Chapter 17

Searching high and low for focus in Ibibio

Philip T. Duncan
University of Kansas

Travis Major
University of California, Los Angeles

Mfon Udoinyang
University of Kansas

This paper discusses two strategies in Ibibio for focusing verbs: contrastive verb focus and exhaustive verb focus. We demonstrate how these constructions differ crucially in the syntactic configurations and derivations that underlie each. Exhaustive verb focus is marked by the presence of the focus operator *kpɔ́t* 'only', which is base-generated high in the left periphery and triggers phrasal movement of the TP containing the focused verb via pied-piping. Contrastive verb focus is marked by verb doubling produced by head movement, and it invokes a low focus phrase situated in the middle field, somewhere at the boundary of the inflectional and verbal domains. Both types of verb focus in Ibibio are thus syntactically-driven, but the locus of each is split across the clausal spine, and each Foc head can probe independent of the other. Ibibio thus furnishes further evidence that multiple foci can occur in a single clause, and it also provides independent support for the existence of a low focus phrase.

1 Introduction

In this paper, we discuss morphosyntactic properties of two types of focus involving verbs in Ibibio: contrastive verb focus (1b) and exhaustive verb focus (1c).

(1) a. ékpê á-mà á-kót ŋ̀-wèt (input to 1b,c)
ekpe 3SG-PST 3SG-read NMLZ-write
'Ekpe read a book.'

Philip T. Duncan, Travis Major & Mfon Udoinyang. Searching high and low for focus in Ibibio. In Jason Kandybowicz, Travis Major, Harold Torrence & Philip T. Duncan (eds.), *African linguistics on the prairie: Selected papers from the 45th Annual Conference on African Linguistics*, 269–288. Berlin: Language Science Press. DOI:10.5281/zenodo.1251740

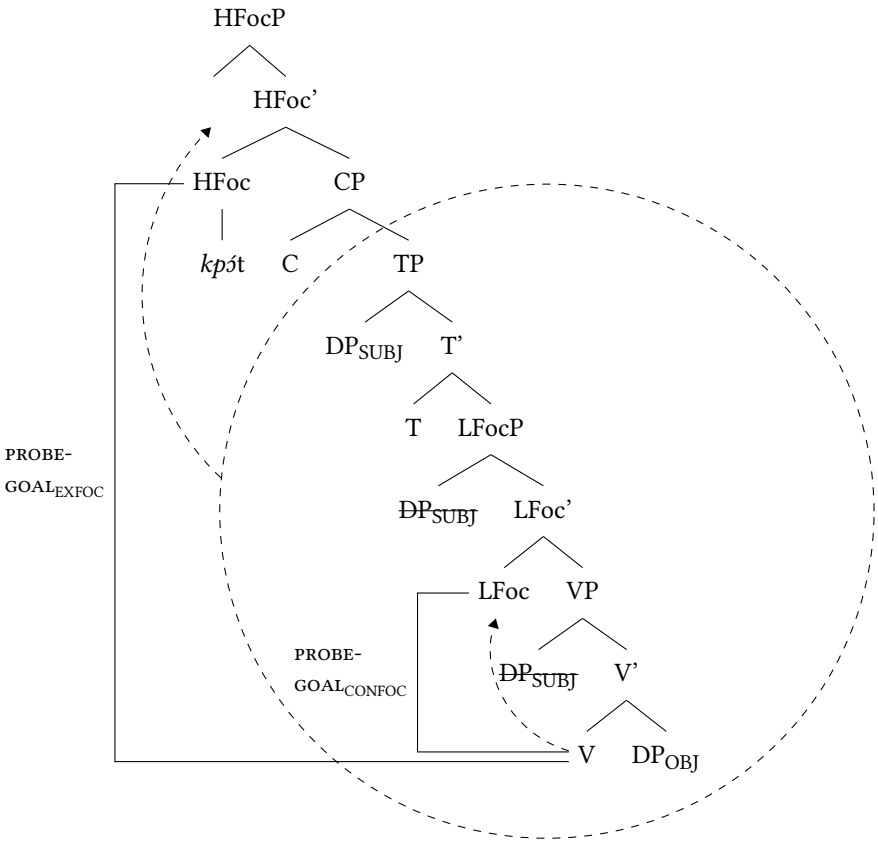
b. ékpê á-ké á-kòó-kót ŋ̀-wèt Contrastive Verb Focus
ekpe 3SG-PST.FOC 3SG-CON.FOC-read NMLZ-write
'Ekpe READ the book (not, say, take it away).'

c. ékpê á-ké á-kót ŋ̀-wèt kpɔ́t Exhaustive Verb Focus
ekpe 3SG-PST.FOC 3SG-read NMLZ-write only
'Ekpe only read the book.'

We motivate and explore two distinct focus positions corresponding to each construction, a high focus phrase (HFocP) in the C domain, and a low focus phrase (LFocP) in the inflectional domain. We also show that Ibibio has both syntactically and semantically distinct loci of verb focus. Exhaustive verb focus recruits structure high in the left periphery, and is derived by phrasal movement where the TP is pied-piped. On the other hand, contrastively focused verbs are situated much closer to VP and are generated by head movement, where V^0 is attracted to the lower focus head. Moreover, we discuss how these distinct structural configurations allow for double verb focus constructions. The structural superiority of the phrasal projection that houses the exhaustively focused verb triggers scope effects such that exhaustive focus takes wide scope over contrastive focus obligatorily.

