gur-a</b>	tu- <b>zo-ba</b> tú- <b>ri-mwó</b> tu- <b>ra-gur-a</b> <i>we will be buying</i> N: nti-tú- <b>zó-ba</b> tu- <b>ri-mwo</b> tú- <b>ra-gur-a</b>	tu- <b>zo-ba</b> tú- <b>ki-gur-a</b> <i>we will be still buying</i> N: nti-tú- <b>zó-ba</b> tú- <b>ki-gur-a</b>	tu- <b>zo-ba</b> tu- <b>â-guz-e</b> <i>we will have bought</i> N: nti-tu- <b>zó-ba</b> tu- <b>â-guz-e</b>

## E102 Lu-bwisi

	Perfective	Habitual <b>-agha</b>	Progressive <b>-Ø-</b>	Persistent <b>-na-</b>	Anterior <b>-ie</b>
Past <b>-ka- / -a-</b>	tu- <b>ka</b> -ghend-a <i>we went</i>  N: ta-tu- <b>ka</b> -ghend-a	tw- <b>a</b> -ghend- <b>agha</b> <i>we used to go</i>  n- <b>a</b> -b- <b>agha</b> <i>I was (being)</i>	tw- <b>a</b> -ba-ye n-tu- <b>Ø</b> -ghend-a <i>we were going</i>	tw- <b>a-na</b> -b- <b>agha</b> n-tu- <b>na</b> -li-a <i>we were still eating</i>	tu- <b>ka</b> -b-a tw- <b>a</b> -ghend- <b>ie</b> <i>or</i> tu- <b>Ø</b> -mal- <b>ie</b> ku-ghend-a <i>we had gone</i>  tw- <b>a</b> -ghend- <b>ie</b> <i>we went, have just gone</i>
	tu-ku-ghend-a <i>we are going, we will go</i> (NF/realis)  n-ku-b-a <i>I am</i>  ti-n-di <i>I am not</i>	tu-ku-ghend- <b>agha</b> <i>we go</i>  N: ta-tu-ku-ki-bon- <b>agha</b> <i>we do not see it</i>	(n-)tu- <b>Ø</b> -ghend-a <i>we go(ing)</i>	( <b>na</b> -)si- <b>na</b> -liisi-a <i>they are still feeding</i>	a- <b>Ø</b> -hek- <b>ie</b> <i>she is carrying</i>  tu- <b>Ø</b> -man- <b>ie</b> <i>we know</i>  N: abaana ti-bategheelel- <b>ie</b> <i>children are not listening</i>
Future <b>-li- / -la-</b>	tu- <b>li</b> -ghend-a <i>we will go</i> (FF/irrealis)	tu- <b>la</b> -ghend- <b>agha</b> <i>we will always go</i>			

E11 Ru-nyoro

	Perfective	Habitual <b>-Ø- / -aga</b>	Progressive <b>n(i)-</b>	Persistent <b>(ni-) ... -ki(-aa-)</b>	Anterior <b>-ire</b>
<b>P<sub>2</sub></b> <b>-ka- / -a-</b>	tu- <b>ka</b> -gúr-a <i>we bought</i> N: tu-ta-gúr-e	tu- <b>a</b> -gur- <b>ága</b> <i>we used to buy</i> N: ti-tu- <b>a</b> -gur- <b>ága</b>	tu- <b>ka</b> -ba <b>ni</b> -tu-gúr-a <i>we were buying</i> N: tu- <b>ka</b> -ba tu-tá-( <b>ru</b> -)ku-gur-a	tu- <b>ka</b> -ba <b>ni</b> -tu- <b>ki-áá</b> -gúr-a <i>we were still buying</i> N: tu- <b>ka</b> -ba tu-ta- <b>ki</b> -gúr-a	tu- <b>ka</b> -ba tu-gúz- <b>ire</b> <i>we had bought</i> N: tu- <b>ka</b> -ba tu-ta-guz- <b>íre</b>
<b>P<sub>1</sub></b> <b>-ire(-ge)</b>	tu-guz- <b>iré-ge</b> <i>we bought</i> N: ti-tu-guz- <b>iré-ge</b>	tu- <b>Ø</b> -gúr-a <i>we buy</i> N: ti-tu-gúr-a	tu-ba- <b>ire ni</b> -tu-gúr-a <i>we were buying</i> N: tu-ba- <b>ire</b> tu-tá-( <b>ru</b> -)ku-gur-a	tu-ba- <b>ire ni</b> -tu- <b>ki-áá</b> -gúr-a <i>we were still buying</i> N: tu-ba- <b>ire</b> tu-ta- <b>ki</b> -gúr-a	tu-ba- <b>ire</b> tu-gúz- <b>ire</b> <i>we had bought</i> N: tu-ba- <b>ire</b> tu-ta-guz- <b>íre</b>
<b>-Ø-</b>			<b>ni</b> -tu-gúr-a <i>we are buying</i> N: ti-tú-( <b>r</b> )u-ku-gur-a	<b>ni</b> -tu- <b>ki-áá</b> -gúr-a <i>we are still buying</i> N: ti-tu- <b>ki</b> -gúr-a	tu-guz- <b>íre</b> <i>we have bought</i> tu- <b>a</b> -ba tú-guz- <b>ire</b> <i>we had bought</i> N: ti-tu-guz- <b>íre</b>
<b>F<sub>1</sub></b> <b>-ra-</b>	tu- <b>ra</b> -gúr-a <i>we will buy</i> N: ti-tu-gúr-e			tu- <b>ra</b> -ba <b>ni</b> -tu-gúr-a <i>we will be buying</i> N: tu- <b>ra</b> -ba tu-tá-( <b>ru</b> -)ku-gur-a	tu- <b>ra</b> -ba <b>ni</b> -tu- <b>ki-áá</b> -gúr-a <i>we will still be buying</i> N: tu- <b>ra</b> -ba tu-ta- <b>ki</b> -gúr-a
<b>F<sub>2</sub></b> <b>-ri-</b>	tu- <b>ri</b> -gúr-a <i>we will buy</i> N: ti-tu- <b>ri</b> -gúr-a	tu- <b>ra</b> -gur- <b>ága</b> <i>we will buy regularly</i> N: ti-tu- <b>u</b> -gur- <b>ége</b>	tu- <b>ri</b> -ba <b>ni</b> -tu-gúr-a <i>we will be buying</i> N: tu- <b>ri</b> -ba tu-tá-( <b>ru</b> -)ku-gur-a	tu- <b>ri</b> -ba <b>ni</b> -tu- <b>ki-áá</b> -gúr-a <i>we will still be buying</i> N: tu- <b>ri</b> -ba tu-ta- <b>ki</b> -gúr-a	tu- <b>ri</b> -ba tu-gúz- <b>ire</b> <i>we will have bought</i> N: tu- <b>ri</b> -ba tu-ta-guz- <b>íre</b>

