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Focus Marking in Aghem: Syntax or Semantics?

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[small caps used for emphasis]
ABSTRACT

Following up on previous work by Anderson (1979), Watters (1979) and myself (Hyman 1979a,b, 1985), this paper presents an overview and analysis of focus marking in Aghem, a Grassfields Bantu language spoken in Cameroon. It is shown that focus marking pervades virtually every aspect of the grammar. While Aghem has a basic S AUX V O X word order, an XP may be focused by positioning it immediately after the verb, or defocused by placing it between the auxiliary and the verb. As part of a system of “auxiliary focus” (Hyman & Watters 1984), certain tenses condition different allomorphs depending on whether the truth value of a proposition is included within the focus or not. The most unusual property of Aghem, however, concerns the contrast between so-called A- vs. B-forms within the noun phrase, which also bears an important relation to the focus system. I show that A forms are those which allow a null determiner, while B forms are those which do not. Although (semantic) focus is implicated in determining which form of the noun phrase is found in what context, it is really a syntactic generalization having to do with heads and their governees that accounts for the full range of facts.
1. Introduction

Even on African standards, Aghem, a Western Grassfields Bantu language of the Ring Subgroup (Hyman 1980, Watters 1989), is particularly rich in focus marking. When Stephen C. Anderson, John Watters and I jointly undertook the study of Aghem in 1978, we were impressed to see how pervasive considerations of focus are throughout the grammar. This can be clearly seen in the publications which resulted: Watters (1979) investigated the relation between different syntactic constructions and focus. He found that the focus position is immediately after the verb (IAV) in Aghem, an SVO language. While there is also a defocused position immediately before the verb (IBV), Watters indicated that the semantic interpretation of sentences with both pre- and postposed arguments or adjuncts is quite intricate. Anderson (1979) demonstrated that verb tense, aspect, mood and polarity may also encode focus, in two senses: First, some verb forms, e.g. main clause affirmative past tenses, are expressed with different morphology, depending on what is in focus. Second, some parts of the verbal paradigm appear to be inherently focused, independent of information structure, e.g. imperative and negative forms. However, quite unusual was part of the story that fell to me (Hyman 1979). Besides verb marking, noun phrases have two different markings which very often correlate with whether an NP is in focus or not. What this meant was that NPs in all positions of all constructions would have to be investigated to see whether they fell into “A form” or “B form”. While my earlier study presented a functional description of the facts, based on work with one speaker, I enlarged the scope of my inquiry in the early 1980s to three speakers, ultimately publishing a short formal account within the government-binding framework (Hyman 1985).

The goals of the present paper are the following. First, I present an outline of the grammatical properties of focus in Aghem. Second, I extend the descriptive coverage of focus marking beyond the above studies. Finally, I again take up the formal/functional dichotomy and examine the extent to which focus marking within the noun phrase is determined by syntactic vs. semantic properties. The paper is organized as follows: §2 and §3 recapitulate the syntactic marking of focus and the morphological marking of focus on the verb auxiliary system, drawing respectively from Watters (1979) and Anderson (1979). §4 then addresses the marking of focus within the noun phrase. §5 presents a brief conclusion.

2. Syntactic marking of focus (Watters 1979)

As seen in (1), the unmarked clause structure of Aghem is S AUX V O X, where X stands for additional arguments or adjuncts which may be prepositionally marked:

(1) Unmarked clause structure = S AUX V O X

   a. tī-bvū tī -bighā mō zā kī -bē ḳē ‘the two dogs ate fufu today’
      dogs        two     P1    eat   fufu     today

   b. fīl ā mō fūo kī -bē ā bvū ḳō ḳō ‘ndūghō ‘the friends gave fufu to
      friends   SM     P1    give   fufu   to   dogs   D    LOC    house   the   dogs   in   the   house’

There are at least three arguments that establish the immediate-after verb (IAV) position as a focus position. The first is that contrastively focused constituents move to IAV. The sentences in (2) illustrate this process, which Watters terms Adposing:
(2) ADPOSING: Focus-movement to IAV (= [marked focus])

a. \( X \rightarrow \text{IAV} \)
   
   \( \text{tí-bvú tì- التجارية mò zì nè ìbè ìkò} \) ‘the two dogs ate fufu \text{TODAY}’

   dogs two \( P_1 \) eat today fufu \( D \)

b. \( \text{S} \rightarrow \text{IAV} \)
   
   \( \text{à mò zì tì-bvú tì- التجارية bè ìkò nè} \) à ‘the TWO DOGS ate fufu today’

   \( \text{DS} P_1 \text{ eat } \text{dogs two } \text{fufu } D \text{ today} \)

Comparing (2a) to the sentence in (1a) we see that the temporal adverbial \( \text{nè ‘today’} \) has moved to IAV. In (2b) it is the subject that moves to IAV, leaving behind the dummy subject (DS) \( \text{à} \).

The second argument that IAV is the focus position is that a WH element also obligatorily undergoes Adposing:

(3) WH elements must be in IAV position

a. WH-X \( \rightarrow \text{IAV} \)
   
   \( \text{tí-bvú tì- التجارية mò zì zìn bè ìkò} \) ‘when did the two dogs eat fufu?’

   dogs two \( P_1 \) eat when fufu \( D \)

b. WH-S \( \rightarrow \text{IAV} \)
   
   \( \text{à mò zì ndúghò ìbè ìkò nè à} \) ‘who ate fufu today?’

   \( \text{DS} P_1 \text{ eat who } \text{fufu } D \text{ today } \text{QM} \)

c. Multiple-WH: \( S > O > X \)
   
   \( \text{à mò zì ndúghò kwòkò zìn} \) ‘who ate what when?’

