Focus Marking in Aghem: Syntax or Semantics?

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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 1979), 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 1979a). 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. tɨ́-bvʉ́ tʉ̀-bɨ̀gha mɔ̂ zɨ̀ kɨ́-bɛ́ ˡnɛ́
dogs two P_1 eat fufu today
'the two dogs ate fufu today'

b. fɨ̋l á mɔ̂ fùo kɨ́-bɛ́ â bvʉ́ ˡtɔ́ á ˡndúghó
friends SM P_1 give fufu to dogs D LOC house
'the friends gave fufu to the dogs in the house'

The sentences in (1) have what Watters (1979: 146) refers to as "unmarked focus": focus may be on the entire sentence (e.g. in answer to the question 'what happened?'), on the part of the sentence from the verb to the end (e.g. in answer to the question

'what did the dogs/the friends do?') or on some subpart of this sequence (e.g. in answer to the questions 'what did the two dogs do today?', 'what did the friends do 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 constitutents move to IAV. The sentences in (2) illustrate this process, which Watters terms Adposing:

(2) ADPOSING: Focus-movement to IAV (= [marked focus])

a. X → IAV

tɨ́-bvʉ́	tɨ̀-bɨ̀ghà	mɔ̂	zɨ̀	nɛ́	ꜜbɛ́	ꜜkɔ́
dogs	two	P_1	eat	today	fufu	D

'the two dogs ate fufu TODAY'

b. S → IAV

à	mɔ̀	zɨ̀	tɨ́-bvʉ́	tɨ̀-bɨ̀ghà	bɛ́	ꜜkɔ́	nɛ́
ES	P_1	eat	dogs	two	fufu	D	today

'the TWO DOGS ate fufu today'

Comparing (2a) to the sentence in (1a) we see that the temporal adverbial *nɛ́* 'today' has moved to IAV. In (2b) it is the subject that moves to IAV, leaving behind the expletive subject (ES) *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 → IAV

tɨ́-bvʉ́	tɨ̀-bɨ̀ghà	mɔ̂	zɨ̀	zɨ́n	bɛ́	ꜜkɔ́
dogs	two	P_1	eat	when	fufu	D

'when did the two dogs eat fufu?'

b. WH-S → IAV

à	mɔ̀	zɨ̀	ndúghɔ́	ꜜbɛ́	ꜜkɔ́	nɛ́	à
ES	P_1	eat	who	fufu	D	today	QM

'who ate fufu today?'

c. Multiple-WH: S > O > X

à	mɔ̀	zɨ̀	ndúghɔ́	kwɔ̀kɔ̀	zɨ́n
ES	P_1	eat	who	what	when

'who ate what when?'

(3a) shows the temporal WH element *zɨ́n* 'when' in IAV position. Similarly, (3b) shows the subject WH element *ndúghɔ́* 'who' undergoing Adposing, again leaving behind the ES *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. *ò mɔ̀ bvù̵ cf. ò mɔ̀ bvù̵ nɔ̀
SM P_1 fall SM P_1 fall FM
'he fell'

b. *ò mɔ̀ zɨ̵˚ cf. ò mɔ̀ nɛ̀ nɔ̂
SM P_1 eat SM P_1 eat FM
'he ate (it)'

c. wìzɨ̵́n wɨ̵là ò mɔ̀ bvú̵
woman who SM P_1 fall
'the woman who fell'

As seen in the sentences to the right, the sentences are rendered grammatical when the general focus marker (FM) *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
tɨ́-bvú̵ tɨ̀-bɨ̵ghà mɔ̂ bɛ́ ˡkɨ́ zɨ́ nɛ́
dogs two P_1 fufu D eat today
'the two dogs ate fufu TODAY' (= (2a))

b. X → IBV
tɨ́-bvú̵ tɨ̀-bɨ̵ghà mɔ̂ nɛ́ zɨ́ kɨ́-bɛ́
dogs two P_1 today eat fufu
'the two dogs ate FUFU today'

c. WH → *IBV
*tɨ̀-bvʉ́ tɨ̀-bɨ̀ghà mɔ̂ zɨ́n zɨ́ kɨ́-bɛ́
dogs two P_1 when eat fufu
'when did the two dogs eat fufu?'