Ibibio thus provides independent evidence for multiple foci occurring in a single clause (Krifka 1992; Rizzi 1997; Kiss 1998) and further support for the existence of a low focus position (Belletti 2004). Our proposed analysis is given in (2), which shows the derivation for both exhaustive verb focus and contrastive verb focus:

(2)



This derivation illustrates our analyses for contrastive and exhaustive verb focus, and it also demonstrates how both of these structurally distinct foci can be activated to generate double focus. In contrastive verb focus, LFoc^0 probes V^0 and triggers head raising. In exhaustive focus, HFoc^0 forms a probe-goal relation with V^0; instead of generating head movement, though, the TP is pied-piped to Spec,HFocP. When both foci are activated, ordering is critical: contrastive verb focus must be embedded under exhaustive focus for the derivation to be sustained.

This paper is organized as follows. In §2, we provide a basic background of Ibibio, focusing on word order and agreement, and motivating the existence of verb raising in the language. Following this, in §3 we turn to argument focus and *wh*-questions to provide a backdrop for understanding verb focus constructions. §4–6 provide our analyses of contrastive verb focus, exhaustive verb focus, and double verb focus, respectively. §7 concludes.

2 Background

2.1 Word order & agreement

Ibibio is a Lower Cross Niger-Congo language spoken in Akwa Ibom state in southeastern Nigeria. It is an SVO language with both subject agreement and object agreement (Essien 1990a; Baker & Willie 2010):

(3) a. èkà **á**-mà **á**-fát áyín
mother 3SG-PST 3SG-hug child
'The mother hugged the child.'

b. èkà **á**-mà **á-ḿ**-fát (míèn)
mother 3SG-PST 3SG-1SG-hug 1SG
'The mother hugged me.'

As seen in (3), subject agreement surfaces on both T^0 and V^0, leading to multiple subject agreement. Object agreement occurs on V^0 only, and is not always visible in the surface form.[1]

Ibibio matrix clauses project not only TP, but also a series of functional layers such as AspP and MoodP. Subject agreement has "no firm upper limit" and is present on "every verbal functional head" (Baker & Willie 2010: 110):

(4) ú-kpá ú-ké ú-sé ú-màná-ké ú-nám
2SGS-COND 2SGS-PERF 2SGS-IMPF 2SGS-do.again-NEG 2SGS-do
'You should not have been doing it again.' (Baker & Willie 2010: 118)

These facts yield the following word order in a standard declarative clause:

(5) DP_{SUBJ} Agr_{SUBJ}-T […] Agr_{SUBJ}-/Agr_{OBJ}-V DP_{OBJ}

2.2 Verb raising

Verb movement occurs in several contexts in Ibibio. One of these is negation, illustrated below:

(6) a. òkón á-mà á-**tóŋŋó** Affirmative
okon 3SG-PST 3SG-start
'Okon had started.'

b. òkón í-ké **í-tóŋŋó-ké** Negative
okon 3SG-PST.FOC 3SG-start-NEG
'Okon had not started.'

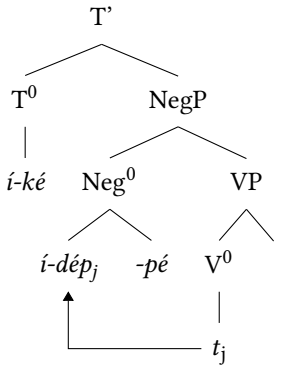
[1] Oftentimes because of phonological reasons (e.g. vowel hiatus resolution) object agreement is difficult to discern. All person markers in Ibibio are vowels except 1SG, which is a nasal that assimilates to the onset of the verb root. Thus, object marking always survives in cases involving 1sg objects because the nasal does not delete.

c. ímá á-mà á-**dép** Affirmative
ima 3SG-PST 3SG-buy
'Ima bought it.'

d. ímá í-ké í-**dép-pé** Negative
ima 3SG-PST.FOC 3SG-buy-NEG
'Ima didn't buy it.'

Note in these examples that negation surfaces as a CV suffix, which in these cases is either *-ké* (6b) or an assimilated suffix (6d).[2] These forms provide evidence for the order of Tense and Negation, as well as morphosyntactic consequences of V raising (Baker & Willie 2010).[3,4] The abbreviated tree in (7) shows the formation of the complex head in (6d):

(7)



As in (7), NegP dominates VP, and V-to-Neg raising results in negation surfacing postverbally.[5]

Verb raising also occurs in reciprocal constructions, which are bipartite in Ibibio, producing a suffix that resembles negation. Reciprocal morphology is circumfixal, as in (8c), consisting of a *du-* prefix and a CV suffix[6]:

[2]There is also a third allomorph, -ɣV, which surfaces on monosyllabic verb roots. See Akinlabi & Urua (2002), who also treat the various allomorphs of the negative suffix to be "underlyingly /ké/" (Akinlabi & Urua 2002: 127).

[3]In agreement with Baker & Willie (2010), we believe that V raising is supported by the fact that negation surfaces preverbally as a separate word, ké, in small clause constructions (e.g. causatives) and subjunctives, which may lack the TP layer. We remain agnostic at present with respect to the possibility of V raising through Neg to T, though we feel this is a viable option (see Baker 2008).

[4]We discuss below our account for the change in tense markers.

[5]Alternatively, one reviewer points out, the negative suffix could result from V raising around Neg followed by Neg encliticizing onto V (see Pollock 1989, for French; Holmberg & Platzack 1995, for Scandinavian). For our purposes, though, either analysis predicts the same output, as we merely wish here to motivate the existence of verb raising in Ibibio independent of contrastive verb focus.

[6]As with the negative suffix, the reciprocal suffix form is assimilative and varies according to the syllable structure and phonetic form of the verb root.

(8) a. é-mà é-kɨ́t — Affirmative
3PL-PST 3PL-see
'They saw.'

b. í-ké **í-kɨ́t-té** — Negation
3PL-PST.FOC 3SG-see-NEG
'They didn't see.'

c. é-mà é-dû-**kɨ̀t-tè** — Bipartite reciprocal
3PL-PST 3PL-REC-see-REC
'They saw each other.'