   \( \text{DS} P_1 \text{ eat who what when} \)

(3a) shows the temporal WH element \( \text{zìn ‘when’} \) in IAV position. Similarly, (3b) shows the subject WH element \( \text{ndúghò ‘who’} \) undergoing Adposing, again leaving behind the DS \( \text{à} \). The two sentences would be ungrammatical if the WH element remained in situ. The sentence in (3c) shows the order in which multiple WH elements co-occur in IAV position.

The third argument that IAV is the focus position is that in the absence of an overt focus within the auxiliary (cf. §3), main clause affirmative (MCA) clauses require the IAV position to be filled. Thus, the intransitive sentence in (4a) and the transitive sentence (with third person inanimate Ø pronominal object) in (4b) are both ungrammatical:

(4) Main clause affirmatives requiring IAV to be filled

a. \( \ast \text{ à mò bvù} \) cf. \( \text{ à mò bvù nò} \) ‘he fell’

   \( \text{SM } P_1 \text{ fall } \text{SM } P_1 \text{ fall } \text{FM} \)

b. \( \ast \text{ à mò zì} \ast \) cf. \( \text{ à mò nè nò} \) ‘he ate (it)’

   \( \text{SM } P_1 \text{ eat } \text{SM } P_1 \text{ eat } \text{FM} \)

c. \( \text{wizín wòlà à mò bvù} \) \( \text{the woman who fell} \)

   woman who \( \text{SM } P_1 \text{ fall} \)

As seen in the sentences to the right, the sentences are rendered grammatical when the general focus marker (FM) \( \text{nò} \) appears in IAV. The reason (4a,b) are ungrammatical is that a main clause affirmative requires that something be marked as focused, in these cases requiring that something
appear in IAV. As they are not subject to this focus requirement, (4c) shows that relative and other non-main clauses do not require that the IAV position be filled.

Besides IAV, there is also an immediate-before-verb (IBV) position which Watters (1979) identifies as the “marked presupposition”. As seen in (5), one or more postverbal constituents can be moved to IBV by a process which Watters terms Preposing:

(5) **Preposing** to immediate-before-verb (IBV) position

a. O → IBV

\[
\text{tí-bvú tì -bìghà mò bé ₄kfí zì né} \quad \text{‘the two dogs ate fufu TODAY’}
\]
\[
\text{dogs two P₁ fufu D eat today} \quad (= (2a))
\]

b. X → IBV

\[
\text{tí-bvú tì -bìghà mò né zì kí -bé} \quad \text{‘the two dogs ate FUFU today’}
\]
\[
\text{dogs two P₁ today eat fufu}
\]

c. WH → *IBV

\[
\text{* tí-bvú tì -bìghà mò zín zì kí -bé} \quad \text{‘when did the two dogs eat fufu?’}
\]
\[
\text{dogs two P₁ when eat fufu}
\]

d. S → *IBV

\[
\text{* à mò bùva ³tò tí-bìghà zì kí -bé ³né} \quad \text{‘the two dogs ate fufu today’}
\]
\[
\text{DS P₁ dogs D two eat fufu D}
\]

As seen, by preposing other elements, the one constituent which remains in the IAV is now contrastively focused. While there are other word order changes that potentially interact with focus, I shall limit the discussion to the IAV and IBV positions and now consider focus marking within the verbal auxiliary.

### 3. Morphological marking of focus on the verbal auxiliary (Anderson 1979)

In Aghem focus marking may occur on the tense, aspect, mood and polarity, or these features may influence focus marking elsewhere in the clause. Hyman & Watters (1984) use the cover term “auxiliary focus” for such phenomena which are widespread in African languages (cf. Güldeman’s 2003 “predication focus”). Hyman & Watters recognized two types of auxiliary focus, EXTRINSIC and INTRINSIC, both of which occur in Aghem.

Auxiliary focus is extrinsic when contrastive [+focus] is morphologically marked. As summarized in (6), Aghem distinguishes extrinsic focus on a main clause completive aspect non-future auxiliary:

(6) **Main clause completive aspect, non-future tense markers**

<table>
<thead>
<tr>
<th>Tense</th>
<th>[-focus]</th>
<th>[+focus]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present perfect</td>
<td>(P₀)</td>
<td>Ø</td>
</tr>
<tr>
<td>Today past</td>
<td>(P₁)</td>
<td>mò</td>
</tr>
<tr>
<td>General past</td>
<td>(P₂)</td>
<td>`mò</td>
</tr>
</tbody>
</table>

As seen in (7), the choice of extrinsic [±focus] has an effect on the semantics.
As seen in the sentences in (10), negatives and imperatives do not require the IAV to be filled:

In (7a), where the P₁ [-focus] marker mô occurs, the semantic focus may be on the IAV (kfé ‘fufu’), the verb phrase, or the entire proposition (= “even focus”). It could be an answer to a question such as ‘what did the two dogs eat?’, ‘what did the two dogs do?’ or ‘what happened?’ When a [+focus] auxiliary is present, e.g. màa in (7b), the truth value of the proposition is necessarily included within the focus, as in (7b). This sentence may occur as a report out of the blue (“Hey, guess what? The two dogs ate fufu!”), where no truth value is presupposed, or it could mean ‘the two dogs did eat fufu’ where contrastive, possibly counterassertive, focus is placed on the truth value (e.g. contradicting someone’s assertion that the two dogs had not eaten fufu). The sentence (7c) shows that focus on the lexical meaning of the verb is obtained by placing the focus marker nó in IAV position.

Additional evidence that màa does indeed mark focus is seen from the fact that the IAV is not required to be filled in an utterance containing a [+focus] auxiliary. This is seen in the sentences in (8) which should be compared with those in (4).

