

Focus in Aghem^{*}

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1 Introduction

Aghem focus marking has long been noted by researchers as an unusual phenomenon, both descriptively and theoretically. The main descriptive generalization is that focus expression in Aghem is intimately connected with the immediate postverbal position, which, since the pioneering work of Watters (1979) and Hyman (1979a), has been known under the abbreviation IAV (immediately after the verb). To illustrate, compare the baseline sentence in (1), where the focus is either on the entire verb phrase or on the object (narrow focus), with (2a), where the narrowly focused subject appears in the IAV, and (2b), where the focused adjunct instead appears in the IAV:¹

- (1) tí-bvú tì -bìghà m̂ zì kí -bé ↓né
dogs two P₁ eat fufu today
'The two dogs ate fufu today.'²

- (2) a. subject in IAV
à m̂ zì tí-bvú tì -bìghà bé ↓kó né
ES P₁ eat dogs two fufu D.OBL today
'The TWO DOGS ate fufu today.'

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¹ The following abbreviations are used in the glosses: COMP = complementizer, D = determiner, DEM = demonstrative, ES = expletive subject, FM = "focus" marker, LOC = locative, OBL = oblique, P₁ = today past tense, P₂ = general past, HAB = habitual, QM = question marker.

² *Fufu* is a traditional starchy accompaniment for stews or other dishes with sauce, made of corn or yams.

b. adjunct in IAV

tí-bvú tì -bìghà mō zì né ↓bé ↓kó
 dogs two P₁ eat today fufu D.OBL
 ‘The two dogs ate fufu TODAY.’

As seen in (3a), a matrix clause cannot end in a bare verb;³ thus intransitive verbs and transitive verbs that appear without a postverbal object have their IAV filled by the particle *nò* which we will for now identify as the focus marker (FM):

(3) Bare verb: IAV has to be filled

- a. ò mō bvù *(nò)
 3SG P₁ fall FM
 ‘He fell.’
- b. ò mō zì *(nô)
 3SG P₁ eat FM
 ‘He ate (it).’
- c. bvú ↓tí mō bé ↓kí zí *(nô)
 dogs D P₂ fufu D eat FM
 ‘The dogs ATE the fufu.’

Unlike many other West African languages, Aghem does not have verb fronting, and verbs are focused “in situ”, often by combination with *nò*. The contrast between bare verbs and verbs followed by the particle *nò* is similar to the contrast between conjoint (conjunctive, weak, short) and disjoint (disjunctive, strong, long) forms in other Bantu languages (Hyman & Watters 1984, Creissels 1996, Güldemann 2003, Buell 2006): in all the relevant cases, the conjoint form cannot appear clause-finally. We will discuss the particle *nò* further in section 4.

³ Clauses with the auxiliary *maa* constitute an exception to this generalization. Their analysis is beyond the goals of this paper.

Finally, *wh*-words appear in the same position as the relevant focused material, thus invariably in the IAV. Compare *wh*-questions about object (4a), subject (4b), and adjunct (4c):

- (4) a. bvú ↓tí mò zí kwò né (à)
 dogs D P₂ eat what today QM
 ‘What did the dogs eat today?’
- b. à mò zì ndúghó ↓bé ↓kó né (à)
 ES P₁ eat who fufu D.OBL today QM
 ‘Who ate fufu today?’
- c. tí-bvú tì -bìghà mô zì zín bé ↓kó (á)
 dogs two P₁ eat when fufu D.OBL QM
 ‘When did the two dogs eat fufu?’

While the empirical characterization of the IAV as being associated with focus is quite robust, how these facts fit in with the total analysis is less clear. Two sets of questions naturally arise. The first set concerns what the IAV is: is it the surface postverbal position that matters, or does the IAV represent a deeper structural association with the verb? Either way, is the IAV a dedicated focus/*wh*-position, as it superficially appears to be, or does it represent something else, either different from or more general than focus? If the IAV is indeed dedicated to focus, is it accidental that focus is in IAV and not somewhere else in the clause? If the IAV is not exclusively bound to focus, how does Aghem express focus in general?

The other set of questions concerns the contribution of the final marker *nò*: does it mark focus directly (as is assumed in Hyman and Watters 1984, Aboh 2006),⁴ or is it simply a marker of constituency, thus only indirectly associated with focus, as has been argued for disjoint forms in Zulu (Buell 2006)?

In the rest of the paper we will present an analysis of focus expression in Aghem which addresses these questions. We will begin with a general discussion of the basics of Aghem grammar in section 2, and we will then analyze two possible approaches to focus that have been

⁴ Cf. similar analyses of conjoint/disjoint forms in other Bantu languages (Creissels 1996, Güldemann 2003).

proposed for Aghem and related languages: the representation of focus as a special projection in the verb phrase, and a movement analysis of focus (section 3). We show that both approaches, although they offer considerable insights, are not supported by the empirical evidence. In section 4, we present our own proposal concerning the grammar of focus in Aghem and analyze the status of *nò*. Our main conclusion is that exhaustive focus expressions and *wh*-words in Aghem have to occur in the verb phrase and receive the focus/*wh*-interpretation from an operator in the complementizer layer of the clause. Section 5 outlines our general conclusions and presents outstanding questions.

2 *Basics of Aghem structure*

Aghem is a Western Grassfields Bantu language of the Ring subgroup spoken by about 27,000 speakers in Cameroon (Hyman 1979a, 1985, 2006; Anderson 1979, Watters 1979). Although more morphosyntactically analytic than the Narrow Bantu languages, Aghem maintains much noun class morphology as well as some marking on verbs. Since tone plays an important role in Aghem syntax, in (5) we present the tone marking adopted in this study:

(5) Aghem tones and tone marking

(ˊ) high tone (ˋ) high-to-low falling tone (↓) downstep
 (ˉ) low tone (ˊ) low-to-high rising tone

The surface word order in Aghem is SVO, with the auxiliary verb always preceding the main verb, e.g. *mô* ‘today past’ (P₁) in (6a,b):

- (6) a. tí-bvú tì -bìghà mô zì kí -bé ↓né
 dogs two P₁ eat fufu today
 ‘The two dogs ate fufu today.’

b. fí́l á m̂ fùo kí-bé â bvú †tó á †ndúghó

friends D P₁ give fufu to dogs D.OBL LOC house

‘The friends gave fufu to the dogs in the house.’

2.1 Noun phrase

The structure of the DP is quite complicated, and in this paper we will address only those aspects that are relevant to the general points made here; for a more detailed discussion, see Hyman (1979a, 1985, 2006). Unlike better known Bantu languages, Aghem actually has a morphological distinction between direct and oblique cases, where the direct case is assigned by the verb (light verb for the subject, and lexical verb for the object), whereas the oblique case is assigned by overt prepositions, as in (7), or by a suprasegmental preposition consisting solely of an underlying high tone, as in (8).