Negated reciprocals have stacked suffixes, as seen in (9), and negation appears farther away from the verb than the reciprocal suffix:[7]

(9) í-ké í-dú-**kɨ̀t-tè-kè** — Reciprocal + Negation
3PL-PST.FOC 3PL-REC-see-REC-NEG
'They didn't see each other'

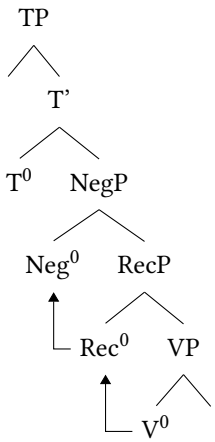
Ibibio verbs thus raise for structurally superior heads to surface postverbally (à la Baker's 1985 Mirror Principle). In (9), the bipartite reciprocal is formed prior to negation, and the ordering of the stacked suffixes gives insight into syntactic structure. The schematic in (10) shows the derivation based on the hierarchy we posit to derive the aforementioned properties of negatives and reciprocals:

[7]The semantics of negated reciprocals support our ordering where Neg >> Rec. Negation always takes wide scope over the reciprocal, which suggests that the reciprocal verb constitutes the input to negation. Additionally, negation can appear before a reciprocal verb in the effect clause of a causative:

(i) eno á-mà á-nám ɔ́mmɔ́ ké í-dú-kɨ̀t-tè
eno 3SG-PST 3SG-make they NEG 3PL-REC-SEE-REC
'Eno made them not see each other.'

Following Baker & Willie (2010) we take it that the preverbal negative particle in (i) is the morphological exponent of Neg^0 when the verb does not raise. Note, though, that the verb bears reciprocal morphology, which again suggests that the reciprocal suffix attaches to the verb before the negative suffix.

(10)



Thus, if RecP intervenes between NegP and VP, V raising ensures that the reciprocal suffix surfaces closest to the verb, since the verb head raises first to Rec^0. This forms a complex head that provides the input to Neg^0. As we argue below, verb raising and the architecture in (10) are significant for understanding contrastive verb focus, which also involves head movement.

3 Argument focus & *wh*-questions

When arguments are focused, the past tense marker *-mà* is replaced with *-ké*:[8]

(11) a. ànìyè (ówó) ké èkà á-**ké/*mà** á-fát Object *wh*-question
who person COMP mother 3SG-PST.FOC/*PST 3SG-hug
'Who did the mother hug?'

b. (á-dò) áyɨ́n ké èkà á-**ké/*mà** á-fát Object focus
3SG-be child COMP mother 3SG-PST.FOC/*PST 3SG-hug
'It was the child that the mother hugged.'

Thus, in past tense, *-mà* is incompatible with argument focus (Essien 1990a,b; Willie & Udoinyang 2012: 244). "Focus" *-ké* surfaces obligatorily in argument focus contexts (for past tense), as well as *wh*-questions (Note that the 1st *ké* in (11a–b) is the complementizer; the inflected *á-ké*—relevant for our discussion—is obligatory). Following Rizzi (1997), we take it that the landing site of focused constituents and *wh*-expressions is a focus phrase located in the C domain. In this paper, we call this projection HFocP to distinguish it from a second focus phrase that we argue projects rather low in the clausal spine. $HFoc^0$ bears a focus feature that draws a phrasal element to its specifier, presumably because such movement is induced by the need to satisfy a focus-criterion (Rizzi 1997).

[8]We here only present data in the past tense, though present and future tenses pattern similarly in this regard.

In contrast to object *wh*-questions and object focus, an overt C is illicit in subject *wh*-questions and subject focus. Moreover, past tense *-mà* cannot occur in these constructions, and the fact that *-mà* and "focus" *-ké* are in complementary distribution suggests that the *-ké* in (12a, c) is "focus" *-ké*, not the complementizer.

(12) a. ànìyé í-**ké**/***mà** í-fát áyín Subject *wh*-question
who 3SG-PST.FOC/*PST 3SG-hug child
'Who hugged the child?'

b. * ànìyé **ké** í-**ké** í-fát áyín
who COMP 3SG-PST.FOC 3SG-hug child
(Intended: 'Who hugged the child?' or 'Who is it that hugged the child?')

c. (á-dò) èkà á-**ké**/***mà** á-fát áyín Subject focus
3SG-be mother 3SG-PST.FOC/*PST 3SG-hug child
'It was the mother that hugged the child (not the father).'

d. * èkà **ké** á-**ké** á-fát áyín
mother COMP 3SG-PST.FOC 3SG-hug child
(Intended: 'It was the mother that hugged the child [not the father].')

This subject-object asymmetry in argument focus suggests a "that-trace effect" (Perlmutter 1971; Chomsky & Lasnik 1977) disallowing subject extraction over overt complementizers.

In summary, argument focus in Ibibio requires a special tense marker ("focus" *-ké* in past tense), and the neutral tense marker is illicit in such constructions. Focused arguments and *wh*-items undergo movement to HFocP in the complementizer domain, and land higher than the C head. As we discuss below, these properties of focus constructions are significant for differentiating between the two types of verb focus under consideration here: exhaustively focused verbs pattern much like argument focus constructions and involve phrasal movement to the left periphery, whereas contrastively focused verbs do not activate structure in the C system, and instead are derived in the inflectional domain via head movement.

4 Contrastive verb focus

4.1 Morphophonological properties

When verbs are contrastively focused, verb morphology expresses focus (Essien 1990a: 103–106; Akinlabi & Urua 2000; 2002; see Cook 2002 for verb focus in the closely related Efik).

(13) a. ákùn á-mà á-dép ŋ̀-wèt (input to 13b)
akun 3SG-PST 3SG-buy NMLZ-write
'Akun bought the book.'

b. ákùn á-ké á-**dèé-dép** ŋ̀-wèt í-ké
akun 3SG-PST.FOC 3SG-CON.FOC-buy NMLZ-write 3SG-PST.FOC
í-yì̀p-pé-yì̀p
3SG.CON.FOC-NEG-steal
'Akun BOUGHT the book, she didn't STEAL it.'