Additional evidence that AUX [+focus]: IAV may be Ø in MCA

It will thus come as no surprise that màa may not co-occur with a WH element or appear in “backgrounded” clauses such as relative, temporal and if-clauses. As also expected, [+focus] auxiliaries not only occur with unmarked S AUX V O X word order, as in (9a), but also with preposing of elements into IBV position, as in (9b):

AUX [+focus] naturally occurs with preposing of O and X

In the second type of auxiliary focus, intrinsic, an inflectional feature which is not necessarily semantically focused nevertheless has an effect on focus marking within the clause. As seen in the sentences in (10), negatives and imperatives do not require the IAV to be filled:

Negatives and imperatives have intrinsic focus [+F] independent of semantic focus
As Hyman & Watters (1984) document, negatives and imperatives often act as if they were “inherently focused” (cf. Marchese 1983). Like their extrinsic counterparts, they satisfy focus marking in the utterance thereby denecessitating an IAV element. As we shall see in §4, they also condition “out of focus” marking within the noun phrase.

4. Marking of focus in the noun phrase (Hyman 1979a, 1985)

While other languages have both syntactic marking and auxiliary marking of focus, perhaps the originality of Aghem and closely related languages such as Weh and Isu (Kießling, this volume) lies in how focus affects marking within the noun phrase. As can already be seen in the sentences cited above, noun phrases potentially have different realizations which interact with the focus system. The object noun ‘fufu’ has thus appeared as either kí -bë “A form”or bë ‘kó “B form”. As seen in (11a), the A form is used when an object noun appears in IAV position in the MCA:

(11) Correlating with focus in above examples is the form of an object noun phrase

a. ó mò zi kí -bë ‘né ‘he ate fufu today’ (*bë ‘kó)
   SM P₁ eat fufu D today

b. ó mò zi né ìbë ‘kó ‘he ate fufu TODAY’ (*kí -bë)
   SM P₁ eat fufu D D

c. ó mò bë ‘kí zi né ‘he ate fufu TODAY’ (IBV position)
   SM P₁ fufu D eat D today

d. ó màa zi bë ‘kó né ‘he did eat fufu today’ (after AUX [+focus])
   SM P₁-FOC eat fufu D D today

e. wizín wìlà ó mò zi bë ‘kó né ‘the woman who (in non-main clause)
   woman who SM P₁ eat fufu D eat D today

f. ó kà mò zì bë ‘kó ‘he did not eat fufu’ (after negative verb)
   SM NEG P₁ eat fufu D

g. zì bë ‘kó (nô) ‘eat fufu/FUFU!’ (after imperative verb)
   eat fufu D FM

By contrast, in (11b), we see that when ‘fufu’ appears after the IAV it takes the B form. It also takes the B form in IBV position in (11c), where a preverbal allomorphy rule requires the form kí instead of kó. (11d) shows that ‘fufu’ also appears in B form after a [+focus] auxiliary, even though it superficially appears to be in IAV position. The B form is similarly required in (11e) where ‘fufu’ occurs in a relative clause. The sentences in (11b-e) suggest that the B form will be used when an object NP is “out of focus”, i.e. not in the IAV in a MCA. Sentences (11f,g) show that the B form is also required after an intrinsic [+F] auxiliary. In discussing the sentences in (10) I pointed out that negatives and imperatives act as if they are inherently focused in that the IAV need not be filled. That the B form must be used reinforces this notion. Thus, (11g) would not only be used in response to the question ‘what should I do with the fufu?’, where ‘fufu’ would be presupposed, but also in response to questions like ‘what should I eat?’, ‘what should I do?’, or even ‘should I eat rice?’ where counterassertive focus on ‘fufu’ can be reinforced by the
FM /nò/, as indicated. In none of the sentences in (11) can an A form be substituted for a B form, or vice-versa.

In order to understand the morphological basis of the distinction, (12) shows the A and B forms for all of the noun classes in Aghem:

(12) Aghem noun classes and noun forms found in A vs. B contexts (gh = [ɣ])

<table>
<thead>
<tr>
<th>A-form</th>
<th>B-form</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>class</strong></td>
<td><strong>prefix-stem</strong></td>
</tr>
<tr>
<td>1</td>
<td>(')</td>
</tr>
<tr>
<td>2</td>
<td>á-</td>
</tr>
<tr>
<td>3</td>
<td>ó-</td>
</tr>
<tr>
<td>4</td>
<td>é-</td>
</tr>
<tr>
<td>5</td>
<td>é-</td>
</tr>
<tr>
<td>6</td>
<td>á-</td>
</tr>
<tr>
<td>7</td>
<td>kí-</td>
</tr>
<tr>
<td>8</td>
<td>ó-</td>
</tr>
<tr>
<td>9</td>
<td>(v)</td>
</tr>
<tr>
<td>13</td>
<td>tí-</td>
</tr>
<tr>
<td>19</td>
<td>fí-</td>
</tr>
<tr>
<td>6a</td>
<td>ní</td>
</tr>
</tbody>
</table>

As seen, nouns in the A form are marked by a noun class prefix + stem structure, except for classes 1 and 9, which do not have a prefix and which do not show an A vs. B distinction. Nouns in the B form do not have a prefix, but rather are followed by a clitic, which has been glossed as D (for determiner; cf. below). If this D is realized as an enclitic it will end in the vowel [ə] (from historical *[a]). If, however, the D procliticizing to the following word, e.g. to a verb in IBV, the forms are segmentally identical to the noun class prefixes (as well as subject and genitive markers).