(7) Oblique case assigned by an overt preposition

a. â bvú †tó

to dogs D.OBL

‘to (the) dogs’

b. à bvú †tó

with dogs D.OBL

‘with (the) dogs’

(8) Oblique case assigned by an underlying high tone

a. ò m̂ kò? wù

3SG P₁ see person

‘He saw a person.’ (NB: There is no high tone between ‘see’ and ‘person’)

b. à m̂ kò? wǔ ñ̀m ‘a PERSON saw the animal’ (/wù + ´ + ñ̀m/)

ES P₁ see person animal

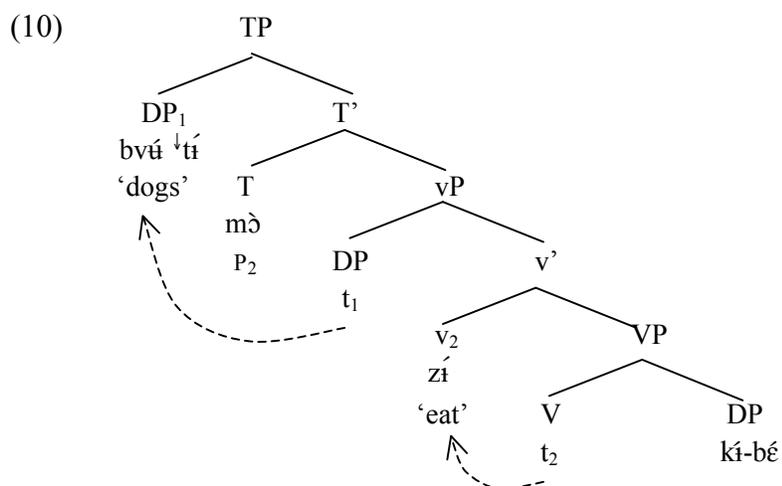
person PREP animal

The morphological exponence of case is fused with the expression of the determiner, which follows the noun.⁵ In the direct cases, the determiner procliticizes to the next constituent, as in (9a), which shows the direct case of the subject, and (9b) illustrating the direct case on the object:

- (9) a. bvú ↓tí m̀ ñíŋ ǹ
 dogs D P₂ run FM
 ‘The dogs ran.’
- b. bvú ↓tí m̀ zí kí-bé
 dogs D P₂ eat D-fufu
 ‘The dogs ate the fufu.’

2.2 Basic clause structures

In analyzing Aghem clause structures, we adopt the standard assumptions concerning verbal and inflectional domains, namely, that the internal arguments are generated within vP. The highest XP in the vP domain then raises to spec,TP; recall that verb phrase raising to spec,TP, attested in other West African languages, does not occur in Aghem. The structure of (9b) is shown in (10):



⁵ Noun prefixes delete before all agreeing elements except numerals; see Hyman 1979a, 1985, 2006 on conditions on the realization of (9a) vs. (9b).

‘fufu’

In this structure, the verb remains low in the verbal domain, raising to v° but not higher. Evidence for the low position of the verb comes from the placement of adverbials, which have to precede the verb when the object is in direct case, here *kí-bé* ‘fufu’.

- (11) *bvú* [↓]*tí* *mò* (*á*[↓]*zósó*) *zí* (**á*[↓]*zósó*) *kí-bé* (*á*[↓]*zósó*)
 dogs D P₂ yesterday eat yesterday fufu yesterday
 ‘The dogs ate fufu (yesterday).’

In addition to the SVO structure just shown, the object can also appear in the preverbal position. We assume that this preverbal position is adjoined to vP; thus, the sentence in (12a) has the structure in (12b).

- (12) a. *bvú* [↓]*tí* *mò* *bé* [↓]*kí* *zí* *á*[↓]*zósó*
 dogs D P₂ fufu D eat yesterday
 ‘The dogs ate fufu YESTERDAY.’
 b. [TP *bvú* [↓]*tí* [T *mò* [_{VP} *bvú* [↓]*tí* [_{VP} *bé* [↓]*kí* [_v *zí* [_{VP} [_{VP} *zí* *kí-bé*] *á*[↓]*zósó*]]]]]]]]]

Adjunction inside the vP results in typical middle-field effects, including defocusing (as in German or Slavic; cf. Reinhart 1996, Sturgeon 2006, among many others). However, there is no evidence for a dedicated Topic projection since the preverbal object does not show obligatory wide scope of the defocused constituent or reconstruction effects. In section 4, we will return to the differences between SVOX (11) and SOVX (12), but for now let us just emphasize that the preverbal position of the object (identified in Watters 1979 as immediate before the verb, IBV) is not tied to a unique interpretation.

Next, Aghem has the inversion construction VS, illustrated in (13a), which contrasts with the regular SV structure in (13b):

- (13) a. à m̀ ñíŋ tí-bvú á^lzɔɔ
 ES P₂ run dogs yesterday
 ‘There ran dogs yesterday./ The DOGS ran yesterday.’
- b. tí-bvú m̀ ñíŋ á^lzɔɔ
 dogs P₂ run yesterday
 ‘(The) dogs ran yesterday.’

Following extensive research on subject inversion in other languages (e.g., Déprez 1990, Kayne and Pollock 1978, 2001), we analyze (13a) as involving the movement of the verb to a higher head, with the subject staying in the base-generated position in spec,vP. Unlike other languages with inversion where the verb moves to the inflectional head, in Aghem the verb stays lower, which is indicated by adverbial placement data: in inversion constructions, adverbs can still intervene between the tense marker and the verb, but not between the verb and the subject:

- (14) à m̀ (á^lzɔɔ) ñíŋ (*á^lzɔɔ) tí-bvú
 ES P₂ yesterday run yesterday dogs
 ‘There ran dogs yesterday./ The DOGS ran yesterday.’

We hypothesize that the verb raises to the head of a higher light verb phrase. This vP is possibly aspectual, which would account for the episodic interpretation found in presentational contexts. Aghem does not allow predicate fronting to satisfy the EPP,⁶ nor is it a pro-drop language, hence inversion constructions invariably have an overt expletive subject in the preverbal position, thus (English glosses are substituted for Aghem words):

- (15) [TP *expl* [TP P₂ [AspP [Asp^o run [vP dogs [v^o ~~run~~] [VP ~~run~~]]]]]]

Although it may appear on the surface that Aghem allows inversion with transitive verbs, as seen in many examples in Hyman (1979b), closer inspection reveals that such clauses are in fact

⁶ Cf. Alexiadou and Anagnostopoulou 1998, Massam 2000 on predicate raising satisfying the EPP.

different from the uninverted ones. For example, the baseline sentence (16a) cannot be simply inverted, hence the ungrammaticality of (16b), where the object *kí-bé* ‘fufu’ occurs in direct case:

- (16) a. *bvú* [↓]*tí* *m̀* *zì* *kí-bé*
 dogs D P₂ eat fufu
 ‘The dogs ate fufu.’
- b. **à* *m̀* *zì* *tí-bvú* *kí-bé*
 ES P₂ eat dogs fufu
 (“There ate dogs fufu.”)
- c. **à* *m̀* *bé* *kí* *zì* *tí-bvú*
 ES P₂ fufu eat dogs
 (“There ate dogs fufu.”)