## E13 Ru-nyankore

	Perfective	Habitual -Ø- (... -aga)	Progressive ni-	Persistentive -ki-(aa-)	Anterior -Ø- ... -ire
P <sub>3</sub> -ka-	tú-ka-gur-a <i>we bought</i> N: ti-tu-rá-guz-ire	tu-ka-bá tú-Ø-gur-a <i>we used to buy</i>	tú-ka-bá ni-tu-gúr-a <i>we were buying</i> N: tu-ka-bá tu-tá-(r)í-ku-gur-a	tú-ka-bá tu-kí-(áá-)gur-a <i>we were still buying</i> N: tú-ka-bá tu-tá-ki-gur-a	tu-ka-bá tú-Ø-guz-ire <i>we had bought</i> N: tu-ka-bá tu-ta-guz-ire
P <sub>2</sub> -Ø- ... -ire	tu-Ø-guz-íre <i>we bought</i> N: ti-tu-guz-íre	tu-Ø-gúr-a <i>we buy</i> N: ti-tu-gúr-a	tu-Ø-ba-ire ni-tu-gúr-a <i>we were buying</i> N: tu-ba-ire tu-tá-(r)í-ku-gur-a	tu-Ø-ba-ire tu-kí-(áá-)gur-a <i>we were still buying</i> N: tu-ba-ire tu-tá-ki-gur-a	tu-Ø-ba-ire tú-Ø-guz-ire <i>we had bought</i> N: tu-ba-ire tu-ta-guz-ire
P <sub>1</sub> -a(a)-	tu-áá-gur-a <i>we bought</i> N: ti-tu-aa-gur-a		tu-aa-ba ni-tu-gúr-a <i>we were buying</i> N: tu-aa-ba tu-tá-(r)í-ku-gur-a	tu-aa-ba tu-kí-(áá-)gur-a <i>we were still buying</i> N: tu-aa-ba tu-tá-ki-gur-a	tu-aa-ba tú-Ø-guz-ire <i>we had bought</i> N: tu-aa-ba tu-ta-guz-ire
-Ø-			ni-tu-gúr-a <i>we are buying</i> N: ti-tú-rí-ku-gur-a	tu-kí-(áá-)gur-a <i>we are still buying</i> N: ti-tú-ki-gur-a	tu-Ø-guz-íre <i>we have bought</i> N: ti-tu-guz-íre
F <sub>1</sub> ni- ... -iža + INF	ni-tu-iža ku-gur-a <i>we will buy</i> N: ti-tú-ri-ku-iža ku-gur-a		ni-tu-iža ku-bá ni-tu-gúr-a <i>we will be buying</i> N: tu-ni-tu-iža ku-bá tu-tá-rí-ku-gur-a	ni-tu-iža ku-bá tu-kí-(áá-)gur-a <i>we will still be buying</i> N: ni-tu-iža ku-bá tu-tá-ki-gur-a	ni-tu-iža ku-bá tú-Ø-guz-ire <i>we will have bought</i> N: ni-tu-iža ku-bá tu-ta-guz-ire
F <sub>2</sub> -rí(a)-	tu-ríá-gur-a <i>we will buy</i> N: ti-tu-rí-gur-a	tu-ríá-gur-aga <i>we will buy (regularly)</i> tu-ri-ba ni-tu-gúr-a	tu-ri-ba ni-tu-gúr-a <i>we will be buying</i> N: tu-ri-ba tu-tá-rí-ku-gur-a	tu-ri-ba tu-kí-(áá-)gur-a <i>we will still be buying</i> N: tu-ri-ba tu-tá-ki-gur-a	tu-ri-ba tú-Ø-guz-ire <i>we will have bought</i> N: tu-ri-ba tu-ta-guz-ire

E16 Lu-soga

	Perfective	Habitual (-anga)	Progressive -Ø-	Persistentive -kia-	Anterior -mal- + -ile (-maz-e)
P <sub>3</sub> -aa-	tu-aa-gul-a <i>we bought</i> N: ti-tu-aa-gul-a	tu-a-gul-anga <i>we used to buy</i> N: ti-tu-aa-gul-anga	tu-aa-li tu-gul-a <i>we were buying</i> N: tu-aa-li ti-tu-li ku-gul-a	tu-aa-li tu-kia-gul-a <i>we were still buying</i> N: tu-aa-li te-tu-kia-gul-a	tu-aa-li tu-maz-e o-ku-gul-a <i>we had already bought</i> N: tu-aa-li tu-ka-li ku-gul-a
P <sub>2</sub> -a- ... -ile	tu-a-guz-e <i>we bought</i> N: ti-tu-a-guz-e	tu-Ø-gul-a <i>we buy</i> N: ti-tu-gul-a	(?) <i>we were buying</i>	(?) <i>we were still buying</i>	tu-a-maz-e o-ku-gul-a <i>we had already bought</i>
P <sub>1</sub> -ile	tu-guz-e <i>we (have) bought</i> N: ti-tu-guz-e		tu-ba-ile tu-gul-a <i>we were buying</i>	(?) <i>we were still buying</i>	tu-maz-e o-ku-gul-a <i>we had already bought</i>
-Ø-			tu-li ku-gul-a <i>we are buying</i> N: ti-tu-li ku-gul-a	tu-kaa-gul-a <i>we are still buying</i> N: ti-tu-kaa-gul-a	tu-maz-e o-ku-gul-a <i>we have bought</i>
F <sub>1</sub> -ida + INF	tu-ida ku-gul-a <i>we will buy</i> N: ti-tu-ida ku-gul-a		(?) <i>we will be buying</i>	(?) <i>we will be still buying</i>	(?) <i>we will have bought</i>
F <sub>2</sub> -li-	tu-li-gul-a <i>we will buy</i> N: ti-tu-li-gul-a	tu-li-gul-anga <i>we will buy regularly</i> N: ti-tu-li-gul-anga	tu-li-ba tu-gul-a <i>we will be buying</i> N: tu-li-ba ti-tu-li-gul-a	tu-li-ba tu-kia-gul-a <i>we will be still buying</i> N: tu-li-ba te-tu-kia-gul-a	tu-li-ba tu-maz-e oku-gul-a <i>we will have bought</i> N: tu-li-ba tu-ka-li ku-gul-a

Indefinite Future:      A: tu-naa-gul-a                      N: ti-tu-naa-gul-a                      *we will (not) buy*  
 Perfect:                      A: tu-aka-gul-a                      N: ti-tu-aka-gul-a                      *we have just bought*  
 cf.                              A: tu-guz-e                              N: ti-tu-guz-e                              *we (have) bought*

## E24 Ru-kerebe

	Perfective	Habitual <b>-aga</b>	Progressive <b>n(i) / -ku-</b>	Persistentive <b>-ki-(aa-)</b>	Anterior <b>-Ø- ... -ile</b>
<b>P<sub>3</sub></b> <b>-ka- /</b> <b>-a-li-ga</b>	tu- <b>ka</b> -gul-a <i>we bought</i> N: ti-tu- <b>a-gúz-ile</b>	tu- <b>a-gul-ága</b> <i>we used to buy</i> N: ti-tu- <b>a-gúl-aga</b>	tu- <b>a-li-ga n(i)</b> -tú-gul-á <i>we were buying</i> N: tu- <b>a-li-ga</b> tu-ta- <b>kú</b> -gul-a	tu- <b>a-li-ga</b> tu- <b>kí</b> -gul-a <i>we were still buying</i> N: tu- <b>a-li-ga</b> tu-ta- <b>kí</b> -gul-a	n- <b>ka</b> - <b>βá</b> n- <b>Ø</b> -gúz- <b>íle</b> <i>I had bought</i> N: n- <b>ka</b> - <b>βá</b> n-tá-guz- <b>ilé</b>
<b>P<sub>2</sub></b> <b>-Ø- ... -ile</b>	tu- <b>Ø</b> -guz- <b>ilé</b> <i>we bought</i> N: ti-tu-guz- <b>ilé</b>	A <sub>1</sub> : tu- <b>Ø</b> -gul- <b>agá</b> A <sub>2</sub> : tu- <b>Ø</b> -gul-á <i>we buy</i>  N <sub>1</sub> : tu-tú-gul- <b>aga</b> N <sub>2</sub> : ti-tu-gúl-a	tu- <b>βe-ele n(i)</b> -tú-gul-á <i>we were buying</i> N: tu- <b>βe-ele</b> tu-ta- <b>kú</b> -gul-a	tu- <b>βe-ele</b> tu- <b>kí</b> -gul-a <i>we were still buying</i> N: tu- <b>βe-ele</b> tu-ta- <b>kí</b> -gul-a	n- <b>βe-ele</b> n- <b>Ø</b> -gúz- <b>íle</b> <i>I had bought</i> N: n- <b>βe-ele</b> n-tá-guz- <b>ilé</b>
<b>P<sub>1</sub></b> <b>-a-</b>	tu- <b>a</b> -gul-á <i>we bought</i> N: ti-tu- <b>a</b> -gúl-a		tu- <b>a-li n(i)</b> -tu-gúl-a <i>we were buying</i> N: tu- <b>a-li</b> tu-ta- <b>kú</b> -gul-a	tu- <b>a-li</b> tu- <b>kí</b> -gul-a <i>we were still buying</i> N: tu- <b>a-li</b> tu-ta- <b>kí</b> -gul-a	n- <b>á</b> - <b>βá</b> n- <b>Ø</b> -gúz- <b>íle</b> <i>I had bought</i> N: n- <b>á</b> - <b>βá</b> n-tá-guz- <b>ilé</b>
<b>-Ø-</b>			tu- <b>kú</b> -gul-a <i>we are buying</i> N: ti-tu- <b>kú</b> -gul-a	tu- <b>caa</b> -gúl-a <i>we are still buying</i> N: ti-tu- <b>kí</b> -gul-a	tu- <b>Ø</b> -guz- <b>ilé</b> <i>we have bought</i> N: ti-tu-guz- <b>ilé</b>
<b>F<sub>1</sub></b> <b>-laa-</b>	tu- <b>laa</b> -gúl-a <i>we will buy</i> N: ti-tú-gul-a		tu- <b>laa-βa ni</b> -tú-gul-á <i>we will be buying</i> N: tu- <b>laa-βa</b> tu-ta- <b>kú</b> -gul-a	tu- <b>laa-βa</b> tu- <b>kí</b> -gul-a <i>we will still be buying</i> N: tu- <b>laa-βa</b> tu-ta- <b>kí</b> -gul-a	n- <b>daa</b> - <b>βa</b> n- <b>Ø</b> -gúz- <b>íle</b> <i>I will have bought</i> N: n- <b>daa</b> - <b>βa</b> n-tá-guz- <b>ilé</b>
<b>F<sub>2</sub></b> <b>-li-</b>	tu- <b>li</b> -gul-á <i>we will buy</i> N: ti-tu- <b>li</b> -gúl-a	tu- <b>laa</b> -gul- <b>ága</b> <i>we will buy (regularly)</i> N: ti-tuu-gul- <b>ega</b>	tu- <b>li-βa ni</b> -tu-gúl-a <i>we will be buying</i> N: tu- <b>li-βa</b> tu-ta- <b>ku</b> -gul-a	tu- <b>li-βa</b> tu- <b>kí</b> -gul-a <i>we will still be buying</i> N: tu- <b>li-βa</b> tu-ta- <b>kí</b> -gul-a	n- <b>di</b> - <b>βa</b> n- <b>Ø</b> -gúz- <b>íle</b> <i>I will have bought</i> N: n- <b>di</b> - <b>βa</b> n-tá-guz- <b>íle</b>