The fact that B forms lack a noun class prefix follows from the general process of prefix deletion in Aghem. As seen in (13), prefix deletion will occur whenever a noun is followed by any agreeing element except for a numeral or quantifier:

(13) Prefix-deletion before an agreeing element (other than a numeral/quantifier)

a. /_POS/ buvú ò=tánjá ‘my dogs’ nwin ò=tánjá ‘my bird’
/_DEM_ buvú ò=tín ‘these dogs’ nwin ò=ntin ‘this bird’
/_ADJ_ buvú ò=dú=tó ‘big dogs’ nwin ò=dú=tó ‘big bird’
/_GEN_ buvú ò=we ‘child’s dogs’ nwin ò=we ‘child’s bird’
/_SM_ buvú ò=mɑ́ mà bbvú ‘the dogs fell’ nwin ò=mɑ́ mà bbvú ‘the bird fell’

b. /_NUM_ tí-buvú ò=bihgà ‘two dogs’ fnwín ò=mɔ́ ‘one bird’
/_Q_ tí-buvú ò=bdzim ‘all the dogs’ fnwín ò=bdzim ‘the whole bird’

c. /_D_ buvú ò=tó ‘Dogs!’ (voc.) nwin ò=tó ‘Bird!’ (voc.)
/_ß-buvú_ ò=tó/ ò=tó nwin ‘fó’

The examples in (13a) show the deletion of the class 13 prefix tí- of tí-buvú ‘dogs’ and the class 19 prefix fn- of fn-nwín ‘bird’ before a possessive pronoun, a demonstrative, an adjective, a genitive noun, and a subject marker. There is no prefix deletion before a numeral or quantifier in
The examples in (13c) show that B forms can be used as vocatives in isolation. Thus, in B-forms, prefix-deletion occurs before D exactly as it does before the agreeing elements in (13a).

In Hyman (1979a) I argued that D is a determiner, since it appears in the same “slot” as demonstratives (which may also pre-empt it):

(14) \( D = \) a determiner occurring in the same “slot” as demonstratives

<table>
<thead>
<tr>
<th>N</th>
<th>Poss</th>
<th>Adj</th>
<th>Det</th>
<th>Num</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ó mâa kɔ?</td>
<td>bvú</td>
<td>ᵁtáná</td>
<td>tì-dú'ú</td>
<td>tó</td>
</tr>
<tr>
<td>SM P₁-FOC see</td>
<td>dogs</td>
<td>my</td>
<td>big</td>
<td>D</td>
</tr>
<tr>
<td>b. ó mâa kɔʔ</td>
<td>bvú</td>
<td>ᵁtáná</td>
<td>tì-dú'ú</td>
<td>tîn</td>
</tr>
<tr>
<td>SM P₁-FOC see</td>
<td>dogs</td>
<td>my</td>
<td>big</td>
<td>DEM</td>
</tr>
</tbody>
</table>

My approach at that time was to account for D in semantic/functionalist terms: “[D] is a demonstrative whose meaning is ‘out of focus.’ And the noun phrase within which it occurs is considered out of focus by Aghem speakers in the environments outlined in preceding sections....” (Hyman 1979a:68). I presented comparative evidence to show that D derives historically from a ‘near hearer’ demonstrative. After completing the 1979 study I continued to explore the grammatical properties of D, ultimately attempting an account of D in syntactic/formal terms: “I propose that the D node is obligatory in Aghem, either being filled lexically by one of the three demonstratives or remaining as an empty element eD. If the eD is ‘syntactically well-formed’ it surfaces as Ø; if it is not well-formed, it must be spelled out post-lexically via the -s” (Hyman 1985:151). In this account the distinction between A vs. B forms reduces to whether a noun phrase can (=A) vs. cannot (=B) occur without an overt determiner.

Despite its relationship to focus, I maintain the view that the distribution properties of D are best accounted for in syntactic rather than semantic terms. An A form is one where an empty determiner (eD) is well-formed, or licensed by well-formedness conditions. These conditions are of three types: (i) internal conditions on the NP; (ii) external conditions on the NP vis-à-vis its governing head; (iii) external conditions on the NP or its governing head with respect to modality and clause-type. I now take up these three types of conditions in turn.

In order to appreciate the NP-internal conditions it is necessary to understand the structure of the NP. The two possible linear orders of noun + modifiers are shown in (15).

(15) Linear order within the noun phrase, e.g. ‘these two big dogs of the child’:

<table>
<thead>
<tr>
<th>a. N + POSS + ADJ + DET + NUM</th>
<th>b. N + ADJ + POSS + DET + NUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>bvú ᵁtì ᵁwé tì-dú'ú tín tì-bìghà</td>
<td>bvú tì-dú'ú tì ᵁwé tín tì-bìghà</td>
</tr>
<tr>
<td>dogs of child big these two</td>
<td>dogs big of child these two</td>
</tr>
</tbody>
</table>

As illustrated, a genitive noun (or possessive pronoun) and adjective can occur in either order, followed by the fixed order determiner + numeral. Although only the demonstrative ‘this/these’ is illustrated in (16a), there can be only one demonstrative or numeral in a noun phrase with multiple genitive embeddings:
There can only be one Det and one Num in a noun phrase with multiple genitives/adjectives

\begin{align*}
\text{a.} & \quad \text{fú kí } \text{i'bvú } \text{iťí} \text{i'wē } \text{wín} \quad \text{‘the rat of the dog of this child’} \\
& \quad \text{fú kí } \text{i'bvú } \text{iťí} \text{i'wē } \text{tíñ} \quad \text{‘the rat of these dogs of the child’} \\
& \quad \text{fú kí } \text{i'bvú } \text{iťí} \text{i'wē } \text{kín} \quad \text{‘this rat of the dogs of the child’} \\
& \quad \text{rat of dogs of child this/these} \\
\text{b.} & \quad \text{fú kí-bá'ŋá } \text{kí-dú'í } \text{kín } \text{kí-mosph} \quad \text{‘this one big red rat’} \\
& \quad \text{rat red big this one}
\end{align*}

As seen in (16a), the demonstrative (also a numeral) can agree with any of the noun heads in the genitive sequence. (16b) shows that multiple adjectives are also possible.