For a two place predicate to undergo inversion, the object has to be externalized outside the verb phrase. The descriptive generalization is as follows: the object cannot appear in the direct case and it has to be at the right periphery of the clause. This captures the ungrammaticality of (16b) and (16c) respectively.

In order to understand the structure as in (16a), we first need to address the status of the right-peripheral object.

The understanding of the right peripheral position starts with the observation that direct arguments in Aghem are not dedicated topics—as (17) shows, sentences opening a narrative can have a preverbal subject in the direct case:

- (17) wù lí fǐ kí tsíghá ↓ kó wí
 person certain once had HAB only wife
 ‘A certain person once had a wife...’ (Hyman 1979b: 202)

More importantly, direct forms cannot appear in the right periphery, as shown by the ungrammaticality of (18):

- (18) *bvú ↓tí m̀ zí á↓zós, kí-bé
 dogs D P₂ eat yesterday fufu
 ‘The dogs ate yesterday fufu.’

Oblique case-marked left dislocated topics are possible but rare and dispreferred (Hyman 1979a: 70). Thus right-periphery seems to be the preferred place for topic expressions. Topic expressions on the right have to be in the oblique case, and they share this oblique cases marking with another set of peripheral expressions, vocatives (Hyman 1979a: 61); cf. Lambrecht 1996 on the systematic parallels between vocatives and base-generated topics in French.

Our approach to these right peripheral expressions is that they are base-generated in a high adjoined position. In addition to the case marking, the evidence for their adjunct status comes from several quarters. First, such expressions can appear further to the right, following another adjunct, as in the following example:

- (19) bvú ↓tí m̀ zí á↓zós bé ↓kó
 dogs D P₂ eat yesterday fufu D.OBL
 ‘The dogs ate fufu YESTERDAY.’

Next, this constituent is required to be marked by the high tone preposition referred to earlier, which is realized on the surface only if it is both preceded and followed by a low tone, as in the following:

- (20) a. $\tilde{n}\tilde{d}\tilde{m}$ $m\tilde{d}$ $k\tilde{d}\tilde{?}$ $\tilde{f}\tilde{i}$ - $k\tilde{a}\tilde{a}$
 animal P₁ see squirrel
 ‘An animal saw a squirrel’
- b. \grave{a} $m\tilde{d}$ $k\tilde{d}\tilde{?}$ $\tilde{n}\tilde{?}\tilde{m}$ $k\tilde{a}\tilde{a}$ $\tilde{f}\tilde{d}$ / $\tilde{n}\tilde{d}\tilde{m}$ + ‘ + $k\tilde{a}\tilde{a}$ $\tilde{f}\tilde{d}/$
 ES P₁ see animal squirrel D-OBL animal PREP squirrel D.OBL
 ‘An ANIMAL saw a squirrel’

We see in (20a) that the noun $\tilde{n}\tilde{d}\tilde{m}$ ‘animal’ has an inherent low tone. However, as seen in (20b), when ‘animal’ is followed by the oblique form of the noun $k\tilde{a}\tilde{a} \tilde{f}\tilde{d}$ ‘squirrel’, it is realized with a low-to-high rising tone: $\tilde{n}\tilde{?}\tilde{m}$. As indicated in the underlying representation to the right, the high tone that has been assigned to create the rise is the tonal preposition referred to above. Although underlyingly present to assign the oblique form of the following noun phrase, this high tone will only be realized if both the preceding and following tones are low (i.e. it will be “absorbed” into either a preceding or following high tone).

In sentences with rightward constituents, these expressions always take wide scope, as shown in (21a), where the clause final locative takes wide scope over the subject. Compare that with example (21b), where such wide scope is optional:

- (21)a. \acute{a} - $gh\acute{i}$ \acute{a} - $\acute{t}\acute{i}gh\acute{a}$ $m\hat{o}$ $n\grave{u}\eta\grave{o}$ (no) $\acute{a}\acute{n}$ $\acute{f}\acute{i}$ - $m\acute{u}\acute{t}\acute{u}$ $\acute{t}\acute{i}$ - $b\grave{i}gh\grave{a}$
 people three P₁ leave FM in cars two
 ‘Three people went in two cars.’
 (*two cars* > *three people*; **three people* > *two cars*)
- b. \acute{a} - $gh\acute{i}$ \acute{a} - $\acute{t}\acute{i}gh\acute{a}$ $m\hat{o}$ $\acute{a}\acute{n}$ $\acute{f}\acute{i}$ - $m\acute{u}\acute{t}\acute{u}$ $\acute{t}\acute{i}$ - $b\grave{i}gh\grave{a}$ $n\grave{u}\eta\grave{o}$ no
 people three P₁ in cars two leave FM
 ‘Three people went in two cars.’
 (*three people* > *two cars*—preferred; *two cars* > *three people*)

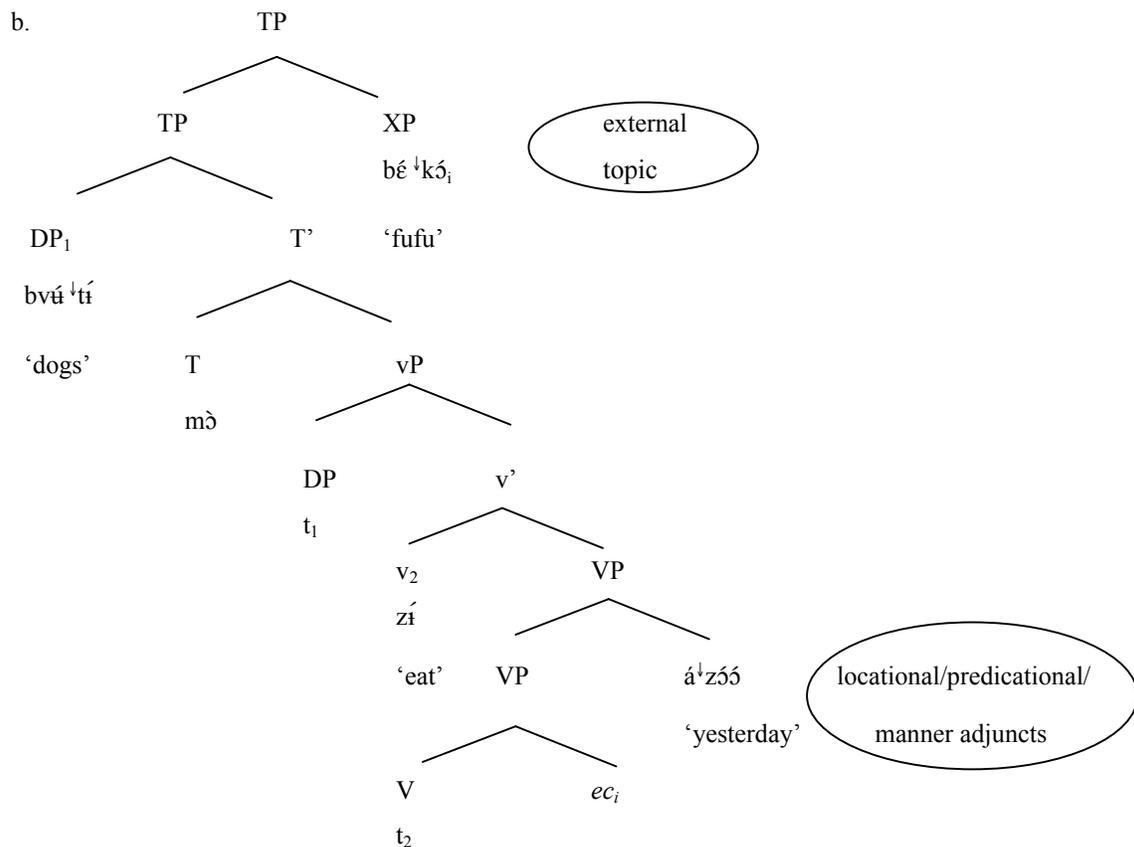
In addition to the wide scope, right periphery expressions cannot include anaphors or NPIs, and they can be iterated and scrambled. All these properties are typical of topics. Given that right