Forms of focused verbs demonstrate interactions between phonology, morphology, and syntax. In affirmative forms, the focus component "takes the shape of a heavy (bimoraic) syllable" (Akinlabi & Urua 2002: 156), which appears on the surface to be some type of prefixal "reduplicant." Vowel lengthening occurs on the "reduplicant," and the initial CV sequence of the verb root becomes a "reduplicative prefix" of the form CVV-p. This prefix bears a tone pattern (LH or HH) that is sensitive to the tone melody on the root. The -ATR vowels /ɨ, ʉ, ʌ/ cannot be lengthened in Ibibio, and these change to [e, u, ɔ] in order to be lengthened. Finally, verb roots with underlyingly low tones become HL falling tones in contrastive reduplication. These properties can be seen in the examples of affirmative contrastively focused verbs in Table 1, which are given for each of the vowels and simple tones in Ibibio.

Table 1: Contrastive verb focus forms

Vowel (w/ tone)	Permissible syllable type	Verb	English gloss	Focused stem (affirmative)
[í]	CV(C)	dí	'come'	dìídí
[ì]	CV(C)	kpì	'cut'	kpìíkpî
[ɨ́]	CVC	tɨ́m	'pound'	tèétɨ́m
[ɨ̀]	CVC	nɨ̀m	'keep'	nèénɨ̂m
[é]	CV(C)	sé	'look'	sèésé
[è]	CV(C)	wèt	'write'	wèéwêt
[ú]	CV(C)	túúk	'touch'	tùútúúk
[ù]	CV(C)	fù	'be lazy'	fùúfû
[ʉ́]	CVC	bʉn	'keep many things'	bùúbʉ́n
[ʉ̀]	CVC	bʉm	'break'	bùúbʉ̂m
[ó]	CV(C)	bót	'mold'	bòóbót
[ò]	CV(C)	bòn	'begat'	bòóbôn
[ɔ́]	CVC	tɔ́k	'urinate'	tɔ̀ɔ́tɔ́k
[ɔ̀]	CVC	tɔ̀k	'verbally abuse'	tɔ̀ɔ́tɔ̂k
[ʌ́]	CVC	fʌk	'cover'	fɔ̀ɔ́fʌ́k
[ʌ̀]	CVC	tʌk	'grate'	tɔ̀ɔ́tʌ̂k
[á]	CV(C)	má	'love'	màámá
[à]	CV(C)	mà	'complete'	màámâ

4.2 Morphosyntactic structure

Unlike argument focus, which recruits structure in the C domain, we claim that the derivation for verb focus is more local, that is, TP-internal:

(14) ákùn [$_{TP}$ á-ké á-yèé-yî̂p ŋ̀-wèt] í-ké
akun 3SG-PST.FOC 3SG-CON.FOC-steal NMLZ-write 3SG-PST.FOC
í-dép-pé-dép
3SG-buy-NEG-buy
'Akun STOLE the book, she didn't BUY it.'

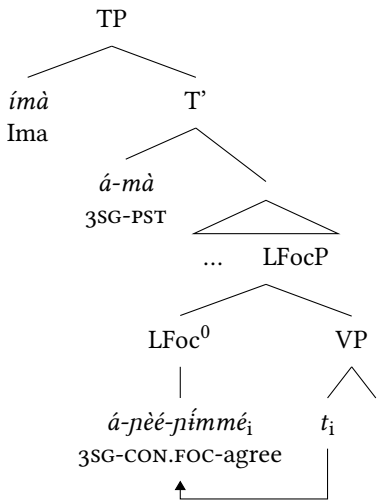
Evidence for our claim comes from the position of contrastively focused verbs with respect to T^0. We take it that the presence or absence of "focus" *-ké* is a diagnostic of activation (or not) of the left periphery. Unlike argument focus, where "focus" *-ké* tense marker appears obligatorily, contrastively focused verbs can occur with the standard past tense *-mà* and without "focus" *-ké*:

(15) ímà á-mà á-ɲèé-ɲɨ́mmé
ima 3SG-PST 3SG-CON.FOC-agree
'Ima AGREED (she didn't disagree).'

Thus, contrastive verb focus does not activate the left edge. Instead, the focused verb *ɲééɲɨ́mmé* 'AGREED' in (15) surfaces below the T^0 *-mà*.

To account for this, we posit a low focus projection that dominates VP, and propose that verbs undergo movement to $LFoc^0$ in contrastive verb focus. This is shown in the abbreviated tree in (16), which shows the derivation of (15):

(16)



We argue that the contrastive verb focus "morpheme" is the product of the verb head-moving to LFoc^0 (see (2) above), and that the syntax provides input to phonology, which results in this special verb morphology. In the derivation in (16), LFoc^0 probes for V^0 (Chomsky 2000; 2001) and attracts it to itself. We take it that this probing and attraction is driven by an interpretable focus feature on LFoc^0, which V^0 values following head adjunction. Focus "reduplication" is a post-syntactic consequence that results from head raising. Interestingly, in Ibibio this low focus position is uniquely associated with contrastive semantics for verbs, which is sort of an unexpected restriction.[9] We stipulate—but leave for future investigation—that Ibibio LFoc^0 has a property such that it probes for features exclusive to verbs, and this disallows attracting phrasal units.

Negated verbs may offer insight into the syntactic structure of verb focus. As noted above, V raising produces a CV negative suffix, as seen in (17b).

(17) a. à-mà á-fɔ́p Affirmative
2SG-PST 3SG-burn
'You burned it.'

b. ú-ké ú-fɔ́p-**pɔ́** Negative
2SG-PST.FOC 2SG-burn-NEG
'You didn't burn it.'