In order to account for the above properties, I originally proposed the phrase structure rules in (17a).

\begin{enumerate}
\item[(16)] There can only be one Det and one Num in a noun phrase with multiple genitives/adjectives
\end{enumerate}

\begin{enumerate}
\item[(17)] Noun phrase structure rules
\item[(a)] Hyman (1985)
\item[(i)] N\text{"} \rightarrow N\text{’} \text{ SPEC}
\item[(ii)] SPEC \rightarrow [ \text{ Det } (\text{ Num }) ] \\
\item[(iii)] N\text{’} \rightarrow N (A*)
\item[(b)] Alternative
\item[(i)] NumP \rightarrow DP (Num)
\item[(ii)] DP \rightarrow NP Det \\
\item[(iii)] NP \rightarrow N\text{’} (NumP)
\item[(iv)] N\text{’} \rightarrow N (A*)
\end{enumerate}

Since N\text{"} is responsible for genitive recursion, the phrase structures correctly produce one D and one Num, but fail to get the range of agreements on Det and Num, e.g. as seen on the demonstratives in (16a). Since NumP is responsible for genitive recursion, the alternative phrase structure rules in (17b) can encode these different agreements. Since each DP and NumP produces its own Num and Det, a constraint will be needed to prohibit more than one surface Det or Num. In addition, given the head-initial structure of Aghem, one might balk at the idea of NumP and DP being right-headed.

What the two sets of phrase structure rules have in common is that Det is obligatory. The question then is when it need not be spelled out, i.e. when gD is well-formed with respect to the NP-internal phrase structure. As seen in (18), a noun in isolation and a noun phrase consisting only of a noun + genitives does not require an overt determiner:

\begin{enumerate}
\item[(18)] N (of N)* does not require an overt determiner; i.e. gD (.) is well-formed
\item[(a)] kí-fú (.) \quad \text{‘rat’} \quad \text{rat D} \\
\item[(b)] fú kí-bá’ŋá (.) \quad \text{rat of dogs D} \\
\item[(c)] fú kí tíf-i’bvú (.) \\
\item[(d)] fú kí tíf-i’bvú tíf-i’wē (.) \\
\end{enumerate}
On the other hand, whenever an adjective is present, ɛD is not well-formed:

(19) Whenever N (of N)* is interrupted by an adjective, ɛD is not well-formed

<table>
<thead>
<tr>
<th>a.</th>
<th>fú kí-báiŋá kó (*Ø)</th>
<th>c.</th>
<th>fú kí tí-bvútí-dúíú tó</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rat red D</td>
<td></td>
<td>rat of dogs, big, D</td>
</tr>
<tr>
<td>b.</td>
<td>fú kí-báíŋá kí-dúíú kó</td>
<td>d.</td>
<td>fú kí-dúíú kí tí-bvú tó (*kó)</td>
</tr>
<tr>
<td></td>
<td>rat red big D</td>
<td></td>
<td>rat, big, of dogs, D j D i</td>
</tr>
</tbody>
</table>

(19a,b) show a single noun with one vs. two adjectives and obligatory spell-out of D. (19c,d) show an adjective appearing after the first vs. second noun of a genitive construction. As seen, D must be spelled out in both cases. Since *kó is ungrammatical in (19d), D must be spelled out in agreement with the closest noun. The one exception to this occurs when the closest noun belongs to class 1 or 9, which do not have an overt D spell-out. In this case D may either be empty or may agree with the higher noun: fú kí-dúíú kí 'wé (. ) or fú kí-dúíú kí 'wé kó 'big rat of child'.

A second condition on ɛD is that there must not be an empty head within the noun phrase:

(20) When the head noun is empty, ɛD is not well-formed

<table>
<thead>
<tr>
<th>a.</th>
<th>bvú ɪtáŋá (. ) ‘my dogs’ vs. (tí-) táŋá tó ‘mine’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dog my D</td>
</tr>
<tr>
<td>b.</td>
<td>bvú ɪtí ‘wé (. ) ‘the child’s dogs’ vs. tí ‘wé tó ‘the child’s’</td>
</tr>
<tr>
<td></td>
<td>dog of child D</td>
</tr>
</tbody>
</table>

As seen, a determiner is required in the forms on the right even though there is no adjective.

The two NP-internal conditions on ɛD are restated in (21).

(21) Internal conditions on ɛD within the NP

<table>
<thead>
<tr>
<th>a.</th>
<th>ɛD must not be separated from a N or sequence of N by Adj</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>the head N must not be empty</td>
</tr>
</tbody>
</table>

In other words, ɛD is internally well-formed if it is preceded only by a lexical noun/pronoun or a string of lexical nouns (the genitive agreement marker ‘of’ being irrelevant). In government-binding terms, ɛD must be properly governed—here, by every N up to the highest node of the NP (assuming for expository purposes the phrase structure rules in (17a)). The phrase structures of the forms in the right in (20) are reproduced from Hyman (1985) in (22).
Adjacency or c-command?

The eD is not well-formed in (22a) because the chain of lexical nouns (‘rat’, ‘dogs’) is interrupted by the adjective ‘big’. It could be argued either that proper government depends on adjacency (‘dogs’ is not adjacent to ‘rat’) or on c-command: the first branching node dominating the governor must dominate eD (the N’ above ‘rat’ does not dominate ‘dogs’). In (22b) it is the non-lexical governor itself which is responsible for the ill-formedness of eD.

That the notion “lexical governor” may be at play is seen when we consider the prepositional phrases in (23).

Non-lexical governers à ‘to/for’ and à ‘with, and’ require B-form (*gD)

Whenever a well-formed NP occurs within a PP headed by à ‘to/for’ or à ‘with, and’, a determiner is required. This means that these (non-lexical) prepositions are not proper governors. On the other hand, as seen in (24), the instrumental/locative preposition á (~ án) acts as if it is a lexical head:

Instrumental/locative á (~ án) acts as if = lexical head

What is attractive about the above structural account is that the same notion of proper government naturally extends to what was said about the IAV and focus marking: For eD to be well-formed, an object NP must also be properly governed. This is only possible if the object NP appears in IAV, indicated as x in (25).
(25) Structure of S (x = IAV)

If another constituent appears in IAV, thus intervening between the governing verb and the object NP, the latter will require an overt determiner.