periphery expressions appear in the oblique case, we therefore propose that they are base-generated in the right periphery of the clause, adjoined either to TP or to CP (assuming that CP may be projected optionally). As such, they have the status of external topics (cf. Aissen 1992, de Cat 2002). Thus, for (22a), the proposed structure is as in (22b).⁷

(22) a. $bv\acute{u}$ $\downarrow t_1$ $m\grave{o}$ $z\acute{i}$ $\acute{a}\downarrow z\acute{o}s$ $b\acute{e}$ $\downarrow k\acute{o}$

dogs D P₂ eat yesterday fufu D.OBL

‘The dogs ate fufu YESTERDAY.’ (lit.: ‘Of fufu, the dogs ate YESTERDAY.’)



⁷ In our approach, we do not assume the antisymmetric view and allow right adjunction at various heights. We hypothesize that right adjunction at TP is the base-generated position of an external topic (cf. de Cat 2002 for a similar proposal for spoken French), and that right adjunction at VP is typically associated with manner or locative adverbials (cf. Ernst 2002, 2003; Shaer 2003 for similar structures in other VO languages).

2.3 Question formation

Questions are marked by the particle *a*, which appears clause-finally, for example:

- (24) wò zǐá à-lím á
 2SG eat yams QM
 ‘Are you eating yams?’

Wh-words are actually indeterminate expressions, and receive the interrogative interpretation due to the presence of a question particle.¹⁰ Compare:

¹⁰ It should be noted that the QM is often optional. While /ɛ/ assimilates to the QM (e.g., /nɛ/ ‘today’ + /a/ → [náà] in the examples in (4)) above, the more usual case is for the question marker to assimilate and lengthen other preceding vowels, e.g. /kwɔ̃/ + /a/ → [kwɔ̃:] ‘what’. This sometimes makes it difficult to determine whether this marker is present.

- (25) a. bvú †tí mō kòʔ kî-fíghá
 dogs D P₁ see thing
 ‘The dogs saw something.’
- b. bvú †tí mō kòʔ kwò à
 dogs D P₁ see what QM
 ‘What did the dogs see?’

Subjects cannot be questioned in the preverbal position:

- (26) a. wù mò ñĩŋ nō
 person P₁ run FM
 ‘Someone ran.’
- b. *ndùghò mò ñĩŋ nó à
 who P₁ run FM QM
- c. à mò ñĩŋ ndú[†]ghó á
 ES P₁ run who QM
 ‘Who ran?’

Now that we have established the basic structures of Aghem, we are ready to address the status of the IAV and its relationship with focus.

3 *IAV and focus: An overview of existing proposals*

To recapitulate our starting point, it seems that focus expressions and *wh*-words in Aghem invariably appear immediately after the verb, in the IAV. In this section, we would like to address the question of whether the IAV is a dedicated focus projection. We will first address the analysis in terms of an articulated focus projection proposed for Aghem by Aboh (2006) and show that this analysis makes incorrect empirical predictions. In section 3.2, we will examine another analysis of Aghem focus, one formulated in terms of movement with pied-piping, and show that it is also untenable.

3.1 Focus projection in the vP

Starting with Rizzi's seminal work (1997), many researchers have embraced the idea that information-structural categories are projected in the complementizer layer and may also be projected in the exploded vP layer, thus:

(27) Force P < **(TopicP)** < **FocusP** < **(TopicP)** < FinP < TP < **(TopicP)** < **FocusP** < **(TopicP)** < **vP** < **FocusP**

Such clausal architecture is appealing because it allows linguists to associate certain positions with topic or focus interpretations and to constrain the range of possible parametric variation in topic/focus marking: some languages may house all their information-structural categories in the CP layers, others in the inflectional layer, and still others in the verbal layer. According to a recent proposal by Aboh (2006), Aghem instantiates the last kind, the low focus projection type.

Aboh follows Belletti (2002) in assuming that the vP periphery includes a focus phrase, thus:

(28) vP < FocusP < (TopicP) < (TopicP) < VP

Languages where focus is in the complementizer layer are analyzed as high focus languages, and the ones with focus in the verbal layer instantiate the low focus type. Aboh proposes a principled difference between Kwa and Gur, which he shows to be high focus (Aboh 2004a, b, 2006), and Bantu, which he considers low focus. His argument for Bantu low focus relies heavily on Aghem data (Aboh 2006).

Aboh makes the following assumptions for Aghem: the verb invariably moves to T, and the focus projection follows. The head of the focus projection is the final marker *nò* which was introduced above; this marker can also alternate with a null element. The indication that *nò* is a phrasal head comes from the fact that it cannot be iterated, cf. the ungrammaticality of (29):¹¹

(29) *fú kí m̀ ñíñ nò á kí-[↓]bé nò
 rat D P₂ run FM in compound FM
 'The rat ran inside the compound.' (Watters 1979:167)

¹¹ Aghem has verb serialization, and *nò* cannot be iterated even in serial verb constructions.

Adding all these pieces together, the proposed syntax of focus in Aghem is as follows:

- (30) bvú ʔtí m̀ [vP bÉ ʔkí [FocP zí [Foc nò [VP zí-kí-bÉ]]]]
- dogs D P₂ fufu D eat FM
- ‘The dogs ATE the fufu.’

This account correctly captures the word order facts and the distribution of *nò*. However, it makes a number of incorrect predictions and is incompatible with empirical data.

