Counterfactual conditional sentences in Mbugu

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Mbugu (or Ma'a) is the language spoken in the West Usambara Mountains of Tanzania. It has two varieties. The first variety is a "mixed language" featuring the Bantu concord system and numerous words of non-Bantu origin called *Kimbugu cha ndani* "Inner Mbugu" in Swahili and the second variety is similar to the Bantu language Pare (G22) called *Kimbugu cha kawaida* "Normal Mbugu."

In counterfactual conditional sentences in Mbugu, both protasis and apodosis state counterfactual propositions. No distinction in construction is observed between subjunctive past and subjunctive past perfect. The constructions are as shown below:

(1) Protasis: affirmative apodosis: affirmative

kai (KK kama) S -ée- (O) - V - (Verbal Inflectional Suffix(es)) -je/íe,
CONJ.if S-PST$_2$-(O)-V-(VIS)-PST$_1$

aNgá S -sée- (O) - V - (VIS) -je/íe
CONJ.then (IRR) S-IRR-(O)-V-(VIS)-PST$_1$

(2) Protasis: negative apodosis: affirmative

kai (KK kama) NegS -ée- (O) - V - (VIS) -je/íe, aNgá NegS -sée- (O) - V - (VIS) -je/íe

(3) Protasis: affirmative apodosis: negative

kai (KK kama) S -ée- (O) - V - (VIS) -je/íe, aNgá NegS -sée- (O) - V - (VIS) -je/íe

(4) Protasis: negative apodosis: negative

kai (KK kama) NegS -ée- (O) - V - (VIS) -je/íe, aNgá S -sée- (O) - V - (VIS) -je/íe

Nurse describes *aNgá* (*-nga-* in Nurse 2008) in apodosis as belonging to the "concessive," "conditional," "potential," "irrealis," "may," and "if/when" forms. But, in Mbugu, it exists only in the "irrealis" mood. A similar form of the prefix *-sée-* used in apodosis is *-sáa-*, which is used as a negative prefix; however, *-sée-* does not seem to have a negative meaning. It is used as a conditional marker in the irrealis mood.

This paper discusses the counterfactual conditional sentences in Mbugu with reference to its neighboring languages such as Shambaa and Pare.

Reference:

Nurse, Derek. 2008. *Tense and Aspect in Bantu.* Oxford: Oxford University Press.

Basaá Fragments: EPP and focus movement

Paul Roger Bassong

Abstract

I propose a new syntactic approach to fragment answers in light of Basàá (Bantu) by showing that they involve focus fronting of a null focus operator in the embedded clause followed by A-movement of a matching head of an external relative clause into the matrix TP. The first movement step is said to be driven by focus requirements while the second is argued to be driven by the classical EPP requirements that every clause should have a subject. By adopting Merchant's (2001 etc) ellipsis approach, I also show that contrary to what is widely known in the literature, the syntactic derivation of Basàá fragments differs from what is proposed for many languages. Based on data such as in (1) below,

(1) Q: Kíí **í** ŋúdú a- ń-tila A: kaat **i**
7.what 7.Evid 1.student 1.SM-PRS-write 7.letter 7.Evid
'What is the student writing/what is it that the student is writing?' 'A LETTER'
B: kaat **i** **jɔ̌-n** pro$_i$ a$_i$- ń-tila
7.letter 7.Evid 7-FOC pro 1.SM-PRS-write
'He is writing a LETTER'

I propose that A's statement is derived from B's via a movement plus deletion process that targets a focus phrase (FocP) as briefly depicted in (2) where the fragment is initially merged as the external head of a relative clause prior to its movement into Spec-TP of the matrix clause while a null focus operator is moved ~~into~~ Spec-FocP such that the remnant and the null operator are linked via ~~a~~ feature ~~ma~~tching mechanism.

(2) [TP **kaat**$_i$ [T$^{[EPP]}$[VP[V ø [DP **kaat**$_i$ [ForceP[Force[EvidP[Evid **i** <[FocP **Op**$_i$ [Foc **jɔ̌-n** [AgrCP[AgrC **jɔ̌**-[TP…**Op**$_i$…]]]]]]]>

Keywords: Bantu, Basa'a, Evidentiality, Focus, EPP.

Selected references:

Grimshaw, J. (1991). 'Extended projection'. ms, Brandeis University.

Merchant, J. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: OUP.

Corpus of Spoken Xhosa

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The aim of this poster is to present ongoing work on a multi-modal corpus of transcribed spoken Xhosa. The development of the corpus takes place within the project Morpho-syntactic variation in the dialects of Xhosa, funded by the Swedish Research Council.

The aim of the corpus is to share data and provide a resource for a wide community of researchers within linguistics and other disciplines, who want access to natural spoken Xhosa. The corpus explicitly incorporates variation of any kind, be it geographical, socioeconomic, gender- or age-based. Metadata is therefore very important. The corpus can be used for the study of variation, but as variation is intrinsic to language and can depend on many different factors, we do not tag a text as being of a certain variety. We do not classify the variation. We merely provide the metainformation that tells the researcher that the speaker in question is e.g. male, from Mthatha, and educated until grade 9.

Importantly, this corpus is multi-modal, i.e. it incorporates audio as well as video, and the transcribed text.

A foot-based typology of mobile tone

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Many Bantu languages show mobile tone: they have some form of shift or spread. The target of such tonal movement can be either local ('bounded') or at a long distance ('unbounded'). An analysis of mobile tone has to answer two questions: why does tone move, and why does it stop moving where it does?

This talk argues that foot structure answers both questions. For bounded tone, all tone movement occurs in a locally constructed foot. For unbounded tone, a foot at the edge of the prosodic domain defines the target for tone movement. Examples are in (1) and (2).

The present proposal offers two improvements over previous works (notably Bickmore 1996; Cassimjee and Kisseberth 1998; Key 2007). Firstly, the size of the tone movement domain, which is typically 2-3 syllables, is a result of foot representation, rather than a stipulation. Secondly, the foot-based approach obviates the need for constraints that mix markedness and faithfulness.

The foot-based approach uses cutting-edge phonological theory to achieve its results. Harmonic Serialism is adopted as the grammar framework, to allow foot construction to precede tone movement (McCarthy 2010). The approach also adopts recently proposed layered foot representations, to accomodate patterns that span three syllables (Martínez-Paricio and Kager forthcoming). Lastly, the constraint set is based on De Lacy (2002), but uses licensing constraints (Zoll 1996).

Previous work demonstrated its typological predictions through select showcases. The typology of the present approach has been more thoroughly explored using OT-Workplace (Prince et al. 2015) and software by the author. Results include binary and ternary bounded shift and spread, as well as unbounded shift and spread to the final, penult, and antepenult, all of which are attested.