Recall from (18) that eD will be well-formed (properly governed) if preceded either by a single noun or pronoun or by a genitive sequence. (26a) shows that eD is similarly well-formed in an IAV object NP that follows an uninterrupted verb sequence:

(26) If uninterrupted, verbs in series properly govern the IAV

a. ̀̀ò ̀mò ǹiǹ bùc ̀ zi ̀ kí-bé (*Ø ‘it’) ‘he ran in this direction and ate fufu’
   SM P₁ run come eat fufu

b. à ̀mò ǹiǹ bùc ̀ zi ̀ ndúghó bé ̀ kó ‘who ran in this direction and ate fufu?’
   DS P₁ run come eat who fufu D

c. *à ̀mò ǹiǹ ndúghó bùc ̀ zi ̀ bé ̀ kó

d. *à ̀mò ǹiǹ ndúghó bùc ̀ zi ̀ bé ̀ kó

e. ̀ò kà ̀mò ǹiǹ bùc ̀ zi ̀ bé ̀ kó ‘he didn’t run in this direction and eat fufu’
   SM NEG P₁ run come eat fufu D

As indicated, the IAV cannot be Ø in (26a). If no object NP were expressed, it would be necessary to add the FM nò, and the sentence would mean ‘he ran in this direction and ate it’. The WH element ndúghó ‘who’ in (26b) confirms that the IAV position follows the three-verb sequence (cf. the ungrammatical placements of ndúghó in (26c,d)). Finally, it can be noted in (26e) that negation again requires an overt determiner on the object NP.

While an uninterrupted verb sequence appears to function as one complex govenor, a different situation obtains in (27).

(27) If interrupted, each V+NP functions separately

a. ̀ò mò ǹi kí-tà ̀ zi ̀ kí-bé ‘he took a spoon and ate fufu’
   SM P₁ take spoon eat fufu

b. à ̀mò ǹi ndúghó tà kò ̀ zi ̀ kí-bé ‘who took a spoon and ate fufu?’
   DS P₁ take who spoon D eat fufu

c. *à ̀mò ǹi kí-tà ̀ zi ̀ ndúghó bé ̀ kó
   DS P₁ take who spoon eat who fufu D

d. à kà ̀mò ǹi tà kò ̀ zi ̀ kí-bé ‘he didn’t take a spoon and eat fufu’
   DS NEG P₁ take spoon D eat fufu
e. à m̀ nì zì ndúghọ́ bê i’kọ̀ ‘who took (it) and ate fufu?’
\[ DS P₁ \text{ take eat who } fufu D \]

f. *à m̀ nì ndúghọ́ zì kí-bé
\[ DS P₁ \text{ take who eat fufu} \]

(27a) consists of two V + NP sequences representing a same-subject serial construction. As seen in (27b), the WH element goes after the first verb, and not after the second (cf. (27c)). The second verb of the V + NP sequence thus appears to independently license eD on the object. This is seen in (27d) where the negative marker kà affects only tù kọ́ ‘spoon + D’, the object of the first verb nì ‘take’, not kí-bé ‘fufu’, the object of the second verb zì ‘eat’. The placement of ndúghọ́ ‘who’ in (27e) shows that when the object of ‘take’ is null (= third person singular inanimate object), nì + zì ‘take + eat’ function as a single complex verb by virtue of being uninterrupted. It is not possible to place ndúghọ́ between the two verbs, as in (27f).

We are now left with the question of how to incorporate “auxiliary focus” into the analysis. Recall that eD is not well-formed when the auxiliary is [+focus], e.g. màa ‘P1-foc’ or [+F], e.g. negative or imperative. There are at least two analytic possibilities. First, [+focus] and/or [+F] auxiliaries may require that the IAV position remain empty, i.e. [ [ V e ]ₐ NP ... ]ₐ. In this case the verb would fail to properly govern the object NP. Second, [+focus] and/or [+F] auxiliaries may trigger the attraction of the verb to INFL, leaving the V node empty, i.e. [ e NP ]ₐ. In this case the non-lexical empty head [ e ]ₐ is not a proper governor.

It is possible that the first solution is correct for [+focus] and the second correct for [+F] auxiliaries. Watters (1979) notes the following difference between the two in examples such as (28).

(28) Different behavior of [+focus] and [+F] AUX with respect to IAV (Watters 1979)

a. * à m̀à b̀vù ndúghọ́ ‘who did fall?’
\[ DS P₁-FOC fall who \]

b. * à m̀à b̀vù b̀vù i’tò ‘THE DOGS did fall’
\[ DS P₁-FOC fall dogs D \]

c. à kà m̀ b̀vù ndúghọ́ ‘who didn’t fall?’
\[ DS NEG P₁ fall who \]

d. à kà m̀ b̀vù b̀vù i’tò ‘THE DOGS didn’t fall’
\[ DS NEG P₁ fall dogs D \]

(28a) shows that a [+focus] auxiliary cannot co-occur with a WH element, nor is it possible for the subject to move to the IAV, as shown in (28b). As seen in (28c,d), however, both a WH The facts in (28a,b) suggest that a [+focus] auxiliary requires that the IAV be empty. The properties of [+F] are, however, quite different, perhaps suggesting an analysis along the lines of the second solution above (cf. Hyman 1985).