E46 Ki-sonjo (Ki-temi)

	Perfective	Imperfective <b>-aga</b>	Anterior <b>-ba-</b>
P <sub>2</sub> <b>-a-</b>	(n)tw- <b>a-gor-ε</b> <i>we bought</i>  N <sub>1</sub> : tu-ta-ndi-gol- <b>aga</b> <i>we have never bought</i> N <sub>2</sub> : n-ta-ndi etem-el- <b>aga</b> <i>I have never cultivated</i>	(n)tw- <b>a-gol-aga</b> <i>we were buying, used to buy</i>  N: tu-ta-gol- <b>aga</b> <i>we were not ...ing</i>	
P <sub>1</sub> <b>-ba-</b>	(n)tu- <b>ba-gor-ε</b> <i>we bought</i>  N <sub>1</sub> : tu-ta-ndi-gol(-a) N <sub>2</sub> : n-ta-ndi-(e)tem-a <i>I did not cultivate, I have not ... yet</i>	(n)tu- <b>ba-gol-aga</b> <i>we were buying</i>	
	(n)tu-gol- <b>ate</b> <i>we are buying</i>  N <sub>1</sub> : tu-ti-gol- <b>aga</b> N <sub>2</sub> : tu-ti-mune-gol(-a)	(n)tu-gol- <b>aga</b> <i>we buy regularly</i>  N: tu-ti-gol- <b>ete</b> <i>we are not buying</i>	(n)tu- <b>ba-gol-a</b> <i>we have bought</i>
Future <b>-ke-</b>	(n)tu- <b>ke-gol-a</b> <i>we will buy</i>  N <sub>1</sub> : tu-ti-gol- <b>ete</b> N <sub>2</sub> : tu-ti-mune-gol(-a)	tu- <b>ke-gol-aga</b> <i>we will be buying</i>  N: n-ti-mune-etem-el- <b>aga</b> <i>I will never cultivate</i>	

E56 Ki-daiso

	Perfective	Imperfective (?)	Situative -ki-
P <sub>3</sub> -a-	n-a-rem-a <i>I cultivated</i>  N <sub>1</sub> : ta-ti-ka-rem-a <i>we did not hoe</i> N <sub>2</sub> : si-ka-rem-a <i>I did not hoe</i> N <sub>3</sub> : ta-t-a-vika-(ku-)rem-a <i>we did not hoe, have not hoed, have never hoed</i>		t-a-re ti-ki-keta pata <i>we were working</i>
P <sub>2</sub> -raa-	ma-raa-j-i <i>they went</i>		
P <sub>1</sub> =Anterior -Ø-	ti-Ø-rem-a <i>we (have) hoed</i> ngo-rem-a <i>I (have) hoed</i>  N <sub>1</sub> : ta-t-a-rem-a, s-a-rem-a N <sub>2</sub> : si-vika-rem-a <i>I have not hoed yet</i>	N: ta-t-a-vika na-ti-rem-a <i>we have not hoed yet = we are still hoeing</i>	ni-ke-re ni-ki-rem-a <i>I was hoeing (when ?)</i>
	u-Ø-keta-cha <i>what are you doing?</i>	na-ti-Ø-rem-a <i>we hoe, are hoeing, will hoe</i>  N: ta-ti-rem-a <i>we do not hoe, are not hoeing, will not hoe</i>	ti-ki-doj-a <i>if we buy, when we bought, we buying, and we bought</i>
Future -sa-	ti-sa-rem-a <i>we will hoe</i> ni-sa-s-a <i>I will come</i>  N: ta-ti-Ø-rem-a, si-Ø-rem-a		

## E701 Ki-ilwana

	Perfective	Habitual -ka- / -ku-	Progressive -( )ku- ... -e:ni	(?)
Past	<p>tu-cek-<b>ie</b> <i>we laughed, have laughed, had laughed</i></p> <p>u-cek-<b>ie</b> <i>you laughed</i></p> <p>u-cék-<b>ie</b> <i>he laughed</i></p> <p>bozi u-f-<b>i:le</b> <i>the goat is dead</i></p> <p>N: da-tú-cek-<b>íé</b> <i>we did not laugh</i></p>		<p>tw-e:<b>ku-lim-e:</b> <i>we were hoeing (when he arrived)</i></p>	<p>n-é:-cek-<b>íé</b> <i>I laughed</i></p>
		<p>(niji-)tu-<b>ka</b>-som-a <i>we read regularly</i></p> <p>tu-<b>ka</b>-som-a <i>we read</i></p>	<p>ni-muku-<b>lím-é:ni</b> <i>I am cultivating</i></p> <p>N: da-ni-muku-<b>lím-é:ni</b></p>	
Future n- ... -aku-	<p><b>n-a:ko</b>-sóm-á <i>I will read, can read</i></p> <p>gy-a:kw-á:ban-a <i>it will fall (Cl. 7)</i></p> <p>N: da-<b>n-a:ko</b>-som-a <i>I will not read</i></p>		<p>tw-<b>a:kw-i:ta</b> tu-<b>ku-lim-e:(ni)</b> <i>we will be hoeing</i></p>	