(1)	$\acute{\sigma}\sigma\sigma$	$\rightarrow$	$(\acute{\sigma}\sigma)\sigma$	$\rightarrow$	$(\acute{\sigma}\acute{\sigma})\sigma$	$\rightarrow$	$(\sigma\acute{\sigma})\sigma$
	0. UF		1. Footing		2. Linking		3. Delinking

(2)	$\acute{\sigma}..\sigma\sigma]$	$\rightarrow$	$\acute{\sigma}..(\sigma\sigma)]$	$\rightarrow$	$\acute{\sigma}..(\acute{\sigma}\sigma)]$	$\rightarrow$	$\sigma..[(\acute{\sigma}\sigma)$
	0. UF		1. Foot at edge		2. Link (gapped) to foot		3. Delinking

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Herbivores and their symbolism in Bantu speaking communities: a linguistic contribution

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In Bantu speaking communities, the symbolism of the lion or the leopard is well known notably as a mark of power. Here we show that a similar representation is attested for herbivores. In these communities, herbivores may represent vivacity, speed, beauty, strength, nobility or bravery. For instance, the giant sable antelope or palanca negra *Hippotragus niger (Harris, 1838)* is the national symbol of Angola. Besides being a means of subsistence, these animals are sometimes seen as divinities or sacred beings. This is the case of the Aka (Thomas *et al.,* 1981: 168) where: *"…we find in the animal world representations of the human world, characteristics, feelings, capabilities: the elephant* **(nz k** *is a model of strength, wise and calm, but he shines not because of his intelligence"; "the white bellied duiker,* **n** *´) is an animal with a baleful spirit for the Aka… (id.p. 93)".* Certain antelopes, especially *Philantomba monticola (Thunberg, 1789)*, are present in tales and proverbs. All this mythology centered on animals is represented metaphorically in Bantu speaking cultures through the denominations of certain species to name persons, things, plants, fruits etc. This paper aims at: **1)** reinforcing the idea that through a metaphorical process, a symbolic name may display a semantic broadening and thus have more than one meaning, and **2)** showing that such a name may be given to people or things via physical or psychological motivations. For instance: C101- Aka '**mbólókó'** *'blue duiker'; 'mushrooms'; 'buffalos, groups of patrilineal filiations' (*Thomas *et al., 1981: 99).*C41- Ngombe '**gbongó na mondongá'** *'the big and the small antelope; 'names given to twins'.* (Rood, 1958: 124). C61- Lomongo **'bofalá'** *'Cephalophus callipgurus Peters; 'fig. someone who has no fixed residence, woman who doesn't stay long with the same husband, inconstant'.* (Hulstaert, 1956: 127). According to Hulstaert (1956: 94), the use of the names of the herbivores is common in anthroponyms. We can mention many examples: ***"mbuli, mpambi, nkúlufa, nginda, nkúfo, bombolo, eséndé, botómba".*** However, the choice of such a name is conditioned by various criteria's: physical features, ethology, the circumstances of that person's birth, ex: '**njɔ u'** *'elephant' 'recalls that an elephant was killed that day or may also indicate that the child was born plump'.* (Hulstaert, 1956: 96).

Keywords: Herbivores, Symbolism, Bantu

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Grammaticalization of time adverbials in Liko (D.201)

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Sources of some of the inflectional morphemes in Bantu are typically structures involving auxiliary verbs or non-inflecting particles. Bantu post-final elements are reported to be mostly derived from proniminal enclitics. This paper aims to present a completely different grammaticalization path, namely that of post-verbal time adverbials. In Liko, a Bantu language of the DRC, Past and non-Past are distinguished by a High vs. a Low tone on the subject prefix. In addition, the language has a grammatical system that is linked to but separate from the verb and expresses only tense, no aspect nor other related categories. It is of interest that tense as a unique and discrete category is introduced through this grammaticalization. Five post-verbal time adverbials, all with a H.L pattern, refer to different locations in time, i.e. ˚Hɓi 'hodiernal or hesternal', ndúku 'a few days earlier than hesternal', '˚Hndɩ 'earlier than about a week ago', ɓánu 'from tomorrow to the next few weeks' and ndékɛ 'later than the next few weeks'. The process of grammaticalization can be discerned both in form and meaning. In form these adverbials get restricted to the Immediately After Verb position, get reduced, and develop a vowel harmony domain which includes part of the verb proper. Liko has a dominant ATR vowel harmony system in which [+ATR] is the active value. The time adverbial ˚Hndɩ creates a [−ATR] domain in a verb form with a [+ATR] value, when it follows non-high vowels. The other time adverbial which has lost its initial CV-syllable, [+ATR] ˚Hɓi, causes the preceding vowel to assimilate. Their initial floating High tone (which remains after initial-syllable loss) is associated with the tone of the preceding vowel. In another development, the Insistive enclitic in Post-Final position, tɔ́, refers to the near future when no post-verbal time adverbial is present. The system that evolves contains two tense contrasts for both past and future: near past and near future, vs. general reference to past and future.

Number in Bamileke Medumba

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In Medumba (Grassfields Bamileke Bantu, Western Cameroon), count Ns show a number-based partition that defines five noun classes (Voohoeve 1968). As shown in (1), they are grouped into singular/plural pairs and numbered as follows: 1/6, 3/4, 5/4. Medumba N-classes are defined according to two criteria. **First** is the form of the number prefix. The $1_{SG}/6_{PL}$ contrast has three sub-patterns: (i) $\boldsymbol{m}_1/\boldsymbol{b}_6$ with HUMAN Ns; (ii) $\varnothing_{1A}/\boldsymbol{REDUP}_{6A}$ with RELATION Ns, (iii) elsewhere $\varnothing_{1B}/\varnothing_{6B}$. (Note that the latter is number-neutral.) As for the $3_{SG}/4_{PL}$ and $5_{SG}/4_{PL}$ pairings, singular is unmarked, and plural is marked with a homorganic nasal ($\varnothing_3/\boldsymbol{N}_4$. $\varnothing_5/\boldsymbol{N}_4$). Prefixal marking on the noun cross-cuts with the **second** criteria, which is the concordial agreement found on demonstratives and possessive pronouns; this is illustrated with the possessive pronoun *-àm* 'my'. With the $1_{SG}/6_{PL}$,pairing, the singular concord is $\varnothing$, and the plural is ***tʃ-***. With the $3_{SG}/4_{PL}$ pairings, singular concord is $\varnothing$, and the plural is ***m-***. And with the $5_{SG}/4_{PL}$ pairing, the singular concord is ***s-***, and the plural is ***m-***. In addition to marking number with count Ns, these paradigmatic contrasts mark sortal contrasts with mass Ns. This indicates that the dividing function (Borer 2005) applies to both count and mass Ns in Medumba. Moreover, the two plurals, namely Class 4 and 6, distinguish between two types of mass Ns: collective Ns on the one hand, and kind Ns on the other, with the latter including liquids, substances, and materials. Representative examples are given in the lefthand column of (2). Medumba treats mass Ns as inherently plural, and in contexts where one wants to pick out a portion of a mass noun, the associative plural ***bà*** (Keupdjio 2015) is introduced; this is shown in the righthand column of (2).

(1) *Medumba number contrasts: count nouns*

CL		SG			CL	PL		
1	HUMAN	***m-Én*** CL1-child$_1$	*∅-àm* SG-1POSS	'my child'	6	***b-ún*** CL6-child$_6$	***tʃ-am*** CL6-1sg	'my children'
	KIN	∅-shùm NUM-son$_{1A}$	*∅-àm* SG-1POSS	'my son'		***shùm-shùm*** CL6$_A$-son$_{6A}$	***tʃ-am*** CL6-1sg	'my sons'
	ELSE	∅-b~~u~~ NUM-dog$_{1B}$	*∅-àm* SG-1POSS	'my dog'		*∅-b~~u~~* NUM-dog$_{6B}$	***tʃ-am*** CL6-1sg	'my dogs'
3		∅-b^{h}u NUM-hand$_3$	*∅-ám* SG$_3$-1POSS	'my hand'	4	***m -b^{h}u*** NUM-hand$_4$	***m-am*** CL4-1sg	'my hands'
5		∅-sò NUM-tooth$_5$	***s-am*** CL5-1sg	'my tooth'		***n-sò*** CL4-tooth$_4$	***m-am*** CL4-1sg	'my teeth'