d. S → *IBV
*à mɔ̀ bvʉ́ ˡtɔ́ tɨ́-bɨ̀ghà zɨ́ kɨ́-bɛ́ ˡnɛ́
ES P_1 dogs D two eat fufu today
'the two dogs ate fufu today'

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

		[-focus]	[+focus]
Present perfect	(P_0)	Ø	ń̀
Today past	(P_1)	mɔ̀	mâa
General past	(P_2)	`mɔ́	máˡá

As seen in (7), the choice of extrinsic [±focus] has an effect on the semantics.

(7) AUX [+focus] indicates that truth value is included within the focus

a. tɨ́-bvʉ́ tɨ̀-bɨ̀ghà mɔ̂ zɨ̀ kɨ́-bɛ́
dogs two P_1 eat fufu
'the two dogs ate fufu'

b. tɨ́-bvʉ́ tɨ̀-bɨ̀ghà mâa zɨ̀ bɛ́ ˡkɔ́
dogs two P_1-FOC eat fufu D
'the two dogs ATE/DID EAT fufu'

c. tɨ́-bvʉ́ tɨ̀-bɨ̀ghà mɔ̂ zɨ̀ nó ˡbɛ́ ˡkɔ́
dogs two P_1 eat FM fufu D
'he ATE fufu today'

In (7a), where the P_1 [-focus] marker *mɔ̀* occurs, the semantic focus may be on the IAV (*kɨ́-bɛ́* '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. *mâa* 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 *nò* in IAV position.

Additional evidence that *mâa* 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).

(8) Additional evidence that AUX = [+focus]: IAV may be empty in MCA

a. ò máà bvʉ̀ 'he did fall' cf. *ò mɔ̀ bvʉ̀ = (4a)
SM P_1-FOC fall

b. ò máà zɨ̀˚ 'he did eat (it)' cf. *ò mɔ̀ zɨ̀˚ = (4b)
SM P_1-FOC eat

Since *mâa* marks main predicative focus, it 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):

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

a. tɨ́-bvʉ́ tɨ̀-bɨ̀ghà mâa zɨ̀ bɛ́ ˡkɔ́ nɛ́
dogs two P_1-FOC eat fufu D today
'the two dogs ate/did eat fufu today'

b. tɨ́-bvʉ́ tɨ̀-bɨ̀ghà mâa bɛ́ ˡkɔ́ nɛ́ zɨ́
dogs two P_1-FOC fufu D today eat
'the two dogs DID (TOO) eat fufu today'

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:

(10) Negatives and imperatives have intrinsic focus [+F] independent of semantic focus

a.	ò	kà	mɔ̀	bvʉ̀	'he did not fall'
	SM	NEG	P_1	fall	
b.	ò	kà	mɔ̀	zɨ̀°	'he did not eat (it)'
	SM	NEG	P_1	eat	
c.	zɨ́à				'eat (it)!'

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

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 *kɨ́-bɛ́* "A form" or *bɛ́ ˡkɔ́* "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.	ò	mɔ̀	zɨ̀	kɨ́-bɛ́	ˡné		(*bɛ́ ˡkɔ́)
	SM	P_1	eat	fufu	today		
	'he ate fufu today'						
b.	ò	mɔ̀	zɨ̀	né	ˡbɛ́	ˡkɔ́	(*kɨ́ -bɛ́)
	SM	P_1	eat	today	fufu	D	
	'he ate fufu TODAY'						
c.	ò	mɔ̀	bɛ́	ˡkɨ́	zɨ́	né	(IBV position)
	SM	P_1	fufu	D	eat	today	
	'he ate fufu TODAY'						