E71 Lower Ki-pokomo

	Perfective	Situative <b>-ki-</b>	Progressive <b>-aku- ... -ni</b>	Anterior <b>-Ø-</b>
P <sub>2</sub> <b>-i-</b>	hw- <b>i</b> -guy-a <i>we bought</i>  N: nta-hu-ku-guy-a	hw- <b>i-ki</b> -guy-a <i>we were buying, used to buy</i> <i>/hw-i-w-a hu-ki-guy-a/</i>	hw- <b>i-w-a hu-guy-a-ni</b> <i>we were buying</i>	hw- <b>i-w-a hu-Ø-guy-a</b> <i>we had bought</i>
P <sub>1</sub> = Anterior <b>-Ø-</b>	hu- <b>Ø</b> -guy-a <i>we have bought = we bought</i>	hu-ka-a hu- <b>ki</b> -guy-a <i>we have been buying</i>	hu-w-a hw- <b>aku-guy-a-ni</b> <i>we were buying</i>	
	hu-na-gúy-a <i>we buy</i>  N: nta-hu-guy- <b>i</b> (or -e)	hu- <b>ki</b> -guy-a <i>we buying, if we buy</i>  hu-na-ka-a hu- <b>ki</b> -guy-a <i>we buy (HABITUAL)</i>	hw- <b>aku-guy-a-ni</b> <i>we are buying, will buy</i> <i>(near future)</i>  N: nta-hu-kw- <b>aku-guy-a-ni</b>	hu- <b>Ø</b> -guy-a <i>or</i> hu-ma-guy-a <i>or</i> hw-is-a ku-guy-a <i>we have bought</i>  N: nta-hu-dza-guy-a <i>we have not bought yet</i>
Future <b>-na-</b>	hú- <b>na</b> -guy-á <i>we will buy</i>  N: nta-hu-guy- <b>i</b> (or -e)	hu- <b>na-ka-a hu-ki</b> -guy-a <i>we will buy, be buying</i>	hu- <b>na-w-a hw-aku-guy-a-ni</b> <i>we will be buying</i>	hu- <b>na-w-a hu-Ø-guy-a</b> <i>or</i> hu- <b>na-w-a hw-is-a ku-guy-a</b> <i>we will have bought</i>

E71 Upper Ki-pokomo (Ndera)

	Perfective	Situative <b>-ki-</b>	Progressive <b>-a ... -ni</b>	Anterior = Past <b>-Ø-</b>
Past = Anterior <b>-Ø-</b>	<p>hu-Ø-chez-a <i>we (have) played</i></p> <p>N: nta-hu-ku-chez-a <i>we did not play, have not played</i></p> <p>hw-is-a ku-chez-a <i>we have just played</i></p> <p>N: nta-hu-ja-chez-a <i>we have not played yet</i></p>	<p>hu-w-a hu-ki-chez-a <i>we used to play</i></p> <p><i>or as left</i></p>	<p>hu-w-a h-a-chez-a-ni <i>we were playing</i> <i>(at the moment when, or</i> <i>all day long)</i></p> <p><i>or as right</i></p>	<p>hu-w-a hu-Ø-chez-a <i>we had played</i></p> <p>hu-w-a hw-is-a ku-chez-a <i>we had just played</i></p>
	<p>h-a-chez-a <i>we play (regularly)</i></p> <p>N: <i>as above</i></p>	<p>hu-ki-chez-a <i>we playing, when we play</i></p>	<p>h-a-chez-a-ni <i>we are playing</i></p> <p>h-a-ku-j-a-ni <i>we are coming</i></p> <p>N: nta-hu-koku-chez-a <i>we are not playing</i></p>	<p>hu-Ø-chez-a <i>we have played</i></p> <p>N: nta-hu-ku-chez-a <i>we did not play, have not played</i></p> <p>hw-is-a ku-chez-a <i>we have just played</i></p> <p>N: nta-hu-ja-chez-a <i>we have not played yet</i></p>
Future <b>-a-</b>	<p>h-a-chez-a <i>we will play</i></p> <p>h-a-ku-imb-a <i>we will sing</i></p> <p>h-a-na-gw-a <i>we will fall</i></p> <p>N: nta-h-a-chez-a</p>	<p>h-a-ku-w-a hu-ki-chez-a <i>we will play regularly</i></p>	<p>h-a-ku-w-a h-a-chez-a-ni <i>we will be playing</i></p>	<p>h-a-ku-w-a hu-Ø-chez-a <i>we will have played</i></p>

E74b Saghala (as spoken at Teri in 1984)

	Perfective	Progressive <b>-ende-</b>	Habitual <b>-a...-agha</b>	Anterior <b>-a...-a</b>	Inceptive (?) <b>-a-malila + INF</b>
Past <b>-a...-ile</b>	<b>t-a-ghul-ile</b> <i>or</i> <b>tanaghulile</b> <i>we bought</i>  N: s-ti-Ø-ghúl-íle	t-e-lú-o ti-ke-ghúl-á <i>we were buying</i>  N: s-t-e-lú-o ti-ke-ghúl-á			
	<b>ti-Ø-ghulagha</b> <i>we buy, are buying, will buy</i>  Also <b>ti-Ø-ghula ??</b>  N: s-tighulagha	<b>t-ende-ghul(agh)a</b> <i>we are buying, will buy</i>	<b>t-a-na-ghul-agha</b> <i>we buy (every day)</i>	t-a-ghúl-á <i>or</i> <b>t-a-na-ghula</b> <i>we have bought</i>  N: s-tighúlíle  mwana w-a-velo <i>child has been born</i>	<b>t-a-málíla kughula</b> <i>we have already bought</i>  N: t-a-na-ka-ílé kughula <i>we haven't bought yet</i>

This Saghala, source Gérard Philippon, p.c, differs somewhat from the Saghala in Wray (1894). Saghala seems to have changed in a century.

F25 Ci-vungu

	Perfective	Imperfective <sub>1</sub>	Imperfective <sub>2</sub> -aya	Persistentive -ce-le +	Anterior (?) -ile
P <sub>3</sub>	tw-a-kaz-ile <i>we bought</i>	inga to-Ø-kal-a <i>we were buying</i>	inga to-Ø-kal-aya <i>we used to buy</i>		
P <sub>2</sub>	tw-a-kal-a				
P <sub>1</sub>	tw-a-kal-a <i>we just bought</i>				
	to-ma-kal-a <i>we are buying</i>		to-Ø-kal-aya “we buy”	to-ce-le to-Ø-kal-a <i>we are still buying</i>  N: to-ce-le to-ta-kal-a <i>we have not bought yet</i>	to-Ø-kaz-ile <i>we have bought, we bought today</i>
F <sub>1</sub>	to-Ø-kal-a (also tw-izo-kal-a) <i>we will buy</i>				
F <sub>2</sub>	to-le-kal-e		to-le-kal-ay-e <i>we will buy (regularly)</i>		

F34 Bowe (Ki-mbugwe) (1)

	Perfective	Progressive <b>-kende-</b>	Habitual <b>-anda-</b>
<p>P<sub>3</sub> -á- ... -á</p>	<p>n-áa-rem-á <i>I hoed</i></p> <p>N: s-á-rem-íe</p>	<p>(n-)o-síta á-a-re o-ny-é rusú <i>he used to refuse to drink beer</i> <i>he was refusing to drink beer</i></p> <p>N: s-á-ré-rém-a <i>I was not hoeing</i></p>	
<p>P<sub>2</sub> -á- ... -íe</p>	<p>n-áa-rem-íe</p>		
<p>P<sub>1</sub> -Ø- ... -íe</p>	<p>n-dem-íe <i>I (have) hoed</i></p> <p>N: si-jé-rém-íe</p>		
	<p>(o-ny-a <i>you drink</i></p> <p>N: t-o-ny-a)</p>	<p>o-rem-a ku-kénde <i>we are hoeing</i></p>	<p>n-ándá-rem-a <i>I (usually) hoe</i></p> <p>N: si-jé-rém-a <i>I do not hoe often</i></p>
<p>Future INF + 'come' (-je)</p>	<p>o-ra ko-j-e <i>eat we will</i></p> <p>o-jé-mó-ra <i>you will eat him</i></p> <p>N: te-ko-je-rem-a <i>we will not hoe</i></p>		

F34 Bowe (Ki-mbugwe) (2)