Instead of a phonologically reduced copy of the verb that appears in affirmative contrastive verb focus forms, negative focused verbs exhibit two full copies of the verb (irrespective of syllable type) with Neg intervening:

(18) a. ú-ké ú-**fɔ́p-pɔ́-fɔ́p** Neg + Contrastive Verb Focus
2SG-PST.FOC 2SG-burn-NEG-burn
'You didn't BURN it.'

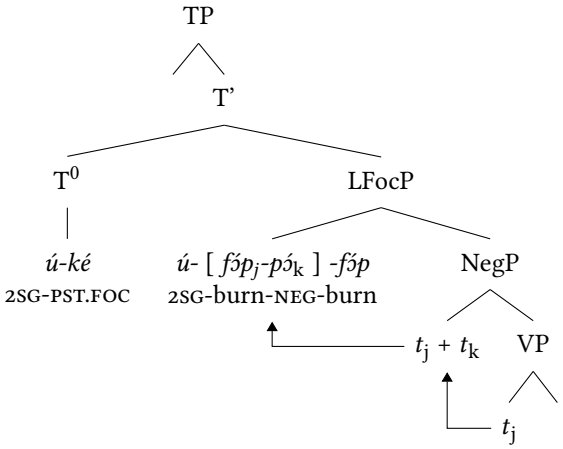
b. í-ké í-**dép-pé-dép** ŋ̀-wèt á-ké á-yèé-yi̋p
3SG-PST.FOC 3SG-buy-NEG-buy NMLZ-write 3SG-PST.FOC 3SG-CON.FOC-steal
'She didn't BUY the book, she STOLE it.'

Similar to our analysis of negated reciprocals above, we take it that the suffix closest to the verb attaches first as a result of verb raising. In (18), this is the negative suffix, either *-pɔ́* (18a) or *-pé* (18b). Negation thus precedes contrastive focus, and the negated verb forms the input to the low focus position.

We propose (19) as the derivation of (18a):

[9] Belletti (2004) shows that, in Italian, low focus involving postverbal subjects is associated with new information.

(19)



In the derivation of negative contrastive verb focus, $LFoc^0$ probes for V^0 (as in (16) above), but it attracts the morphologically complex verb that has first raised to Neg^0. The negative suffix is a consequence of V-to-Neg (similar to patterning of reciprocals), and the negative suffix + a full verb copy are a consequence of V-to-Neg-to-Foc.

Why is affirmative contrastive focus a heavy CVV "prefix" while negative contrastive focus retains a full copy? We tentatively propose (but leave for future analysis) the possibility that the grammar disprefers adjacent copies in contrastive focus constructions and instead prefers to dissimilate and maintain distinction. Support for this comes from other instances of contrastive focus in the language. Full reduplication exists elsewhere in Ibibio, as in (20) below, but when items are contrastively focused some strategy for differentiation is employed, as in (21):

(20) a. ìtɔ́k
'(a) race'
b. ìtɔ́k ìtɔ́k
'hurriedly'

(21) a. éwá **ámì**
'this dog'
b. éwá **ókò**
'that (visible) dog'
c. éwá ***ódò***
'that (not visible) dog'

a'. éwá **ámì-ŋímmí**
'THIS dog (not that one)'
b'. éwá *ókó-ŋóŋ̀kó*
'THAT (visible) dog (not this one)'
c'. éwá **ódò-ŋóǹdó**
'THAT (not visible) dog (not this one)'

Thus, (phonologically) maintaining a distinction seems to be specific to contrastively focused items – either verbs or demonstratives – in Ibibio; identical adjacent items in non-contrastive constructions are permitted (20). The patterning of contrastively focused demonstratives in (21) could be explained in a way that is analogous to the narrative of contrastive verb focus we develop here; that is, if the syntax generates adjacent items that are phonologically identical then the phonological system resorts to a post-syntactic strategy to differentiate them.

In our analysis, then, verb focus morphology is a syntactic consequence of focused verbs undergoing V-to-LFoc movement. This enables us to provide a more unified account of both affirmative and negative contrastive verb forms, since the same derivation underlies both, despite their superficial dissimilarity. However, more work is needed in this area to determine what additional morphophonological processes generate the affirmative forms (such as those proposed by Akinlabi & Urua 2000; 2002). What we see as critically important is that the presence of intervening material (e.g. the negative suffix) blocks phonological reduction, though full copies of the verbs are present in the syntactic derivation of both affirmative and negative forms.

5 Exhaustive focus

A second type of focus construction in Ibibio corresponds to exhaustive focus, which is illustrated below in (22). As with argument focus – and unlike contrastive verb focus – "focus" *ké* surfaces obligatorily in exhaustive focus constructions.

(22) a. ìmá á-mà á-fèɥé ítɔ̀k (input to 22b,c)
ima 3SG-PST 3SG-run race
'Ima ran the race.'

b. ìmá **kpɔ́t** á-ké á-fèɥé ítɔ̀k Subject exhaustive focus
ima only 3SG-PST.FOC 3SG-run race
'Only Ima ran the race (not Ekpe or Akun).'/*'Ima only ran the race (she didn't go to the party).'

c. ítɔ̀k **kpɔ́t** ké ìmá á-ké á-fèɥé Object exhaustive focus
race only COMP ima 3SG-PST.FOC 3SG-run
'It was only the race that Ima ran.'