(2) *Medumba sortal contrasts: mass nouns*

a.	CL4-N.root$_4$	CL4-1sg	GLOSS		***bà*** CL4-N.root$_4$	CL4-1sg	GLOSS
	n-tsə̀	***m-ám***	'my water'		***bà*** **n**-tsə̀	***m-ám***	'my waters'
	n-dzùʔ	***m-ám***	'my beer'		***bà*** **n**-dzùʔ	***m-ám***	'my beers'
	m-vɛ́t	***m-ám***	'my oil'		***bà*** **m**-vɛ́t	***m-ám***	'my oils'
	ŋ-kwɛ́	***m-ám***	'my sand'		***bà*** **ŋ**-kwɛ́	***m-ám***	'my sands'
	ŋ-kònì	***m-ám***	'my love'		***bà*** **ŋ**-kònì	***m-ám***	'my loves'
b.	CL6-N.root$_6$	CL6-1sg	GLOSS		***bà*** CL6-N.root$_4$	CL6-1sg	
	kákù	***tʃ-ám***	'my luggage'		***bà*** k□kù	***tʃ-ám***	'my pieces of luggage'
	t^{h}ú	***tʃ-ám***	'my furniture'		***bà*** t^{h}ú	***tʃ-ám***	'my pieces of furniture'

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A repository for analysing Bantu morpho-syntactic variation: objectives and design considerations

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Research into morpho-syntactic variation in Bantu languages has grown in recent years (e.g. Marten et al. 2007, Bax and Diercks 2012, Zeller and Ngoboka 2015). These studies have adopted a parametric approach in the investigation of a wide range of phenomena, including of object marking, word order and inversion constructions.

Studies have typically used small samples of languages and parameters due to limited access to data. It is therefore proposed to build a repository of source data saved in a manner designed to answer such questions over a wider range of languages and parameters. This paper explores the objectives of the repository and other factors affecting its design.

The principle challenge is how to balance the immediate objectives of answering specific questions against a broader objective of providing a platform for saving data in a generic cross-language format suitable for answering a range of questions in the future.

A first step might be to propose a hybrid approach with a table of languages and binary parameter values, with links to source data stored in their original format, and assessments of their reliability.

A second step would be to save the source data in a more generic fashion to facilitate automated analyses. For example it may be possible to save source data with morphological glosses coded such that they can be compared algorithmically across languages.

An additional design objective is to make the data accessible to the research community.

Once enough data are available, one goal might be to be able to group languages according to their morpho-syntactic characteristics and compare these groupings with those derived from lexical and other studies (Bastin et al. 1999, Holden 2002, Grollemund et al. 2015).

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Title: On the final vowel in Kikae
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In this paper, I argue that the final vowel of verbs is not a segmentable suffix in the Kikae dialect of Swahili; Verbal bases and suffixes are not listed separately in the lexicon.

Verbal stems appear to be divisible into a verbal base and a final suffix, similar to other Bantu languages, based on the regular alternations shown in (1). In the perfect form, a final vowel is the same as the last vowel of the base (Vowel Copy). In the subjunctive forms, all verbs end with *-e*, in all other inflected forms with *-a*.

(1)

	Perfect	Subjunctive	Others
-lal- 'sleep'	*-lal-**a***	*-lal-**e***	*-lal-**a***
-tend- 'do'	*-tend-**e***	*-tend-**e***	*-tend-**a***
-maliz- 'finish'	*-maliz-**i***	*-maliz-**e***	*-maliz-**a***
-som- 'read'	*-som-**o***	*-som-**e***	*-som-**a***
-fugu- 'open'	*-fugu-**u***	*-fugu-**e***	*-fugu-**a***

However, I propose that the final vowel is not a suffix based on the following three observations.

First, there is a number of irregular forms, especially in the perfect, as shown in (2) and (3).

(2)

	Perfect	Others
a. *-j-* 'come'	*-j-**a***	*-j-**a***
b. *-fw-* 'die'	*-f-**u***	*-fw-**a***
c. *-ly-* 'eat	*-l-**i***	*-ly-**a***
d. *-laṃk-* 'awake'	*-laṃk-**u***	*-laṃk-**a***
e. *-furahi* 'enjoy'	*-furahi*	*-furahi*
f. *-pigw-* 'hit (passive)'	*-pigw-**a***	*-pigw-**a***

(3)

	Perfect	Others
a. *-ch-* 'dawn'	*-ch-**e***	*-ch-**a***
b. *-t-* 'lay egg'	*-t-**i***	*-t-**a***
c. *-iju-* 'know'	*-iju-**a***	*-iju-**a***
d. *-chew-* 'be late'	*-chew-**a***	*-chew-**a***
e. *-iv-* 'be ripe'	*-iv-**u***	*-iv-**a***

While the forms in (2) can be explained positing (ad hoc) rules as in (4), rules deriving those in (3) are not plausible.

(4) a. Mono syllabic stems (2a, b, c): because the last vowels of the stem causing vowel copy are not syllabic, they emerge as semivowels in the other forms and do not surface in the perfect forms.
b. Syllabic nasals (2d): the *u* after the *m* is subject to vowel copy, but merges into a syllabic *ṃ*.
c. Loanwords (2e): the vowel copy rule does not apply to the loanwords.
d. Passive forms (2f): the vowel copy rule does not apply to the passive forms.

Second, the forms in (2e,f) cast doubt on the function of the final vowels. If perfect aspect and subjunctive mood are encoded in the final vowel, it is unclear how AM information is marked in loanwords without the final vowel like (2e). Furthermore, the function of the final vowel *-a* is opaque; Does this represent aspect, mood or nothing? Is the final vowel *-a* of the passive stem in perfect forms like that in (2f) the same morpheme as in the other forms?

Third, the assumption that the base and the final vowel are listed together in the lexicon and the final vowel alternations are applied productively to verbs ending with *-a*, provides a simpler explanation for the following alternations than the assumption that the base and the final vowel are different morphemes, because we don't need to posit the reanalysis process in which the last vowel and the other part are segmented. Both (5a) and (5b) are originally unsegmented.

(5)

	Perfect	Subjunctive	Others
a. *-na* 'have (verbid)'	———	*-ne*	*-na*
b. *-tafuta* 'search (loanword)'	*-tafutu*	*-tafute*	*-tafuta*

Surface realizations of boundary tones – A comparison between Kikuyu and Kikamba

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This study examines common properties between floating L tones (Ⓛ) in Kikuyu (E51) and boundary tones in Kikamba (E55). Based on data recorded in Berlin (2014), the following two claims are made: (i) Ⓛ in Kikuyu triggers downstep at the right edge of a p(honological)-phrase; (ii) This peculiar edge-positioning of downstep is due to its diachronic relation with the Super-Low boundary tone in the neighboring language Kikamba.

Kikuyu is a tone language with a /H L Ø/ distinction and floating L tones which trigger downstep (Clements & Ford 1981; Clements 1984). The proposed domain of downstep in Kikuyu is the p-phrase. In (1), the verb and the modified object, form one p-phrase. Two Ⓛ tones can be observed. They do not trigger downstep in their underlying position. Instead, downstep appears at the right edge of the p-phrase.

(1) /nd-ɔ̀ːn-ìrɛ́Ⓛ mo-rèmìⓁ mo-rìtò rò:-sí:nĕ/ *Underlying tones*
(nd-ɔ̀ːn-ìrɛ́ mò-rèmì mò-rìtò)$_\phi$ ↓(rò:-sí:nĕ)$_\phi$ *Surface tones*
SM-see-PRF.FV 1-farmer 1-ugly 11-morning
'I saw the ugly farmer this morning.'