	Perfective	Progressive -kende-	Habitual -anda-	Anterior ... -íe
Past -á-	n- <b>áa</b> -rem- <b>á</b> <i>I hoed</i>  N: s- <b>á</b> -rem- <b>íe</b>	(n) <b>o-síta</b> <b>á-a-re</b> o-nyé rusú <i>he used to refuse to drink beer</i> <i>he was refusing to drink beer</i>  N: s- <b>á-ré</b> -rém-a <i>I was not hoeing</i>		n- <b>áa</b> -rem- <b>íe</b> <i>I (have) hoed</i>
	(u-ny-a <i>you drink</i>  N: t-u-ny-a)	o-rem-a ku- <b>kénde</b> <i>we are hoeing</i>	n- <b>ándá</b> -rem-a <i>I (usually) hoe</i>  N: si- <b>jé</b> -rém-a <i>I do not hoe often</i>	n-dem- <b>íe</b> <i>I (have) hoed</i>  N: si- <b>jé</b> -rém- <b>íe</b>
Future INF + 'come' (-je)	<b>o-ra</b> ko- <b>j-e</b> <i>we will eat</i>  <b>o-jé</b> -mó- <b>ra</b> <i>you will eat him</i>  N: te-ko- <b>je</b> -rem-a <i>we will not hoe</i>			

G11 Chi-kagulu

	Perfective	Imperfective -aga	Persistentive -ŋ <sup>h</sup> ali	Anterior -Ø-...-a
Past <b>ha-...-Ø-</b> , or <b>-a-</b>	<b>ha-chi-Ø-luta</b> <i>or (infrequent)</i> <b>ch-a-luta</b> <i>we went</i> N: <b>chi-s-a-luta</b> <i>or</i> <b>chi-s-a-lut-ile</b>	<b>chi-Ø-j-aga</b> <i>we used to come</i> <b>ha-chi-Ø-lut-aga</b> <i>we were going</i>		
	<b>chi-ku-luta</b> <i>we go, are going, will go</i> N: <b>si-chi-ku-luta</b> <i>or</i> <b>chi-si-ku-luta</b>		<b>dimudyo di-ŋ<sup>h</sup>ali di-ku-diika</b> <i>the fruit is still edible</i>	<b>chi-Ø-luta</b> <i>we have gone</i> <b>chi-Ø-kala</b> <i>we are sitting</i> N: <b>si-mu-Ø-lut-ile</b> <i>you haven't gone</i> <b>si-chi-many-ile</b> <i>we don't know</i>
Future <b>-o-</b> , or <b>-ka-</b> (or <b>-ku-</b> )	<b>ch-o-luta</b> <i>or</i> <b>chi-ka-luta</b> <i>we'll go</i> N: <b>chi-si-ka-luta</b> <i>or</i> <b>si-chi-ka-luta</b>	<b>ch-o-ki-on-aga</b> <i>we will see each other repeatedly</i>		<b>chi-Ø-kuwa chi-Ø-lut-ile</b> <i>we'll have gone</i> <b>chi-Ø-kuwa chi-Ø-mala</b> <i>we'll have finished</i>

This is an interpretation of Petzell 2007. Kagulu also has many auxiliary-based forms.

G20A Mbugu / Ma'a

	Perfective	Imperfective, Situative? <b>-kú-</b>	Habitual <b>-tuwáá-</b> or <b>-túwa-</b>	Persistent <b>-chéri-</b> (or <b>-ra-/-re-</b> ?)	Anterior <b>-áa-...-a</b>
P <sub>2</sub> (?) <b>-áa-...-áa,</b> or <b>-ée-...-íye</b>	tw- <b>áa</b> -im- <b>áa</b> tw- <b>ée</b> -kúru- <b>ye</b> <i>we cultivated, we dug</i> N: te-tw- <b>ée</b> -kúru- <b>ye</b>	tw- <b>é</b> -kú-íma <i>we used to cultivate, were cultivating</i> N: te-v- <b>éku</b> -vika <i>they weren't putting</i>			
P <sub>1</sub> (?) <b>-Ø-...-íye</b>	tu- <b>Ø</b> -fum- <b>íye</b> <i>we came from</i> N: tetufum <b>íye</b>				
	tu- <b>Ø</b> -kúru tu- <b>Ø</b> -ima <i>we dig, are digging</i> N: te-tú- <b>Ø</b> -kúru	té- <b>kú</b> -kúru <i>if we dig, when we dig, 'we digging', etc.</i> N: tu- <b>ku</b> -sa-kuru	tu- <b>túwa</b> -ima we cultivate (HAB) N: te-tú- <b>túwa</b> -ima	tu- <b>chéri</b> -ima <i>we are still digging</i> N: té- <b>chéri</b> -kúru <i>he hasn't dug yet</i>  é- <b>re</b> -ata i'í <i>he's still here</i>	tw- <b>áa</b> -kúru <i>we have dug</i> tw- <b>áa</b> -kwáha <i>we are tired</i> N: te-tú-na-kúru
Future <b>-ne-</b>	tu- <b>ne</b> -kúru tu- <b>ne</b> -ima <i>we will dig, cultivate</i> N: te-tú-ka-kúru te-tú-ka-im-é				

This is one interpretation of Mous' (2003b) material. Main verbs: low-toned *-im-a* 'cultivate', high-toned *-kúru* 'dig' with unchanging final vowel. Meanings of many of these forms unclear (Mous 2003b: 121, 'rudimentary semantic analysis'). Negative equivalencies also uncertain in some cases. Many other (modal, discourse) morphemes may occur in the pre-stem position, up to three at a time (e.g *hé-né-za-ku-hláwa* 'there will be suffering for sure'). Compare this, G22 (especially), and G23.

G22 North Ki-pare (Ki-asu)

	Perfective	Imperfective <b>-eki-</b>	Habitual <b>-na-</b> / <b>'be' + MAIN VERB</b>	Persistive <b>-ra-</b> / <b>-ré-</b>	Experiential <b>-ána-</b>	Anterior
P <sub>2</sub> <b>-é- ... -ie</b>	tw- <b>é</b> -im- <b>ie</b> <i>we cultivated</i> N: te-tú-im- <b>ie</b> tw-ethí-im- <b>ie</b>	tw- <b>é'</b> ki-im-a <i>we were cultivating</i> N: te-tw- <b>é</b> ki-im-a tw-eth- <b>é</b> ki-im-a	tw-( <b>é</b> -)na-im-a <i>we used to cultivate</i> N: te-tú-na-im-a tw-ethí-na-im-a	tw- <b>é</b> -ré-im-a <i>we were still cultivating</i>		tw- <b>é'</b> ki-im- <b>ie</b> <i>we had cultivated</i> N: te-tw- <b>é'</b> ki-im- <b>ie</b> tw-eth- <b>é</b> ki-im- <b>ie</b>
P <sub>1</sub> <b>-é- ... -ie</b>	tw- <b>é</b> -im- <b>ie</b> <i>we cultivated</i>					
	tu- <b>Ø</b> -im-a <i>we cultivate, are cultivating</i> N: te-tú- <b>Ø</b> -im-a tw-ethí-im-a	tw- <b>é</b> ki-im-a <i>if we cultivate, "we cultivating"</i> N: tw- <b>é</b> ki-thá-im-a	tu- <b>Ø</b> -oka tu- <b>Ø</b> -im-a <i>we cultivate regularly</i> N: tu- <b>Ø</b> -oka te-tú-im-a	tu- <b>ra</b> -im-a <i>(or tu-re-hó tu-im-a)</i> <i>we are still cultivating</i> N: te-tú- <b>re</b> -im-a	tw- <b>ána</b> -im-a <i>we once cultivated, we have experience of cultivating</i> N: te-tw- <b>é</b> na-im-a	tw- <b>á</b> -im- <b>á</b> <i>we have cultivated</i> N: te-tú-na-im- <b>á</b> tw-ethí-na-im- <b>á</b> tw-athá-im-a
Future <b>-ne-</b>	tu- <b>ne</b> -im-a <i>we will cultivate</i> N: te-tú-ka-im- <b>é</b> tw-ethí-ka-im- <b>é</b>		tu- <b>ne</b> -oka-im-a <i>(or tu-ne-tua-im-a)</i> <i>we will regularly</i>	tu- <b>né</b> -ré-im-a <i>we will still be cultivating</i> N: tw-ethí-ka- <b>ré'</b> -im-a		β- <b>é</b> na-im-a <i>(or β-ána-im-a)</i> <i>they will have cultivated</i>