The above facts highlight the fact that there is an imperfect relation of focus marking to semantic focus. This is something I have pointed out in previous work: “There are unmistakeable [sic] correlations such that focus may be associated with a syntactic position (or construction), a morphological spell-out, or a phonological process. In all cases that I know, however, the construction, morphological exponent or phonological process may also characterize elements
not semantically in focus; or they may fail to characterize constituents which clearly are focused. Perhaps this is true in all languages that mark focus formally. To account for this imperfect alignment of semantic focus and linguistic form, it is thus necessary to evoke the Grammar as a mediator” (Hyman 1999:152). The same kind of imperfect overlap of [+focus] and [+F] has been demonstrated in other African languages as well (Hyman & Watters 1984). As summarized in (29), the relation of A- and B-forms, and the special status of the IAV are reminiscent of comparable oppositions in Narrow Bantu:

(29) Relation of A- and B-forms to comparable oppositions in Narrow Bantu:

<table>
<thead>
<tr>
<th>Aghem verb + A-form (kí-bé)</th>
<th>Aghem verb + B-form (bé `íká)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“close context”</td>
<td>“open context”</td>
</tr>
<tr>
<td>“strong link”</td>
<td>“weak link”</td>
</tr>
<tr>
<td>“conjoint”</td>
<td>“disjoint”</td>
</tr>
<tr>
<td>“post-verb focus”</td>
<td>“verb focused”</td>
</tr>
</tbody>
</table>

In Narrow Bantu languages such as Bemba, Rundi, Tonga, Haya, Luganda, Tswana etc. the difference between “conjoint” and “disjoint” verb + XP combinations can be expressed either through allomorphy (as in Aghem) or through tone (cf. Sharman 1955, Meeussen 1959, 1963, Carter 1962, Givón 1971, Hyman & Watters 1984, Creissels 1996, Hyman 1999, Güldemann 2003, etc.).

Although quite subtle, tone is potentially implicated in A- vs. B-marking in Aghem as well. In (30a) we see that the object nouns /` + wù/ ‘person’ (class 1) and /` + bvú `/ ‘dog’ (class 9) directly follow the L tone verb ká? ‘see’ in the non-focus today past (P1). (Class 1 and 9 nouns are marked by a floating L prefix.)

(30) A floating H tone precedes O nouns in B contexts (seen when the noun begins with L)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>ó m̀ à ká? wù ‘he saw a person’ ó m̀ à ká? nò ‘he saw (it)’</td>
</tr>
<tr>
<td></td>
<td>ó m̀ à ká? bvú ‘he saw a dog’ SM P1 see FM</td>
</tr>
<tr>
<td></td>
<td>SM P1 see person/dog /<code>-bvú</code>/ (*ó m̀ à ká?)</td>
</tr>
<tr>
<td>b.</td>
<td>ó màa ká? wù ‘he did see a person’ ó màa ká?</td>
</tr>
<tr>
<td></td>
<td>ó màa ká? bvú ‘he did see a dog’ SM P1-FOC see</td>
</tr>
<tr>
<td></td>
<td>SM P1-FOC see person/dog ‘he did see (it)’</td>
</tr>
<tr>
<td>c.</td>
<td>ó kà m̀ à ká? wù ‘he didn’t see a person’ ó kà m̀ à ká?</td>
</tr>
<tr>
<td></td>
<td>ó kà m̀ à ká? bvú ‘he didn’t see a dog’ SM NEG P1 see</td>
</tr>
<tr>
<td></td>
<td>SM NEG P1 see person/dog ‘he didn’t see (it)’</td>
</tr>
</tbody>
</table>

In (30b) we see that the same verb has a LH rising tone in the corresponding [+focus] P1 marked by màa. Similarly, the verb has a rising tone in (30c) in the corresponding [+F] negative. It thus appears that a floating H tone occurs before class 1 and 9 nouns in IAV position. (The floating H may also exist with other noun classes, but is absorbed into their underlying /H/ tone prefix.) The sentences in (31a,b) show that the floating H is also present before a noun in post-IAV position:

(31) The floating H also occurs before a post-IAV (but not IBV) noun

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>à m̀ à ká? wù ñòm ‘a PERSON saw the animal’</td>
</tr>
<tr>
<td></td>
<td>DS P1 see person animal</td>
</tr>
</tbody>
</table>
It might appear that this floating H is a preposition or case marker and that B forms are really prepositional phrases or obliques (cf. à ‘to/for’ and à ‘with, and’, which also require the B form.) However, as seen in (31c), this H is not found in IBV position (which also requires B form). What this means is that we not only have to track NPs throughout the grammar for A vs. B form (i.e. determine whether a non-null DET is required), but also for the H- vs. Ø case (prepositional?) marking of B forms.

To conclude this section, I now expand the coverage to consider dependent clauses and subject NPs. The above examples have generally involved main clauses. In (32a-c) we see that even if an object NP immediately follows the verb, eD is ill-formed in backgrounded clauses:

(32) eD is ill-formed on post-verbal NP in backgrounded clauses

a. bûghô bûhu á’ tî mò zî bê ’kô ’the dogs that ate the fufu’
b. bûghô bûhu á’ tî mò zî bê ’kô ’if the dogs ate the fufu’
c. ghî’â bûhu á’ tî mò zî bê ’kô ’as the dogs ate the fufu’
d. bê ’kîl á à mò zî bûhu t tô ’the fufu that THE DOGS ate’

This is true of relative clauses, if-clauses, and temporal clauses. In addition, if the subject is adposited in a backgrounded clause, it too will require an overt determiner, as in (32d). Thus, in addition to the NP-internal conditions and the governor+NP conditions, there are clause-dependent conditions as well: eD is potentially licensed on an IAV NP only in a MCA.

Up to now I have not said anything about the form of subject NPs which remain in situ. In a sentence such as (33a), one cannot unambiguously determine whether the subject is in A or B form.

(33) Subject Det must be spelled out when adjacent

a. bûhu tî’ mò zî kl-bê ’the dogs ate the fufu’
b. *tî-bûhu (. ) mò zî kl-bê ’the dogs ate the fufu’
c. bûhu tî’n (*tî) mò zî kl-bê ’these dogs ate the fufu’

This is because subject-verb agreement is identical to the proclitic variant of the default determiner D, as was seen in (12). As I argued in Hyman (1979a), the SM and D are underlying the same entity occurring under DET: In class 13, tî differs from tô only in that it is procliticized to the following verb rather than being encliticized to the preceding word. What I have called the
subject marker (SM) in Aghem originates in the DET position of the subject noun phrase. When DET immediately precedes the auxiliary or main verb, it cannot be null, as in (33b). The D/SM may also not cooccur with a demonstrative, as seen in (33c).