Cross-linguistically, downstep commonly applies within a domain (Yip 2002) but in Kikuyu, Ⓛ triggers downstep at the *edge* of a domain. This peculiar positioning can be accounted for by looking at the origins of Ⓛ: Clements and Ford (1979) have showed that Kikuyu Ⓛ relates diachronically to the Super-Low (SL) tone in the neighboring Bantu language Kikamba. Their hypothesis is that Kikuyu once had an SL tone as well. Due to tone shift, the SL tone has evolved to word-final Ⓛ in Kikuyu. Indeed, they appear in similar domains: The SL tone is a boundary tone which surfaces at the right edge of an XP. In (2), *moèmà* is underlyingly L-final but receives a SL tone (marked with a double grave accent) because it is XP-final (cf. Odden and Roberts-Kohno 1999).

(2) [né-né-ké-nɛ́ɛ́ng-iɛ́]$_V$ [moèmä̀]$_{NP}$ [kwáachā́]$_{PP}$]$_{VP}$ /moèmà/
FM-SM-OM-give-PRF M. this.morning
'I gave it to Moema this morning'

Kikamba (Odden & Roberts-Kohno 1999: 157)

In sum, Kikuyu downstep appears on the edge of a domain and has a similar distribution as the SL boundary tone in Kikamba. This similarity can be accounted for diachronically.

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BASIC AND EXTENDED FUNCTIONS OF TENSE AND ASPECT FORMATIVES OF NYÀMWÉÉZÌ

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It is common in many Bantu languages to find one tense or aspect marker indicating other functions apart from its most common meaning. There are many studies in Bantu languages focused on identifying the basic functions of tense or aspect (or mood) markers. However, these studies do not pay much attention to investigating if it is possible for these extended functions to occur in all types of verbs. In this respect, the current study has shown that {-ø-…-ilɛ́}, which indicates retrospective aspect in Nyàmwéézì can be used to indicate present tense mostly in situation verbs (example 1). Also, {-á-…-ilɛ́}, which marks perfective aspect can be used to denote past tense almost in all types of verbs (example 2). However, it can also be used to mark future tense mainly in action verbs (example 3). Lastly, {-lu-…-a}, which marks progressive aspect can interact with any type of verb to indicate present (example 4) and future tenses (example 5).

1. maáyʊβʊ́kwi w-**ø**-iikal- **ilɛ́** Táánzaníja
   mother-in-law SM-**PST**- live- **RET** Tanzania
   'My mother-in-law lives in Tanzania'

2. wa- **á**- gʊl- ilɛ́ ŋwɛɛndá
   SM- **PST**- buy- **PFV** cloth
   '(Some time in the past) s/he bought the cloth'

3. igɔlɔ na-**á**-ʤ- **ílɛ́** ndáála
   tomorrow SM-**PST**-go-**PFV** ndala
   'Tomorrow, I am going to Ndala'

4. maámí á-**lu**-sɔm-ɛl-**a** βʊlájá
   uncle SM-**PROG**-study-APPL-**FV** Europe
   'My uncle studies in Europe

5. mɔɔkɔ́ɔ́nɔ́ na-**líí**-zɛɛng-**a** nuúmbá
   this year SM-**PROG**-build- **FV** house
   'This year, I am going to build a house' = 'This year, I will build a house'

These extended functions of tense or aspect markers are highly contextual and require further investigation. In this respect, a cognitive approach proposed by Guillaume (1984) will be used in this presentation to differentiate the meaning of the contextual function given by each form.

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Structure segmentale du radical verbal et comportement tonal en ruwund L53

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Résumé

Le comportement tonal du verbe en ruwund L53 (J. Maho, 2009) dépend de la structure segmentale du radical. Trois structures segmentales caractérisent le radical verbal en ruwund comme en bantu : -CVC-, -CV- et -VC-, des sous-types non inclus. Contrairement au proto bantu ayant distingué les tons haut et bas sur chacun de ces trois types de radicaux, le ruwund montre une évolution marquée par une réduction voire une simplification tonale bien connue dans la même zone K (Maniacky, 2003) de laquelle relève génétiquement le ruwund. La documentation disponible montre une évolution ayant abouti à un haut unilatéral sur les radicaux -CVC- et -VC-, réduction tonale s'étendant aussi au substantif.

Au regard du verbe, toute tonalité basse qui s'y manifeste ne serait que le résultat de phénomènes morphotonologiques. Si l'unanimité se dégage entre différents spécialistes sur ce point (Stappers, 1954 ; Vincke, 1967 ; Nash, 1992), nous nous joignons au premier pour relever une tonalité librement haute ou basse sur la finale des radicaux -CVC-. D'où la validité, par exemple, de la notation : *kubûl* 'frapper' qu'adopte Stappers que *kubùl* selon Vincke et Nash. En effet, la documentation montre aujourd'hui les variantes libres *kubûl* et *kubul* coexistant pour le même verbe. Donc, la finale verbale disparue $_{\text{-v}}$ est librement haute ou basse dans cette langue pour ce type de radical. Soit :

(1) *kubûl/kubul* (kú-búl-$_{\grave{v}\,\acute{v}}$) 'frapper'

Elle est uniquement basse pour les radicaux -CV- de sorte que la notation *kudâ* (kú-dí-à) 'manger' selon Stappers nous semble plus justifiée que *kudà* 'manger' selon Vincke et Nash. Notons cependant avec intérêt que lorsque le verbe de structure -CVC- comporte une longueur inhérente (soit -CVVC-, -CVNC-, -CSVVC-, etc.) ou factice (longueur par adjonction de suffixes), la finale -$_{\text{v}}$ est nécessairement haute, soit :

(2) *kulaal* (kú-láál-$_{\acute{v}}$) 'dormir'
(3) *kulond* (kú-lónd-$_{\acute{v}}$) 'parler'
(4) *kukwaat* (kú-kwáát-$_{\acute{v}}$) 'tenir'
(5) *kubudil* (kú-búl-íl-$_{\acute{v}}$) 'frapper pour' (jamais *kubudîl* [kú-búl-íl-$_{\grave{v}}$])

De ce qui précède, il appert que tout radical verbal en ruwund est nécessairement haut, toute tonalité basse qu'il comporte au plan phonologique résultant d'un morphotonème de déplacement ou de propagation. Soit :

(6) *àmùbùdin* (à-mù-búl-ín) 'ils le frappent'(le bas sur *bùd* provenant de la propagation du bas de SBJ_{3pl} à-)
(7) *kubûl* (kú-búl-$_{\grave{v}}$) 'frapper' (le bas sur *bûl* provenant du déplacement du bas de la finale -$_{\grave{v}}$)

Une approche structuraliste à la fois synchronique et diachronique est de nature à éclairer le rapport entre structure segmentale et structure tonale en bantu.

On A-bar Agreement in Bamileke Medumba

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A-bar agreement, usually referred to as *wh-agreement* (Carstens 2005, Cheng 1994, Hedinger 2008, Lochbihler and Mathieu 2010, Wasike 2007), is a morphological reflex of A-bar movement. In Medumba (Grassfields Bamileke Bantu, Western Cameroon), it is achieved via vowel lengthening and exhibits the following pattern: (i) With **root clauses**, A-bar extractions trigger A-bar agreement on T for subjects (1) and on V and T for non-subjects (2). (ii) With **non-root clauses**, there is agreement with embedded subject extractions, only on T in both matrix and embedded clauses (3) whereas with non-subjects, there is lengthening with embedded post-V extraction on V and T in embedded clause, but lengthening only on T in matrix clause (4). This paper addresses the following central questions: What is the mechanism of A-bar agreement in Medumba? I propose that A-bar extractions in Medumba proceed by **phase** (Chomsky 2001) and creates an '*agreement chain*' within the phase spell out domains each time movement crosses a phase and the A-bar feature is checked. Valuation of the A-bar feature is reflected by vowel lengthening on V within the vP phase spell out domain, and vowel lengthening on T within the CP phase spell out domain. With regard to the agreement contrast in root clauses and non-root clauses, I am assuming adjunction of embedded CPs at TP in Medumba. By adjoining to TP, embedded CPs fall outside the matrix vP phase. In consequence, the matrix vP phase cannot participate in A-bar agreement operation. This proposal correctly predicts that embedded clauses should pattern with adjunct clauses in regard to extraction and agreement. As evidence, A-bar movement from embedded CPs and adjunct CPs in Medumba is only possible if there is resumption.