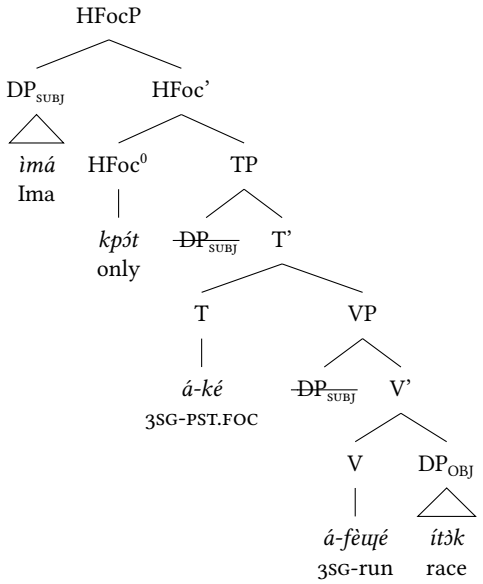
d. èté â-ké-dép-pé àkàrà á-mà á-kót
man 3SG-PST.FOC-buy-REL bean.cake 3SG-PST 3SG-read
ŋ̀-wèt (input to 22e)
NMLZ-write
'The man who bought the bean cake read the book.'

e. èté â-ké-dép-pé àkàrà **kpɔ́t** á-ké á-kót ŋ̀wèt
man 3SG-PST.FOC-buy-REL bean.cake only 3SG-PST.FOC 3SG-read NMLZ-write
'Only the man who bought the bean cake read the book (not Ima or

Akun).'/*'The man who bought the bean cake only read the book (he didn't read the magazine/he didn't sell the book).'[10]

The focus particle *kpɔ́t* 'only' acts as an exhaustive focus operator, and it appears to the right of the focused element. We posit that *kpɔ́t* heads its own phrasal projection, which is a high focus phrase in the complementizer domain.[11,12] Exhaustively focused XPs that are attracted by $HFoc^0$ thus land in Spec, HFocP (Rizzi 1997; Kayne 1998; É. Kiss 1998), which guarantees that *kpɔ́t* always follows it's focused constituent, as the examples in (22) show. The structure in (23) shows the derivation of (22b) along these lines.

(23)



[10] An anonymous reviewer points out that this structure is ambiguous, and that it has the additional meaning 'The man who bought only the bean cake read the book.' We assume here that relative clauses of the form in (22d-e) involve raising-to-C, which accounts for the appearance of the relative suffix. We take it that this additional meaning is still compatible with movement to a high focus position, since the subject and relativized verb also undergo movement to the C domain. However, we leave a more precise account of relative clause structures for future investigation.

[11] Note, too, that the complementizer ké is required when an object is exhaustively focused, as in (22c), and that this complementizer appears after *kpɔ́t*. An overt C^0 is illicit when subjects are exhaustively focused, which is reminiscent of the subject-object asymmetry observed in argument focus constructions due to the "that-trace effect" (see §3). It may be the case that *kpɔ́t* constructions do not require the type of Spec-Head configuration that we propose. However, what is most important for our analysis is that exhaustive focus in Ibibio recruits structure high in the left periphery.

[12] An alternative analysis could treat *kpɔ́t* as a focus-sensitive adjunct much like 'only' in English (this point was raised by an audience member of LSA 2015 and an anonymous reviewer). In such an account, *kpɔ́t* would not head a projection in the C domain; instead, it would adjoin to an XP that bears a focus feature. We take it that this is indeed a viable option, but at present it is difficult to distinguish with much certainty. Importantly, data suggest that *kpɔ́t*-focused constituents (including exhaustive verb focus) activate a left-peripheral focus projection in a way that parallels argument focus and wh-questions in the language. That is, exhaustive focus requires "focus" tense/aspect morphology (just like in cases of Ā-extraction), which is not a requirement of verb focus constructions that recruit the low focus projection.

When verbs are exhaustively focused in Ibibio, the entire TP is targeted for movement. Consequently, the exhaustive focus operator *kpɔ́t* always appears to the right edge of the TP, as seen in (24).[13]

(24) a. [$_{\text{HFocP}}$ [$_{\text{TP}}$ ìmá á-ké á-fèɯ̀è ítɔ̀k] **kpɔ́t**]
ima 3SG-PST.FOC 3SG-run race only
'Ima only ran the race.'/*'Only Ima ran the race.'

b. [$_{\text{HFocP}}$ [$_{\text{TP}}$ ékpê á-ké á-kòt ŋ̀-wèt] **kpɔ́t**]
ekpe 3SG-PST.FOC 3SG-read NMLZ-write only
'Ekpe only read the book.'/*'Only Ekpe read the book.'

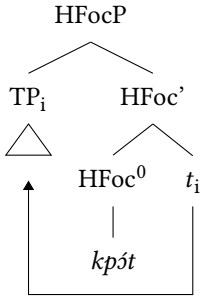
Moreover, exhaustive verb focus constructions bear an affinity to subject focus in that an overt complementizer is not permitted:

(25) * ìmá á-ké á-fèɯ́é ítɔ̀k **kpɔ́t ké**
ima 3SG-PST.FOC 3SG-run race only COMP
(Intended: 'Ima only ran the race.')

Exhaustively focused verbs thus demonstrate a "that-trace effect," which is the same configuration for subject focus.

We propose the analysis for exhaustive TP focus shown in (26), where HFoc^0 probes for V^0 and pied-pipes (Ross 1967) TP.

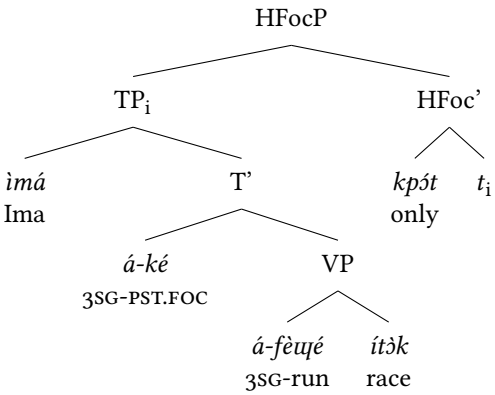
(26)



Our analysis of (24a) is given in (27):

[13] One anonymous reviewer notes that, with a change of tone, the second readings in (24) are possible. Thus, if the final tone of the verb complexes in (24a) and (24b) are high, the grammaticality judgments are reversed. We assume that the different readings have similar underlying structures. The fact that *kpɔ́t* can scope over the whole TP or the subject, but not the object, further supports our pied-piping analysis. It could be that the object is too deeply embedded inside TP to be focused in this construction.