First, as we already showed using adverbial placement data, Aghem does not have across-the-board V-to-T raising. The absence of this raising undermines one of the premises of the structure in (30). If such raising were somehow available in spite of the adverbial placement facts, it is unclear how it could be reconciled with the occurrence of preverbal and postverbal objects. To accommodate structures where the object is preverbal (IBV) and postverbal (IAV), the low focus analysis should presumably allow for verb raising (V-to-T) as well as for vP raising in (30) and in (31).

- (31) tí-bvú tí -bìghà m̀ [vP [zì kí -bÉ]_i [FocP t_i [Foc nò [VP t_i]]]]
- dogs two P₁ eat fufu FM
- ‘The two dogs ate fufu.’

Both verb-raising and VP-raising are generally available but it is unlikely for them to co-occur within a single language (Bobaljik 2002, Oda 2005). If we were to follow the established contrasts between verb-raising and VP-raising languages proposed by Oda (2005), then Aghem would be closer to the profile a verb-raising language, not VP-raising language: it does not allow nominal predicate fronting (VP-raising languages do), or any verb fronting for that matter, and it has the inversion alternation SV/VS, typical of V-raising languages. Unlike typical verb-raising languages, Aghem does not have obvious rich verb agreement; however, the cliticized determiners that we have glossed as D can arguably be identified as agreement markers (Hyman 2006). If this were the case, that would bring Aghem even closer to the profile of a verb-raising language.

Next, the low focus analysis predicts that focus phrases should be equally available in matrix and embedded clauses. However, the focus marker *nò* cannot occur in embedded clauses, despite the fact that a constituent inside the embedded clause can receive focus interpretation. For example, this marker cannot occur in a relative clause or in a purpose clause:

- (32) a. wìzín wí¹l[-á ò m̀ tsìghà bv̀ (*ǹ)]
 woman DEM-COMP 3SG P₁ pass fall FM
 ‘the woman that fell’
- b. ò ñghà [ñí¹á ñ zí kí-bé (*ǹ)]
 3SG want COMP 1SG eat fufu FM
 ‘He wants me to eat fufu.’

Since the focus projection is low, in the verb phrase, such a restriction is unexpected.

Finally, the focus-projection hypothesis assumes that *nò* is a phrasal head that takes the focused constituent as its complement. However, phonological phrasing evidence suggests that it does not have head properties. Consider the following example:

- (33) à m̀ ǹǹò k̀i-k̀ò ǹò /k̀i-k̀ò + ‘ + ǹò/
 ES P₁ leave slave FM
 ‘A slave left.’

In this example, the focus marker /ǹò/, which has underlying low tone, inexplicably appears with a high-to-low falling tone. Where is this extra high feature from? We suggest that it is exactly the same high tone that marks adjuncts in the right peripheral position, as we saw in (20), repeated as (34a) below:

- (34) a. à m̀ k̀ò? ñǎm k̀àa f̀
 ES P₁ see animal squirrel D-OBL
 ‘An ANIMAL saw a squirrel’

- b. ... $\tilde{n}\grave{o}m + ' + \text{fi-kàa} \text{ f}\acute{o} \rightarrow \tilde{n}\grave{o}m + \underline{\text{fi}}\text{-kàa} \text{ f}\acute{o} \rightarrow \tilde{n}\grave{o}m + ' \text{ kàa} \text{ f}\acute{o} \rightarrow \tilde{n}\check{o}m \text{ kàa} \text{ f}\grave{o}$
 animal PREP squirrel D.OBL

As seen in the derivation in (34b), the high is first assigned to the prefix of ‘squirrel’. When the prefix falls out because there is an agreeing determine /fó/, the resulting freed high tone is then relinked to the preceding syllable to produce [n̄m]. In (33), the high tone is also assigned to the right, converting /nò/ to [nô]. The “oblique” tonal marking indicates that *nò* is not the head of a focus projection but instead a complement of a silent preposition. This makes *nò* similar to the adjuncts in verb phrases we have seen above, for example:

- (35) $\text{bv}\acute{u} \ \downarrow\text{t}\acute{i} \ \text{m}\grave{o} \ \text{z}\acute{i} \ \acute{a}\downarrow\text{z}\acute{o}\acute{o} \ \text{b}\acute{e} \ \downarrow\text{k}\acute{o}$
 dogs D P₂ eat yesterday fufu D.OBL
 ‘The dogs ate fufu YESTERDAY.’

The analysis of postverbal adjuncts proposed above places the material introduced by a suprasegmental preposition in the right adjunction position in the VP, shown schematically in (36a). Accordingly, the particle *nò* could appear in a similar adjunct position, as shown in (36b):

- (36) a. [VP [VP eat fufu] [Adv]/[PP]]
 b. [VP [VP eat] [PP Prp [*nò*]]]

Aghem has a variety of phrasal heads, most of them preceding the complement in surface structure (tense, mood), but also determiners, the question marker *á*, and suprasegmental hortative and imperative markers, which follow their complements on the surface (Anderson 1979: 106-109). None of these phrasal heads can occur with the tonal preposition, and in fact hortative and imperative markers combine with the preceding material conditioning tone change. Thus, *nò* behaves completely opposite from other comparable heads and would require a special analysis. When compared to other dependent forms, however, *nò* fits their profile.

All these considerations indicate that the low focus projection in the verb phrase cannot account for Aghem focus.

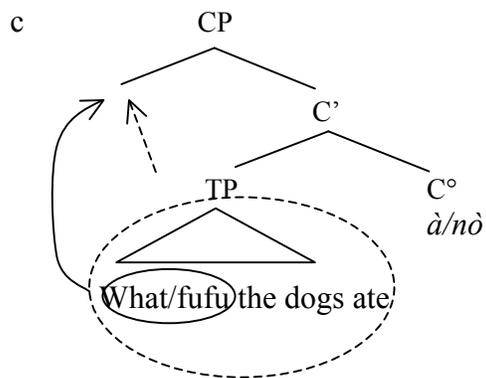
3.2 Focus movement

In a number of African languages which are known to have articulated focus marking, focus has been analyzed on par with *wh*-movement as an A-bar movement of the relevant expression followed by clausal pied-piping (cf. Nkemnji 1995, Koopman 2000; Sabel and Zeller 2006; see also Cheng and Downing (2006) for a different analysis employing A-bar movement). Nkemnji's analysis has been proposed for a closely related language, which makes it particularly relevant for discussion. The basic idea is that the focus expression/*wh*-word first moves to *spec,CP* (alternatively, to the head of a high dedicated projection), and the remaining clause is then pied-piped to it.

(37) A-bar movement and pied-piping

a. *bvú* [↓]*tí* *m̀* *zí* *kẁ* *à*
 dogs D P₂ eat what QM
 'what did the dogs eat?'

b. *bvú* [↓]*tí* *m̀* *zí* *kí-bé* *ǹ*
 dogs D P₂ eat fufu FM



Under this analysis, the question marker *à* and the final marker *ǹ* can be identified as complementizer heads. That would presumably account for the absence of *ǹ* in embedded clauses (see (32a, b) above), which was problematic for the low focus projection account.