d. ò mâa zɨ̀ bɛ́ ˡkɔ́ nɛ́ (after AUX [+focus])
SM P_1-FOC eat fufu D today
'he did eat fufu today'

e. wìzɨ́n wɨ̀là ò mɔ̀ zɨ̀ bɛ́ ˡkɔ́ nɛ́ (in non-main clause)
woman who SM P_1 eat fufu D today
'the woman who ate fufu today'

f. ò kà mɔ̀ zɨ́ bɛ́ ˡkɔ́ (after negative verb)
SM NEG P_1 eat fufu D
'he did not eat fufu'

g. zɨ́ bɛ́ ˡkɔ́ (nô) (after imperative verb)
eat fufu D FM
'eat fufu/FUFU!'

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 *kɨ́* instead of *kɔ́*. (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])

	A-form		**B-form**		**B-form**		
class	*prefix-stem*		*stem*	*=enclitic*	*stem*	*proclitic=*	
1	(ˋ)	wɛ́	wɛ́		wɛ́		'child'
2	á-	wɛ́	wɛ́	=ghɔ́	wɛ́	á=	'children'
3	ó-	kɔ́ʔ	kɔ́ʔ	=ˡwɔ́	kɔ́ʔ	ˡó=	'ladder'
4	é-	kɔ́ʔ	kɔ́ʔ	=ˡzɔ́	kɔ́ʔ	ˡé=	'ladders'
5	é-	ghóm	ghóm	=ˡzɔ́	ghóm	ˡé=	'egg'

6	á-	ghóm	ghóm	=ˡghɔ́	ghóm	ˡá=	‘eggs’
7	kɨ́-	fú	fú	=kɔ́	fú	kɨ́=	‘rat’
8	ó-	fú	fú	=wɔ́	fú	ó=	‘rats’
9	(ˋ)	bvʉ́	bvʉ́		bvʉ́		‘dog’
13	tɨ́-	bvʉ́	bvʉ́	=ˡtɔ́	bvʉ́	ˡtɨ́=	‘dogs’
19	fɨ̃-	nwɨ́n	nwɨ́n	=ˡfɔ́	nwɨ́n	ˡfɨ̃=	‘bird’
6a	ń	nwɨ́n	nwɨ̀n	=mɔ̀	nwɨ̀n	ǹ=	‘birds’

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 [ɔ] (from historical *[ʌ]). If, however, the D procliticizes 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 quantifer:

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

a.	/ _ POSS	bvʉ́ ˡtáŋá	‘my dogs’	nwɨ́n ˡfáŋá	‘my bird’
	/ _ DEM	bvʉ́ ˡtɨ́n	‘these dogs’	nwɨ́n ˡfɨ̃n	‘this bird’
	/ _ ADJ	bvʉ́ tɨ̀-dúˡú tɔ́	‘big dogs’	nwɨ́n fɨ̀-dúˡú fɔ́	‘big bird’
	/ _ GEN	bvʉ́ ˡtɨ́ ˡwɛ́	‘child’s dogs’	nwɨ́n ˡfɨ́ ˡwɛ́	‘child’s bird’
	/ _ SM	bvʉ́ ˡtɨ́ mâa bvʉ̀	‘the dogs fell’	nwɨ́n ˡfɨ́ mâa bvʉ̀	‘the bird fell’
b.	/ _ NUM	tɨ́-bvʉ́ tɨ̀-bɨ̀ghà	‘two dogs’	fɨ̃nwɨ́n fɨ̀-mɔ̰ʔ	‘one bird’
	/ _ Q	tɨ́-bvʉ́ tɨ̀-dzɨ̀m	‘all the dogs’	fɨ̃nwɨ́n fɨ̀-dzɨ̀m	‘the whole bird’
c.	/ _ D	bvʉ́ ˡtɔ́	‘Dogs!’	nwɨ́n ˡfɔ́	‘Bird!’
		/tɨ́-bvʉ́ ˋ tɔ́/		/fɨ́-nwɨ̀n´ fɔ́/	