G35 Chi-lugulu

	Perfective	Progressive	Habitual <b>-aya</b>	Persistent <b>-gali +</b>	Anterior <b>-ile</b>
P <sub>2</sub> tsa ... -Ø-	<b>tsa tu-Ø-γul-a</b> <i>we bought</i>				
P <sub>1</sub> -Ø-	tu-Ø-γul-a <i>we bought</i> N: ηa-tu-gul- <b>ile</b> baye/mbe	tu-ηali tu-Ø-γul-a <i>(?) we were buying</i>	tu-ηali tu-Ø-γul- <b>aya</b> <i>we used to buy</i>		
	t- <b>o</b> -γul-a <i>we buy, are buying, will buy</i> N: ηa-t-o-γul-a baye/mbe		tu-γul- <b>aya</b> <i>we buy regularly</i>	tu- <b>gali</b> tu-γul-a <i>we are still buying</i>	tu-γul- <b>ile</b> <i>we have bought</i>
Future	tu- <b>tso</b> -gul-a <i>we will buy</i>		tu- <b>tso</b> -γul- <b>aya</b>		

G411 Chi-m(w)i:ni

	Perfective	Situative <b>-chi-</b>	Habitual <b>hu-</b>	Progressive <b>-naku-</b>	Anterior = Past <b>-ile</b>
Past = Anterior <b>(-ile)</b>	sh- <u>t</u> esh- <b>e</b> lé <i>we laughed</i>  N <sub>1</sub> : nt <sup>h</sup> a-sh-ko-olok-a <i>we did not go</i>  N <sub>2</sub> : nt <sup>h</sup> aasa nt <sup>h</sup> a-sh-ku- <u>t</u> ek-a <i>we have not laughed yet</i>	shi- <b>chi</b> - <u>t</u> ek-a <i>we were laughing, used to laugh</i>  chi-wa:liko sh- <b>ch</b> -u:l-a <i>we used to buy, were buying, were there buying (all day or at a specific point)</i>  N: nt <sup>h</sup> a-sh- <b>chi</b> - <u>t</u> ek-a	<i>as left</i>	si chi-wa:liko chi- <b>naku</b> -ul-a <i>we were buying</i>	(si) chi-wa:liko ch-u:z- <b>i:Le</b> <i>we had bought</i>  wa:liko le- <b>ele</b> <i>she was asleep, had fallen asleep</i>  chi-wa ha-shk <sup>h</sup> a:dir- <b>i</b> <i>we were we not able, we were sick</i>
		shi- <b>chi</b> - <u>t</u> ek-á <i>we laughing, if we laugh</i>	si <b>hu</b> - <u>t</u> ek-a <i>we laugh (regularly)</i>  N: si ha-sh- <u>t</u> ek- <b>i</b> <i>we do not (never) laugh</i>	chi- <b>nax</b> - <u>t</u> ek-á <i>we are laughing</i>  N: nt <sup>h</sup> a-chi- <b>nax</b> - <u>t</u> ek-a	sh- <u>t</u> esh- <b>e</b> lé <i>we have laughed</i>
Future <b>-ta:ku-</b>	sh- <u>t</u> a:x- <u>t</u> ek-a <i>we will laugh</i>  sh- <b>ta:ku</b> -j-a <i>we will eat</i>  N: ha-sh- <b>ta:ku</b> -j-a			si sh- <b>taku</b> -wa chi- <b>naku</b> -uL-a <i>we will be buying</i>	si sh- <b>taku</b> -wa ch-uz- <b>iLe</b> <i>we will/would have bought</i>

G52 Chi-ndamba

	Perfective	Imperfective <b>-agha / -aya</b>	Progressive <b>-ku- or -eyi</b>	Anterior <b>-Ø-...-a</b>
P <sub>2</sub> <b>-a-</b>	tw- <b>a</b> -telek-ili <i>we cooked (long ago)</i>	tw- <b>a</b> -telek- <b>agha</b> <i>we used to cook, were cooking</i>	tw- <b>a</b> -vel- <b>ili</b> tu- <b>ku</b> -telek-a <i>or</i> tw- <b>a</b> -telek- <b>eyi</b> <i>we were cooking</i>	tw- <b>a</b> -vel- <b>ili</b> tu- <b>Ø</b> -telek- <b>a</b> <i>we had cooked</i>
P <sub>1</sub> <b>-ka-</b>	tu- <b>ka</b> -telek-ili <i>we cooked</i>	tw- <b>ka</b> -telek- <b>agha</b> <i>we were cooking</i>	tw- <b>ka</b> -vel- <b>ili</b> tu- <b>ku</b> -telek-a <i>or</i> tw- <b>ka</b> -telek- <b>eyi</b> <i>we were cooking</i>	tu- <b>Ø</b> -telek- <b>ili</b> <i>we had cooked</i>  Structurally this is the Present Perfective
<b>-Ø-, -ku-</b>		tu- <b>Ø</b> -telek- <b>agha</b> <i>we usually cook</i>	tu- <b>ku</b> -telek-a <i>we are cooking, will cook</i>	tu- <b>Ø</b> -telek- <b>a</b> <i>we have cooked (often narrative)</i>
		tu- <b>ku</b> -telek- <b>agha</b> <i>we usually cook (generic)</i>		
Future <b>da-...-Ø-...-i,</b> or <b>na-...-Ø-...-i</b>	<b>da</b> -tu- <b>Ø</b> -telek- <b>i</b> <i>we'll cook</i>	<b>da</b> -tu- <b>Ø</b> -v- <b>i</b> tu- <b>Ø</b> -telek- <b>agha</b> <i>we'll cook, be cooking</i>	<b>da</b> -tu- <b>Ø</b> -v- <b>i</b> tu- <b>ku</b> -telek- <b>a</b> <i>or</i> <b>da</b> -tu- <b>Ø</b> -telek- <b>eyi</b> <i>we'll be cooking (at specific time)</i>	<b>da</b> -tu- <b>Ø</b> -v- <b>i</b> tu- <b>Ø</b> -telek- <b>a</b> <i>we'll have cooked</i>

H16 Ki-kongo (Laman)

	Perfective	Imperfective
P <sub>3</sub> -a-	tw- <b>a</b> -káng-a <i>we bound</i>  N: k- <b>a</b> tw- <b>a</b> -káng-a <b>ko</b>	tw- <b>a</b> -káng- <b>ang</b> -a <i>we were binding, used to bind</i>
P <sub>2</sub> -a- ... -idi	tw- <b>a</b> -keng- <b>i</b> <i>we bound</i> tw- <b>a</b> -dimb- <b>idi</b> <i>we praised</i>	tw- <b>a</b> -keng- <b>ing</b> -i
P <sub>1</sub> -idi	tu- <b>Ø</b> -keng- <b>i</b> <i>we bound, have bound</i> tu- <b>Ø</b> -dimb- <b>idi</b> <i>we praised, have praised</i>	tu-keng- <b>ing</b> -i
-Ø-	tu- <b>Ø</b> -káng-a <i>we bind, will bind (near)</i>  N: k- <b>a</b> tu-káng-a <b>ko</b>	tu-káng- <b>ang</b> -a <i>we are binding</i>
Future -a-	tw- <b>á</b> -káng-a <i>we will bind</i>	tw- <b>à</b> -káng- <b>ang</b> -a