Despite the identity of D and the SM, it is possible to test whether gD is well-formed in subject position. In the sentence in (34a), a numeral occurs after gD, as we expect from either set of phrase structure rules in (17):

(34) Subject gD is well-formed in main clauses

a. tʃ-bvú (.) tí-bígàì mò bì-ké ‘the two dogs ate the fufu’
   dogs D two P₁ eat fufu

b. *bvú ító tí-bígàì mò bì-ké ‘the two dogs ate the fufu’
   dogs D two P₁ eat fufu

c. tʃ-bvú (.) tí-bígàì kà mò bì-ké íkó ‘the two dogs didn’t eat the fufu’
   dogs D two NEG P₁ eat fufu D

Since DET does not occur before the auxiliary, if gD were not well-formed, DET would have had to be spelled out as tó, as in (34b). As seen, this sentence is ungrammatical. (34c) show that gD is also well-formed when the main clause is negative.

In all of the above sentences the judgments are robust: an A form cannot substitute for a B form, and vice-versa. There are two cases where there is variation. The first concerns the subject of a backgrounded clause, which has been recorded in both forms, as in (35a,b).

(35) The subject of background clauses is the first of two A-/B-variable positions

a. bì íkò á tʃ-bvú (.) tí-bígàì mò zì ‘the fufu that the two dogs ate’
   fufu DEM REL dogs D two P₁ eat

b. bì íkò á bvú ító tí-bígàì mò zì ‘the fufu that the two dogs ate’
   fufu DEM REL dogs D two P₁ eat

The same variation is found in condition clauses headed by búghó ‘if’ and in temporal clauses, e.g. ghíá ‘as, when’. While my impression is that speakers more often preferred bvú ító, for the same sentence a speaker might on one occasion state that tʃ-bvú is unacceptable, but on another occasion (sometimes a page later in my notes) insist that bvú ító is unacceptable.

Perhaps related to the above is the variation that occurs on the subject NP of a change-of-subject consecutive.

(36) Some variation also detected with respect to change-of-subject consecutives

a. Êríà? mò ghíngó Kóm vì mò nám bì íkó, bvú ító tí-bígàì tíá tí mò zì bì íkó
   Inah P₁ make Kum CNS P₁ cook fufu D dogs D two & SM P₁ eat fufu D
   ‘Inah made Kum cook fufu, and then the two dogs ate the fufu’

b. ò mò zóm é-zóm, tʃ-bvú (.) tí-bígàì tíá tí mò zì bì íkó
   SM P₁, sing song dogs D two & SM P₁ eat fufu D
   ‘he sang a song and then the two dogs ate fufu’
It must be emphasized that in order to study the form of the subject NP a numeral must be present. Since the limited texts published in Hyman (1979b) are of little help, we must rely on judgments obtained via elicitation.

The second variation concerns object noun phrases in an S AUX X V NP construction where some other element has been fronted into the IBV position. Elicited forms include the following:

(37) Variation of the object in an S AUX X V NP construction

a. búghô ô mô né zî ki-bè
today eat fufu
SM P1 (*bè ‘k5 : consistently rejected)

b. ô kà mô né zî bè i-k5
SM NEG P1 today eat fufu D
(‘he didn’t eat FUFU today’
(*ki-bè : usually rejected)

c. à kà mô bé i-kì zî ti-bvû
SM NEG P1 fufu D eat dogs
(‘THE DOGS didn’t eat fufu’
(bvû ‘t5 accepted AND rejected)

d. à kà mô bê i-kì zî bvû i-t5
SM NEG P1 fufu D eat dogs D
(‘THE DOGS didn’t eat fufu’
(tü-bvû accepted AND rejected)

(37a,b) involve the realization of the object NP when the the adjunct nê ‘today’ is preposed. Since I elicited such clauses on numerous occasions and with different speakers, I include under each gloss a summary of my findings. As seen in (37a), where an if-clause should condition the B form, the B form is consistently rejected. On the other hand, in (37b), where negation continues to condition the B form, the A form is usually rejected. (37c,d) involve the realization of the adposited subject NP when the object NP ‘fufu’ is preposed. While negation should condition the B form, as indicated, both A and B forms have been accepted and rejected on different occasions—and by the same speaker. Why these inconsistent effects should be the way they are is not clear at this point.

5. Conclusion

In the above sections I have presented an overview of focus marking in Aghem. As seen, focus marking is impressively pervasive in the language affecting not only the syntactic structure, but also the tense-aspect morphology and the properties of DET within the noun phrase. In Hyman (1979a) I was impressed by tendency for the B form to appear more frequently when the NP was “out of focus”, e.g. an object knocked out of the IAV or occurring in a “backgrounded clause”. There was however considerable “leakage”. First there was the question of how to account for the B forms that appear after negatives or imperatives? In a sentence like zî bè i-k5 nô ‘eat FUFU!’, repeated from (11g), the focus marker /nô/ clearly indicates that the object ‘fufu’ is in focus, but ‘fufu’ is still in B form. Even more damaging to the semantic approach is its inability to account for the NP-internal conditions: Why should the B form should be required when an adjective is present or when the head of the noun phrase is null? A syntactic approach not only accounts for this, but captures the obvious relation to what happens within the verb phrase. Thus, although semantic focus at first appeared to be centrally involved in determining whether we get -5 or gD, the syntactic generalization concerning heads and their governees accounts for a fuller range of facts.

While I have of course not given a full formal account, the above can be taken to represent a general strategy for developing a more fully articulated theory to handle the Aghem facts. In
the meantime we might take two morals from the Aghem experience. The first is that it is profitable to follow the morphology. The second is that all focus systems leak.

References

Kießling, Roland. Focalisation and defocalisation in Isu (in this volume).