The examples in (13a) show the deletion of the class 13 prefix *tɨ́-* of *tɨ́-bvʉ́* ‘dogs’ and the class 19 prefix *fɨ̃-* of *fɨ̃-nwɨ́n* ‘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 quantifer in (13b). 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

				N	POSS	ADJ	DET	NUM	
a.	ò	mâa	kɔ̀ʔ	bvʉ́	ꜜtáŋá	tɨ̀-dúꜜú	tɔ́	tɨ́-bɨ̀ghà	'he saw my
	SM	P_1-FOC	see	dogs	my	big	D	two	two big dogs'
b.	ò	mâa	kɔ̀ʔ	bvʉ́	ꜜtáŋá	tɨ̀-dúꜜú	tɨ́n	tɨ̀-bɨ̀ghà	'he saw these
	SM	P_1-FOC	see	dogs	my	big	dem	two	two big dogs of mine'

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 can surface as null; if it is not well-formed, it must be spelled out post-lexically via the -ɔ́" (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'

a. N + POSS + ADJ + DET + NUM

bvʉ́	ꜜtɨ́	ꜜwɛ́	tɨ̀-dúꜜú	tɨ́n	tɨ̀-bɨ̀ghà
dogs	of	child	big	these	two

b. N + ADJ + POSS + DET + NUM

bvʉ́	tɨ̀-dúꜜú	ꜜtɨ́	ꜜwɛ́	tɨ́n	tɨ̀-bɨ̀ghà
dogs	big	of	child	these	two

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:

(16) Single DET and NUM in a noun phrase with multiple genitives/adjectives

a. fú kɨ́ ˡbvʉ́ ˡtɨ́ ˡwɛ́ wɨ́n 'the rat of the dog of this child'
fú kɨ́ ˡbvʉ́ ˡtɨ́ ˡwɛ́ tɨ́n 'the rat of these dogs of the child'
fú kɨ́ ˡbvʉ́ ˡtɨ́ ˡwɛ́ kɨ́n 'this rat of the dogs of the child'
rat of dogs of child this/these

b. fú kɨ̀- báˡŋá kɨ̀-dúˡú kɨ́n kɨ̀-mə̀ʔ 'this one big red rat'
rat red big this one

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).

(17) Noun phrase structure rules

a. Hyman (1985)
(i) N" → N' SPEC
(ii) SPEC → { DET (NUM) / N" }
(iii) N' → N (A*)

b. Alternative
(i) NUMP → DP (NUM)
(ii) DP → NP DET
(iii) NP → N' (NUMP)
(iv) N' → N (A*)

Since N" 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). If 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 eD 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:

(18) N (of N)* does not require an overt determiner; i.e. eD (.) is well-formed

a.	kɨ́-fú	(.)		c.	fú	kɨ́	tɨ́-ˡbvɨ́	(.)	
	rat	D			rat	of	dogs	D	
b.	fú	káˡŋá	(.)	d.	fú	kɨ́	tɨ́-ˡbvɨ́	tɨ́	ˡwɛ́ (.)
	rat	my	D		rat	of	dogs	of	child D

On the other hand, whenever an adjective is present, eD is not well-formed:

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

a.	fú	kɨ̀-báˡŋá	kɔ́ (*Ø)	c.	fú	kɨ́	tɨ́-ˡbvɨ́	tɨ̀-dúˡú	tɔ́	
	rat	red	D		rat	of	$dogs_i$	big_i	D	
b.	fú	kɨ̀-báˡŋá	kɨ̀-dúˡú	kɔ́	d.	fú	kɨ̀-dúˡú	kɨ́	tɨ́-ˡbvɨ́	tɔ́ (*kɔ́)
	rat	red	big	D		rat_i	big_i	of	$dogs_j$	D_j D_i

(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 **kɔ́* 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 kɨ̀-dúˡú kɨ́ ˡwɛ́* (.) or *fú kɨ̀-dúˡú kɨ́ ˡwɛ́ kɔ́* 'big rat of child'.