The examples below show only wh-movement but the same facts are observed with other A-bar movement such as focus movement, relative clauses and topicalization.

(1) á wú (à) fə̀-ə́ n-kú m-fá bɔ̀ Nùm□ □□
FOC wh 3SG.S P4-H N-IMP N-give bag Numi Q
'who was giving the bag to Numi?

(2) á kú Nùgà fə̀-ə́ n-kú m-fá-à — Nùm□ □□
FOC wh Nuga P4-H N-IMP N-give-L Numi Q
'what was Nuga giving to Numi?'

(3) á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-tʃúp mbù *(á) fə̀-ə́ n-kú m-fá bɔ̀ Nùmí □□
FOC wh Sami P4-H N-IMP N-say COMP 3SG.S P4-H N-IMP N-give bag Numi Q
'who was Sami saying that (he) was giving the bag to Numi'

(4) á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-tʃúp mbù Nùgà fə̀-ə́ n-kú m-fá-à *(í) Nùm□ □□
FOC wh Sami P4-H N-IMP N-say COMP Nuga P4-H N-IMP N-give-L 3SG.DO Numi Q
'who was Sami saying that Nuga was giving (him/her) to Numi?

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Contrastive FOCUS and verb doubling in Mədúmbà

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Abstract

The article provides an in-depth description and analysis of contrastive focus marking in Mədúmbà (Grassfields Bantu), with particular emphasis on the expression of focus on verbal predicates. The primary means of marking contrastive focus in Mədúmbà is the morphological focus marker *á*, which consistently precedes the focused constituent in its canonical *in situ* position. Morphological focus marking *in situ* obviates the need for moving the focused constituent into the specifier of a designated functional projection FocP. We show that an analysis in terms of a lower FocP at the VP-edge, as has been proposed for other West African languages (see e.g. Tuller (1992) for Tangale, and Collins & Essizewa (2007) for Kabiye) does not account for the Mədúmbà data. We further demonstrate that the focus marker is morpho-syntactically restricted to attach to [+nominal] constituents only. This restriction has repercussions for the expression of focus on verbs, which in Mədúmbà involves the introduction of a nominal (infinitival) copy of the verb in the post-VP domain, following the direct object (if present). We argue that such verb doubling under focus in Mədúmbà is the result of syntactic movement of the lexical V-root, and that the lower copy of the movement chain must be spelt out in order to serve as a host for the abstract functional features located in v.

Keywords: contrastive focus, verb doubling, morphological focus marking.

Animacy hyerachy in Doubule Objects Construcion in Lunyole

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In Lunyole (E33, Uganda), as in many Bantu languages, applicative construction licenses the introduction of an applied object (AO). The newly added AO normally precedes the base object (BO) (1). However, these objects appear with a different word order.

(1) a.	Máma	a-lim-íl-á	ésimbó	ólwigá.
	1-mother	SM1- dig - APPL- FV	9-stick	5-hole
	'Mother digs the hole with the stick'			
b.	*Máma	a-lim-íl-á	ólwigá	ésimbó.
(2) a.	Máma	a-hub-íl-á	ómwíbi	ésimbó.
	1-mother	SM1- hit- APPL- FV	3-thief	9-stick
	'Mother hits a thief with the stick.'			
b.	*Máma	a-hub-íl-á	ésimbo	ómwíbi.
(3) a.	Máma	a-hub-íl-á	ómusóta	ésimbó.
	1-mother	SM1- hit- APPL- FV	3-snake	9-stick
	'Mother hits a snake with the stick.'			
b.	*Máma	a-hub-íl-á	ésimbo	ómusóta.

As (1) shows, when AO and BO occupy the same level in the animacy hierarchy, AO comes immediately after the verb and precedes BO. This shows that there is a syntactic restriction that licenses AO as the primary object. However, when BO is [+animate] and AO is [–animate], BO precedes AO (2, 3), which shows that in Lunyole the animacy hierarchy of objects has a greater priority than the syntactic hierarchy between AO and BO. This phenomenon is also seen in the benefactive applicatives (4, 5). In addition, the same word order rule applies to the order of double object markers (6).

(4)	n-á-lang-il-a	ómusomésa	ábaaná
	SM1-PAST-call-APPL-FV	1-teacher	2-children
	'I called the children for teacher'		
	*'I called the teacher for a children'		
(5) a.	n-á-lang-il-a	ábaaná	éshohúlya
	SM1-PAST-call-APPL-FV	2-children	7-meal
	'I called the children for the meal'		
b.	* n-á-lang-il-a	éshohúlya	ábaaná
(6)	n-á-hi-mu-gul-il-a		
	SM1-PAST-OM7(=it)-OM3(=her)-buy-FV		
	'I bought it for him/her'		

reference

Marten, Lutz, Nancy, Kula and Nhlanhla, Thwala. 2007. "Parameters of morpho-syintactic variation in Bantu" in *Transaction of the Philological Society* 105 : 253-338.

Swahili Passive and Stative Extensions and their Interaction with the Applicative

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This paper examines two constructions in Swahili that fail to assign an external θ-role, namely, passive and stative and their interaction with the applicative. Although both the passive extension and the stative extension suppress the external argument, they exhibit several significant differences. This paper examines three such differences. The first difference is that the passive exhibits the existence of an implicit argument while the stative does not. As evidence, the paper demonstrates that in passive constructions it is possible to (i) have an optional *by*-phrase, (ii) show subject control, and (iii) use object-oriented adverbs. All these are not possible with stative construction. The second difference is that the stative affix may appear before the applicative while the passive extension appears after the applicative. The third difference is that in applicative constructions, passivization promotes the applied object while statives promote the direct object. This is complicated by an apparent violation of Burzio's generalization. Object marking is not possible with passivized applicative but it is found in statives. This leads to the conclusion that assignment of external theta role and checking accusative case do not have causal relationship.

The two constructions are analyzed using the split vP structure (Pylkkänen 2002). The VP is the locus of the lexical verb and introduces the internal argument. The vP introduces a verbalizing element such as a causative affix. The VoiceP is a functional projection with the external argument introduced in its specifier. The passive extension is generated as Voice, while the stative as a head that takes the VP as its complement. The analysis provides an elegant account for the relative positions of the two extensions and the different effects on the objects.

(1) a. maji ya-li-wa-mwag-ik-i-a mbwa.
6.water 6SM-PT-2OM-spill-ST-APP-FV 2.dog
'the water got spilled on the dogs'

c. *mbwa wa-li-mwag-ik-i-a maji
2.dog 2SM-PT-spill-ST-APP-FV 6.water
'the dogs got water spilled on them.'