K11 Cokwe

	Perfective	Anterior <b>hi-</b> ... -VC	Progressive <b>-na-</b> ... -VC	Habitual <b>-ááku-</b>	Persistentive <b>ci-</b> / - <b>ci-</b>	Assertion <b>ku-</b>
P <sub>4</sub> <b>-á-</b> ... <b>-ile</b>	<b>n-á-lim-ine</b> <i>I hoed</i> N: <b>c-a-lím-ine</b>			<b>k-á-pw-ile</b> nyi-ku-lim-a <i>he used to hoe</i>	<b>ci-n-á-lim-ine</b> <i>I still hoed</i>	<b>ku-n-á-lim-ine</b> <i>I definitely hoed</i>
P <sub>3</sub> <b>-na-(ka-)</b>	<b>ngú-na-ka-lim-a</b> N: <i>as above</i>	<b>hi-ngú-ná-lim-i</b> <i>I have (already) hoed</i>			<b>ci-ngú-na-ka-lim-a</b>	<b>ku-ngú-na-ka-lim-a</b>
P <sub>2</sub> <b>-á-</b> ... <b>-anga</b>	<b>n-á-lim-anga</b> N: <i>as above</i>				<b>ci-n-á-lim-anga</b>	<b>ku-n-á-lim-anga</b>
P <sub>1</sub> <b>-á-</b>	<b>n-á-lim-a</b> N: <b>c-a-lim-ine</b>				<b>ci-n-á-lim-a</b>	<b>ku-n-á-lim-a</b>
		<b>hi-ngu-Ø-lím-í</b> <i>I have hoed (recently)</i>	<b>ngú-ná-lim-i</b> <i>I am hoeing</i> N: <b>ci-shi-ku-lím-a</b>	<b>n-ááku-lim-a</b> <i>I hoe (habitually)</i> N: <b>ci-cíkù-lim-a</b>	<b>mú-ngú-ci-lim-a</b> <i>I am still hoeing</i> N: <b>kandá-ngú-ci-lim-a</b> <i>I have not hoed yet</i>	<b>ku-ngú-ná-lim-i</b> <b>ku-n-ááku-lim-a</b>
F <sub>1</sub> <b>mú-</b> ... <b>-Ø-</b>	<b>mú-ngu-Ø-lim-a</b> <i>I will hoe</i> N: <b>ci-ciká-lím-a</b>					<b>ku-mú-ngu-Ø-lim-a</b> <i>I will definitely hoe</i>

## K14 Chi-luvale

	Perfective	Habitual AUX ... -anga	Progressive 'be' + na	Anterior -a-
P <sub>3</sub> -a- ... -ile	tw-a-mu-vwík-ile <i>we dressed him</i> N: ka-ngw-a-lánj-íle-ko <i>I did not buy</i>		ngw-a-pw-íle na ku-tángis-a <i>I was teaching</i> N: ka-ngw-a-pw-íle na ku-tángis-á-ko	
P <sub>2</sub> -a- ... -anga	ngw-a-tángis-anga <i>I taught</i> N: ka-ngw-a-mu-tángis-angá-ko <i>I did not teach him</i>		ngw-a-pw-anga na ku-tángis-a <i>I was teaching</i> N: ka-ngw-a-pw-anga na ku-tángis-á-ko	
P <sub>1</sub> -na- ... -VC	ngu-na-mu-zúl-u <i>I undressed him</i> N: ka-ngw-a-lanj-ílé-ko <i>I did not buy</i>		ngu-ná-p-ú na ku-tángis-a <i>I was teaching</i> N: ka-ngu-na-pw-íle na ku-ángis-á-ko	
		ngw-echi ku-tángis-a-(nga) <i>I teach</i> N <sub>1</sub> : ka-ngw-échi ku-tángis-á-(nga)-ko N <sub>2</sub> : ka-ngw-a-mu-tángis-á-ko <i>I do not teach him</i>	ngu-(lí-)na ku-tángis-a <i>I am teaching</i> N: ka-ngw-échi na ku-tángis-á-ko	ngw-á-ly-a <i>I have eaten</i> N: kandá ngu-ly-é
F <sub>1</sub> na-	ná-vá-tángis-a <i>they will teach</i> N: ka-ngw-échi ngu-tángis-é-ko <i>I will not teach</i>		ná-ngu-pw-a na ku-tángis-a <i>I will be teaching</i> N: ka-ngw-échi ngu-pw-é na ku-tángis-á-ko	
F <sub>2</sub> na- ... -ka-	na-tu-ka-tángis-a <i>we will teach</i> N: kéchi a-ká-ly-é-ko <i>he will not eat</i>		ná-ngu-ká-pw-á na ku-tángis-a <i>I will be teaching</i> N: ka-ngw-échi ngu-ka-pw-é na ku-tángis-á-ko	

## K332 Dciriku

	Perfective	Progressive	Anterior
P <sub>2</sub> -à-	tw-a-píng-ire <i>we inherited</i>		tw-a-píng-a <i>we (have) inherited</i>
P <sub>1</sub> -v̂c	ká-tu-píng-i <i>we inherited</i>	amě kú-ná-jimb-i <i>I was just singing</i>	tu-na-píng-i <i>we have inherited</i>  tu-na-júv-u <i>we hear</i>
		murúme kú-na-ku-dípag-a <i>the man is killing</i>	
F <sub>1</sub> (kú- ...) -Ø- ... -á	(kú-)tu-Ø-píng-á <i>we will inherit</i>		
F <sub>2</sub> ngá- ... -Ø- ... -à	ngá-tu-Ø-píng-a <i>we will/may inherit</i>		

## K352 Si-mwenyi

	Perfective	Habitual -ánga	Progressive -ilé	Persistentive -si-	Anterior (?)
P <sub>3</sub> <b>mbá na- / -naku-</b>	<b>mbá ná</b> -ni-b-a <i>I gave</i> ní- <b>nakú</b> -mon-á <i>I saw</i>	<b>mbá ná</b> -ni-mon-ánga <i>I used to see</i>			
P <sub>2</sub> <b>mbá na- ... -VC</b>	<b>mbá na</b> -ni-mú-mon-ó <i>I saw him</i> N: ká-n-a-mon-íne				
P <sub>1</sub> <b>-na- ... -VC</b>	sí- <b>na</b> -mú-mon-ó <i>I saw him (today)</i> N: ká-n-así-mon-á				
	n- <b>a</b> -món-a <i>I see</i>	n- <b>á</b> -mon-ánga <i>I see (regularly)</i> N: ká-tu-mon-ángá <i>we do not see</i>	ní-mon-íne <i>I am looking</i> N: ká-tu-mon-íne <i>we are not looking</i>	ní- <b>si</b> -mon-á <i>(?) I still see</i> ní- <b>si</b> -mon-íne <i>I am still seeing</i>	
F <sub>1</sub> <b>mbá ... -Ø- ... -a</b>	<b>mbá</b> ni-Ø-mú-b-a <i>I will give him</i> <b>mbá</b> ni-Ø-món-a <i>I will see</i> N: ká-n-akú-mon-á				
F <sub>2</sub> <b>tambá ... -Ø- ... -e</b>	<b>tambá</b> ni-Ø-món-e <i>I will see</i> N: ká-ni-mon-ó				
F <sub>3</sub> <b>tamba mbá ... -Ø- ... -e</b>	<b>tamba mbá</b> ni-Ø-món-e <i>I will see</i> N: ka- <b>mba</b> ní-mon-ó <i>I will never see</i>	kúmba <b>mbá</b> ni-Ø-mon-ánga <i>I will see regularly</i>			

L23 Ki-songye, Lu-songye

	Perfective	Progressive -Ø- ... -a(ng)a	Persistentive -kí-	Inceptive Anterior (?) -ta(:)-
P <sub>3</sub> -bá:- ... -ile	tu-ba:-sép-ele <i>we hoed (before yesterday), we had hoed</i>	tu-baá-di tu-Ø-dim-a(ng)a <i>we were hoeing</i>	N: tatu-kí-báá-di tu-dim-anga <i>we did not hoe anymore</i>	tú-tá-báá-dím-ine <i>we had already hoed</i>
P <sub>2</sub> -Ø- ... -ilé	tu-Ø-dim-iné <i>we hoed (yesterday)</i>	tu-Ø-fun-iné tu-Ø-dim-a(ng)a <i>we were hoeing</i>		tú-táá-dím-ine <i>we have already hoed</i>
P <sub>1</sub> -bá:- ... -vC	tu-ba:-dím-i <i>we (have) just hoed</i> tu-ba:-sép-e <i>we (have) just laughed</i>			
	tw-a-dim-ǎ(ng)á <i>we hoe, are hoeing, were hoeing</i> tw-e-kan-ángá tu-dim-anga <i>we usually hoe</i>	tu-Ø-dim-a(ng)a, tu-Ø-kwëte tu-dim-a(ng)a <i>we are hoeing</i>	tu-ki-dim-anga <i>we still hoe, are still hoeing</i>	tú-táá-dím-ǎ(ng)á <i>we are already hoeing</i>
Future -a:ku-	tw-aku-sep-a <i>we will laugh</i>		N: tatu-ky-áku-dim-a	