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

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

a.	bvɨ́	ˡtáŋá	(.)	'my dogs'	vs.	(tɨ́-)	táˡŋá	tɔ́	'mine'	
	dog	my	D			of	my	D		
b.	bvɨ́	ˡtɨ́	ˡwɛ́	(.)	'the child's dogs'	vs.	tɨ́	ˡwɛ́	tɔ́	'the child's'
	dog	of	child	D			of	child	D	

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

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

(21) Internal conditions on eD within the NP

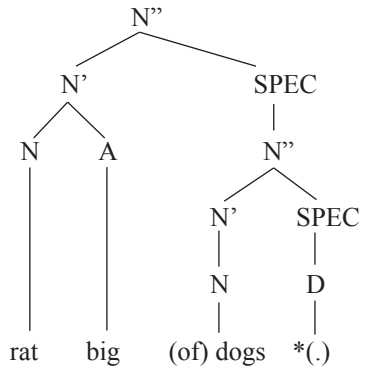
a. eD must not be separated from a N or sequence of N by ADJ

b. the head N must not be empty

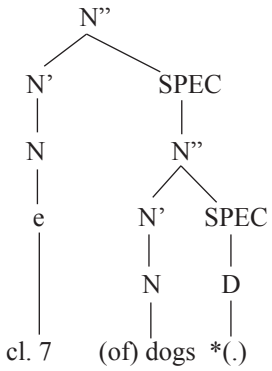
In other words, eD is internally well-formed if it is preceded only by a lexical noun/pronoun or a string of lexical nouns (the genitive agreement marker 'of' being irrelevant). In government-binding terms, eD must be properly governed — here, by every N up to the highest node of the NP (assuming for 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).

(22) Adjacency or c-command?

a.



b.



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 governer 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 governer" may be at play is seen when we consider the prepositional phrases in (23).

(23) Non-lexical governers *â* 'to/for' and *à* 'with, and' require B form (*eD)

a.	ò	mɔ̀	fùo	kɨ́-bɛ́	â	bvʉ́	ꜜtɔ́	'he gave fufu to the dogs'
	SM	P_1	give	fufu	to	dogs	D	
b.	ò	mɔ̀	kɔ̀ʔ	tɨ́-dzɨ́	à	bvʉ́	ꜜtɔ́	'he saw goats with/and dogs'
	SM	P_1	see	goats	with	dogs	D	

Whenever a well-formed NP occurs within a PP headed by *â* 'to/for' or *à* 'with, and', a determiner is required. This means that these (non-lexical) prepositions are not proper

governers. On the other hand, as seen in (24), the instrumental/locative preposition *á* (~ *án*) acts as if it is a lexical head:

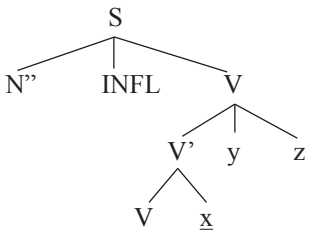
(24) Instrumental/locative *á* (~ *án*) acts as if = lexical head

a. á fɨ̵-ˡñɨ́ (.) ‘with a knife’ *á ˡñɨ́ fɔ́

b. á fɨ̵-ghàm (.) ‘on the mat’ *á ghàm fɔ̀

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 e̲D 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 (x̲ = 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 e̲D will be well-formed (properly governed) if preceded either by a single noun or pronoun or by a genitive sequence. (26a) shows that e̲D 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 mɔ̀ ñɨ̵ŋ bùɔ zɨ̵ kɨ́-bɛ́ (*Ø ‘it’)
SM P_1 run come eat fufu
‘he ran in this direction and ate fufu’

b. à mɔ̀ ñɨ̵ŋ bùɔ zɨ̵ ndúghɔ́ bɛ́ ˡkɔ́
ES P_1 run come eat who fufu D
‘who ran in this direction and ate fufu?’