An argument in support of the movement analysis in Aghem comes from island effects, illustrated in (38) for a relative clause island:

- (38) *m̄ m̄ k̄? wé wíl [ʼá ò m̄ n̄ kw̄-k̄] à
 1SG P₁ see child DEM-COMP 3SG P₁ take what QM
 ('For what *x*, *x* a thing, did I see the child who took *x*?')

Surprisingly, island effects hold well only for wh-questions, not for focus; cf. the following example showing that focus in a relative clause is possible:

- (39) m̄ m̄ k̄? wé wíl [ʼá ò m̄ n̄ bv̄ ʼt̄s̄]
 1SG P₁ see child DEM-COMP 3SG P₁ take dogs D.OBL
 'I saw the child who took the DOGS.'

In addressing the movement analysis, we will set aside more general, conceptual arguments against movement for elements that on the surface appear in situ (cf. Reinhart 1998 for arguments against such an approach, and Heck 2004 for a general discussion of pied-piping). We remain agnostic as to whether such movement is justified or not; it is quite possible that languages differ with respect to it. Instead, we will concentrate on language-particular evidence which indicates that the movement analysis of Aghem focus is untenable.

First of all, the actual implementation of movement with pied-piping for Aghem would be difficult. One would need to move the wh-word to spec,CP, and then front the remnant clause in front of that, presumably in some higher position (rather than to the same position). Even if the machinery of movement itself were to work, this analysis would still have to stipulate the IAV because the remnant would *have to* have the verb as the last part of the surface string. We have seen above that the postverbal area in Aghem is quite extensive, so this is a difficulty for this analysis.

The other difficulty of maintaining the movement analysis for Aghem questions has to do with the fact that many familiar manifestations of A-bar movement are absent. First, Aghem allows multiple wh-expressions but shows no superiority effects, which is again surprising under a movement analysis. Consider the following examples:

- (40) a. à m̀ z̀ ndúghó kẁ-̀ z̀n
 ES P₁ eat who what when
 ‘Who ate what when?’
 ‘When did who eat and what?’
- b. à m̀ z̀ kẁ ndúghó
 ES P₁ eat what who
 ‘Who ate what?’
 “What did who eat?”

Another argument against movement comes from an unusual asymmetry between arguments and adjuncts with respect to islands. In *wh*-in situ languages, argument and adjuncts show different sensitivity to islands, with arguments escaping island constraints but adjuncts subject to them (cf. Huang 1982, Saito 1992, Lasnik and Saito 1992, Tsai 1995 for Chinese and Japanese). In Aghem, the situation is the opposite: as we just saw, arguments are impossible in islands, whereas adjuncts are accepted, if only marginally:

- (41) ? à m̀ ts̀ghà bv̀ ndúghó ↓z̀n
 ES P₁ pass fall who when
 ‘Who fell when?’ (lit. ‘when was it that who fell?’)
 ‘for what *x*, *x* a place, did I see the child who ran in *x*?’

Thus, the movement analysis of Aghem focus faces too many empirical challenges, and we will not pursue it further. This of course does not mean that the *wh*-movement analysis may not work for other languages, even closely related.

4 *In search of an alternative*

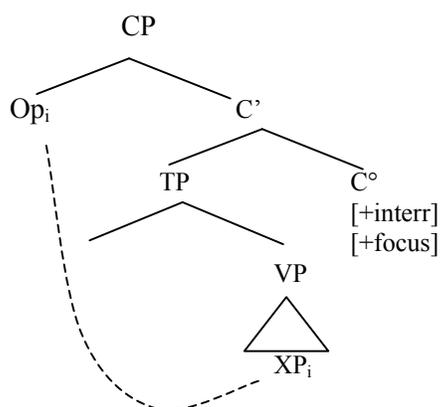
4.1 *Focus operator*

We have argued that proposals in terms of an articulated verb periphery and focus movement fail to capture the full range of Aghem data. In this section we will outline our own proposal on Aghem postverbal focus. Our main idea is that identificational (exhaustive) focus is sensitive to

constituency and is assigned within the predicate phrase (VP). Conceptually, the association between focus and predicate is well established, so in that sense the idea that focus is linked to predication is not new (cf. Horvath 1986; Diesing 1992; van Geenhoven 1998; Reinhart 1998; Kiss 1998; Partee and Borschev 2003, for similar views). The other main component of our proposal is that the focus/wh-interpretation is licensed by an alternative-activating operator in the complementizer projection.

The structure we propose is as follows: an interrogative or focus operator is in the specifier of the highest functional projection (CP or ForceP—nothing hinges on the actual category here) and unselectively binds the lowest XP in the clause.

(42) *focus assignment in Aghem*



If our proposal is on the right track, the association between the IAV and focus is an artifact of a general focus-assignment rule. Focus is read off constituent structure, but is not directly projected. Rather, it is associated with a particular projection, namely the verb phrase; the association between the verb (or predicate) phrase and focus is cross-linguistically quite common (see Lambrecht 1994: ch 5; Vallduvi 1998, and many others).

4.2 *Deriving focus*

We will now show how this proposal works, starting with details of focus assignment. In an intransitive clause with no additional material after the verb, the focus is naturally interpreted with the VP, thus (only the relevant derivations shown):¹²

- (43)a. ò m̀ò bv̀ù ǹò
 3sg P₁ fall FM
 ‘He fell.’ (=3a)
- b. [CP Op_i [TP he [vP fall [vP ~~fall~~]]]]

Turning to transitive clauses, we have seen that constituents in the IAV are interpreted as narrow focus or as part of the wide VP focus, thus in (44), repeated from (1) above, the focus is either ‘fufu’ or ‘ate fufu’:

- (44) tí-bv̀ú t̀ì -b̀ìghà m̀ô z̀ì k̀í -bé ↓né
 dogs two P₁ eat fufu today
 ‘The two dogs ate fufu today.’

In this structure, the object is hierarchically the deepest XP, hence the narrow interpretation, and the well-known phrasal focus rule (Selkirk 1984: ch.5; 1996) allows for focus to spread to the vP, yielding the wide scope interpretation.

¹² We will turn to the category of *nò* in the next section; here, for ease of exposition we did not include it in (41b).

whose basic idea is that the wide focus reading in inversion constructions is due to the recognition that the alternative could only be focus on the predicate. In avoiding this interpretation, speakers make an accommodation and recognize the entire inverted phrase as focus. Importantly, the problem identified here is not specific to Aghem.

If the object or subject position in these examples is filled with an indeterminate expression, this expression is interpreted as a *wh*-word when under the scope of an interrogative operator, thus:

- (49) tí-bvú tì -bìghà m̂ zí kwò à
 dogs two P₁ eat what QM
 ‘What did the two dogs eat?’

- (50) à m̂ ñíj ʔndúghó à
 ES P₂ run who QM
 ‘Who ran?’

In all these examples, the narrowly focused constituent stays in the IAV on the surface.