(2) a. mbwa wa-li-mwag-i-w-a maji
2.dog 2SM-PT-spill-APP-PAS-FV 6.water
'the dogs were poured water onto'

c. *maji ya-li-wa-mwag-i-w-a mbwa
6.water 6SM-PT-2OM-pour-APP-PAS-FV 2.dog
'water was spilled on the dogs'

Reference

Pylkkänen, L. (2002). *Introducing Arguments.* MIT Doctoral dissertation.

Conditional constructions in Basaa

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Conditional constructions are fairly under-described in Ɓàsàá. Even the comprehensive verbal system description of Ɓàsàá by Bitjaa Kody (1990) only provides a basic, arguably logical account of conditionals, against the backdrop of the French language conditional system.

Bitjaa Kody's (1990: 448-450) analysis of conditionals in Ɓàsàá focuses on the logical properties of conditional constructions on the one hand, and on their grammatical markedness on the other hand. In any case, his account of conditionals falls within the broader scope of tense marking, as in (1).

(1) a. [à jôp]p [mɛ̀ ḿ-ˬpám]q
3.SM COND.enter 1SG.SUBJ FUT1-go out
'If he comes in, I will go out.'

According to Bitjaa Kody (1990: 448), apart from the logical dependency if the apodosis (*q)* upon the protasis (*p*) (namely, for *q* to hold, *p* must be true) there exists a particular verb form which must inflect the initial clause, and this is what is referred to as conditional. This verb form is an inflectional pattern which combines a zero morpheme and a floating high tone. The floating H combines with the verb base ("jòp" > "jôp" *enter*), which results in a contour tone.

Analysis of inflectional pattern in the apodosis is ignored in Bitjaa's perspective and only targets the "if" clause (protasis); the author highlights a conditional morpheme which is marked by a floating H on the noun subject marker, and which spreads to the verb base.
However, it is not clear why Bitjaa Kody restricts the description of conditionals only to the protasis, when it is evident from the inflectional patterning that the conditional morpheme surfaces in both clauses.

My presentation will seek to discuss conditional constructions in Ɓàsàá more comprehensively by attempting a typological sketch and function of these constructions.

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Love and hate in an Interlacustrine language: statives in Nata

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This paper proposes a lexical aspect classification for Nata (E45, Tanzania) based on the temporal characteristics of stative verbs in this Bantu language. This new classification supported by work done on other Bantu languages like Kilega (Botne & Kershner 2008) and Yeyi (Seidel 2008). Using formal theoretical tools, I demonstrate that simple grammatical aspect and complex lexical aspect explain the complexity of the Nata TA system.

Since Vendler's classification (1957) of verbs into four categories (activities, statives, achievements, accomplishments) there has been little to no modification to this categorization.[1] However, research done on understudied languages has shown different patterns especially for states (Bar-el (2005) for Skwxwú7mesh, Kiyota (2008) for Sənčáθən).

Research question: What is the effect of lexical aspect on a complex TA system like Bantu? More specifically: in a system as aspect-dependent as Bantu systems, what is the interaction between the two types of verbal aspect?

To answer these questions, I focus on the Nata equivalent of two canonical states: *sẹ́ẹ̣gha* 'to love' and *regha* 'to hate'. Their behaviour with imperfective and perfective deviates from what one would predict based on the traditional verb categorization: on the one hand, the perfective combined with an activity renders an immediate past reading with activities, it renders a present reading with states (1); on the other hand, the imperfective combined with an activity renders present progressive reading with activities, it renders only future reading with states (2):[2]

(1) *nnéchireghire* STATIVE + PERFECTIVE = PRESENT
n-ni-tʃi-reɣ-ire
COMP-1SG.SBJ-C10-hate-PFV

'I hate them.'

(2) *nokoisẹ́ẹ̣gha* STATIVE + IMPERFECTIVE = FUTURE
n-o-ko-i-sɛɛɣ-a
COMP-2SG.SBJ-IPFV-C9-love-fv

'You will love it.'

Conclusions: Based on this and other evidence, I claim that we need a new categorization of verbs in Nata, in which states behave like achievements. In that sense, the literal translation for (1) would be "I have come to hate them" and for (2) "I will come to love". I show that this categorization can be extended to other Bantu languages, even other Niger-Congo languages (Siamou in Toews 2015).

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[1] Except for the addition of semelfactives.

[2] With activities, the imperfective also has futurate reading with activities, its default reading is present progressive.

Abstract: How many futures are there? The case of Nyakyusa

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Bantu languages are well known for their complex tense-aspect systems (Dahl 1985). These fine-grained distinctions are commonly most pronounced with past time reference and less so for the future (Nurse 2008). In Nyakyusa (M31, Tanzania), however, we encounter a wide array of constructions with future time reference, which can further be combined with one another.

The aim of the present study is to give an overview of the formal aspects and semantics of each constructions. Special attention will be paid to the relationship between aspectual and temporal meanings. It will further be shown that the complex present-day situation can best be understood by applying a diachronic perspective. Therefore, an internal reconstruction will be conducted, drawing on descriptions (Schumann 1899; Endemann 1914) and text collections (i.a. Berger 1933) from earlier chronolects. This will be informed by typological considerations (Dahl 2000) and research on grammaticalization in the field of tense and aspect (i.a Bybee et al 1991, 1994). Disentangling thus the systematic relationship between the various constructions, Nyakyusa shows to be a test case of how a synchronic description of tense and aspect in a Bantu language profits from a diachronic perspective.

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Phonetic variation in an obsolescent language (Kami, G36)

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Kami is an endangered language in Tanzania. It is said spoken by approximately 5000 people according to LoT (2009), but we believe that there are significantly fewer speakers left, and only a few hundred fluent speakers.

In this paper we present the variation in the Kami phonetic inventory. There is a striking variety of allophones representing the same phoneme. Some of these sounds can be traced to Swahili influence, some to local languages such as Luguru while others are probably Bantu cognates. There is variation between speakers but also within the idiolect of individual speakers.

Moreover, the correspondence between one speaker's pronunciation and that same speaker's choice of spelling is inconsistent. A speaker may choose to spell for instance the word 'string' either *lusabi*, *lutsabi* or *luzabi* while the pronunciation differs between [s], [ts] and [z] and is unrelated to how the same person spelt it.

We are not opposing the claim that language obsolescence can lead to simplification, but in our case, it seems to be the contrary. A factor that most likely plays a role in the abundance of forms is the fact that more than two languages are influencing the endangered language. A similar phenomenon is seen in another endangered language where lexical items from two language varieties appear in free variation. Such a mixture of dialects is ascribed to language obsolescence (Aikhenvald 2012: 85).

Kami has ceased to exist as a uniform language since it is not the main language for any individual speaker, nor is it the main language in any domain. We believe that the Kami speakers have expanded their sound inventory by incorporating the phonetic variants from surrounding languages. This unstable situation – an obsolescent language which is heavily influenced by two other languages – has led to the large variation of phones within Kami.

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Generating deverbal nouns as reserve of coining scientific terms in Lingala

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Several African communities would greatly benefit from using their own language as language of instruction but most of those languages suffer from a lack of specialized terminology. Developing morpho-semantic work will therefore allow lexicographers to enhance their strategies of coining terms and establishing definitions in those languages.

This paper describes my work of finding tools for creating scientific vocabulary in Lingála based on the morpho-semantics of deverbal nouns (DNs) I have extracted from a corpus of 5 million words using the Unitex software.