c. *à mɔ̀ ñɨ̵ŋ ndúghɔ́ bùɔ zɨ̵ bɛ́ ˡkɔ́

d. *à mɔ̀ ñɨ̵ŋ bùɔ ndúghɔ́ zɨ́ bɛ́ ˡkɔ́

e. ò kà mɔ̀ ñɨ̀ŋ bùɔ zɨ́ bɛ́ ˡkɔ́
SM NEG P_1 run come eat fufu D
'he didn't run in this direction and eat fufu'

As indicated, the IAV cannot be empty 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 *ndúghɔ́* 'who' in (26b) confirms that the IAV position follows the three-verb sequence (cf. the ungrammatical placements of *ndúghɔ́* 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 governer, a different situation obtains in (27).

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

a. ò mɔ̀ nì kɨ́-tà zɨ́ kɨ́-bɛ́
SM P_1 take spoon eat fufu
'he took a spoon and ate fufu'

b. à mɔ̀ nì ndúghɔ́ tà kɔ̀ zɨ́ kɨ́-bɛ́
ES P_1 take who spoon D eat fufu
'who took a spoon and ate fufu?'

c. *à mɔ̀ nì kɨ́-tà zɨ́ ndúghɔ́ bɛ́ ˡkɔ́
ES P_1 take spoon eat who fufu D

d. à kà mɔ̀ nì tà kɔ̀ zɨ́ kɨ́-bɛ́
ES NEG P_1 take spoon D eat fufu
'he didn't take a spoon and eat fufu'

e. à mɔ̀ nì zɨ́ ndúghɔ́ bɛ́ ˡkɔ́
ES P_1 take eat who fufu D
'who took (it) and ate fufu?'

f. *à mɔ̀ nì ndúghɔ́ zɨ́ kɨ́-bɛ́
ES P_1 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 *tà kɔ̀* 'spoon + D', the object of the first verb *nì* 'take', not *kɨ́-bɛ́* 'fufu', the object of the second verb *zɨ́* 'eat'. The placement of *ndúghɔ́* 'who' in (27e) shows that when the object of 'take' is null (= third person singular inanimate object), *nì* + *zɨ́* 'take + eat' function as a single complex verb by virtue of being uninterrupted. It is not possible to place *ndúghɔ́* 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. *mâa* 'P_1-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]$_V$, NP ...]$_{V''}$. 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]$_{V''}$. In this case the non-lexical empty head [e]$_V$ is not a proper governer.

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	mâa	bvʉ̀	ndúghɔ́		'who did fall?'
	ES	P_1-FOC	fall	who		
b.	*à	mâa	bvʉ̀	bvʉ́	ꜜtɔ́	'THE DOGS did fall'
	ES	P_1-FOC	fall	dogs	D	
c.	à	kà	mɔ̀	bvʉ̀	ndúghɔ́	'who didn't fall?'
	ES	NEG	P_1	fall	who	
d.	à	kà	mɔ̀	bvʉ̀	bvʉ́	ꜜtɔ́ 'THE DOGS didn't fall'
	ES	NEG	P_1	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 and the subject can occur in IAV after a negative verb. 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, elsewhere

Aghem verb + A form (*kí-bɛ́*)	Aghem verb + B form (*bɛ́ ˡkɔ́*)
"close context"	"open context"
"strong link"	"weak link"
"conjoint"	"disjoint"
"post-verb focus"	"verb focused"