## L31a Cí-luba (Luba Kasayi)

	Past	Present
Perfective	tú-Ø-kwac- <b>ilé</b> <i>we seized</i>	tú-Ø-énz-á <i>we do, are doing</i>
Imperfective <b>'be' + PfV</b>	tú- <b>vú</b> -á tú-Ø-énz-á <i>we were doing, used to do</i>	tú-Ø-dí tú-Ø-énz-á <i>we are doing, will do</i>
Habitual <b>-tu + PfV</b>	<i>as above?</i>	ú- <b>tú</b> ú-y-a <i>you always go</i>  ú- <b>tú</b> w-â-y-a <i>you go regularly</i>
Persistentive <b>-ci-</b>	tú- <b>ci</b> -vú-á tú-kwat-á <i>we were still holding</i>	n- <b>ci</b> -kwat-á <i>I still hold</i>  n- <b>ci</b> -dí n-kwat-á <i>I am still holding</i>
“Subsecutive” <b>-a-</b>		mb- <b>â</b> -kwat-á <i>I hold, held, will hold, that I hold, and I hold, etc.</i>
Anterior <b>-a- ... -í</b>		tw- <b>â</b> -kwac- <b>í</b> <i>we have seized</i>
Itive <b>-ká-</b>		tú- <b>ká</b> -kwat-á <i>we are going to hold</i>  tú- <b>ká</b> -dí tú-kwat-á <i>we are about to hold</i>

## L33 Ki-luba-shaba

	Perfective	Imperfective <b>-ngá</b>	Persistentive <b>-kì-</b>	“Go to” <b>-ká-</b>	Anterior (?)
P <sub>3</sub> <b>-á- ... -ile</b>	<b>n-áá-pááp-ile</b> <i>I carried</i>				
P <sub>2</sub> <b>-a- ... -ilé</b>	<b>w-aa-cip-ílé</b> <i>he swore</i> <b>w-áa-tw-ilé</b> <i>you pounded</i>				
P <sub>1</sub> <b>-(b)áá- ... -é / -à</b>	<b>w-aá-cip-é mú-cip-o</b> <i>he swore, has sworn</i> <b>tú-baá-mon-é</b> <i>we saw, have seen</i> <b>tú-baá-pál-a</b> <i>we (have) paid</i>	<b>w-aá-dya-ngá</b> <i>he has really eaten</i> <b>w-aá-fwa-ngá</b> <i>he is really dead</i>	<b>w-aa-dí u-ki-dy-á</b> <i>he was still eating</i>	<b>ú-baa-ká-di</b> <i>you went to eat</i>	
<b>-Ø-</b>	<b>ng-énd-á</b> <i>I walk</i> <b>N: ké-tu-fík-a-po</b> <i>we do not arrive</i>	<b>m-Ø-póyá-ngá</b> <i>I hunt (regularly)</i> <b>N: n-Ø-ki-tomé-ngá-po</b> <i>I do not drink regularly</i>	<b>ná-ki-sép-á</b> <i>I still laugh</i>		
Future <b>-ka-</b>	<b>u-ka-tum-a</b> <i>you will send</i> <b>N: ké-mu-kátóok-á-po</b> <i>you will not purify</i>	<b>n-ká-póyá-ngá</b> <i>I will hunt regularly</i>			

N14 Su-mpotu

	Perfective	Progressive
P <sub>3</sub> -a- ... -iti	t-a-hik-iti <i>we came</i>	t-a-yi-li mu-ku-l-a <i>we were eating</i>
P <sub>2</sub> -ka- ... -iti	ti-ka-hik-iti <i>we came</i>	ti-ka-yi-li mu-ku-l-a <i>we are been eating</i>
P <sub>1</sub> -Ø- ... -iti	ti-Ø-hik-iti <i>we came</i>	
	ti-Ø-hik-a <i>we come, are coming, will come</i>	ti-Ø-yi-li mu-ku-l-a <i>we are eating</i>
F <sub>1</sub> ya- ... -Ø- ... -(ay)i	ya-ti-Ø-hik-(ay)i <i>we will come very soon</i>	
F <sub>2</sub> -ká- ... -ayi	ti-ká-hek-ayi <i>we will laugh</i>	
F <sub>3</sub> -á- ... -a(yi)	t-á-hek-ayi <i>we will laugh</i>	t-á-ayi mu-ku-l-a <i>we will be eating</i>

R21 Oshi-kwányáma

	Perfective	Habitual ha-...-Ø-...-VC	Progressive	Anterior ...-VC
‘Remote Past’ -á-...-ile	o-kw-á-tung-ílé <i>she built</i>  N: ka-nd-a-hálúk-ile <i>I was not frightened</i>			
‘General Past’ -a-...-a	tw-a-fika <i>we arrived</i>  N: i-na-mu-Ø-haluka <i>ye were not frightened</i>	o-kw-á-li ha-Ø-end-e <i>she used to go</i>	o-kw-á-li tw-a-til-á <i>we were fearing</i>	tw-á-nyón-ó <i>we’ve destroyed</i>
Non-past tá-/há-...-Ø-VC  -ka-...á	ta-vá-Ø-yól-o <i>they laugh, are laughing, will laugh</i>  <b>há-ndí-ká-dénga</b> <i>I will (go and) meet</i>  N: i-ta-mú-Ø-haluk-á <i>ye are not frightened</i>  i-t-o-ká-món-a <i>you will not (go and) see</i>	o-há-ndi-Ø-énd-e <i>I go (regularly)</i>  <b>o-há-vá-ka-lándifa</b> <i>they usually (go and) sell</i>  N: i-ha-mú-Ø-haluk-á <i>ye are usually not frightened</i>		

## S32 Northern Se-sotho

	Perfective	Imperfective (‘be’ +) -Ø-	Habitual	Persistentive -sa-	Anterior (‘be’ +) -ile	Conditional (‘be’ +) -tlo-
Past		re-b-e re-Ø-rek-a <i>I was buying</i>  N: re-b-e re-sa-rek-a		re-b-e re-sa-rek-a <i>we were still buying</i>  N: re-b-e re-sa-hlwe re-rek-a	re-b-e re-rek-ile <i>we had bought</i>  N: re-b-e re-se-ka-rek-a	re-b-e re-tlo-rek-a <i>we would have bought</i>  N: re-b-e re-sa-tlo-rek-a
	(1) re-rék-á dijo <i>we buy, are buying food</i>  (2) re-a-rék-a <i>we buy, are buying</i>  N: ga-ré-rék-e <i>we do not buy, are not buying</i>	ré-Ø-rék-a <i>we buy, are buying, if we buy</i>  N: ré-sa-rék-e	re-rék-e <i>we buy</i> (HABITUAL)  N: ré-se-rék-e	re-sá-rék-a <i>we still buy, are still buying</i>  N: ga-ré-sa-rék-a <i>we no longer buy, are no longer buying</i>	re-rék-ile <i>we (have) bought</i>  N: ga-ré-a-rék-a <i>or</i> ga-sé-r-a-rék-a	
Future -tlo- / -tla-	re-tlo-rék-a <i>or</i> re-tla-rék-a <i>we will buy</i>  N: re-ká-se-rék-e	re-tlo-b-e/-a re-Ø-rek-a <i>we will be buying</i>  N: re-tlo-b-e/-a re-sa-rek-e		re-sá-tlo-rék-a <i>we will still buy</i>  re-tlo-b-e/-a re-sa-rek-a <i>will still be buying</i>  N: ga-ré-sá-tlo-rék-a	re-tlo-b-e/-a re-rek-ile <i>we will have bought</i>  N: re-tlo-b-a/-e re-se-ka-rek-a	