For example, the structure **mò**-ROOT-**ì** lists different words having a prefix **mò**- and the final vowel **-i**. This group of deverbal nouns generally concerns the agent from class 1 (***mòsálì***). From this structure, I have derived the following general definitions:

mòtò óyo à-ROOT-aka.
human REL PV:SG:3-ROOT-HABITUAL
The person who usually [does]…

mòtò óyo à-ROOT-í
human REL PV:SG:3-ROOT-PERFECTIVE1
The person who has [done] …

mòtò óyo à-ROOT-á.
Human REL PV:SG:3-ROOT-PERFECTIVE2
The person who has been [doing]…

By compiling definitions of each structure attested in Lingála, I have created a derivative generator, which is a table where, by replacing a certain verbal root, a list of derivative nouns candidates is generated, alongside a brief definition allowing me to link a certain term to a certain scientific concept with a specific definition.

The second step of the work concerns the evaluation of the process of using of those generated DNs in natural sentences. For that purpose, I have written a chemistry schoolbook and, in order to observe the clarity of the discourse using generated DNs, I have compared them with verbal phrases or code-switching (Lingala-French) strategies normally used in natural language.

This paper is a contribution to a morpho-semantic approach of empowering African languages in the aim of using them as languages of instruction.

Key words: deverbal noun, morpho-semantic, Lingála, Congo, language of Instruction, empowerment, Unitex

Tone in Kabwa (EJ.405)

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Kabwa is an under-described Bantu language spoken by 14,000 speakers on the Eastern shore of Lake Victoria in Northern Tanzania. Recent published research on Kabwa has focused on syntax and discourse analysis (Rundell 2012; Walker 2013; Nicolle 2015). The fact that Kabwa is a tonal language and that tonal research is required has been acknowledged: "underlying tonal patterns cannot be ascertained until fuller descriptions of the verbal tone systems […] have been undertaken" (Walker 2013:51). Work currently submitted for publication on grammar sketches of six Mara Bantu languages (Aunio et al., in progress) includes overview data on Kabwa tone. General statements about Kabwa identify the syllable as TBU, attest the existence of tone spread and report a final H-deletion rule. The submitted chapter also provides a chart of different tonal melodies for nouns as well as a description of tonal melodies of various verb forms.

This poster endeavours to expand on the data currently available for Kabwa. It is based on 400 utterances, mainly NPs and mono-clausal sentences, recorded in 2014.

At the lexical tone level, final and non-final forms are correlated to their Proto-Bantu source, in order to trace the development of correspondences, e.g.:

(1) ɛ̀ⁿdʒɔ̀kà [lll] 'snake' / ɛ̀ⁿdʒɔ́ká jìnù [lhh ll] 'this snake' / *-jókà

At the grammatical tone level, clauses are contrasted with regard to information structure, e.g.:

(2) tù-tà-rì-hàrùrá ɛ́kì-ràndì vs. ɛ̀kì-ràndí tú-tá-rì-kì-hàrúrà
1PL-NEG-FUT-scrape_out 7-calabash 7-calabash 1PL-NEG-FUT-7:OBJ -scrape_out
'We will not scrape out the calabash.' 'The calabash, we won't scrape it out.'

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The comparative analysis of morphemic and submorhemic neutralizations in Bantu pronominal paradigms (what they are for, and what they say about the language change).

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1. Morphemic neutralization is the case when as in Swahili in object paradigm the pronouns of 2 and 3 pl *-wa-* coincide. See also German *sie* for 3 SG.FEM, 3 PL and 2 PL.HONORIFIC and English *you* for 2 SG/PL. According to [Pozdniakov 2003] these neutralizations (homonymy) within paradigms are not occasional but very important to mark the oppositional (paradigmatic) relations between the signs.

2. Submorphemic neutralizations were first introduced by Roman Jackobson [Jackobson 1985]. Further analysis for pronominal paradigms – see [Pozdniakov 2003, Zheltov 2005]. The cases of partial formal coincidence of neighboring elements in paradigms with common semantic componet (eg. "locutor") as in French ***moi***–*t***oi**, ***nous***–***vous***; German ***mich***-***dich***, ***mir***-***dir***, Swahili ***wak***o-***wake*** – 2SG.POSS/3 SG.POSS are considered. According to Pozdniakov these cases are not occasional either and serve the same purposes as morphemic neutralizations often being with them in additional distribution.

3. Bantu pronominal systems have not yet been analyzed within this theoretical framework. This presentation deals with comparative analysis of the distribution of morphemic and submorphemic neutralizations in pronominal paradigms of the Bantu languages from different zones and Proto-Bantu reconstruction. In the table you can see the fragment of it. Morphemic neutralizations are marked with dark-grey, submorphemic - with light-grey. The data show that 1) morphemic and submorphemic neutralizations are often in additional distribution, 2) they are not "occasional", but rather systematic; 3) it often happens to be important for paradigms to keep the structure of oppositions and neutralizations rather than forms; 4) if some "stable" neutralization (2 SG/PL.OBJ - in all the languages except Luvale) is lost via innovation (2 PL.OBJ *mi* instead of common *mu* in Luvale) another neutralization appears to keep the important formal link between sg and pl. (1 SG/PL *ng**u**- t**u***) - innovative 1 SG.OBJ *ngu* instead of *ni* keeps it actual.

	Protobantu		Umbundu R11		Herero R31		Luvale K14		Mbukushu K43	
	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl	Sg	Pl
Subject										
1	N	tu	ndi/n	tu	mbi	tu	ngu	tu	ni	tu
2	u	mu	o	(v)u	u	mu	u	mu	ghu	mu
3	u/a	ba	o	va	u	ve	u/a	va	gha	ha
Object										
1	N	tu	ndi/n	tu	ndji	tu	ngu	tu	ni	tu
2	ku	mu	ku	ku	ku	mu	ku	mi	ku	mu
3	mu	ba	u	va	mu	ve	mu	va	mu	va

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Melodic tones in Simbiti

Lotta Aunio (University of Helsinki) & John B. Walker (SIL International)

In this paper we will present the melodic tone system of Simbiti (JE431) spoken in the Mara Region of western Tanzania. Simbiti – like all other JE40 languages in the Mara region – has lost the lexical tone contrast of verb roots, but Simbiti verbal inflection makes use of tonal melodies.

In Simbiti, the tone bearing unit is the mora, and Simbiti assigns melodic tones in relation to the left edge of the macrostem: melodic tones are assigned to the first, the third, or the fourth (but not the second) mora of the macrostem. The Simbiti tone system is similar to that of Kuria (JE43), but Simbiti melodic tones do not spread like the tones in Kuria, apart from syllable-internal spreading to avoid contour tones. Also in line with Kuria, the domain of melodic tones is sometimes extended to the whole verb phrase. Specifically interesting in Simbiti is the negation post-clitic *he* which is regarded as belonging to the domain of melodic tones. However, it is possible for the post-clitic to occur after other post-verbal words like explicit objects.

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Tone assignment in Bukusu nouns and verbs

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This talk explores the relationship between the tonal patterns of nouns and verbs in Bukusu (JE31c; ISO: bxk), a Bantu language of western Kenya. Bukusu nouns take one of four primary tone patterns: (1a) toneless; (1b) H on the augment; (1c) H on the augment and H on the stem-initial mora (the intervening toneless mora becomes H by a regular process of Plateau); and (1d) H on the augment and H on the first mora of the second stem syllable. We analyze the lexical Hs of nouns as being underlyingly floating and assigned by rule to different positions of the noun.

(1)	a.	ku-mu[koye]	b.	kú-mu[saala]	c.	kú-mú[tíxiɲi]	d.	lí-i[ruuŋgéeti]
		3-3[rope]		3-3[tree]		3-3[morning]		5-5[blanket]
		'rope'		'tree'		'morning'		'blanket'

Bukusu verbs fall into two lexical tone classes: (2a) toneless vs. (2b) /H/. As in nouns, the lexical H of /H/ verbs associates to the augment in infinitives. In the Near Future, the lexical H associates to the tense prefix *la-* (3b).