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 / `+*bvú̱*/ 'dog' (class 9) directly follow the L tone verb *kɔ̀ʔ* 'see' in the non-focus today past (P_1). (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)

a.	ò mɔ̀ kɔ̀ʔ wù	'he saw a person'	ò mɔ̀ kɔ̀ʔ nò
	ò mɔ̀ kɔ̀ʔ bvú̱	'he saw a dog'	SM P_1 see FM
	SM P_1 see person/dog /ˆ-bvú̱ `/		(*ò mɔ̀ kɔ̀ʔ)
			'he saw (it)'
b.	ò mâa kɔ̰̄ʔ wù	'he did see a person'	ò mâa kɔ̀ʔ
	ò mâa kɔ̰̄ʔ ˡbvú̱	'he did see a dog'	SM P_1-FOC see
	SM P_1-FOC see person/dog		'he did see (it)'
c.	ò kà mɔ̀ kɔ̰̄ʔ wù	'he didn't see a person'	ò kà mɔ̀ kɔ̀ʔ
	ò kà mɔ̀ kɔ̰̄ʔ ˡbvú̱	'he didn't see a dog'	SM NEG P_1 see
	SM NEG P_1 see person/dog		'he didn't see (it)'

In (30b) we see that the same verb has a LH rising tone in the corresponding [+focus] P_1 marked by *mâa*. 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

a. à mɔ̀ kɔ̀ʔ wŭ ñɔ̀m ‘a PERSON saw the animal’
ES P_1 see person animal

b. à kà mɔ̀ kɔ̆̀ʔ wŭ ñɔ̀m ‘a PERSON didn’t see the animal’
ES NEG P_1 see person animal

c. ò kà mɔ̀ wù kɔ̂ʔ ‘he didn’t SEE a person’
SM NEG P_1 person see

It might appear that this floating H is a preposition or case marker and that B forms are really prepositional phrases or obliques (cf. *â* ‘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. bvɨ́ ˡtɨ́l á tɨ́ mɔ̂ zɨ́ bɛ́ ˡkɔ́ ‘the dogs that ate the fufu’
dogs DEM REL SM P_1 eat fufu D

b. búghɔ́ bvɨ́ ˡtɨ́ mɔ̀ zɨ́ bɛ́ ˡkɔ́ ‘if the dogs ate the fufu’
if dogs SM/D P_1 eat fufu D

c. ghɨ́ˡá bvɨ́ ˡtɨ́ mɔ̀ zɨ́ bɛ́ ˡkɔ́ ‘as the dogs ate the fufu’
as dogs SM/D P_1 eat fufu D

d. bɛ́ ˡkɨ́l á à mɔ̀ zɨ́ bvɨ́ ˡtɔ́ ‘the fufu that THE DOGS ate’
fufu DEM REL ES P_1 eat dogs D

This is true of relative clauses, if-clauses, and temporal clauses. In addition, if the subject is adposed in a backgrounded clause, it too will require an overt determiner, as in (32d). Thus, in addition to the NP-internal conditions and the governer+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. bvʉ́ ˩tɨ́ mɔ̂ zɨ̀ kɨ́-bɛ́ ‘the dogs ate the fufu’
dogs SM/D P_1 eat fufu

b. *tɨ́-bvʉ́ (.) mɔ̂ zɨ̀ kɨ́-bɛ́ ‘the dogs ate the fufu’
dogs D P_1 eat fufu

c. bvʉ́ ˩tɨ́n (*tɨ́) mɔ̂ zɨ̀ kɨ́-bɛ́ ‘these dogs ate the fufu’
dogs DEM SM/D P_1 eat 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, *tɨ́* differs from *tɔ́* 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 eD is well-formed in subject position. In the sentence in (34a), a numeral occurs after eD, as we expect from either set of phrase structure rules in (17):

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

a. tɨ́-bvʉ́ (.) tɨ̀-bɨ̀ghà mɔ̂ zɨ̀ kɨ́-bɛ́ ‘the two dogs ate the fufu’
dogs D two P_1 eat fufu

b. *bvʉ́ ˩tɔ́ tɨ́-bɨ̀ghà mɔ̂ zɨ̀ kɨ́-bɛ́ ‘the two dogs ate the fufu’
dogs D two P_1 eat fufu

c. tɨ́-bvʉ́ (.) tɨ̀-bɨ̀ghà kà mɔ̀ zɨ̀ bɛ́ ˩kɔ́ ‘the two dogs didn’t eat the
dogs D two NEG P_1 eat fufu D fufu’