In clauses with the object adjoined to the *vP*, thus appearing preverbally, focus is identified with the material remaining in the *VP*, for example, in (51a), where the focus is on ‘yesterday’ or in (51b), where the locative *PP* is in focus:

- (51)a. bvú ʔtí m̂ [vP [vP bé ʔkí_i [v zí_j [VP [VP t_j t_i] áʔzós]]]]
 dogs D P₂ fufu D eat yesterday
 NARROW FOCUS
 ‘The dogs ate fufu YESTERDAY.’
- b. fíl á m̂ [vP [vP bé ʔkí_i [v zí_j [VP [VP t_j t_i] án ʔsóm]]]]
 friends D P₁ fufu D eat at farm
 ‘The friend ate fufu AT THE FARM’ (Watters 1979:148)

Since the adverb inside the VP is not an argument of the verb, the focus remains narrow, on the adjunct.¹³ Note however, that a focused adjunct is in a different structural position from that of the postverbal object:

- (52) a. fɪl á m̀ zɪ áʼzɔ́ bɛ ʼkɔ́
 friends D P₂ eat yesterday fufu D.OBL
 ‘the friends ate fufu YESTERDAY’
 b. fɪl á m̀ [vP [v zɪ_i [vP [vP t_i] áʼzɔ́]]]]

The difference in structure indicates that the IAV is a surface position only, derived in different ways. In that sense, the postverbal position in Aghem is no different from the preverbal focus position in other languages, which is uniform on the surface but can in fact mask a number of different configurations (see for example, Horvath 1986, Kiss 1995, Kishimoto 2005, Hagstrom 1998).

In cases where there is a postverbal adjunct in focus and the object appears preverbally, in the middlefield, one may get an impression that the preverbal object is topicalized, or at least associated with “given” information. In fact, in the spirit of an articulated left periphery approach, it would be tempting to categorize the position occupied by the preverbal object (IBV in surface terms for Aghem) as a dedicated topic position, thus:

- (53)[vP [TopP [TopP [FocP [vP [VP]]]]]]]

However, the preverbal position is not associated with known properties of topics: it does not have obligatory wide scope, can host non-specific expressions, and can be associated with

¹³ Incidentally, the fact that focus does not spread from the temporal or locative expression to the verb argues that the analysis of the verb phrase where the direct object is in spec,VP and the locative/temporal expression is a complement of the lexical verb, as shown in (i), is untenable for Aghem.

- (i) [vP fufu [v' [eat yesterday]]]

Baker and Collins (2006) and Kandybowicz (2006) propose this structure for several other Bantu languages. At this point, we do not have an explanation as to why such parametric variation in the structure of VP is possible.

contrastive or informational focus. For example, in (54), the postverbal subject ‘friends’ is identificational focus, but the preverbal (IBV) constituent is also interpreted as focus, this one being highly contrastive:¹⁴

- (54) à m̀d̀ nzàŋ z̀ɔ̀m á-f̀in â bàʔtòm
 ES P₂ Nzaŋ sing friends for chief
 ‘The FRIENDS sang NZAŋ for the chief.’

We therefore conclude that whatever interpretive properties may be associated with this position, they do not follow from the presence of a dedicated topic projection.¹⁵

An outstanding problem for our proposal is that Aghem allows multiple wh-questions, as in the following example, which shows that the interrogative operator can take scope over the entire VP even with some material adjoined.

- (55) à m̀d̀ [VP [VP z̀ɛ̀ ndúghó] kẁd̀-k̀d̀ z̀ín]
 ES P₁ eat who what when
 ‘Who ate what when?’
 ‘When did who eat and what?’

We hypothesize that multiple wh-questions are licit for interpretive reasons, not for syntactic reasons. It is possible that the reading of the multiple indeterminate expressions as wh-words is forced in the presence of an interrogative operator.

Another problem for the proposed analysis has to do with the availability of focus in embedded clauses, for example, as in the relative clause in the following example. If the family of alternative-activating operators that we propose included focus and interrogative operators as

¹⁴ Nzaŋ is a kind of dance accompanied by singing.

¹⁵ See Sturgeon 2006 for a similar analysis of the middle-field in Czech, and Lee-Schoenfeld 2005 for a similar approach to the German middle-field.

equal members, then the availability of a focus reading contrasting with the impossibility of *wh*-questions in relative clauses needs to be accounted for.

- (56) *m̄ m̄ k̄? wé w̄l̄ [ʋá ò m̄ n̄ bv̄ ʋt̄]*
 1SG P₁ see child DEM-COMP 3SG P₁ take dogs D.OBL
 ‘I saw the child who took the DOGS.’

The availability of focus in relative clauses is due to the difference between identificational and informational focus (Kiss 1998); while further work on this issue is needed, the focus reading in the relative clause in (56) could be accounted for under the informational interpretation, which is independent of an alternative-activating operator. Such an operator is needed only for the identificational (exhaustive) focus. With *wh*-words, a non-exhaustive reading is simply impossible, and this leads to the appearance of island effects shown here.

To summarize what have achieved so far, the identificational (exhaustive) focus in Aghem is located in the verb phrase, with the lowest XP in that phrase interpreted as focus. The interpretation of the entire verb phrase as focus also occurs under the inheritance of focus from object to the verb (accounted for under the phrasal focus rule), and in the presentational construction, where the explanation for wide focus is still outstanding.

4.3 *The content of CP*

Recall that we have proposed that the verb phrase is under the scope of an operator which we hypothesize to be in the complementizer phrase or, assuming an articulated complementizer layer, in the force phrase.

In this section, we will address two questions concerning the complementizer phrase that we associate with the focus and interrogative interpretations: the nature of the focus and interrogative operator and the head of this high structural phrase.

Our proposal is as follows: the specifier of the complementizer (force) phrase has an alternative-activating operator which binds the lowest constituent in the VP. For focus, this operator activates a set of alternatives forcing the selection of one element in a set to the exclusion of the others. This is a standard exhaustiveness operation, characteristic of identificational (exhaustive) focus (Kiss 1998, Rooth 1996). For questions, the operator activates

a set of alternatives that could constitute the answer to a given question (cf. Karttunen 1977, Ginzburg and Sag 2000). Thus, the proposed operators are as follows:

- (57) a. Focus: Op [+exhaustive]
 b. Question: Op [+interrogative]

Since this approach does not appeal to movement, a question arises as to why we still observe island effects associated with movement, for example in relative clauses:

- (58) *m̄ m̄ k̄? wé w̄l [ʰá ò m̄ n̄ kw̄-k̄] à
 I SG P₁ see child DEM-COMP 3SG P₁ take what QM
 ‘For what *x*, *x* a thing, did I see the child who took *x*?’