(2)	a.	xu-u[loleelel-a]	b.	xú-u[βotooxan-a]
		15-15[watch-fv]		15-15[go_around-fv]
		'to watch'		'to go around'
(3)	a.	a-la[loleelel-a]	b.	a-lá[βotooxan-a]
		1.sbj-near.fut[watch-fv]		1.sbj-near.fut[go_around-fv]
		's/he will watch'		's/he will go around'

In verb forms inflected with a melodic H, the melodic H targets other positions familiar from nouns: (4a) the stem-initial mora and (4b) the first mora of the second stem syllable.

(4)	a.	a-li[lóleelel-a]	b.	a-li[βotóoxan-a]
		1.sbj-indef.fut[watch-fv]		1.sbj-indef.fut[go_around-fv]
		's/he will watch'		's/he will go around'

We develop an analysis which has general rules of H tone assignment that apply to lexically defined classes of nouns and to groupings of verbal constructions defined by their tense-aspect-mood-polarity features. We also identify tonal differences we have found between nouns and verbs. For instance, some nouns, e.g. *é-e*[*xeeŋgeeŋgéle*] 'ankle', have a penultimate H; we have not identified a parallel pattern in verbs. There is also a process that deletes the penultimate H from nouns followed by numerals, e.g. *é-e*[*xeeŋgeeŋgele*] *n*[*dala*] 'one ankle', but we are unaware of an analogous process in verbs. Verbs inflected with a melodic H are also affected by Reverse Meeussen's Rule, which deletes the root H (see (4b)), but does not affect nouns.

Melodic tone in Fwe (Bantu, K402)

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This paper describes the use of melodic tone in the tonal patterns of verbal inflections in Fwe, a Bantu language of Zambia and Namibia. It has become increasingly recognized that melodic tone plays an essential role in Bantu languages (Odden & Bickmore 2014), and descriptions of tone that include reference to melodic tone are available for languages closely related to Fwe, such as Totela (Crane 2014) and Tonga (Carter 1962). This paper presents an analysis of melodic tone in Fwe and how it interacts with lexical and grammatical tone, vowel length and tone rules, showing that the use of melodic tone in Fwe is quite different from that in related languages.

Verbal inflections use one of three melodic tone patterns: a high tone (H) on the final stem syllable (1), H on the second stem syllable (2), or H on the subject concord (3). One minor pattern without melodic H is found (4).

(1) **tù-kà-bòòr-á** **zyônà**
SC_{1PL}-DIST-return-FV tomorrow
'We return tomorrow.'

(2) **ndì-kòmók-èt-w-à**
SC_{1SG}-surprise-STAT-PASS-FV
'I am surprised.'

(3) **mbò-ndí-shòtók-è**
FUT-SC_{1SG}-jump-FUT
'I will jump.'

(4) **nd-à-kù-tòmbwèr-à**
SC_{1SG}-PST-PROG-weed-FV
'I was weeding.'

In addition to melodic H, lexical tone, vowel length and tonal processes also play a role in verbal inflection. Fwe verb stems have either a high or a low (toneless) lexical tone, which is deleted in some inflections, such as the present tense, but maintained in others, such as the remote future.

(5) **kù-ùr-à**	**ndì-úr-à**	**nà-ndí-nà-ùr-à**
INF-buy-FV	SC_{1SG}-buy-FV	FUT-SC_{1SG}-FUT-buy-FV
'to buy'	'I buy.'	'I will buy.'
(6) **kù-têk-à**	**ndì-ték-à**	**nà-ndí-nà-têk-à**
INF-fetch-FV	SC_{1SG}-fetch-FV	FUT-SC_{1SG}-FUT-fetch-FV
'to fetch'	'I fetch.'	'I will fetch.'

An additional observation is that in certain cases grammatical tones, such as high-toned object markers, erase all melodic and lexical Hs of a verb. Vowel length also manifests itself as a factor in that, in the present tense, verbs with a short penultimate vowel have a different tone from verbs with a long penultimate vowel.

(7) **ndì-dám-à**
SC_{1SG}-beat-FV
'I beat.'

(8) **ndì-â:mb-à**
SC_{1SG}-speak-FV
'I speak.'

Finally, tonal processes involved in verb inflection are the retraction of high tones and the realization of high tones as falling in utterance-final context.

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Tonal melodies in the Limbum verbal system

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This paper presents the melodic tone system of Limbum, a Narrow Grassfields Bantu language spoken in the North West of Cameroon. It is a language which has various inflectional tone patterns which are determined by the tone of the tense, aspect and mood (TAM) markers. Comprising only monosyllabic and disyllabic verb roots and often preceded by TAM features, Limbum verb roots display a H and L tonal contrast. Even so, Bradley (1994) portrays that M tones are the most regular in Limbum verbs especially when collocated with TAM markers. The tones of TAM markers condition changes on the tonal melodies of verb roots and so there is a relatively complex non-melodic verb tone system in the language. Various tonal processes including tone raising and lowering are responsible for non-melodic verb tones. In order to satisfy OCP, adjacent H tones are lowered. Although the language shows a lexical distinction between L and H, the H tone is very rare when TAM markers combine with the verb stem (Bradley 1994). I argue in this paper that M tones in certain positions within the verb system are actually H tones. I therefore consider these as melodic H tones.

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Melodic tones in Mbugwe (F34) verbs

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Most TAM forms in Mbugwe (F34) display lexical tone only, so that the verb root either has a H tone on the initial syllable, or there is no tone on the verb root. For some TAM forms, however, there are additional melodic High (MH) tones which are assigned to a syllable of the derivational verb stem (Odden and Bickmore 2014). In this paper, the various patterns of the MH tones are presented. An overview of the patterns for the MH is given in Table 1.

Table 1. Overview of TAM forms with MH in Mbugwe

Pattern	**TAM form**
1a) MH on the ultimate	Conditional Ø verbs
	Irrealis Far Past Ø verbs
	Subjunctive Ø verbs
	Subjunctive H verbs W/O OP
1b) MH on ultimate with left spread till σ2	Conditional H verbs
	Irrealis Far Past H verbs
	Subjunctive H verbs W/ OP
2) MH on σ2-ultimate	Far Past Perfective verbs
3a) MH on penultimate	Imperative singular Ø verbs
3b) MH on penultimate with left spread till σ2	Imperative singular H verbs
	Hodiernal H verbs and Ø verbs with H SP/OP
4) MH on σ2-penultimate	Hodiernal Ø verbs with Ø SP/OP
	Imperative plural verbs

In Pattern 1 the MH is assigned to the ultimate syllable of the verb stem. In verbs with a lexical tone, the MH tone spreads to the left, so that the whole verb stem surface as H (1b). For the subjunctive, the verb roots with a lexical tone and no object marker behave in the same way as verb roots with no lexical tone. The far past perfective verbs have a H tone on the whole verb stem except for the initial syllable of verbs with no lexical H tone (pattern 2). In pattern 3a) and 3b) the MH docks on the penultimate syllable of the verb stem, and spreads to the second syllable of the verb root in verbs with a lexical tone. This is the case for imperative singular verb forms, and hodiernal verbs with a lexical tone. Hodiernal verbs with no lexical tone, but a H tone present in the subject prefix (SP) or object prefix (OP) behave in the same way as the hodiernal verbs with a lexical tone. Hodiernal verbs with no lexical tone and no H tone present in the SP or OP behave according to pattern 4), where the whole verb stem after the initial syllable is H. The imperative plural verbs also pattern after pattern 4.

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