(27)



Exhaustive verb focus constructions thus require a different structural configuration than that of contrastively focused verbs. Exhaustive VP focus targets XPs for movement to the C layer, rather than being derived by head movement more local to VP. Exhaustively focused constituents move to Spec,HFocP and appear to the left of the exhaustive focus operator.

6 Double focus

Given the tree in (1), Ibibio should allow "real multiple focus" (Krifka 1992). That is, if there are truly two distinct focus projections, it should be able to activate both focus heads in a single clause; Ibibio shows that this can indeed happen.

Rizzi (1997: 298) noted for Italian that *wh*-questions are incompatible with focus constructions, since they compete for the same position:

(28) Italian

a. * A chi IL PREMIO NOBEL dovrebbero dare?
'To whom THE NOBEL PRIZE should they give?' (Rizzi 1997: 298)

b. * IL PREMIO NOBEL a chi dovrebbeo dare?
'THE NOBEL PRIZE to whom should they give?' (Rizzi 1997: 298)

In Ibibio, *wh*-questions allow movement to the left periphery, while contrastive verb focus is derived in the inflectional domain. As a result, Ibibio contrastive verb focus is compatible with *wh*-questions, as seen in (29) below.

(29) a. **ǹsŏ** ké (àfò) à-**dìá-díá**
what COMP 2SG 2SG-CON.FOC-eat
'What the hell are you EATING?'

b. **ǹsŏ** ké (àfò) mmé-ú-ké-ú-**dìá-ɯ̀á-díá**
what COMP 2SG *mmé*-2SG-PST.FOC-2SG-CON.FOC-NEG-eat
'What the hell didn't you EAT?'

In (29), the left edge HFoc and lower LFoc are both activated, allowing the *wh*-element *ǹsʊ̌* 'what?' to move to the C domain and the verb *dìá* 'eat' to raise to the lower focus position. This type of double focus interestingly produces a *wh*-the-hell reading (Pesetsky 1987; den Dikken & Giannakidou 2002).

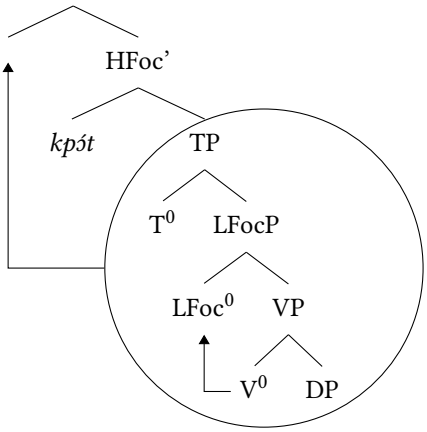
Ibibio also permits double focus (contrastive + exhaustive) with verbs probed for by both Foc heads:

(30) é-ké **é-bɔ̀ɔ́-bwɔ́t** ákʌ́k **kpɔ́t**
3PL-PST.FOC 3PL-CON.FOC-borrow money only
'They only BORROWED money.' (Response to: 'Did they steal money?')

As with (29), our analysis can account for the simultaneity of these focus types since they correspond to distinct structural configurations.

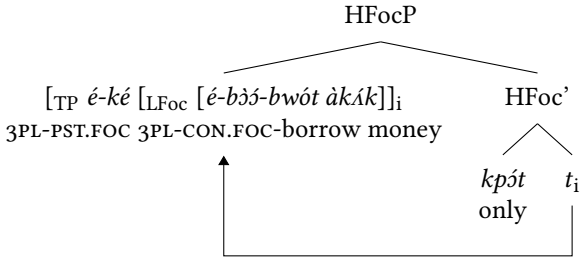
We propose the (truncated) structure in (31) for double verb focus in Ibibio:

(31) HFocP Double verb focus



Here, the order in the derivation is critical, and the derivation of contrastive verb focus precedes exhaustive verb focus. Accordingly, $LFoc^0$ probes for V^0 and causes it to raise, which ensures the verb focus morphology unique to contrastively focused verbs. Following this, $HFoc^0$ also probes for V^0 and pied-pipes the whole TP to Spec,HFocP since exhaustive focus constructions require phrasal movement. This ensures that the contrastively focused verb along with the object DP surface to the left of the exhaustive focus operator. Our analysis of (30) is seen below in (32):

(32)



Again, in our proposal contrastively focused verbs must be derived prior to pied-piping of the TP for verb focus morphology to occur on the verb in a double verb focus construction.[14]

To summarize, in this section we presented data to show that Ibibio does allow double focus constructions, and that such constructions involve real multiple focus. Given the distinct structural configurations required for exhaustive and contrastive verb focus, our analysis comports rather nicely with these facts. Further, given that the different focus positions correspond to particular semantic interpretations when verbs are focused, our proposal also accounts for the scope effects present in double verb focus.

7 Conclusions

We have argued in this paper that Ibibio verb focus constructions are not unified. We motivated the existence of two types of syntactically-driven focus constructions involving verbs in Ibibio: verb raising to a low focus position in the inflectional domain corresponds to contrastive focus, and TP pied-piping to the C layer corresponds to exhaustive focus. Since these focus types are structurally distinct, both Foc probes can target V. Thus, double verb focus is permitted in Ibibio (Krifka 1992), and exhaustively focused verbs always take wide scope (Krifka 1992; Kiss 1998) over contrastively focused ones. From a typological perspective, Ibibio verb focus constructions are significant in that they provide independent evidence for a low focus position associated with a "specialized" semantic interpretation (Belletti 2004). The low focus position in Ibibio is rather unique, however, in that it seems to exclusively target verbs and not, say, NPs. Further exploration into Ibibio contrastive verb focus could thus yield interesting theoretical insights into the nature of low focus and what is possible cross-linguistically.