Since DET does not occur before the auxiliary, if eD were not well-formed, DET would have had to be spelled out as *tɔ́*, as in (34b). As seen, this sentence is ungrammatical. (34c) show that eD 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. bɛ́ ˥kɨ́l á tɨ́-bvʉ́ (.) tʉ̀-bɨ̀ghà mɔ̂ zɨ́
fufu DEM REL dogs D two P_1 eat
'the fufu that the two dogs ate'

b. bɛ́ ˥kɨ́l á bvʉ́ ˥tɔ́ tɨ́-bɨ̀ghà mɔ̂ zɨ́
fufu DEM REL dogs D two P_1 eat
'the fufu that the two dogs ate'

The same variation is found in condition clauses headed by *bùghɔ̀* 'if' and in temporal clauses, e.g. *ghɨ́˥á* 'as, when'. While my impression is that speakers more often preferred *bvʉ́ ˥tɔ́*, for the same sentence a speaker might on one occasion state that *tɨ́-bvʉ́* is unacceptable, but on another occasion (sometimes a page later in my notes) insist that *bvʉ́ ˥tɔ́* 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. Énáʔ mɔ̀ ghɨ̀ŋɔ́ Kóm vɨ̀ mɔ̀ nám bɛ́ ˥kɔ́,
Inah P_1 make Kum CNS P_1 cook fufu D

bvʉ́ ˥tɔ́ tɨ́-bɨ̀ghà tíá tɨ́ mɔ̂ zɨ́ bɛ́ ˥kɔ́
dogs D two & SM P_1 eat fufu D
'Inah made Kum cook fufu, and then the two dogs ate the fufu'

b. ò mɔ̀ zo̱m é-zo̱m, tɨ́-bvʉ́ (.) tʉ̀-bɨ̀ghà tíá tɨ́ mɔ̂ zɨ́ bɛ́ ˥kɔ́
SM P_1 sing song dogs D two & SM P_1 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 S AUX X V NP constructions

a. bùghɔ̀ ò mɔ̀ né zɨ́ kɨ́-bɛ́ 'if he ate FUFU today'
if SM P_1 today eat fufu (*bɛ́ ˥kɔ́: consistently rejected)

b. ò kà mɔ̀ né zɨ́ bɛ́ ˥kɔ́ 'he didn't eat FUFU today'
SM NEG P_1 today eat fufu D (?*kɨ́-bɛ́ : usually rejected)

(37a,b) involve the realization of the object NP when the the adjunct *né* '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. The sentences in (38a,b) involve the realization of the adposed subject NP when the object NP 'fufu' is preposed.

(38) Variation of the subject in *à* AUX NP V NP constructions

a. à kà mɔ̀ bɛ́ ˡkɨ́ zɨ́ tɨ́-bvʉ́ 'THE DOGS didn't eat fufu'
SM NEG P_1 fufu D eat dogs (bvʉ́ ˡtɔ́ accepted AND rejected)

b. à kà mɔ̀ bɛ́ ˡkɨ́ zɨ́ bvʉ́ ˡtɔ́ 'THE DOGS didn't eat fufu'
SM NEG P_1 fufu D eat dogs D (tɨ́-bvʉ́ accepted AND rejected)

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 *zɨ́ bɛ́ ˡkɔ́ nô* 'eat FUFU!', repeated from (11g), the focus marker /*nò*/ 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 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 *-ɔ́* or eD, 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 (cf. Hyman and Polinsky 2007). 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.

Abbreviations

D	determiner	P_2	before today past tense
eD	empty determiner = (.)	SM	subject marker
ES	expletive subject marker		
FM	focus marker	Tone marks are as follows:	
FOC	focus	á	high tone
IAV	immediate after verb position	à	low tone
IBV	immediate after verb position	à°	prepausal level low tone
P_1	today past tense	↓á	downstep

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