The ungrammaticality of such examples can still be accounted for, without reference to movement, under the rubric of standard intervention effects (de Swart 1992; Szabolcsi and Zwarts 1992-3; Beck 1996; Bo_kovi_ 2000; Cheng and Rooryck 2001, Butler and Mathieu 2005). In this case, the relative clause operator, which is hierarchically closer to the indeterminate expression inside the relative, blocks its binding by the interrogative operator:¹⁶

- (59) [CP Op_[+interr] [TP ... [VP [DP [NP] [CP Op_[+rel] ... indefinite]]] C°]

As for the head of the complementizer (or force) phrase, we propose that it is filled by the interrogative particle *á* in questions and by a null head for focus. The association of interrogative particles with a high complementizer projection is well-known (cf. Hagstrom 1998 and many others). For Bantu languages, Buell (2005) and Kandybowicz (2006) present arguments that interrogative markers are in the complementizer phrase. The usual evidence comes from the fact that such markers do not appear in embedded clauses and occur at the right periphery of root clauses. Genuine subordinate clauses embedded under bridge verbs or interrogative or resolute predicates seem to be avoided in Aghem. Relative clauses are widely available but they do not allow interrogative markers anyway. Some evidence that the interrogative marker *á* is in a high

¹⁶ Recall that adjunct wh-words were marginally acceptable, even in the relative clause island. At present we have no explanation for such marginal acceptability. Peter Sells (p.c.) has suggested that this difference between arguments and adjuncts may be due to the fact that the adjunct is generated higher (on the right), which allow it to move out easier than an argument. This is an interesting possibility, which needs to be explored further.

structural position comes from its distribution with postverbal material: postverbal expressions, no matter how many, occur before *á*, for example:

- (60) à m̀ k̀? á-fín bv́ à dzí ʼá
 ES P₁ see friends dog and goat QM
 ‘Did THE FRIENDS see a dog and a goat?’

However, in many cases the overt interrogative marker is omitted, thus alternating with a null particle. At this point we do not know what determines the optionality of *á*.

Turning to *ǹ*, recall Aboh’s proposal that it heads a focus phrase (section 3.1). While the evidence did not support the low focus projection analysis, it may still be possible that *ǹ* could be a complementizer head, with the feature [+focus], thus:

- (61) [CP Op_i [TP he [VP fall [VP ~~fall~~]]] [C° *ǹ*]]

Such an analysis would account for the fact that *ǹ* does not occur in relative clauses and would treat *ǹ* by analogy with the question particle *á*. However, there are at least three arguments indicating that this analysis is untenable.

First, *ǹ* has a different distribution from *á* with respect to right periphery elements: it precedes right-periphery adjuncts and pronominal elements, for example:

- (62) ò m̀ f̀ò nó ʼbe ʼkó â bv́ ʼt́
 3SG P₁ give FM fufu D.OBL to dogs D.OBL
 ‘He GAVE fufu to the dogs.’ (e.g., he didn’t TAKE it from them)

- (63) ò ñghá s̀gh̀ò nó ʼwín
 3SG like also FM 3SG.OBJ
 ‘He also likes him/her.’

Second, *ǹ* co-occurs with *á*, which indicates that they represent different categories. On the standard assumption that yes-no questions also have an exhaustivity operator (akin to the one

found in *wh*-questions) and are incompatible with identificational focus (Kiss 1998), it is surprising to see *nò* in such questions:

- (64) ò m̀ wí kí-kɔ́ ʋ́á ɲ́káá ò m̀ bò nó ʋ́á
 3SG P₁ kill slave QM or 3SG P₁ beat FM QM
 ‘Did he kill the slave, or beat (him)?’

Finally, recall that *nò* may occur with the high tone preposition documented in section 3.1. The question marker *á* (and its variant *à*) does not occur with this preposition; it always undergoes tonal association with the preceding word. If *nò* and *á* belonged to the same category, such difference in distribution would be quite surprising.

The evidence assembled here points to the conclusion that *nò* is not a head and that its place in clause structure is much lower than that of *á*. Under the structure we propose, it cannot be a lower focus marker since the focus marker should head the higher projection. We hypothesize that *nò* marks off the right edge of the verb phrase. If non-verbal constituents on the right edge are present, it is optional; when the verb appears “bare”, *nò* is required. We are not sure what accounts for this optionality.

The proposed approach to *nò* has two main components: first, it places *nò* in the lowest verb phrase, not higher, and second, it removes a direct association between *nò* and focus. This approach is very similar to the proposal made by Buell (2006): according to Buell, the conjoint/disjoint alternation in Zulu (and possibly in other Bantu languages) can be accounted for without direct reference to focus marking. As to the absence of *nò* in embedded clauses, we can only offer a preliminary observation. The particle *nò* is not the only constituent that cannot occur in embeddings. Embedded clauses (relatives and infinitival clauses) do not allow postverbal adjuncts either, which suggests that the verb in these clauses does not raise to the highest light verb as it raises in the matrix clause. Different structural positions of the verb phrase in matrix and embedded clauses are a well-known phenomenon (cf. den Dikken 1995, and many others), so it would not be surprising if this turns out to be the case in Aghem as well. More work on the word order in Aghem embedded clauses is needed, and these outstanding data may also be helpful in understanding the general constraints on distribution of conjoint and disjoint forms across Bantu.

5 *Conclusions and outstanding questions*

In this paper, we have analyzed the expression of focus in Aghem, focusing primarily on the postverbal (IAV) position, which is associated with exhaustive or identificational focus. Previous accounts of Aghem focus have relied on a highly articulated left periphery of the verb phrase (so called low focus analysis, as in Aboh 2006) or an analysis in terms of focus/wh-movement and subsequent pied-piping. We found that both approaches face significant empirical challenges and are untenable for Aghem. We would like to underscore that their failure in Aghem does not render a more general verdict on accounts in terms of fine structure of left periphery or A-bar movement because languages may well vary in their expression of information structural categories. Nevertheless, Aghem data show that one has to proceed with caution and examine language-internal data carefully before extrapolating analyses from other languages to a new one.

Our approach to Aghem focus takes us back to the more traditional accounts, which associate focus with the verb phrase (predicate phrase) and derive focus interpretations indirectly from constituent structure, without dedicating special projections to focus (or topic for that matter, although we did not discuss it in this paper). We propose that the focus and interrogative interpretation is derived without movement, via a relationship between the alternative-activating operator in the highest complementizer projection and the lowest XP in the verb phrase. The presence of lower operators, for example, as in relative clauses, creates an intervention effect breaking the binding chain between the high operator and VP-internal material; this accounts for the island effects in relative clauses, in the absence of A-bar movement.

The approach in terms of an alternative-activating operator captures the similarities between focus and wh-movement and allows us to analyze Aghem as a focus in situ language, where the focus interpretation is achieved scopally, relying on the syntactic structures made independently available by Aghem grammar.

The IAV, which appears uniform on the surface, actually masks different structural positions and is structurally non-uniform. In that sense it can be compared to the preverbal position used for focus in head-final languages—the latter is typically associated with focus but different constituents appearing in it may occupy different structural positions. The structural ambiguity of the IAV in Aghem points to the need to examine similar postverbal positions in other languages.

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