[14] Our analysis predicts that exhaustive focus always takes wide scope over contrastive focus, which is indeed borne out:

(i) a. ìyó, ékpê [$_{\text{HFocP}}$ [$_{\text{TP}}$ á-ke á-kót ŋ̀-wèt] kpɔ́t]
no ekpe 3SG-PST.FOC 3SG-read NMLZ-write only
'No, Ekpe only [read the book] (not the magazine/he didn't even do his laundry/*he did not take it away).'

b. ìyó, ékpê [$_{\text{HFocP}}$ [$_{\text{LFocP}}$ á-ke **á-kòó-kót** ŋ̀-wèt] **kpɔ́t**]
no ekpe 3SG-PST.FOC 3SG-CON.FOC-read NMLZ-write only
'No, Ekpe only [READ the book] (he did not take it away/*he didn't even do his laundry/*not the magazine).'

Thus, (i.b) only corresponds to the interpretation where reading (not doing something else to) the book is the only thing that Ekpe did; it cannot mean that some object other than the book was read.

Abbreviations

1	1st person	NEG	negation
2	2nd person	NMLZ	nominalizer
3	3rd person	OBJ	object
COMP	complementizer	PERF	perfective
CON	contrastive	PL	plural
COND	conditional	PST	past
FOC	focus	SG	singular
IMPF	imperfective	S/SUBJ	subject
INDF	indefinite		

Ibibio is tonal, and tones are marked in the following manner:

- V́ high tone
- V̀ low tone
- V̂ falling tone (note that tones are marked on either vowels or syllabic nasals in the data).

Acknowledgements

We would like to thank our fellow participants in the 2014 Field Methods in Linguistic Description class and the 2014 Research in Field Linguistics seminar at KU, and audience members at both ACAL 45 and LSA 2015 for helpful comments and discussions. We are especially grateful to Harold Torrence and Jason Kandybowicz for their many insights and critiques. Edopeseabasi Udoinyang also graciously provided examples and judgments that informed the final version of this paper. Finally, we thank two anonymous reviewers for their help in suggesting improvements. Unless otherwise noted, the data used in this paper are from Mfon and Edopeseabasi and reflect their judgments.

References

Akinlabi, Akinbiyi & Eno E. Urua. 2000. Tone in ibibio verbal reduplication. In H. Ekkehard Wolff & Orin D. Gensler (eds.), *Proceedings of the 2nd World Congress of African Linguistics Leipzig 1997*, 280–291. Köln: Rüdiger Köppe.

Akinlabi, Akinbiyi & Eno E. Urua. 2002. Foot structure in the Ibibio verb. *JALL* 23. 119–160.

Baker, Mark C. 1985. The Mirror Principle and morphosyntactic explanation. *Linguistic Inquiry* 16(3). 373–415.

Baker, Mark C. 2008. On the nature of the antiagreement effect: Evidence from wh-in-situ in Ibibio. *Linguistic Inquiry* 39. 615–632.

Baker, Mark C. & Willie U. Willie. 2010. Agreement in Ibibio: From every head, to every head. *Syntax* 13(2). 99–132.

Belletti, Adriana. 2004. Aspects of the low IP area. In Luigi Rizzi (ed.), *The structure of CP and IP*, 16–51. Oxford: Oxford University Press.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–156. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam & Howard Lasnik. 1977. Filters and control. *Linguistic Inquiry* 8. 425–504.

Cook, Thomas L. 2002. Focus in Efik. *JALL* 23. 113–152.

den Dikken, Marcel & Anastasia Giannakidou. 2002. From hell to polarity: "Aggressively non-D-linked" wh-phrases as polarity items. *Linguistic Inquiry* 33(1). 31–61.

Essien, Okon E. 1990a. *A grammar of the Ibibio language*. Ibadan: University Press Limited.

Essien, Okon E. 1990b. The aspectual character of a verb and tense in Ibibio. *Journal of West African Languages* 20. 64–72.

Holmberg, Anders & Christer Platzack. 1995. *The role of inflection in Scandinavian syntax*. Oxford: Oxford University Press.

Kayne, Richard S. 1998. Overt vs. Covert movement. *Syntax* 1(2). 128–191.

Kiss, Katalin É. 1998. Identificational focus versus information focus. *Language* 74(2). 245–273.

Krifka, Manfred. 1992. A compositional semantics for multiple focus constructions. In Joachim Jacobs (ed.), *Informationsstruktur und grammatik*, 17–53. VS Verlag: Opladen.

Perlmutter, David M. 1971. *Deep and surface structure constraints in syntax*. New York, NY: Holt, Rinehart & Winston.

Pesetsky, David. 1987. Wh-in-situ: Movement and unselective binding. In Eric Reuland & Alice G. B. ter Meulen (eds.), *The representation of (in)definiteness*, 98–130. Cambridge, MA: MIT.

Pollock, Jean-Yves. 1989. Verb movement, Universal Grammar, and the structure of IP. *Linguistic Inquiry* 20(3). 365–424.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: A handbook in generative syntax*, 281–337. Kluwer: Dordrecht.

Ross, John R. 1967. *Constraints on variables in syntax*. Cambridge, MA: MIT Doctoral dissertation.

Willie, Willie U. & Mfon. E Udoinyang. 2012. The missing component in Ibibio linguistic time. In Michael R. Marlo, Nikki B. Adams, Christopher R. Green, Michelle Morrison & Tristan M. Purvis (eds.), *Selected proceedings of the 42nd Annual Conference on African Linguistics*, 240–256. Somerville, MA: Cascadilla.